SCS ENGINEERS

Transmittal

West Des Moines, IA

PROJECT:	Kossuth Co,FY25 Env Comp,IA 27223408.25	DATE:	2/19/2025
SUBJECT:	Kossuth County Sanitary Landfill - 55-SDP-01-75C - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report	TRANSMITTAL ID:	00003
PURPOSE:	For your approval	VIA:	Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Nathan Ohrt West Des Moines, IA	SCS Engineers	NOhrt@scsengineers.com	+1-515-415-9220

TO

NAME	COMPANY	EMAIL	PHONE
Geoffrey Spain United States		geoffrey.spain@dnr.iowa.gov	

REMARKS:

Good afternoon Geoff-

SCS Engineers, on behalf of the Kossuth County Waste Management Association, is submitting the 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report for the Kossuth County Sanitary Landfill. If you have any questions or comments regarding this report, please contact me at the number below. Thank you.

Nathan Ohrt
Senior Project Professional
SCS Engineers
West Des Moines, Iowa
319-331-9613 (M)
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www.scsengineers.com

Transmittal

DATE: 2/19/2025
TRANSMITTAL ID: 00003

DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	2/19/2025	Kossuth County Sanitary Landfill - 55-SDP-01-75C - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report.pdf	

COPIES:

Nathan Ohrt (SCS Engineers)
dmiller@kossuthcounty.iowa.gov
Jeff Phillips (SCS Engineers)
Becky Jolly

February 19, 2025
File No. 27223408.25

Mr. Geoff Spain
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Dear Geoff:

SCS Engineers, on behalf of Kossuth County, has completed the required statistical evaluation for the closed Kossuth County Sanitary Landfill (Landfill) for the year 2024. Services were performed in general accordance with 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 2024 Annual Water Quality Report.

Additionally, evaluations of the leachate control system and gas monitoring results for the Landfill are included in accordance with the 2002 IAC 567-113.26(2)"l" and 113.26(15)"b," respectively. The 2024 Leachate Control System Performance Evaluation Report and 2024 Landfill Gas Annual Report are included as appendices to the Annual Water Quality Report.

If you have any questions regarding these reports, please contact Nathan Ohrt at (319) 331-9613.

Sincerely,

Nathan Ohrt
Senior Project Professional
SCS Engineers

Timothy C. Buelow, P.E.
Senior Project Advisor
SCS Engineers

NPO/TCB

Copies: Mr. Doug Miller, P.E. – Kossuth County

2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report

Kossuth County Sanitary Landfill
Burt, Iowa
Solid Waste Permit No. 55-SDP-01-75C

Prepared for:

Kossuth County

SCS ENGINEERS

27223408.25 | February 2025

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West Des Moines, IA 50265
515-631-6160

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CERTIFICATION

Prepared by: _____ Date: 2/19/2025

Typed: Nathan Ohrt

Reviewed by: _____ Date: 2/19/2025

Typed: Timothy C. Buelow, P.E.

Certification page (PE or groundwater 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.

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

_____ Date: 2/19/2025

Timothy C. Buelow, P.E.

License No. 14445

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal:

All except Appendix B-1.

EXECUTIVE SUMMARY

ES.1 Period of Report Coverage

SCS Engineers (SCS), on behalf of Kossuth County, has completed the required statistical evaluation of groundwater data collected for the closed Kossuth County Sanitary Landfill (Landfill). The purpose of this Annual Water Quality Report (AWQR) is to document and statistically evaluate the groundwater sampling results for the year 2024. This AWQR was prepared in accordance with the requirements of Iowa Administrative Code (IAC) 567-113.10(5 and 6), the Landfill closure permit and applicable amendments, and current requirements for implementation of the Hydrologic Monitoring System Plan (HMSP).

ES.2 Report Priority

The following summarizes the priorities associated with groundwater compliance at the 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.

ES.3 Site Status and Applicable Rules

- Landfill Status: Closed.
- Types of waste accepted: None, landfill closed.
- Applicable IAC rules: The closure permit was issued on August 12, 2008 (Doc #28512) in accordance with the 2002 IAC Chapter 113. A variance request approved on December 9, 2013 (Doc #78926) replaced the requirements of IAC 567-113.2(5), 113.2(5)"d", and 113.2(5)"e" with the requirements of 567-113.10. In addition, the December 9, 2013 variance approval replaced the requirements in IAC 567-113.21 (effective January 15, 2003) for the Monitoring Well Maintenance and Performance Reevaluation Plan with the requirements in the current IAC 567-113.10(2)"f".

ES.4 Comments

- Previously reported statistically significant levels (SSLs) above the groundwater protection standards (GWPS) for cis-1,2-dichloroethene and vinyl chloride for monitoring well MW-22B remained during this reporting period. The lower confidence limit for cis-1,2-dichloroethene was below the GWPS during the 2nd 2024 statistical evaluation.
- SSIs above background were indicated in monitoring wells MW-18, MW-19, MW-20, MW-22B, MW-23, MW-28, and MWPz-16A. As assessment and corrective action monitoring wells do not require retesting, the indicated SSIs were not confirmed.

ACRONYMS/ABBREVIATIONS

AWQR = Annual Water Quality Report

GWPS = Groundwater Protection Standard

HMSP = Hydrologic Monitoring System Plan

IAC = Iowa Administrative Code

MW = Monitoring Well

PL = Prediction Limit

QA = Quality Assurance

QC = Quality Control

SCS = SCS Engineers

SSI = Statistically Significant Increase Above Background

SSL = Statistically Significant Level

TSS = Total Suspended Solids

U.S. EPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound

1.0 SITE BACKGROUND

1.1 SITE LOCATION

The Kossuth County Sanitary Landfill (Landfill) property is depicted on **Figure 1**, Approved Monitoring Network. The Landfill is located 1.5 miles southeast of Burt, Iowa in a portion of the SE ¼ of Section 30, T79N, R28W, in Kossuth County, Iowa.

1.2 FACILITY

The Landfill began operation in 1975. The Landfill accepted municipal solid waste and construction and demolition waste from its service area. The Landfill was closed and the final cap was installed in 2008. Since closure, waste has been transferred to Central Disposal Systems, Inc. in Lake Mills, Iowa, for disposal. The Landfill closure permit was issued on August 12, 2008 (Doc #28512).

1.3 GEOLOGY AND HYDROGEOLOGY OF THE SITE

The geology and hydrogeology of the Landfill were summarized in the 2022 AWQR, dated January 9, 2022 (Doc #105522), prepared by MER Engineering, Inc.

> *The current HMSP for the Kossuth County Sanitary Landfill was approved on February 13, 1995. Soils at the landfill site are predominately glacial till. Borings indicate the surface layer is black clay loam to a depth of about 1 to 2 feet. Below this is a 14 to 25-foot layer of brown sandy clay loam. Below this is a gray clay loam. A well log from the Iowa Geological Survey for a location ½ mile southwest of the landfill shows Devonian Dolomite at a depth of 200 feet. Four other well logs within a three-mile radius of the landfill show bedrock at depths of about 100 to 200 feet. Further information on site geology is available in a 1974 report prepared by Otto Engineering.*
>
> *Groundwater levels and direction of groundwater flow are influenced by nearby waterways including the East Fork of the Des Moines River, a drainage ditch, and a small unnamed stream. The river is located to the east of the landfill property. The drainage ditch is located along the north and west sides of the property and is about 10-15 feet deep. The unnamed stream meanders across the south half of the landfill property and flows northwest to southeast. The stream is a tributary of the river and originates approximately one mile west of the landfill site near the City of Burt's wastewater treatment lagoon. Treated effluent from the City's lagoon is discharged to the stream. Additional information about the landfill is included in the facilities Operational Plan, Hydrologic Monitoring System Plan (HMSP), and Leachate Control Plan.*

2.0 FIGURES DISCUSSION

The following figures are attached.

2.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Landfill property and HMSP monitoring network are depicted in **Figure 1**.

2.2 FIGURE 2 – GROUNDWATER CONTOURS

A groundwater contour map based on water levels measured by SCS during the May 2024 sampling event is included in Figure 2. Figure 2 indicates flow towards the creek transecting the Landfill, generally in a south-southwest direction north of the creek and a northeast direction south of the creek. There is a component of flow more directly to the east near the eastern boundary of the Landfill. This is similar to the general flow direction depicted in historical groundwater contour maps.

2.3 FIGURE 3 – REPORTING PERIOD DETECTION SUMMARY

Figure 3 shows the range of measured concentrations by monitoring point for the monitoring wells during this reporting period. Further discussion of the detected constituents is included in Section 5.0 – Data Evaluation and Summary of this report.

2.4 FIGURE 4 – CIS-1,2-DICHLOROETHENE CONCENTRATION MAP

Figure 4 shows that the monitoring wells surrounding SSL monitoring well monitoring well MW-22B did not have a quantified detection of cis-1,2-dichloroethene in the most recent four samples.

2.5 FIGURE 5 – VINYL CHLORIDE CONCENTRATION MAP

Figure 5 shows that the monitoring wells surrounding SSL monitoring well monitoring well MW-22B did not have a quantified detection of vinyl chloride in the most recent four samples.

3.0 STANDARDS HISTORY GRAPHS

Standards history graphs for the Appendix I metals are included in Appendix G.

The prediction limits were below the GWPS for the included graphs with the exception of arsenic and cobalt. The prediction limit for arsenic has been above the GWPS of 0.01 mg/L consistently since at least 2014. The cobalt prediction limit was above the GWPS of 0.0021 mg/L before 2017 and since 2022.

The prediction limits for arsenic and cobalt are based on indicated, but not confirmed, statistical outliers. Confidence intervals were calculated compared to the statewide standard GWPS of 0.01 mg/L for arsenic and 0.0021 mg/L for cobalt. More information on prediction limits and GWPSs is available in Table 5.

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 a review of sample handling, analytical sensitivity, blanks, accuracy, and precision. A summary of the laboratory QA/QC

and data validation for the 2024 sampling events can be found in **Appendix B-1**, Laboratory Analytical Data Sheets, and **Appendix B-2**, Data Validation Documentation, respectively.

5.0 DATA EVALUATION AND SUMMARY

Detection and assessment/corrective action statistical evaluations in accordance with the requirements of IAC 567-113.10(5) and 113.10(6) were conducted for the groundwater analytical data collected during the May, September, and November 2024 sampling events. The statistical evaluation for samples collected during this reporting period is located in **Appendix D** (Statistical Method and Output) of this report.

5.1 DATA EVALUATION

The groundwater monitoring network for the Landfill consists of groundwater monitoring wells located along the downgradient perimeters of the waste boundaries. A map showing the measured concentrations by monitoring well during this reporting period is included in **Figure 3**, Reporting Period Detection Summary.

The 1st 2024 semi-annual groundwater sampling event was completed May 22-24, 2024. During the May 2024 sampling event, significantly elevated total suspended solids (TSS) concentrations were measured in monitoring wells MW-12, MW-19, and MWPz-8B2. The inorganic data from these monitoring wells was considered to be not representative of actual aquifer conditions and was not included in the statistical evaluation. Resampling was attempted in November 2024 for the inorganic parameters for monitoring wells MW-12, MW-19, and MWPz-8B2, plus monitoring well MWPz-8A, which did not produce a sample during the May 2024 sampling event. Monitoring wells MW-12 and MWPz-8A did not produce sufficient water for sampling. Samples were successfully collected from monitoring wells MWPz-8B2 and MW-19. The resample from monitoring well MWPz-8B2 was again determined to be not representative due to an elevated TSS concentration, so the inorganic data from the November 2024 resample from monitoring well MwPZ-8B2 was removed from statistical consideration. Organic data collected from monitoring wells MW-12 and MW-19 were included in the statistical evaluation. Monitoring wells MWPz-8A and MWPz-8B2 are not analyzed for organic parameters.

Site-wide maximum concentrations for metals and volatile organic compounds (VOCs) were almost entirely measured in corrective action monitoring well MW-22B and assessment monitoring wells MW-18 and MW-19, with lead in assessment monitoring well MW-23 and selenium in monitoring well MW-26 being the only exceptions. VOCs were measured in monitoring wells MW-18, MW-19, MWPz-16A, and MW-22B.

Constituents exceeding their corresponding GWPSs were SSL constituents cis-1,2-dichloroethene and vinyl chloride plus cobalt in corrective action monitoring well MW-22B, arsenic and cobalt in monitoring well MW-19, and cobalt in monitoring well MW-18.

SSLs for cis-1,2-dichloroethane and vinyl chloride remain in monitoring well MW-22B. The lower confidence limit for cis-1,2-dichloroethane was below the GWPS during the 2nd 2024 statistical evaluation. The monitoring wells surrounding MW-22B have not had detections of cis-1,2-dichloroethene or vinyl chloride in the historical period of record dating to 2009, indicating the impact is localized near monitoring well MW-22B.

5.2 LANDFILL GAS MONITORING SUMMARY

Monitoring of the landfill gas migration was performed quarterly in 2024 by SCS. No action level exceedances of methane were measured during this reporting period.

As stated in The Request for Post-Closure Activities Modification, dated October 12, 2023 (Doc #107915), the monitoring frequency was reduced from quarterly to semi-annually for the monitoring points SW-1, MW-12, MWPz-16A, MW-19, MW-25, MWPz-8A, MW-23, NE corner, SW-2, and NW corner. The facility structures and monitoring points North gas vent, South gas vent, and corrective action monitoring wells MW-22B and MW-28 will continue the quarterly sampling frequency.

A summary of gas monitoring results and monitoring locations are included in **Appendix F**, 2024 Landfill Gas Annual Report.

6.0 RECOMMENDATIONS

6.1 SITE IMPACT ON GROUNDWATER

- GWPS exceedances for metals were limited, including arsenic and cobalt in monitoring well MW-19 and cobalt in monitoring wells MW-18 and MW-22B.
- VOCs are consistently detected at monitoring wells MWPz-16A, MW-19, and MW-22B.
- SSLs for cis-1,2-dichloroethane and vinyl chloride remain in monitoring well MW-22B. The lower confidence limit for cis-1,2-dichloroethane was below the GWPS during the 2nd 2024 statistical evaluation. The monitoring wells surrounding MW-22B have not had detections of cis-1,2-dichloroethene or vinyl chloride in the historical period of record dating to 2009, indicating the impact is localized near monitoring well MW-22B.

6.2 PROPOSED MONITORING

Monitoring is proposed to continue in 2025 as summarized in the attached **Table 2**.

6.3 PROPOSED MONITORING WELL CHANGES

No monitoring well changes are proposed at this time.

Tables

Table 1
Monitoring Program Summary
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Monitoring Well	Formation[1]	Current Monitoring Program	Change for next sampling event	Constituents with SSIs	Constituents with SSLs	Total Number of Samples in Each Monitoring Program since January 1, 2018		
						Detection	Assessment	Corrective Action
HMSP Monitoring Wells								
MW-27	Till	Background	No change	Not applicable	Not applicable	12		
MWPz-8A	Till	Background	No change	Not applicable	Not applicable	6		
MWPz-8B2	Till	Background	No change	Not applicable	Not applicable	8		
MW-22A	Till	Background	No change	Not applicable	Not applicable	8		
MW-22B	Till	Corrective Action	No change	Acetone, Benzene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Vinyl Chloride	Vinyl Chloride, cis-1,2-Dichloroethene			14
MW-23	Till	Assessment	No change	None	None		12	
MW-25	Till	Assessment	No change	None	None		12	
MW-19	Till	Assessment	No change	Arsenic, Barium, Nickel, 1,1-Dichloroethane, Acetone	None		13	
MWPz-16A	Till	Assessment	No change	1,1-Dichloroethane, cis-1,2-Dichloroethene	None		12	
MW-12	Till	Detection	No change	None	Not applicable	10		
MW-18	Till	Assessment	No change	Barium, Cobalt, Acetone, Toluene	None		10	
MW-26	Till	Detection	No change	None	Not applicable		14	
MW-20	Till	Assessment	No change	None	None		12	
MW-28	Till	Corrective Action	No change	None	None			14

Notes:
(1) Obtained from 2022 Annual Water Quality Report (Doc #105522).
SSI = Statistically Significant Increase above background.
SSL = Statistically Significant Level above a groundwater protection standard.

Table 2
Monitoring Program Implementation Schedule
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Monitoring Well	Recent Sampling Dates and Constituents			Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
	May 2024 Semi-Annual Event	September 2024 Semi-Annual Event	November 2024 Resample	1st 2025 Semi-Annual Event	2nd 2025 Semi-Annual Event	Previously Collected	Next Event
MW-27	Metals list, TSS	-	-	-	Metals list, TSS	10/27/2009, 5/14/2013	Not applicable
MWPz-8A	TSS	-	Not sampled (insufficient water)	-	Metals list, TSS	3/17/2009, 5/13/2013	Not applicable
MWPz-8B2	Metals list, TSS	-	Metals list, TSS	-	Metals list, TSS	Not applicable	Not applicable
MW-22A	Metals list, TSS	-	-	-	Metals list, TSS	3/17/2009, 5/13/2013	Not applicable
MW-22B	Appendix I, TSS	Appendix I, TSS	-	Appendix I, TSS	Appendix I, TSS	7/10/2009, 5/13/2013, 5/14/2018, 5/22/2023	2028
MW-23	Metals list, TSS, Appendix I VOCs	-	-	-	Metals list, TSS, Appendix I VOCs	7/10/2009, 5/13/2013, 5/14/2018, 5/22/2023	2028
MW-25	Metals list, TSS, Appendix I VOCs	-	-	-	Metals list, TSS, Appendix I VOCs	7/10/2009, 5/13/2013, 5/14/2018, 5/22/2023	2028
MW-19	Metals list, TSS, Appendix I VOCs	-	Metals list, TSS	-	Metals list, TSS, Appendix I VOCs	4/28/2010, 6/24/2014, 5/14/2018, 5/22/2023	2028
MWPz-16A	Metals list, TSS, Appendix I VOCs	-	-	-	Metals list, TSS, Appendix I VOCs	3/17/2009, 5/13/2013, 5/14/2018, 5/22/2023	2028
MW-12	Metals list, TSS, Appendix I VOCs	-	Not sampled (insufficient water)	-	Metals list, TSS, Appendix I VOCs	1/13/2011, 5/14/2013	Not applicable
MW-18	Metals list, TSS, Appendix I VOCs	-	-	-	Metals list, TSS, Appendix I VOCs	1/13/2011, 5/14/2013, 5/14/2018, 5/23/2023	2028
MW-26	Appendix I, TSS	Appendix I, TSS	-	Appendix I, TSS	Appendix I, TSS	3/17/2009, 5/13/2013	Not applicable
MW-20	Metals list, TSS, Appendix I VOCs	-	-	-	Metals list, TSS, Appendix I VOCs	4/28/201, 5/14/2013, 5/14/2018, 5/23/2023	2028
MW-28	Appendix I, TSS	Appendix I, TSS	-	Appendix I, TSS	Appendix I, TSS	5/23/2023	2028

Notes:
TSS - Total Suspended Solids.
"Metals list" includes arsenic, barium, cadmium, cobalt, lead, nickel, selenium, and zinc.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Compliance with:	2022	2023	2024	2025	2026
567 IAC 113.10(2)"f"(1) high and low water levels		Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths		Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(3) well depths	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		Completed		Scheduled	
Waste separation from groundwater 113.6(2)i	NA	NA	NA	NA	NA

Comments: None.

NA - Not applicable. Waste/groundwater separation is not applicable to this facility.

Table 4
Monitoring Well Performance and Maintenance Summary
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)
					May 2024	September 2024	
MW-27	1133.69	1121.30	27.3	Groundwater Level (ft)	6.90	NM	1.0
				Groundwater Elevation (Ft MSL)	1126.79	NA	
				Measured Well Depth (ft)	26.3	NM	
				Submerged screen	Y	NM	
MWPz-8A	1187.71	1171.20	21.5	Groundwater Level (ft)	18.24	NM	0.8
				Groundwater Elevation (Ft MSL)	1169.47	NA	
				Measured Well Depth (ft)	20.7	NM	
				Submerged screen	N	NM	
MWPz-8B2	1186.93	1135.53	71.4	Groundwater Level (ft)	62.38	NM	-0.5
				Groundwater Elevation (Ft MSL)	1124.55	NA	
				Measured Well Depth (ft)	71.9	NM	
				Submerged screen	N	NM	
MW-22A	1180.01	1124.61	65.4	Groundwater Level (ft)	54.81	NM	1.1
				Groundwater Elevation (Ft MSL)	1125.20	NA	
				Measured Well Depth (ft)	64.3	NM	
				Submerged screen	Y	NM	
MW-22B	1180.24	1170.24	25.0	Groundwater Level (ft)	10.96	13.30	-0.5
				Groundwater Elevation (Ft MSL)	1169.28	1166.94	
				Measured Well Depth (ft)	25.2	25.5	
				Submerged screen	N	N	
MW-23	1173.03	1161.63	31.4	Groundwater Level (ft)	17.58	NM	0.0
				Groundwater Elevation (Ft MSL)	1155.45	NA	
				Measured Well Depth (ft)	31.4	NM	
				Submerged screen	N	NM	
MW-25	1167.98	1157.98	25.0	Groundwater Level (ft)	6.00	NM	-0.3
				Groundwater Elevation (Ft MSL)	1161.98	NA	
				Measured Well Depth (ft)	25.3	NM	
				Submerged screen	Y	NM	
MW-19	1165.95	1128.95	47.0	Groundwater Level (ft)	38.54	NM	-0.8
				Groundwater Elevation (Ft MSL)	1127.41	NA	
				Measured Well Depth (ft)	47.8	NM	
				Submerged screen	N	NM	
MWPz-16A	1164.98	1141.02	26.5	Groundwater Level (ft)	8.68	NM	1.9
				Groundwater Elevation (Ft MSL)	1156.30	NA	
				Measured Well Depth (ft)	24.6	NM	
				Submerged screen	Y	NM	
MW-12	1159.70	1119.39	43.3	Groundwater Level (ft)	35.69	NM	0.2
				Groundwater Elevation (Ft MSL)	1124.01	NA	
				Measured Well Depth (ft)	43.1	NM	
				Submerged screen	Y	NM	
MW-18	1136.42	1126.62	19.8	Groundwater Level (ft)	11.24	NM	-0.3
				Groundwater Elevation (Ft MSL)	1125.18	NA	
				Measured Well Depth (ft)	20.1	NM	
				Submerged screen	N	NM	
MW-26	1138.72	1125.22	23.5	Groundwater Level (ft)	10.25	17.32	0.5
				Groundwater Elevation (Ft MSL)	1128.47	1121.40	
				Measured Well Depth (ft)	23.0	23.2	
				Submerged screen	Y	N	
MW-20	1129.19	1119.59	19.6	Groundwater Level (ft)	4.10	NM	0.7
				Groundwater Elevation (Ft MSL)	1125.09	NA	
				Measured Well Depth (ft)	18.9	NM	
				Submerged screen	Y	NM	
MW-28	1185.00	1178.50	25.0	Groundwater Level (ft)	9.18	11.48	0.4
				Groundwater Elevation (Ft MSL)	1175.82	1173.52	
				Measured Well Depth (ft)	24.6	24.7	
				Submerged screen	N	N	

NA - Not Applicable
NM - Not Measured

Measured well depths were within 1.9 feet of the installed depths. Although some wells failed to produce samples during this reporting period, it is likely the dry weather conditions were the predominant factor rather than siltation affecting the functionality of the monitoring wells.

Table 5
Background and GWPS Summary
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Interwell Background/GWPS (MWPz-8A, MWPz-8B2, MW-22A, MW-27)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Inorganics										
Antimony (Sb)	mg/L	65	0	0.0005 (1/2 RL)	0.003 (1/2 RL)	0.00105	< 0.006	DQR	0.006	MCL
Arsenic (As)	mg/L	84	37	0.0005 (1/2 RL)	0.0436	0.00413	0.0436	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	84	84	0.029	0.744	0.12310	0.3701	PL (P)	2	MCL
Beryllium (Be)	mg/L	69	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.004	MCL
Cadmium (Cd)	mg/L	84	27	0.00005 (1/2 RL)	0.00563	0.00044	0.00398	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	66	0	0.0025 (1/2 RL)	0.01 (1/2 RL)	0.00398	< 0.02	DQR	0.1	MCL
Cobalt (Co)	mg/L	68	12	0.00025 (1/2 RL)	0.0124	0.00144	0.01	PL (NP)	0.0021	SWS
Copper (Cu)	mg/L	79	3	0.001 (1/2 RL)	0.0345	0.00534	0.0345	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	79	9	0.00025 (1/2 RL)	0.0134	0.00112	0.00802	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	68	6	0.0025 (1/2 RL)	0.249	0.01061	0.025	PL (NP)	0.1	SWS
Selenium (Se)	mg/L	74	7	0.0025 (1/2 RL)	0.0224	0.00307	0.00904	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	65	0	0.0005 (1/2 RL)	0.01 (1/2 RL)	0.00225	< 0.02	DQR	0.1	SWS
Thallium (Tl)	mg/L	65	0	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00059	< 0.002	DQR	0.002	MCL
Vanadium (V)	mg/L	65	0	0.0025 (1/2 RL)	0.025 (1/2 RL)	0.00665	< 0.05	DQR	0.035	SWS
Zinc (Zn)	mg/L	84	18	0.005 (1/2 RL)	0.0836	0.01701	0.0836	PL (NP)	2	SWS

Notes:

1) The "Detections" column includes both quantified detections and J flag (estimated) concentrations.

2) Background levels based on calculated prediction limits or reporting limit, as applicable.

3) * -The background standards for arsenic and cobalt are based on indicated, but not confirmed, statistical outliers. Confidence intervals were calculated compared to the statewide standard GWPS of 0.01 mg/L for arsenic and 0.0021 mg/L for cobalt.

4) Water quality results and effectiveness of the statistical data evaluation criteria: Statistical evaluations consist of prediction limits, the double quantification rule, and confidence intervals/confidence bands, as appropriate. Data from the background wells are not used for development of the confidence intervals or confidence bands.

5) Changes to the previous statistical method during reporting period: There were no changes to the statistical method during this reporting period.

6) Re-sampling strategy: Retesting is performed on a 1-of-2 scheme.

7) Justification for data exclusion: Confirmed outliers are excluded from statistical consideration and noted in the Summary of Groundwater Chemistry.

Acronyms/Abbreviations:

GWPS = Groundwater Protection Standard

RL = Reporting Limit PL = Prediction Limit

DQR = Double Quantification Rule NP = Non-Parametric

SSS = Site-Specific GWPS P = Parametric

SWS = Statewide Standard MCL = EPA Maximum Contaminant Level

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Well	Constituent	Units	Most Recent Result	Background Standard
MW-18	Barium	mg/L	0.423	0.3701
	Cobalt	mg/L	0.0367	0.01
	Toluene	µg/L	7.72	<1
MW-19	Nickel	mg/L	0.0311	0.025
	Acetone	µg/L	24.3	<10

Notes:
1) This table represents constituent/well pairs with indicated SSIs during the 2024 reporting period that did not have indicated SSIs during the 2023 reporting period.

Comments:
1) Problems with the current detection network: None.
2) Schedule to implement remedies: None.
3) Alternative constituent or sample frequency changes: None.
4) Significant changes to calculated prediction limits: None.
5) Resampling strategy: Retesting is performed on a 1-of-2 retesting scheme.

Table 7
Summary Table of Ongoing and Newly Identified SSIs
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Well	Constituent	Units	Most Recent Result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
MW-12	None								
MW-18	Barium	mg/L	0.423	0.3701	0.0596	2	5/22/2024	NA	1/11/20212
	Cobalt	mg/L	0.0367	0.01	0.00025	0.0021	5/22/2024	NA	11/10/2024
	Acetone	µg/L	45.7	<10	5	6300	5/22/2023	NA	11/10/2014
	Toluene	µg/L	7.72	<1	0.5	1000	5/22/2024	NA	11/10/2014
MW-19	Arsenic	mg/L	0.13	0.0436	0.007332	0.01	5/22/2023	NA	5/4/2015
	Barium	mg/L	1.19	0.3701	0.7681	2	5/22/2023	NA	5/4/2015
	Nickel	mg/L	0.0311	0.025	0.01809	0.1	11/6/2024	NA	5/5/2016
	1,1-Dichloroethane	µg/L	3.51	<1	3.297	140	5/14/2018	NA	5/5/2016
	Acetone	µg/L	24.3	<10	5.815	6300	5/22/2024	NA	5/4/2015
MW-20	None								
MW-22B*	Acetone	µg/L	<10	<10	5	6300	5/22/2023	8/10/2023	11/10/2014
	Benzene	µg/L	2.38	<0.5	0.9319	5	7/10/2009	NA	10/26/2011
	cis-1,2-Dichloroethene	µg/L	68.95	<1	39.44	70	7/10/2009	NA	10/26/2011
	trans-1,2-Dichloroethene	µg/L	<1	<1	0.9617	100	7/10/2009	NA	10/26/2011
	Vinyl Chloride	µg/L	7.825	<1	2.72	2	7/10/2009	NA	10/26/2011
MW-23	None								
MW-25	None								
MW-26	None								
MW-28	None								
MWPz-16A	1,1-Dichloroethane	µg/L	1.7	<1	1.405	140	3/17/2009	NA	10/26/2011
	cis-1,2-Dichloroethene	µg/L	2.49	<1	2.386	70	3/17/2009	NA	10/26/2011

Notes:

Shaded rows denote constituent/well pair with SSIs indicated in 2024 but not in 2023. Unshaded rows denote constituent/well pairs with SSIs indicated during both the 2023 and 2024 reporting periods.

* - 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.

NA- Not applicable. Resampling of constituents with indicated SSIs was not part of the statistical methodology performed based on the current monitoring program for the monitoring well as the monitoring well was in the assessment or corrective action monitoring programs.

Comments:

1) Problems with the current assessment network: None.

2) Proposed remedies: None.

3) Alternative constituent or sample frequency changes: None.

4) Plume delineation strategies: None.

5) Property owner notifications: Not applicable.

Table 8
Summary Table of Ongoing and Newly Identified SSLs
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Well	Constituent	Units	Most Recent Result	Upper Confidence Limit	GWPS	Initial Exceedance	Upper Confidence Limit Below GWPS		
							1st Year	2nd Year	3rd Year
MW-22B*	cis-1,2-Dichloroethene	µg/L	68.95	96.32	70	2009	NA	NA	NA
	Vinyl Chloride	µg/L	7.825	6.682	2	2009	NA	NA	NA

Notes:

1) The SSLs in monitoring well MW-22B were previously reported.

2) NA indicates Not Applicable. 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 any portion of the confidence band, as appropriate, being below the GWPS.

* - 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.

Table 9
Summary of Groundwater Chemistry
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

The Summary of Groundwater Chemistry is located in Appendix C.

Table 10
Historical SSI and SSL
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Key
SSI
SSL

Well	Constituent	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024
MW-18	Barium												NS		NS
	Cobalt												NS		NS
	Selenium												NS		NS
	Thallium												NS		NS
	Acetone												NS		NS
	Toluene												NS		NS
MW-19**	Arsenic												NS		
	Barium												NS		
	Cobalt												NS		
	Lead												NS		
	Nickel												NS		
	1,1-Dichloroethane												NS		NS
	Acetone												NS		NS
	Benzene												NS		NS
	Carbon Disulfide												NS		NS
	4,4-DDD*												NS	NS	NS
MW-20	Selenium												NS		NS
	Vanadium												NS		NS
MW-22B	Cobalt														
	Nickel														
	Thallium														
	Acetone*														
	Benzene														
	cis-1,2-Dichlorothene														
	trans-1,2-Dichloroethene														
	Vinyl Chloride														
MW-23	Barium												NS		NS
MW-28	Thallium														
MWPz-16A	1,1-Dichloroethane												NS		NS
	cis-1,2-Dichlorothene												NS		NS

Notes:

* - Not confirmed by the August 2023 retesting.

** - Inorganic samples collected in spring 2024 were not representative due to high TSS.

NS - Not sampled. Well is sampled annually.

1) A detection of an organic compound or sulfide is considered an SSI for the purposes of this table.

2) Indicated SSIs for wells in the assessment and corrective action monitoring programs are not confirmed as retesting is not performed for wells in these monitoring programs.

Table 11
Corrective Action Trend Analysis
2024 Annual Water Quality Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Well	Current SSL	Trend	Calculated S	Critical S	Total N	Projected Date to Completion
MW-22B	cis-1,2-Dichloroethene	Increasing	20	21	8	NA
	Vinyl Chloride	Increasing	12	21	8	NA

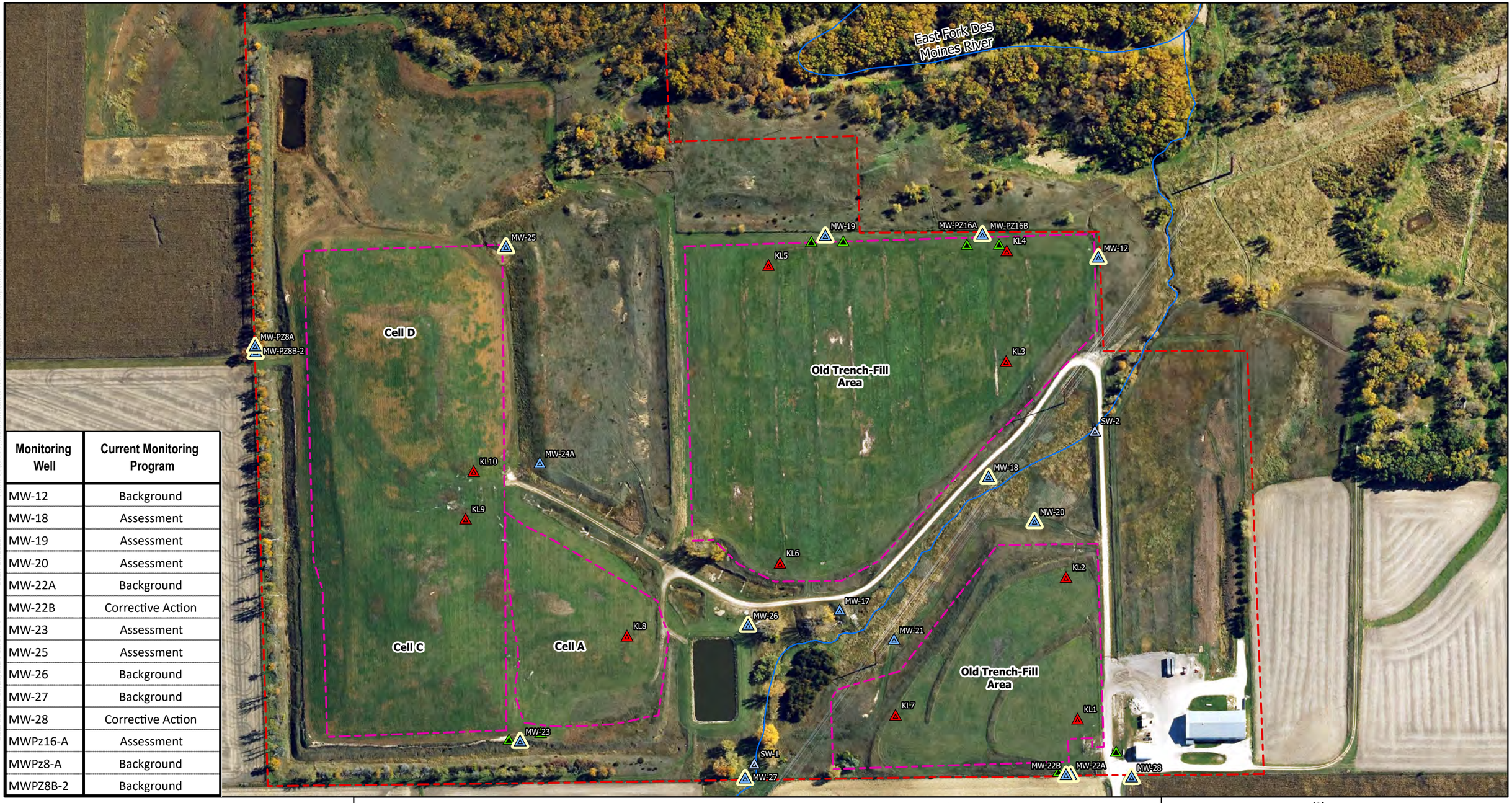
Notes:

N: Number of Samples

S: Mann-Kendall Statistic

NA: Not Applicable; a completion date cannot be calculated with an increasing trend.

Figures



Monitoring Well	Current Monitoring Program
MW-12	Background
MW-18	Assessment
MW-19	Assessment
MW-20	Assessment
MW-22A	Background
MW-22B	Corrective Action
MW-23	Assessment
MW-25	Assessment
MW-26	Background
MW-27	Background
MW-28	Corrective Action
MWPz16-A	Assessment
MWPz8-A	Background
MWPZ8B-2	Background

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Approved Monitoring Network

Legend

- HMSP Monitoring Well
- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Leachate Piezometer
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

N E S W

0 320 640 1,280 Feet

Figure 1

Groundwater Contours

Legend

- Approximate Groundwater Contour Based on Field Measurment Taken May 21, 2024
- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Leachate Piezometer
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

Figure 2

N E S W

0 320 640 1,280 Feet

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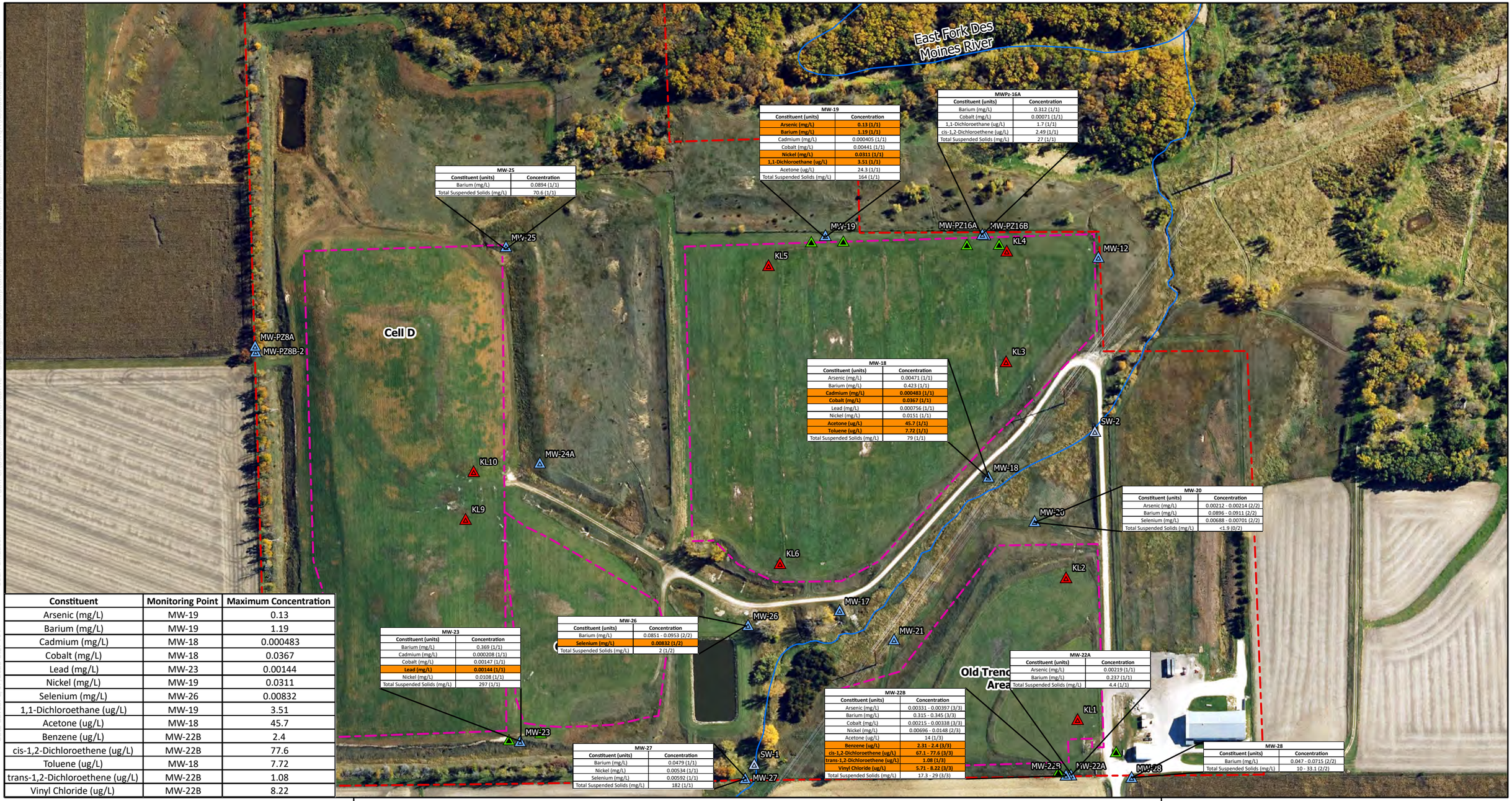

Constituent	Monitoring Point	Maximum Concentration
Arsenic (mg/L)	MW-19	0.13
Barium (mg/L)	MW-19	1.19
Cadmium (mg/L)	MW-18	0.000483
Cobalt (mg/L)	MW-18	0.0367
Lead (mg/L)	MW-23	0.00144
Nickel (mg/L)	MW-19	0.0311
Selenium (mg/L)	MW-26	0.00832
1,1-Dichloroethane (ug/L)	MW-19	3.51
Acetone (ug/L)	MW-18	45.7
Benzene (ug/L)	MW-22B	2.4
cis-1,2-Dichloroethene (ug/L)	MW-22B	77.6
Toluene (ug/L)	MW-18	7.72
trans-1,2-Dichloroethene (ug/L)	MW-22B	1.08
Vinyl Chloride (ug/L)	MW-22B	8.22

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Reporting Period Detection Summary

Legend

- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Leachate Piezometer
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

Figure 3

N E S W

0 320 640 1,280 Feet

East Fork Des Moines River

MW-25
MW-19
MW-PZ16A
MW-PZ16B
KL4
KL5
MW-12
MW-PZ8A
MW-PZ8B-2
Cell D
Old Trench-Fill Area
SW-2
MW-24A
KL10
KL9
MW-18
MW-20
KL6
MW-17
KL2
MW-26
MW-21
Cell C
Cell A
Old Trench-Fill Area
KL1
MW-23
SW-1
MW-27
MW-22B
MW-22A
MW-29

MW-18	cis-1,2-Dichloroethene (ug/L)
11/23/2021	<1
5/23/2022	<1
5/22/2023	<1
5/22/2024	<1

MW-20	cis-1,2-Dichloroethene (ug/L)
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1
5/22/2024	<1

MW-17	cis-1,2-Dichloroethene (ug/L)
5/13/2021	<1
11/23/2021	<1
5/23/2022	<1
5/22/2023	<1

MW-21	cis-1,2-Dichloroethene (ug/L)
11/23/2021	<1
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1

MW-26	cis-1,2-Dichloroethene (ug/L)
5/22/2023	<1
11/30/2023	<1
5/22/2024	<1
9/12/2024	<1

MW-22A	cis-1,2-Dichloroethene (ug/L)
11/19/2019	<1
5/27/2020	<1
5/23/2022	<1
5/22/2023	<1

MW-27	cis-1,2-Dichloroethene (ug/L)
11/23/2021	<1
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1

MW-22B	cis-1,2-Dichloroethene (ug/L)
5/22/2023	67.8
11/30/2023	125
5/22/2024	77.6
9/12/2024	67.1

MW-28	cis-1,2-Dichloroethene (ug/L)
5/22/2023	<1
11/30/2023	<1
5/22/2024	<1
9/12/2024	<1

Cis-1,2-Dichloroethene Concentration Map

Figure 4

Legend

- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Leachate Piezometer
- SSL Well
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

cis-1,2-Dichloroethene Prediction Limit = <1 ug/L

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

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N E S W

0 320 640 1,280 Feet

East Fork Des Moines River

MW-25
MW-19
MW-PZ16A
MW-PZ16B
KL4
KL5
MW-12
MW-PZ8A
MW-PZ8B-2
Cell D
Old Trench-Fill Area
SW-2
MW-24A
KL10
KL9
MW-18
MW-20
KL6
MW-17
KL2
MW-26
MW-21
Cell C
Cell A
Old Trench-Fill Area
KL1
MW-23
SW-1
MW-27
MW-22B
MW-22A
MW-28

MW-18	Vinyl chloride (ug/L)
11/23/2021	<1
5/23/2022	<1
5/22/2023	<1
5/22/2024	<1

MW-20	Vinyl chloride (ug/L)
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1
5/22/2024	<1

MW-17	Vinyl chloride (ug/L)
5/13/2021	<1
11/23/2021	<1
5/23/2022	<1
5/22/2023	<1

MW-21	Vinyl chloride (ug/L)
11/23/2021	<1
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1

MW-22A	Vinyl chloride (ug/L)
11/19/2019	<2
5/27/2020	<1
5/23/2022	<1
5/22/2023	<1

MW-26	Vinyl chloride (ug/L)
5/22/2023	<1
11/30/2023	<1
5/22/2024	<1
9/12/2024	<1

MW-27	Vinyl chloride (ug/L)
11/23/2021	<1
5/23/2022	<1
11/15/2022	<1
5/22/2023	<1

MW-22B	Vinyl chloride (ug/L)
5/22/2023	4.63
11/30/2023	<1
5/22/2024	5.71
9/12/2024	7.43

MW-28	Vinyl chloride (ug/L)
5/22/2023	<1
11/30/2023	<1
5/22/2024	<1
9/12/2024	<1

Vinyl Chloride Concentration Map

Figure 5

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Legend

- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Leachate Piezometer
- SSL Well
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

Vinyl Chloride Prediction Limit = <1 ug/L

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

N E S W

0 320 640 1,280 Feet

Appendix A
Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-12**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	43.1
Initial Static Water Level (feet):	35.69
Initial Groundwater Elevation (ft-amsl):	1124.01
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
9:06 AM	Purging start time.						
9:09 AM	12.0	1.3	741.5	6.95	90.7	190.1	
9:12 AM	11.8	0.4	742.8	6.92	24.3	279.5	
9:15 AM	12.4	0.2	744.1	6.94	-36.3	283.2	
9:18 AM	13.4	0.3	753.5	6.94	-48.6	232.1	
9:21 AM	13.8	0.4	751.0	6.93	-50.6	205.5	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.4
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	160.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Opaque light brown Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-18**	Date:	**5/24/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	20.1
Initial Static Water Level (feet):	11.24
Initial Groundwater Elevation (ft-amsl):	1125.18
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
8:27 AM	Purging start time.						
8:30 AM	9.8	1.1	912.2	6.60	-86.8	29.4	
8:33 AM	9.8	0.3	932.1	6.65	-103.8	31.7	
8:36 AM	10.1	0.1	940.2	6.67	-111.1	32.9	
8:39 AM	9.9	<0.1	942.9	6.68	-115.3	35.9	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.8
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	150.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Requires Peri cap	

Additional Comments:	Color: Cloudy gray Odor: Vegetative Bailer removed and replaced with Peri tubing.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-19**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	47.8
Initial Static Water Level (feet):	38.54
Initial Groundwater Elevation (ft-amsl):	1127.41
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:32 AM	Purging start time.						
11:35 AM	14.0	1.2	1555.4	6.49	-64.6	187.2	
11:38 AM	14.4	0.5	1571.1	6.55	-71.7	187.9	
11:41 AM	16.4	0.5	1580.1	6.58	-76.2	149.6	
11:44 AM	16.3	0.4	1609.1	6.60	-79.7	159.7	
11:47 AM	16.9	0.4	1582.8	6.64	-83.7	146.7	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.3
Was well pumped/bailed dry?	Yes
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	153.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs a new lock.	

Additional Comments:	Color: Light orange brown with orange particles (Fe?). Odor: None Bailer removed and 1/2-inch tubing installed for SS pump.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-20**	Date:	**5/22/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	18.9
Initial Static Water Level (feet):	4.10
Initial Groundwater Elevation (ft-amsl):	1125.09
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
6:05 PM	Purging start time.						
6:08 PM	11.2	5.9	605.2	7.04	0.0	29.4	
6:11 PM	10.7	5.5	577.2	7.03	34.8	21.1	
6:14 PM	10.6	5.4	575.5	6.97	58.1	20.8	
6:17 PM	10.2	5.3	572.7	6.96	73.2	19.4	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.8
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	150.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	No
If yes, explain:	

Additional Comments:	Color: Clear Odor: None Bailer removed and replaced with Peri tubing and cap. No well label, labeled with permanent marker.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-22A**	Date:	**5/22/2024**
Gradient:	Up	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	64.3
Initial Static Water Level (feet):	54.81
Initial Groundwater Elevation (ft-amsl):	1125.20
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:58 PM	Purging start time.						
4:01 PM	12.4	0.3	628.8	7.02	38.0	10.8	
4:04 PM	13.5	0.1	639.7	7.00	2.5	7.7	
4:07 PM	12.5	<0.1	658.3	7.00	-4.0	7.0	
4:10 PM	12.7	<0.1	653.5	7.00	-4.5	7.8	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	3.4
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	283.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Clear Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-22B**	Date:	**5/22/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	25.2
Initial Static Water Level (feet):	10.96
Initial Groundwater Elevation (ft-amsl):	1169.28
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:56 PM	Purging start time.						
4:59 PM	14.0	0.8	1058.2	6.41	-51.0	24.4	
5:02 PM	13.2	0.2	1059.5	6.44	-55.1	24.9	
5:05 PM	13.2	<0.1	1064.2	6.45	-57.4	35.1	
5:08 PM	13.2	<0.1	1070.9	6.46	-59.0	50.4	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.2
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	183.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Peri cap required for well.	

Additional Comments:	Color: Clear Odor: None Bailer removed and replaced with Peri tubing

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-23**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	31.4
Initial Static Water Level (feet):	17.58
Initial Groundwater Elevation (ft-amsl):	1155.45
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
5:01 PM	Purging start time.						
5:04 PM	13.6	0.3	1109.8	6.53	48.4	1313.8	
5:07 PM	13.7	0.2	1114.3	6.57	62.0	799.1	
5:10 PM	13.6	0.1	1113.0	6.59	69.9	589.4	
5:13 PM	12.2	<0.1	1106.7	6.60	74.7	425.1	
5:16 PM	12.7	<0.1	1112.4	6.60	74.4	171.4	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	5.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	333.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Cloudy/light brown Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-25**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	25.3
Initial Static Water Level (feet):	6.00
Initial Groundwater Elevation (ft-amsl):	1161.98
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
12:51 PM	Purging start time.						
12:54 PM	11.6	5.9	663.9	7.18	22.8	43.1	
12:57 PM	11.2	5.4	649.4	7.16	46.0	50.1	
1:00 PM	11.2	5.3	643.8	7.14	60.9	67.6	
1:03 PM	11.0	5.3	640.6	7.15	71.0	88.1	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.9
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	158.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Clear Odor: None Bailer removed and replaced with Peri tubing and cap.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-26**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.0
Initial Static Water Level (feet):	10.25
Initial Groundwater Elevation (ft-amsl):	1128.47
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
6:40 PM	Purging start time.						
6:43 PM	10.9	2.0	649.3	6.44	152.6	4.9	
6:46 PM	9.7	1.5	649.7	6.44	154.7	11.8	
6:49 PM	9.9	1.2	643.8	6.42	156.7	11.5	
6:52 PM	10.0	1.2	642.9	6.41	158.4	10.6	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	166.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well requires new peri cap.	

Additional Comments:	Color: Clear Odor: None

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-27**	Date:	**5/23/2024**
Gradient:	Up	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	26.3
Initial Static Water Level (feet):	6.90
Initial Groundwater Elevation (ft-amsl):	1126.79
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
5:57 PM	Purging start time.						
6:00 PM	9.3	1.8	615.3	7.02	121.6	274.3	
6:03 PM	8.9	1.5	609.1	7.01	122.5	117.2	
6:06 PM	9.3	1.4	608.7	7.00	122.0	52.6	
6:09 PM	9.2	1.4	611.6	6.99	122.6	36.1	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	4.4
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	366.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Light red/brown Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-28**	Date:	**5/22/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	24.6
Initial Static Water Level (feet):	9.18
Initial Groundwater Elevation (ft-amsl):	1175.82
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
2:04 PM	Purging start time.						
2:07 PM	12.8	6.4	749.6	6.82	167.2	21.8	
2:10 PM	12.1	6.2	744.3	6.85	167.9	27.3	
2:13 PM	12.5	6.1	743.7	6.86	168.5	38.2	
2:16 PM	12.8	6.1	745.7	6.87	168.8	45.4	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.8
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	150.00

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Clear Odor: None Bailer removed and replaced with Peri tubing and cap. No well label, labeled with permanent marker.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-PZ8A**	Date:	**5/23/2024**
Gradient:	Up	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	20.7
Initial Static Water Level (feet):	18.24
Initial Groundwater Elevation (ft-amsl):	1169.47
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
2:05 PM	Purging start time.						
2:08 PM	12.9	3.0	644.2	7.10	120.1	372.3	
2:11 PM	12.7	2.8	646.7	7.10	122.0	129.9	
2:14 PM	13.2	2.9	644.8	7.11	123.1	165.8	
2:17 PM	14.2	3.1	647.2	7.09	124.4	530.5	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.8
Was well pumped/bailed dry?	Yes
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	150.00

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Yellow/brown Odor: None Bailer removed and replaced with Peri tubing and cap. No samples taken well went dry.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-PZ8B2**	Date:	**5/23/2024**
Gradient:	Up	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	71.9
Initial Static Water Level (feet):	62.38
Initial Groundwater Elevation (ft-amsl):	1124.55
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:11 PM	Purging start time.						
3:14 PM	12.3	0.2	786.7	6.75	-35.8	2599.7	
3:17 PM	13.3	<0.1	798.1	6.76	-48.5	2354.2	
3:20 PM	14.3	<0.1	815.0	6.76	-56.7	2569.9	
3:23 PM	13.8	<0.1	811.5	6.75	-59.8	2805.0	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.9
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	241.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Gray/brown Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump. No well label, labeled with permanent marker.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-PZ16A**	Date:	**5/23/2024**
Gradient:	Down	Sampler:	Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	24.6
Initial Static Water Level (feet):	8.68
Initial Groundwater Elevation (ft-amsl):	1156.30
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:19 AM	Purging start time.						
10:22 AM	11.3	1.0	1050.7	6.62	165.5	150.8	
10:25 AM	12.9	0.8	1053.7	6.63	163.9	111.7	
10:28 AM	12.9	0.8	1082.1	6.64	163.1	59.8	
10:31 AM	14.0	0.8	1093.4	6.64	162.2	53.3	
10:34 AM	12.4	0.7	1095.9	6.63	162.3	35.7	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.8
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	186.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	No
If yes, explain:	

Additional Comments:	Color: Opaque light brown Odor: None Bailer removed and replaced with 1/2-inch tubing for SS pump. Well labelled as MW-PZ16

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-22B**	Date:	**9/12/2024**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	25.5
Initial Static Water Level (feet):	13.30
Initial Groundwater Elevation (ft-amsl):	1166.94
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:32 PM	Purging start time.						
3:35 PM	18.4	0.4	1161.4	6.33	-44.4	6.5	
3:38 PM	18.2	<0.1	1138.6	6.31	-59.0	11.4	
3:41 PM	18.5	<0.1	1098.9	6.29	-63.1	17.1	
3:44 PM	18.4	0.1	1117.1	6.28	-63.3	17.5	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.2
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	183.33

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color-Clear Odor-Sulfur/Metallic

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-26**	Date:	**9/12/2024**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.2
Initial Static Water Level (feet):	17.32
Initial Groundwater Elevation (ft-amsl):	1121.40
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:08 PM	Purging start time.						
3:11 PM	14.0	1.9	666.1	6.52	112.4	2.7	
3:14 PM	14.0	1.1	665.9	6.41	120.9	2.8	
3:17 PM	14.1	0.9	663.5	6.37	124.7	3.1	
3:20 PM	14.2	0.7	660.2	6.35	126.1	4.1	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	166.67

D. WELL MAINTENANCE

Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-28**	Date:	**9/12/2024**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	24.7
Initial Static Water Level (feet):	11.48
Initial Groundwater Elevation (ft-amsl):	1173.52
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:11 PM	Purging start time.						
4:14 PM	15.9	7.6	643.9	7.16	-57.9	7.1	
4:17 PM	15.5	7.8	638.4	7.14	-36.9	16.9	
4:20 PM	15.5	7.5	641.8	7.11	-21.4	26.9	
4:23 PM	15.7	7.5	642.1	7.09	-9.2	47.8	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	166.67

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color-Clear Odor-Metallic/Sulfur smell

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-12**	Date:	**11/6/2024**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	43.4
Initial Static Water Level (feet):	42.01
Initial Groundwater Elevation (ft-amsl):	1117.69
Equipment Used:	

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
	Purging start time.						
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	0.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	0
Average Purge Rate (mL/min):	0.00

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Well did not have sufficient water to sample and went dry while stabilizing.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-19**	Date:	**11/6/2024**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)

Measured Well Total Depth (feet):	47.9
Initial Static Water Level (feet):	47.85
Initial Groundwater Elevation (ft-amsl):	1118.10
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:41 AM	Purging start time.						
11:44 AM	11.5	2.4	1851.0	6.69	70.2	499.6	
11:47 AM	11.7	2.3	1847.0	6.68	59.4	451.0	
11:50 AM	12.1	1.6	1843.0	6.60	30.0	265.9	
11:53 PM	12.3	1.4	1837.0	6.59	22.1	243.3	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.4
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	200.00

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs a new lock.	

Additional Comments:	Color: Brown/Orange Odor: Paint

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-PZ8A**	Date:	**11/6/2024**
Gradient:	Up	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	20.8
Initial Static Water Level (feet):	19.80
Initial Groundwater Elevation (ft-amsl):	1167.91
Equipment Used:	

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
	Purging start time.						
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	0.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	0
Average Purge Rate (mL/min):	0.00

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Well did not have sufficient water to sample.

FORM FOR GROUNDWATER SAMPLING

Project:	**Kossuth County Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-PZ8B2**	Date:	**11/6/2024**
Gradient:	Up	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS	
Well/Piezometer Capped?	Yes
Litter/Standing Water?	No

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	71.9
Initial Static Water Level (feet):	68.40
Initial Groundwater Elevation (ft-amsl):	1118.53
Equipment Used:	Non-Dedicated Submersible Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
12:30 PM	Purging start time.						
12:33 PM	12.1	1.7	965.0	6.97	111.8	952.4	
12:36 PM	12.0	1.6	909.0	6.96	100.6	950.5	
12:39 PM	11.7	1.3	874.0	6.94	89.3	940.2	
12:42 PM	11.4	1.0	840.0	6.93	77.8	467.1	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	175.00

D. WELL MAINTENANCE		
Does the well require any future maintenance?	No	
If yes, explain:		

Additional Comments:	Color: Gray/Clear Odor: Sulfur

Appendix B-1
Laboratory Analytical Data Sheets

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/12/2024 3:49:31 PM

JOB DESCRIPTION

1st 2024 Semi-Annual Sampling Kossuth County LF

JOB NUMBER

310-282075-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

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

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

Authorization

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Authorized for release by
Mary Yang, Project Management Assistant I
Mary.Yang@ET.EurofinsUS.com
(319)277-2401

Table of Contents

Job ID: 310-282075-1 Eurofins Cedar Falls

Job Narrative
310-282075-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt
The samples were received on 5/24/2024 2:55 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were -0.7°C and -0.4°C.

GC/MS VOA
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.

Sample Summary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-282075-1	MW-27	Water	05/23/24 18:11	05/24/24 14:55
310-282075-2	MWPz-8A	Water	05/23/24 14:18	05/24/24 14:55
310-282075-3	MWPz-8B2	Water	05/23/24 15:27	05/24/24 14:55
310-282075-4	MW-22A	Water	05/22/24 16:19	05/24/24 14:55
310-282075-5	MW-22B	Water	05/22/24 17:19	05/24/24 14:55
310-282075-6	MW-23	Water	05/23/24 17:23	05/24/24 14:55
310-282075-7	MW-25	Water	05/23/24 13:16	05/24/24 14:55
310-282075-8	MW-19	Water	05/23/24 11:53	05/24/24 14:55
310-282075-9	MWPz-16A	Water	05/23/24 10:43	05/24/24 14:55
310-282075-10	MW-12	Water	05/23/24 09:26	05/24/24 14:55
310-282075-11	MW-18	Water	05/24/24 08:53	05/24/24 14:55
310-282075-12	MW-26	Water	05/23/24 19:03	05/24/24 14:55
310-282075-13	MW-20	Water	05/22/24 18:40	05/24/24 14:55
310-282075-14	MW-28	Water	05/22/24 14:29	05/24/24 14:55
310-282075-15	MW-D	Water	05/22/24 18:40	05/24/24 14:55
310-282075-16	Trip Blank 1	Water	05/22/24 00:00	05/24/24 14:55
310-282075-17	Trip Blank 2	Water	05/22/24 00:00	05/24/24 14:55

Detection Summary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-27 — Lab Sample ID: 310-282075-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0479		0.00200		mg/L	1		6020B	Total/NA
Nickel	0.00534		0.00500		mg/L	1		6020B	Total/NA
Selenium	0.00592		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	182		3.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MWPz-8A — Lab Sample ID: 310-282075-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	10500		150		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MWPz-8B2 — Lab Sample ID: 310-282075-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00890		0.00200		mg/L	1		6020B	Total/NA
Barium	0.243		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.00109		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.0112		0.000500		mg/L	1		6020B	Total/NA
Lead	0.00810		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.144		0.00500		mg/L	1		6020B	Total/NA
Zinc	0.0584		0.0200		mg/L	1		6020B	Total/NA
Total Suspended Solids	4450		150		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-22A — Lab Sample ID: 310-282075-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00219		0.00200		mg/L	1		6020B	Total/NA
Barium	0.237		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	4.4		1.9		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-22B — Lab Sample ID: 310-282075-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14.0		10.0		ug/L	1		8260D	Total/NA
Benzene	2.31		0.500		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	77.6	F1	1.00		ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.08		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	5.71		1.00		ug/L	1		8260D	Total/NA
Arsenic	0.00394		0.00200		mg/L	1		6020B	Total/NA
Barium	0.345		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.00338		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.0148		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	29.0		15.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 310-282075-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.369		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000208		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.00147		0.000500		mg/L	1		6020B	Total/NA
Lead	0.00144		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.0108		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	297		15.0		mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-25
Lab Sample ID: 310-282075-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0894		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	70.6		3.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-19
Lab Sample ID: 310-282075-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24.3		10.0		ug/L	1		8260D	Total/NA
1,1-Dichloroethane	3.51		1.00		ug/L	1		8260D	Total/NA
Arsenic	0.0968		0.00200		mg/L	1		6020B	Total/NA
Barium	1.36		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000951		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.00535		0.000500		mg/L	1		6020B	Total/NA
Lead	0.000530		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.0424		0.00500		mg/L	1		6020B	Total/NA
Zinc	0.0364		0.0200		mg/L	1		6020B	Total/NA
Total Suspended Solids	11700		750		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MWPz-16A
Lab Sample ID: 310-282075-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.49		1.00		ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.70		1.00		ug/L	1		8260D	Total/NA
Barium	0.312		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.000710		0.000500		mg/L	1		6020B	Total/NA
Total Suspended Solids	27.0		3.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-12
Lab Sample ID: 310-282075-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.225		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.00784		0.000500		mg/L	1		6020B	Total/NA
Lead	0.00104		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.273		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	666		15.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-18
Lab Sample ID: 310-282075-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45.7		10.0		ug/L	1		8260D	Total/NA
Toluene	7.72		1.00		ug/L	1		8260D	Total/NA
Arsenic	0.00471		0.00200		mg/L	1		6020B	Total/NA
Barium	0.423		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000483		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.0367		0.000500		mg/L	1		6020B	Total/NA
Lead	0.000756		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.0151		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	79.0		15.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-26
Lab Sample ID: 310-282075-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0851		0.00200		mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-26 (Continued) — Lab Sample ID: 310-282075-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.00832		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 310-282075-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00214		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0911		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.00701		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 310-282075-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0715		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	33.1		1.9		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D — Lab Sample ID: 310-282075-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00212		0.00200		mg/L	1		6020B	Total/NA
Barium	0.0896		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.00688		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: Trip Blank 1 — Lab Sample ID: 310-282075-16

No Detections.

Client Sample ID: Trip Blank 2 — Lab Sample ID: 310-282075-17

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-27
Lab Sample ID: 310-282075-1
Date Collected: 05/23/24 18:11
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:33	1
Barium	**0.0479**		0.00200		mg/L		05/29/24 09:30	06/11/24 18:33	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/11/24 18:33	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:33	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:33	1
Nickel	**0.00534**		0.00500		mg/L		05/29/24 09:30	06/11/24 18:33	1
Selenium	**0.00592**		0.00500		mg/L		05/29/24 09:30	06/11/24 18:33	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/11/24 18:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**182**		3.0		mg/L			05/29/24 09:32	1

Client Sample Results

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MWPz-8A
Lab Sample ID: 310-282075-2
Date Collected: 05/23/24 14:18
Matrix: Water
Date Received: 05/24/24 14:55

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	10500		150		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MWPz-8B2
Lab Sample ID: 310-282075-3
Date Collected: 05/23/24 15:27
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00890		0.00200		mg/L		05/29/24 09:30	06/04/24 16:31	1
Barium	0.243		0.00200		mg/L		05/29/24 09:30	06/04/24 16:31	1
Cadmium	0.00109		0.000200		mg/L		05/29/24 09:30	06/04/24 16:31	1
Cobalt	0.0112		0.000500		mg/L		05/29/24 09:30	06/05/24 20:17	1
Lead	0.00810		0.000500		mg/L		05/29/24 09:30	06/04/24 16:31	1
Nickel	0.144		0.00500		mg/L		05/29/24 09:30	06/04/24 16:31	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:31	1
Zinc	0.0584		0.0200		mg/L		05/29/24 09:30	06/04/24 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	4450		150		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-22A
Lab Sample ID: 310-282075-4
Date Collected: 05/22/24 16:19
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00219**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:33	1
Barium	**0.237**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:33	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 16:33	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/05/24 20:21	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 16:33	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:33	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:33	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.4**		1.9		mg/L			05/28/24 13:38	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-22B
Lab Sample ID: 310-282075-5

Date Collected: 05/22/24 17:19
Matrix: Water

Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14.0**		10.0		ug/L			05/29/24 09:43	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 09:43	1
Benzene	**2.31**		0.500		ug/L			05/29/24 09:43	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 09:43	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 09:43	1
Bromoform	<5.00		5.00		ug/L			05/29/24 09:43	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 09:43	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 09:43	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 09:43	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 09:43	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 09:43	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 09:43	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 09:43	1
Chloroform	<3.00		3.00		ug/L			05/29/24 09:43	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 09:43	1
cis-1,2-Dichloroethene	**77.6**	**F1**	1.00		ug/L			05/29/24 09:43	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 09:43	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 09:43	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 09:43	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 09:43	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 09:43	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 09:43	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 09:43	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 09:43	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 09:43	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 09:43	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 09:43	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 09:43	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 09:43	1
Styrene	<1.00		1.00		ug/L			05/29/24 09:43	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 09:43	1
Toluene	<1.00		1.00		ug/L			05/29/24 09:43	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 09:43	1
trans-1,2-Dichloroethene	**1.08**		1.00		ug/L			05/29/24 09:43	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 09:43	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 09:43	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 09:43	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 09:43	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 09:43	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 09:43	1
Vinyl chloride	**5.71**		1.00		ug/L			05/29/24 09:43	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 09:43	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-22B
Date Collected: 05/22/24 17:19
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/29/24 09:43*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*05/29/24 09:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/29/24 09:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:43	1
Arsenic	**0.00394**		0.00200		mg/L		05/29/24 09:30	06/11/24 18:43	1
Barium	**0.345**		0.00200		mg/L		05/29/24 09:30	06/11/24 18:43	1
Beryllium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:43	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/11/24 18:43	1
Chromium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Cobalt	**0.00338**		0.000500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Copper	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Nickel	**0.0148**		0.00500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Silver	<0.00100		0.00100		mg/L		05/29/24 09:30	06/12/24 15:08	1
Thallium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:43	1
Vanadium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:43	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/11/24 18:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**29.0**		15.0		mg/L			05/28/24 13:38	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-23
Lab Sample ID: 310-282075-6
Date Collected: 05/23/24 17:23
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 10:05	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 10:05	1
Benzene	<0.500		0.500		ug/L			05/29/24 10:05	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 10:05	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 10:05	1
Bromoform	<5.00		5.00		ug/L			05/29/24 10:05	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 10:05	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 10:05	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 10:05	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 10:05	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 10:05	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 10:05	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 10:05	1
Chloroform	<3.00		3.00		ug/L			05/29/24 10:05	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 10:05	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:05	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:05	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 10:05	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 10:05	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 10:05	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:05	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:05	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 10:05	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 10:05	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 10:05	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 10:05	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 10:05	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 10:05	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 10:05	1
Styrene	<1.00		1.00		ug/L			05/29/24 10:05	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 10:05	1
Toluene	<1.00		1.00		ug/L			05/29/24 10:05	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 10:05	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:05	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:05	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:05	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 10:05	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 10:05	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 10:05	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 10:05	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 10:05	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 10:05	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-23
Lab Sample ID: 310-282075-6

Date Collected: 05/23/24 17:23
Matrix: Water

Date Received: 05/24/24 14:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/29/24 10:05*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*05/29/24 10:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/29/24 10:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:46	1
Barium	**0.369**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:46	1
Cadmium	**0.000208**		0.000200		mg/L		05/29/24 09:30	06/04/24 16:46	1
Cobalt	**0.00147**		0.000500		mg/L		05/29/24 09:30	06/05/24 20:28	1
Lead	**0.00144**		0.000500		mg/L		05/29/24 09:30	06/04/24 16:46	1
Nickel	**0.0108**		0.00500		mg/L		05/29/24 09:30	06/04/24 16:46	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:46	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**297**		15.0		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-25
Lab Sample ID: 310-282075-7
Date Collected: 05/23/24 13:16
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 10:26	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 10:26	1
Benzene	<0.500		0.500		ug/L			05/29/24 10:26	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 10:26	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 10:26	1
Bromoform	<5.00		5.00		ug/L			05/29/24 10:26	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 10:26	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 10:26	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 10:26	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 10:26	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 10:26	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 10:26	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 10:26	1
Chloroform	<3.00		3.00		ug/L			05/29/24 10:26	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 10:26	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:26	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:26	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 10:26	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 10:26	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 10:26	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:26	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:26	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 10:26	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 10:26	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 10:26	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 10:26	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 10:26	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 10:26	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 10:26	1
Styrene	<1.00		1.00		ug/L			05/29/24 10:26	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 10:26	1
Toluene	<1.00		1.00		ug/L			05/29/24 10:26	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 10:26	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:26	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:26	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:26	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 10:26	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 10:26	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 10:26	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 10:26	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 10:26	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 10:26	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-25
Date Collected: 05/23/24 13:16
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/29/24 10:26*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 130*		*05/29/24 10:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/29/24 10:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:48	1
Barium	**0.0894**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:48	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 16:48	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/05/24 20:46	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 16:48	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:48	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:48	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**70.6**		3.0		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-19
Lab Sample ID: 310-282075-8
Date Collected: 05/23/24 11:53
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24.3**		10.0		ug/L			05/29/24 10:48	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 10:48	1
Benzene	<0.500		0.500		ug/L			05/29/24 10:48	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 10:48	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 10:48	1
Bromoform	<5.00		5.00		ug/L			05/29/24 10:48	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 10:48	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 10:48	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 10:48	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 10:48	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 10:48	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 10:48	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 10:48	1
Chloroform	<3.00		3.00		ug/L			05/29/24 10:48	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 10:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:48	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:48	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 10:48	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 10:48	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 10:48	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:48	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 10:48	1
1,1-Dichloroethane	**3.51**		1.00		ug/L			05/29/24 10:48	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 10:48	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 10:48	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 10:48	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 10:48	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 10:48	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 10:48	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 10:48	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 10:48	1
Styrene	<1.00		1.00		ug/L			05/29/24 10:48	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 10:48	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 10:48	1
Toluene	<1.00		1.00		ug/L			05/29/24 10:48	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 10:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 10:48	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 10:48	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:48	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 10:48	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 10:48	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 10:48	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 10:48	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 10:48	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 10:48	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 10:48	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-19
Lab Sample ID: 310-282075-8

Date Collected: 05/23/24 11:53
Matrix: Water

Date Received: 05/24/24 14:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/29/24 10:48*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*05/29/24 10:48*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/29/24 10:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0968**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:50	1
Barium	**1.36**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:50	1
Cadmium	**0.000951**		0.000200		mg/L		05/29/24 09:30	06/04/24 16:50	1
Cobalt	**0.00535**		0.000500		mg/L		05/29/24 09:30	06/05/24 20:50	1
Lead	**0.000530**		0.000500		mg/L		05/29/24 09:30	06/04/24 16:50	1
Nickel	**0.0424**		0.00500		mg/L		05/29/24 09:30	06/04/24 16:50	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:50	1
Zinc	**0.0364**		0.0200		mg/L		05/29/24 09:30	06/04/24 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11700**		750		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MWPz-16A
Lab Sample ID: 310-282075-9
Date Collected: 05/23/24 10:43
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 11:10	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 11:10	1
Benzene	<0.500		0.500		ug/L			05/29/24 11:10	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 11:10	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 11:10	1
Bromoform	<5.00		5.00		ug/L			05/29/24 11:10	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 11:10	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 11:10	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 11:10	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 11:10	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 11:10	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 11:10	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 11:10	1
Chloroform	<3.00		3.00		ug/L			05/29/24 11:10	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 11:10	1
cis-1,2-Dichloroethene	**2.49**		1.00		ug/L			05/29/24 11:10	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:10	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 11:10	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 11:10	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 11:10	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:10	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:10	1
1,1-Dichloroethane	**1.70**		1.00		ug/L			05/29/24 11:10	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 11:10	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 11:10	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 11:10	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 11:10	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 11:10	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 11:10	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 11:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 11:10	1
Styrene	<1.00		1.00		ug/L			05/29/24 11:10	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:10	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 11:10	1
Toluene	<1.00		1.00		ug/L			05/29/24 11:10	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 11:10	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 11:10	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:10	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:10	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:10	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 11:10	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 11:10	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 11:10	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 11:10	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 11:10	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 11:10	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MWPz-16A
Lab Sample ID: 310-282075-9

Date Collected: 05/23/24 10:43
Matrix: Water
Date Received: 05/24/24 14:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*05/29/24 11:10*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*05/29/24 11:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/29/24 11:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:52	1
Barium	**0.312**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:52	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 16:52	1
Cobalt	**0.000710**		0.000500		mg/L		05/29/24 09:30	06/05/24 20:53	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 16:52	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:52	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:52	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**27.0**		3.0		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-12
Lab Sample ID: 310-282075-10
Date Collected: 05/23/24 09:26
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 11:32	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 11:32	1
Benzene	<0.500		0.500		ug/L			05/29/24 11:32	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 11:32	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 11:32	1
Bromoform	<5.00		5.00		ug/L			05/29/24 11:32	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 11:32	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 11:32	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 11:32	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 11:32	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 11:32	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 11:32	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 11:32	1
Chloroform	<3.00		3.00		ug/L			05/29/24 11:32	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 11:32	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 11:32	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:32	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 11:32	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 11:32	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 11:32	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:32	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:32	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 11:32	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 11:32	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 11:32	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 11:32	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 11:32	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 11:32	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 11:32	1
Styrene	<1.00		1.00		ug/L			05/29/24 11:32	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 11:32	1
Toluene	<1.00		1.00		ug/L			05/29/24 11:32	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 11:32	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 11:32	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:32	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:32	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 11:32	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 11:32	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 11:32	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 11:32	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 11:32	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 11:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-12
Date Collected: 05/23/24 09:26
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-10
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/29/24 11:32*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*05/29/24 11:32*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/29/24 11:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:54	1
Barium	**0.225**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:54	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 16:54	1
Cobalt	**0.00784**		0.000500		mg/L		05/29/24 09:30	06/05/24 20:57	1
Lead	**0.00104**		0.000500		mg/L		05/29/24 09:30	06/04/24 16:54	1
Nickel	**0.273**		0.00500		mg/L		05/29/24 09:30	06/04/24 16:54	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:54	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**666**		15.0		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-18
Lab Sample ID: 310-282075-11
Date Collected: 05/24/24 08:53
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**45.7**		10.0		ug/L			05/29/24 11:53	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 11:53	1
Benzene	<0.500		0.500		ug/L			05/29/24 11:53	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 11:53	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 11:53	1
Bromoform	<5.00		5.00		ug/L			05/29/24 11:53	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 11:53	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 11:53	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 11:53	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 11:53	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 11:53	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 11:53	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 11:53	1
Chloroform	<3.00		3.00		ug/L			05/29/24 11:53	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 11:53	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 11:53	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:53	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 11:53	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 11:53	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 11:53	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:53	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 11:53	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 11:53	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 11:53	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 11:53	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 11:53	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 11:53	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 11:53	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 11:53	1
Styrene	<1.00		1.00		ug/L			05/29/24 11:53	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 11:53	1
Toluene	**7.72**		1.00		ug/L			05/29/24 11:53	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 11:53	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 11:53	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 11:53	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 11:53	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 11:53	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 11:53	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 11:53	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 11:53	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 11:53	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 11:53	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-18
Date Collected: 05/24/24 08:53
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-11
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*05/29/24 11:53*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*05/29/24 11:53*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*05/29/24 11:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00471**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:57	1
Barium	**0.423**		0.00200		mg/L		05/29/24 09:30	06/04/24 16:57	1
Cadmium	**0.000483**		0.000200		mg/L		05/29/24 09:30	06/04/24 16:57	1
Cobalt	**0.0367**		0.000500		mg/L		05/29/24 09:30	06/05/24 21:01	1
Lead	**0.000756**		0.000500		mg/L		05/29/24 09:30	06/04/24 16:57	1
Nickel	**0.0151**		0.00500		mg/L		05/29/24 09:30	06/04/24 16:57	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:57	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**79.0**		15.0		mg/L			05/29/24 13:05	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-26
Lab Sample ID: 310-282075-12
Date Collected: 05/23/24 19:03
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 12:15	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 12:15	1
Benzene	<0.500		0.500		ug/L			05/29/24 12:15	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 12:15	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 12:15	1
Bromoform	<5.00		5.00		ug/L			05/29/24 12:15	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 12:15	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 12:15	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 12:15	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 12:15	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 12:15	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 12:15	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 12:15	1
Chloroform	<3.00		3.00		ug/L			05/29/24 12:15	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 12:15	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:15	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:15	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 12:15	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 12:15	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 12:15	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:15	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:15	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 12:15	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 12:15	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 12:15	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 12:15	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 12:15	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 12:15	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 12:15	1
Styrene	<1.00		1.00		ug/L			05/29/24 12:15	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 12:15	1
Toluene	<1.00		1.00		ug/L			05/29/24 12:15	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 12:15	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:15	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:15	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:15	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 12:15	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 12:15	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 12:15	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 12:15	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 12:15	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 12:15	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-26
Lab Sample ID: 310-282075-12

Date Collected: 05/23/24 19:03
Matrix: Water

Date Received: 05/24/24 14:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/29/24 12:15*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*05/29/24 12:15*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/29/24 12:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:46	1
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:46	1
Barium	**0.0851**		0.00200		mg/L		05/29/24 09:30	06/11/24 18:46	1
Beryllium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:46	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/11/24 18:46	1
Chromium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Copper	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Selenium	**0.00832**		0.00500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Silver	<0.00100		0.00100		mg/L		05/29/24 09:30	06/12/24 15:10	1
Thallium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:46	1
Vanadium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:46	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/11/24 18:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.9		1.9		mg/L			05/29/24 09:32	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-20
Lab Sample ID: 310-282075-13
Date Collected: 05/22/24 18:40
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 12:37	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 12:37	1
Benzene	<0.500		0.500		ug/L			05/29/24 12:37	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 12:37	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 12:37	1
Bromoform	<5.00		5.00		ug/L			05/29/24 12:37	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 12:37	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 12:37	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 12:37	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 12:37	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 12:37	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 12:37	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 12:37	1
Chloroform	<3.00		3.00		ug/L			05/29/24 12:37	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 12:37	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:37	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:37	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 12:37	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 12:37	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 12:37	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:37	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:37	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 12:37	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 12:37	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 12:37	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 12:37	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 12:37	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 12:37	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 12:37	1
Styrene	<1.00		1.00		ug/L			05/29/24 12:37	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 12:37	1
Toluene	<1.00		1.00		ug/L			05/29/24 12:37	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 12:37	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:37	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:37	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:37	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 12:37	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 12:37	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 12:37	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 12:37	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 12:37	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 12:37	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-20
Date Collected: 05/22/24 18:40
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-13
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*05/29/24 12:37*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*05/29/24 12:37*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/29/24 12:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00214**		0.00200		mg/L		05/29/24 09:30	06/04/24 17:03	1
Barium	**0.0911**		0.00200		mg/L		05/29/24 09:30	06/04/24 17:03	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 17:03	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/05/24 21:12	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 17:03	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 17:03	1
Selenium	**0.00701**		0.00500		mg/L		05/29/24 09:30	06/04/24 17:03	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.9		1.9		mg/L			05/28/24 13:38	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-28
Lab Sample ID: 310-282075-14
Date Collected: 05/22/24 14:29
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 12:59	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 12:59	1
Benzene	<0.500		0.500		ug/L			05/29/24 12:59	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 12:59	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 12:59	1
Bromoform	<5.00		5.00		ug/L			05/29/24 12:59	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 12:59	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 12:59	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 12:59	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 12:59	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 12:59	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 12:59	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 12:59	1
Chloroform	<3.00		3.00		ug/L			05/29/24 12:59	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 12:59	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:59	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:59	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 12:59	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 12:59	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 12:59	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:59	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 12:59	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 12:59	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 12:59	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 12:59	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 12:59	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 12:59	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 12:59	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 12:59	1
Styrene	<1.00		1.00		ug/L			05/29/24 12:59	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 12:59	1
Toluene	<1.00		1.00		ug/L			05/29/24 12:59	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 12:59	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 12:59	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 12:59	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 12:59	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 12:59	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 12:59	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 12:59	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 12:59	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 12:59	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 12:59	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-28
Date Collected: 05/22/24 14:29
Date Received: 05/24/24 14:55

Lab Sample ID: 310-282075-14
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*05/29/24 12:59*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*05/29/24 12:59*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/29/24 12:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:53	1
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/11/24 18:53	1
Barium	**0.0715**		0.00200		mg/L		05/29/24 09:30	06/11/24 18:53	1
Beryllium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:53	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/11/24 18:53	1
Chromium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Copper	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Silver	<0.00100		0.00100		mg/L		05/29/24 09:30	06/12/24 15:14	1
Thallium	<0.00100		0.00100		mg/L		05/29/24 09:30	06/11/24 18:53	1
Vanadium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/11/24 18:53	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/11/24 18:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**33.1**		1.9		mg/L			05/28/24 13:38	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-D
Lab Sample ID: 310-282075-15
Date Collected: 05/22/24 18:40
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 13:21	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 13:21	1
Benzene	<0.500		0.500		ug/L			05/29/24 13:21	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 13:21	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 13:21	1
Bromoform	<5.00		5.00		ug/L			05/29/24 13:21	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 13:21	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 13:21	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 13:21	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 13:21	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 13:21	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 13:21	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 13:21	1
Chloroform	<3.00		3.00		ug/L			05/29/24 13:21	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 13:21	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 13:21	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 13:21	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 13:21	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 13:21	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 13:21	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 13:21	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 13:21	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 13:21	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 13:21	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 13:21	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 13:21	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 13:21	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 13:21	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 13:21	1
Styrene	<1.00		1.00		ug/L			05/29/24 13:21	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 13:21	1
Toluene	<1.00		1.00		ug/L			05/29/24 13:21	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 13:21	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 13:21	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 13:21	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 13:21	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 13:21	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 13:21	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 13:21	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 13:21	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 13:21	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 13:21	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-D
Lab Sample ID: 310-282075-15

Date Collected: 05/22/24 18:40
Matrix: Water

Date Received: 05/24/24 14:55

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*05/29/24 13:21*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*05/29/24 13:21*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/29/24 13:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00212**		0.00200		mg/L		05/29/24 09:30	06/04/24 17:16	1
Barium	**0.0896**		0.00200		mg/L		05/29/24 09:30	06/04/24 17:16	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 17:16	1
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/05/24 21:19	1
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 17:16	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 17:16	1
Selenium	**0.00688**		0.00500		mg/L		05/29/24 09:30	06/04/24 17:16	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.9		1.9		mg/L			05/28/24 13:38	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: Trip Blank 1
Lab Sample ID: 310-282075-16
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 08:16	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 08:16	1
Benzene	<0.500		0.500		ug/L			05/29/24 08:16	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 08:16	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 08:16	1
Bromoform	<5.00		5.00		ug/L			05/29/24 08:16	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 08:16	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 08:16	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 08:16	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 08:16	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 08:16	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 08:16	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 08:16	1
Chloroform	<3.00		3.00		ug/L			05/29/24 08:16	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 08:16	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 08:16	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 08:16	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 08:16	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 08:16	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 08:16	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 08:16	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 08:16	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 08:16	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 08:16	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 08:16	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 08:16	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 08:16	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 08:16	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 08:16	1
Styrene	<1.00		1.00		ug/L			05/29/24 08:16	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 08:16	1
Toluene	<1.00		1.00		ug/L			05/29/24 08:16	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 08:16	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 08:16	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 08:16	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 08:16	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 08:16	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 08:16	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 08:16	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 08:16	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 08:16	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 08:16	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: Trip Blank 1
Lab Sample ID: 310-282075-16
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		05/29/24 08:16	1
Dibromofluoromethane (Surr)	101		73 - 130		05/29/24 08:16	1
Toluene-d8 (Surr)	98		80 - 120		05/29/24 08:16	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: Trip Blank 2
Lab Sample ID: 310-282075-17
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 08:37	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 08:37	1
Benzene	<0.500		0.500		ug/L			05/29/24 08:37	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 08:37	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 08:37	1
Bromoform	<5.00		5.00		ug/L			05/29/24 08:37	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 08:37	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 08:37	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 08:37	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 08:37	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 08:37	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 08:37	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 08:37	1
Chloroform	<3.00		3.00		ug/L			05/29/24 08:37	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 08:37	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 08:37	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 08:37	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 08:37	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 08:37	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 08:37	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 08:37	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 08:37	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 08:37	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 08:37	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 08:37	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 08:37	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 08:37	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 08:37	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 08:37	1
Styrene	<1.00		1.00		ug/L			05/29/24 08:37	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 08:37	1
Toluene	<1.00		1.00		ug/L			05/29/24 08:37	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 08:37	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 08:37	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 08:37	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 08:37	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 08:37	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 08:37	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 08:37	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 08:37	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 08:37	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 08:37	1

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: Trip Blank 2
Lab Sample ID: 310-282075-17
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		05/29/24 08:37	1
Dibromofluoromethane (Surr)	102		73 - 130		05/29/24 08:37	1
Toluene-d8 (Surr)	98		80 - 120		05/29/24 08:37	1

Definitions/Glossary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	DBFM	TOL						
Lab Sample ID	Client Sample ID	(80-120)	(73-130)	(80-120)						
310-282075-5	MW-22B	105	101	100						
310-282075-5 MS	MW-22B	101	96	103						
310-282075-5 MSD	MW-22B	100	96	103						
310-282075-6	MW-23	104	103	97						
310-282075-7	MW-25	103	102	100						
310-282075-8	MW-19	101	104	99						
310-282075-9	MWPz-16A	108	105	98						
310-282075-10	MW-12	105	104	98						
310-282075-11	MW-18	104	103	104						
310-282075-12	MW-26	105	106	98						
310-282075-13	MW-20	107	103	97						
310-282075-14	MW-28	106	104	97						
310-282075-15	MW-D	108	103	97						
310-282075-16	Trip Blank 1	108	101	98						
310-282075-17	Trip Blank 2	106	102	98						
LCS 310-422834/6	Lab Control Sample	103	96	103						
LCS 310-422834/7	Lab Control Sample	108	101	99						
MB 310-422834/5	Method Blank	106	100	101						

Surrogate Legend

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

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

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

Lab Sample ID: MB 310-422834/5
Matrix: Water
Analysis Batch: 422834

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			05/29/24 07:10	1
Acrylonitrile	<5.00		5.00		ug/L			05/29/24 07:10	1
Benzene	<0.500		0.500		ug/L			05/29/24 07:10	1
Bromochloromethane	<5.00		5.00		ug/L			05/29/24 07:10	1
Bromodichloromethane	<1.00		1.00		ug/L			05/29/24 07:10	1
Bromoform	<5.00		5.00		ug/L			05/29/24 07:10	1
Bromomethane	<4.00		4.00		ug/L			05/29/24 07:10	1
2-Butanone (MEK)	<10.0		10.0		ug/L			05/29/24 07:10	1
Carbon disulfide	<1.00		1.00		ug/L			05/29/24 07:10	1
Carbon tetrachloride	<2.00		2.00		ug/L			05/29/24 07:10	1
Chlorobenzene	<1.00		1.00		ug/L			05/29/24 07:10	1
Chlorodibromomethane	<5.00		5.00		ug/L			05/29/24 07:10	1
Chloroethane	<4.00		4.00		ug/L			05/29/24 07:10	1
Chloroform	<3.00		3.00		ug/L			05/29/24 07:10	1
Chloromethane	<3.00		3.00		ug/L			05/29/24 07:10	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 07:10	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 07:10	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			05/29/24 07:10	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			05/29/24 07:10	1
Dibromomethane	<1.00		1.00		ug/L			05/29/24 07:10	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 07:10	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			05/29/24 07:10	1
1,1-Dichloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
1,2-Dichloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
1,1-Dichloroethene	<2.00		2.00		ug/L			05/29/24 07:10	1
1,2-Dichloropropane	<1.00		1.00		ug/L			05/29/24 07:10	1
Ethylbenzene	<1.00		1.00		ug/L			05/29/24 07:10	1
2-Hexanone	<10.0		10.0		ug/L			05/29/24 07:10	1
Iodomethane	<10.0		10.0		ug/L			05/29/24 07:10	1
Methylene Chloride	<5.00		5.00		ug/L			05/29/24 07:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			05/29/24 07:10	1
Styrene	<1.00		1.00		ug/L			05/29/24 07:10	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
Tetrachloroethene	<1.00		1.00		ug/L			05/29/24 07:10	1
Toluene	<1.00		1.00		ug/L			05/29/24 07:10	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			05/29/24 07:10	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			05/29/24 07:10	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			05/29/24 07:10	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			05/29/24 07:10	1
Trichloroethene	<1.00		1.00		ug/L			05/29/24 07:10	1
Trichlorofluoromethane	<4.00		4.00		ug/L			05/29/24 07:10	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			05/29/24 07:10	1
Vinyl acetate	<10.0		10.0		ug/L			05/29/24 07:10	1
Vinyl chloride	<1.00		1.00		ug/L			05/29/24 07:10	1
Xylenes, Total	<3.00		3.00		ug/L			05/29/24 07:10	1

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

Lab Sample ID: MB 310-422834/5
Matrix: Water
Analysis Batch: 422834

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*05/29/24 07:10*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 130*		*05/29/24 07:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/29/24 07:10*	*1*

Lab Sample ID: LCS 310-422834/6
Matrix: Water
Analysis Batch: 422834

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	37.78		ug/L		94	50 - 150
Acrylonitrile	200	203.8		ug/L		102	50 - 150
Benzene	20.0	20.25		ug/L		101	72 - 124
Bromochloromethane	20.0	19.19		ug/L		96	73 - 130
Bromodichloromethane	20.0	18.86		ug/L		94	74 - 122
Bromoform	20.0	17.96		ug/L		90	61 - 122
2-Butanone (MEK)	40.0	40.46		ug/L		101	50 - 150
Carbon disulfide	20.0	20.16		ug/L		101	59 - 135
Carbon tetrachloride	20.0	19.79		ug/L		99	67 - 132
Chlorobenzene	20.0	20.07		ug/L		100	76 - 120
Chlorodibromomethane	20.0	18.80		ug/L		94	71 - 121
Chloroform	20.0	19.24		ug/L		96	72 - 125
cis-1,2-Dichloroethene	20.0	19.52		ug/L		98	74 - 123
cis-1,3-Dichloropropene	20.0	19.69		ug/L		98	71 - 125
1,2-Dibromo-3-Chloropropane	20.0	19.34		ug/L		97	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.06		ug/L		95	75 - 125
Dibromomethane	20.0	19.05		ug/L		95	74 - 125
1,2-Dichlorobenzene	20.0	20.14		ug/L		101	74 - 120
1,4-Dichlorobenzene	20.0	19.13		ug/L		96	72 - 120
1,1-Dichloroethane	20.0	20.19		ug/L		101	70 - 127
1,2-Dichloroethane	20.0	18.46		ug/L		92	71 - 125
1,1-Dichloroethene	20.0	19.88		ug/L		99	63 - 132
1,2-Dichloropropane	20.0	19.97		ug/L		100	73 - 124
Ethylbenzene	20.0	20.91		ug/L		105	74 - 122
2-Hexanone	40.0	38.21		ug/L		96	60 - 140
Iodomethane	20.0	14.22		ug/L		71	10 - 150
Methylene Chloride	20.0	21.35		ug/L		107	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	40.10		ug/L		100	60 - 139
Styrene	20.0	20.28		ug/L		101	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.66		ug/L		98	71 - 120
1,1,2,2-Tetrachloroethane	20.0	19.44		ug/L		97	68 - 124
Tetrachloroethene	20.0	18.94		ug/L		95	71 - 130
Toluene	20.0	19.69		ug/L		98	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.03		ug/L		90	50 - 150
trans-1,2-Dichloroethene	20.0	19.68		ug/L		98	70 - 126
trans-1,3-Dichloropropene	20.0	18.37		ug/L		92	69 - 123
1,1,1-Trichloroethane	20.0	19.27		ug/L		96	73 - 129
1,1,2-Trichloroethane	20.0	20.05		ug/L		100	73 - 123

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

Lab Sample ID: LCS 310-422834/6
Matrix: Water
Analysis Batch: 422834

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	20.20		ug/L		101	72 - 126
1,2,3-Trichloropropane	20.0	20.27		ug/L		101	65 - 127
Vinyl acetate	40.0	35.48		ug/L		89	50 - 150
Xylenes, Total	40.0	41.13		ug/L		103	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*73 - 130*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: LCS 310-422834/7
Matrix: Water
Analysis Batch: 422834

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	17.76		ug/L		89	23 - 150
Chloroethane	20.0	20.36		ug/L		102	54 - 136
Chloromethane	20.0	21.92		ug/L		110	38 - 150
Trichlorofluoromethane	20.0	19.06		ug/L		95	54 - 149
Vinyl chloride	20.0	21.63		ug/L		108	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-282075-5 MS
Matrix: Water
Analysis Batch: 422834

Client Sample ID: MW-22B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	14.0		50.0	54.41		ug/L		81	31 - 150
Acrylonitrile	<5.00		250	235.6		ug/L		94	40 - 150
Benzene	2.31		25.0	24.59		ug/L		89	46 - 130
Bromochloromethane	<5.00		25.0	21.70		ug/L		87	57 - 130
Bromodichloromethane	<1.00		25.0	21.63		ug/L		87	57 - 130
Bromoform	<5.00		25.0	20.73		ug/L		83	44 - 130
2-Butanone (MEK)	<10.0		50.0	49.65		ug/L		99	38 - 150
Carbon disulfide	<1.00		25.0	23.39		ug/L		94	38 - 135
Carbon tetrachloride	<2.00		25.0	20.51		ug/L		82	45 - 132
Chlorobenzene	<1.00		25.0	22.42		ug/L		90	59 - 130
Chlorodibromomethane	<5.00		25.0	20.90		ug/L		84	54 - 130
Chloroform	<3.00		25.0	21.50		ug/L		86	51 - 130
cis-1,2-Dichloroethene	77.6	F1	25.0	88.20	F1	ug/L		43	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	21.73		ug/L		87	53 - 130
1,2-Dibromo-3-Chloropropane	<5.00		25.0	24.92		ug/L		100	38 - 150
1,2-Dibromoethane (EDB)	<1.00		25.0	21.99		ug/L		88	60 - 130

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

Lab Sample ID: 310-282075-5 MS
Matrix: Water
Analysis Batch: 422834

Client Sample ID: MW-22B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dibromomethane	<1.00		25.0	22.28		ug/L		89	59 - 130
1,2-Dichlorobenzene	<1.00		25.0	22.75		ug/L		91	59 - 130
1,4-Dichlorobenzene	<1.00		25.0	21.82		ug/L		87	57 - 130
1,1-Dichloroethane	<1.00		25.0	22.69		ug/L		91	49 - 130
1,2-Dichloroethane	<1.00		25.0	21.46		ug/L		86	51 - 130
1,1-Dichloroethene	<2.00		25.0	21.11		ug/L		84	37 - 132
1,2-Dichloropropane	<1.00		25.0	23.20		ug/L		93	57 - 130
Ethylbenzene	<1.00		25.0	22.89		ug/L		92	45 - 130
2-Hexanone	<10.0		50.0	44.89		ug/L		90	46 - 140
Iodomethane	<10.0		25.0	17.10		ug/L		68	10 - 150
Methylene Chloride	<5.00		25.0	24.49		ug/L		98	37 - 150
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	47.03		ug/L		94	47 - 139
Styrene	<1.00		25.0	22.40		ug/L		90	47 - 130
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.49		ug/L		86	55 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	22.43		ug/L		90	54 - 130
Tetrachloroethene	<1.00		25.0	21.00		ug/L		84	47 - 130
Toluene	<1.00		25.0	21.84		ug/L		87	51 - 130
trans-1,4-Dichloro-2-butene	<10.0		25.0	20.25		ug/L		81	26 - 150
trans-1,2-Dichloroethene	1.08		25.0	22.53		ug/L		86	48 - 130
trans-1,3-Dichloropropene	<5.00		25.0	20.51		ug/L		82	50 - 130
1,1,1-Trichloroethane	<1.00		25.0	20.54		ug/L		82	52 - 130
1,1,2-Trichloroethane	<1.00		25.0	23.06		ug/L		92	58 - 130
Trichloroethene	<1.00		25.0	21.83		ug/L		87	51 - 130
1,2,3-Trichloropropane	<1.00		25.0	21.51		ug/L		86	49 - 130
Vinyl acetate	<10.0		50.0	40.08		ug/L		80	29 - 150
Xylenes, Total	<3.00		50.0	44.71		ug/L		89	43 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*73 - 130*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-282075-5 MSD
Matrix: Water
Analysis Batch: 422834

Client Sample ID: MW-22B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	14.0		50.0	51.54		ug/L		75	31 - 150	5	29
Acrylonitrile	<5.00		250	225.2		ug/L		90	40 - 150	4	20
Benzene	2.31		25.0	22.89		ug/L		82	46 - 130	7	20
Bromochloromethane	<5.00		25.0	20.28		ug/L		81	57 - 130	7	20
Bromodichloromethane	<1.00		25.0	20.21		ug/L		81	57 - 130	7	20
Bromoform	<5.00		25.0	19.28		ug/L		77	44 - 130	7	20
2-Butanone (MEK)	<10.0		50.0	46.94		ug/L		94	38 - 150	6	20
Carbon disulfide	<1.00		25.0	20.90		ug/L		84	38 - 135	11	30
Carbon tetrachloride	<2.00		25.0	19.24		ug/L		77	45 - 132	6	20
Chlorobenzene	<1.00		25.0	20.66		ug/L		83	59 - 130	8	20

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

Lab Sample ID: 310-282075-5 MSD
Matrix: Water
Analysis Batch: 422834

Client Sample ID: MW-22B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorodibromomethane	<5.00		25.0	20.01		ug/L		80	54 - 130	4	20
Chloroform	<3.00		25.0	20.11		ug/L		80	51 - 130	7	20
cis-1,2-Dichloroethene	77.6	F1	25.0	82.07	F1	ug/L		18	45 - 130	7	20
cis-1,3-Dichloropropene	<5.00		25.0	20.75		ug/L		83	53 - 130	5	20
1,2-Dibromo-3-Chloropropane	<5.00		25.0	21.63		ug/L		87	38 - 150	14	20
1,2-Dibromoethane (EDB)	<1.00		25.0	20.56		ug/L		82	60 - 130	7	20
Dibromomethane	<1.00		25.0	21.00		ug/L		84	59 - 130	6	20
1,2-Dichlorobenzene	<1.00		25.0	21.55		ug/L		86	59 - 130	5	20
1,4-Dichlorobenzene	<1.00		25.0	20.82		ug/L		83	57 - 130	5	20
1,1-Dichloroethane	<1.00		25.0	20.99		ug/L		84	49 - 130	8	20
1,2-Dichloroethane	<1.00		25.0	20.00		ug/L		80	51 - 130	7	20
1,1-Dichloroethene	<2.00		25.0	19.61		ug/L		78	37 - 132	7	26
1,2-Dichloropropane	<1.00		25.0	21.60		ug/L		86	57 - 130	7	20
Ethylbenzene	<1.00		25.0	21.18		ug/L		85	45 - 130	8	20
2-Hexanone	<10.0		50.0	44.17		ug/L		88	46 - 140	2	20
Iodomethane	<10.0		25.0	20.73		ug/L		83	10 - 150	19	35
Methylene Chloride	<5.00		25.0	23.13		ug/L		93	37 - 150	6	24
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	45.26		ug/L		91	47 - 139	4	20
Styrene	<1.00		25.0	20.73		ug/L		83	47 - 130	8	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	20.35		ug/L		81	55 - 130	5	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	21.14		ug/L		85	54 - 130	6	20
Tetrachloroethene	<1.00		25.0	19.70		ug/L		79	47 - 130	6	20
Toluene	<1.00		25.0	20.02		ug/L		80	51 - 130	9	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	18.53		ug/L		74	26 - 150	9	23
trans-1,2-Dichloroethene	1.08		25.0	20.76		ug/L		79	48 - 130	8	22
trans-1,3-Dichloropropene	<5.00		25.0	19.96		ug/L		80	50 - 130	3	20
1,1,1-Trichloroethane	<1.00		25.0	18.84		ug/L		75	52 - 130	9	20
1,1,2-Trichloroethane	<1.00		25.0	21.40		ug/L		86	58 - 130	7	20
Trichloroethene	<1.00		25.0	20.76		ug/L		83	51 - 130	5	20
1,2,3-Trichloropropane	<1.00		25.0	21.28		ug/L		85	49 - 130	1	26
Vinyl acetate	<10.0		50.0	36.03		ug/L		72	29 - 150	11	23
Xylenes, Total	<3.00		50.0	42.15		ug/L		84	43 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*73 - 130*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-422896/1-A
Matrix: Water
Analysis Batch: 423569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422896

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:16	1
Barium	<0.00200		0.00200		mg/L		05/29/24 09:30	06/04/24 16:16	1
Cadmium	<0.000200		0.000200		mg/L		05/29/24 09:30	06/04/24 16:16	1

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

Lab Sample ID: MB 310-422896/1-A
Matrix: Water
Analysis Batch: 423569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422896

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.000500		0.000500		mg/L		05/29/24 09:30	06/04/24 16:16	1
Nickel	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:16	1
Selenium	<0.00500		0.00500		mg/L		05/29/24 09:30	06/04/24 16:16	1
Zinc	<0.0200		0.0200		mg/L		05/29/24 09:30	06/04/24 16:16	1

Lab Sample ID: MB 310-422896/1-A
Matrix: Water
Analysis Batch: 423728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422896

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000500		0.000500		mg/L		05/29/24 09:30	06/05/24 19:59	1

Lab Sample ID: MB 310-422896/1-A
Matrix: Water
Analysis Batch: 424361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422896

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00100		0.00100		mg/L		05/29/24 09:30	06/12/24 14:58	1

Lab Sample ID: LCS 310-422896/2-A
Matrix: Water
Analysis Batch: 423569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2053		mg/L		103	80 - 120
Barium	0.100	0.1113		mg/L		111	80 - 120
Cadmium	0.100	0.1012		mg/L		101	80 - 120
Lead	0.200	0.1985		mg/L		99	80 - 120
Nickel	0.200	0.1968		mg/L		98	80 - 120
Selenium	0.400	0.4044		mg/L		101	80 - 120
Zinc	0.200	0.1940		mg/L		97	80 - 120

Lab Sample ID: LCS 310-422896/2-A
Matrix: Water
Analysis Batch: 423728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	0.100	0.1024		mg/L		102	80 - 120

Lab Sample ID: LCS 310-422896/2-A
Matrix: Water
Analysis Batch: 424361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.1091		mg/L		109	80 - 120

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

Lab Sample ID: 310-282075-1 MS
Matrix: Water
Analysis Batch: 424262

Client Sample ID: MW-27
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.2194		mg/L		110	75 - 125
Arsenic	<0.00200		0.200	0.2180		mg/L		108	75 - 125
Barium	0.0479		0.100	0.1520		mg/L		104	75 - 125
Beryllium	<0.00100		0.100	0.1042		mg/L		104	75 - 125
Cadmium	<0.000200		0.100	0.1016		mg/L		101	75 - 125
Chromium	<0.00500		0.100	0.1007		mg/L		101	75 - 125
Cobalt	<0.000500		0.100	0.1015		mg/L		101	75 - 125
Copper	<0.00500		0.200	0.1977		mg/L		99	75 - 125
Lead	<0.000500		0.200	0.2048		mg/L		102	75 - 125
Nickel	0.00534		0.200	0.2133		mg/L		104	75 - 125
Selenium	0.00592		0.400	0.4221		mg/L		104	75 - 125
Thallium	<0.00100	F1	0.100	0.08096		mg/L		81	75 - 125
Vanadium	<0.00500		0.100	0.1022		mg/L		100	75 - 125
Zinc	<0.0200		0.200	0.1997		mg/L		100	75 - 125

Lab Sample ID: 310-282075-1 MS
Matrix: Water
Analysis Batch: 424361

Client Sample ID: MW-27
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	<0.00100		0.100	0.1082		mg/L		108	75 - 125

Lab Sample ID: 310-282075-1 MSD
Matrix: Water
Analysis Batch: 424262

Client Sample ID: MW-27
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200		0.200	0.2092		mg/L		105	75 - 125	5	20
Arsenic	<0.00200		0.200	0.2095		mg/L		104	75 - 125	4	20
Barium	0.0479		0.100	0.1462		mg/L		98	75 - 125	4	20
Beryllium	<0.00100		0.100	0.09735		mg/L		97	75 - 125	7	20
Cadmium	<0.000200		0.100	0.09554		mg/L		95	75 - 125	6	20
Chromium	<0.00500		0.100	0.09344		mg/L		93	75 - 125	7	20
Cobalt	<0.000500		0.100	0.09529		mg/L		95	75 - 125	6	20
Copper	<0.00500		0.200	0.1890		mg/L		94	75 - 125	5	20
Lead	<0.000500		0.200	0.1924		mg/L		96	75 - 125	6	20
Nickel	0.00534		0.200	0.2029		mg/L		99	75 - 125	5	20
Selenium	0.00592		0.400	0.4117		mg/L		101	75 - 125	3	20
Thallium	<0.00100	F1	0.100	0.07441	F1	mg/L		74	75 - 125	8	20
Vanadium	<0.00500		0.100	0.09646		mg/L		94	75 - 125	6	20
Zinc	<0.0200		0.200	0.1913		mg/L		96	75 - 125	4	20

Lab Sample ID: 310-282075-1 MSD
Matrix: Water
Analysis Batch: 424361

Client Sample ID: MW-27
Prep Type: Total/NA
Prep Batch: 422896

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	<0.00100		0.100	0.1076		mg/L		108	75 - 125	1	20

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

Lab Sample ID: 310-282075-12 DU — **Client Sample ID: MW-26**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 423569 — **Prep Batch: 422896**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	<0.00200		<0.00200		mg/L		NC	20
Barium	0.0925		0.09398		mg/L		2	20
Cadmium	<0.000200		<0.000200		mg/L		NC	20
Lead	<0.000500		<0.000500		mg/L		NC	20
Nickel	<0.00500		<0.00500		mg/L		NC	20
Selenium	0.00866		0.008784		mg/L		1	20
Zinc	<0.0200		<0.0200		mg/L		NC	20

Lab Sample ID: 310-282075-12 DU — **Client Sample ID: MW-26**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 423728 — **Prep Batch: 422896**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cobalt	<0.000500		<0.000500		mg/L		NC	20

Lab Sample ID: 310-282075-12 DU — **Client Sample ID: MW-26**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 424361 — **Prep Batch: 422896**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Silver	<0.00100		<0.00100		mg/L		NC	20

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

Lab Sample ID: MB 310-422877/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 422877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.0		5.0		mg/L			05/28/24 13:38	1

Lab Sample ID: LCS 310-422877/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 422877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	102.0		mg/L		102	81 - 116

Lab Sample ID: MB 310-422958/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 422958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.0		5.0		mg/L			05/29/24 09:32	1

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

Lab Sample ID: LCS 310-422958/2
Matrix: Water
Analysis Batch: 422958

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	81 - 116

Lab Sample ID: MB 310-423000/1
Matrix: Water
Analysis Batch: 423000

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	<5.0		5.0		mg/L			05/29/24 13:05	1

Lab Sample ID: LCS 310-423000/2
Matrix: Water
Analysis Batch: 423000

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	105.0		mg/L		105	81 - 116

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County
LF

GC/MS VOA

Analysis Batch: 422834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-5	MW-22B	Total/NA	Water	8260D	
310-282075-6	MW-23	Total/NA	Water	8260D	
310-282075-7	MW-25	Total/NA	Water	8260D	
310-282075-8	MW-19	Total/NA	Water	8260D	
310-282075-9	MWPz-16A	Total/NA	Water	8260D	
310-282075-10	MW-12	Total/NA	Water	8260D	
310-282075-11	MW-18	Total/NA	Water	8260D	
310-282075-12	MW-26	Total/NA	Water	8260D	
310-282075-13	MW-20	Total/NA	Water	8260D	
310-282075-14	MW-28	Total/NA	Water	8260D	
310-282075-15	MW-D	Total/NA	Water	8260D	
310-282075-16	Trip Blank 1	Total/NA	Water	8260D	
310-282075-17	Trip Blank 2	Total/NA	Water	8260D	
MB 310-422834/5	Method Blank	Total/NA	Water	8260D	
LCS 310-422834/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-422834/7	Lab Control Sample	Total/NA	Water	8260D	
310-282075-5 MS	MW-22B	Total/NA	Water	8260D	
310-282075-5 MSD	MW-22B	Total/NA	Water	8260D	

Metals

Prep Batch: 422896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-1	MW-27	Total/NA	Water	3005A	
310-282075-3	MWPz-8B2	Total/NA	Water	3005A	
310-282075-4	MW-22A	Total/NA	Water	3005A	
310-282075-5	MW-22B	Total/NA	Water	3005A	
310-282075-6	MW-23	Total/NA	Water	3005A	
310-282075-7	MW-25	Total/NA	Water	3005A	
310-282075-8	MW-19	Total/NA	Water	3005A	
310-282075-9	MWPz-16A	Total/NA	Water	3005A	
310-282075-10	MW-12	Total/NA	Water	3005A	
310-282075-11	MW-18	Total/NA	Water	3005A	
310-282075-12	MW-26	Total/NA	Water	3005A	
310-282075-13	MW-20	Total/NA	Water	3005A	
310-282075-14	MW-28	Total/NA	Water	3005A	
310-282075-15	MW-D	Total/NA	Water	3005A	
MB 310-422896/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-422896/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-282075-1 MS	MW-27	Total/NA	Water	3005A	
310-282075-1 MSD	MW-27	Total/NA	Water	3005A	
310-282075-12 DU	MW-26	Total/NA	Water	3005A	

Analysis Batch: 423569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-3	MWPz-8B2	Total/NA	Water	6020B	422896
310-282075-4	MW-22A	Total/NA	Water	6020B	422896
310-282075-6	MW-23	Total/NA	Water	6020B	422896
310-282075-7	MW-25	Total/NA	Water	6020B	422896
310-282075-8	MW-19	Total/NA	Water	6020B	422896

Metals (Continued)

Analysis Batch: 423569 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-9	MWPz-16A	Total/NA	Water	6020B	422896
310-282075-10	MW-12	Total/NA	Water	6020B	422896
310-282075-11	MW-18	Total/NA	Water	6020B	422896
310-282075-13	MW-20	Total/NA	Water	6020B	422896
310-282075-15	MW-D	Total/NA	Water	6020B	422896
MB 310-422896/1-A	Method Blank	Total/NA	Water	6020B	422896
LCS 310-422896/2-A	Lab Control Sample	Total/NA	Water	6020B	422896
310-282075-12 DU	MW-26	Total/NA	Water	6020B	422896

Analysis Batch: 423728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-3	MWPz-8B2	Total/NA	Water	6020B	422896
310-282075-4	MW-22A	Total/NA	Water	6020B	422896
310-282075-6	MW-23	Total/NA	Water	6020B	422896
310-282075-7	MW-25	Total/NA	Water	6020B	422896
310-282075-8	MW-19	Total/NA	Water	6020B	422896
310-282075-9	MWPz-16A	Total/NA	Water	6020B	422896
310-282075-10	MW-12	Total/NA	Water	6020B	422896
310-282075-11	MW-18	Total/NA	Water	6020B	422896
310-282075-13	MW-20	Total/NA	Water	6020B	422896
310-282075-15	MW-D	Total/NA	Water	6020B	422896
MB 310-422896/1-A	Method Blank	Total/NA	Water	6020B	422896
LCS 310-422896/2-A	Lab Control Sample	Total/NA	Water	6020B	422896
310-282075-12 DU	MW-26	Total/NA	Water	6020B	422896

Analysis Batch: 424262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-1	MW-27	Total/NA	Water	6020B	422896
310-282075-5	MW-22B	Total/NA	Water	6020B	422896
310-282075-12	MW-26	Total/NA	Water	6020B	422896
310-282075-14	MW-28	Total/NA	Water	6020B	422896
310-282075-1 MS	MW-27	Total/NA	Water	6020B	422896
310-282075-1 MSD	MW-27	Total/NA	Water	6020B	422896

Analysis Batch: 424361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-5	MW-22B	Total/NA	Water	6020B	422896
310-282075-12	MW-26	Total/NA	Water	6020B	422896
310-282075-14	MW-28	Total/NA	Water	6020B	422896
MB 310-422896/1-A	Method Blank	Total/NA	Water	6020B	422896
LCS 310-422896/2-A	Lab Control Sample	Total/NA	Water	6020B	422896
310-282075-1 MS	MW-27	Total/NA	Water	6020B	422896
310-282075-1 MSD	MW-27	Total/NA	Water	6020B	422896
310-282075-12 DU	MW-26	Total/NA	Water	6020B	422896

General Chemistry

Analysis Batch: 422877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-4	MW-22A	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 422877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-5	MW-22B	Total/NA	Water	I-3765-85	
310-282075-13	MW-20	Total/NA	Water	I-3765-85	
310-282075-14	MW-28	Total/NA	Water	I-3765-85	
310-282075-15	MW-D	Total/NA	Water	I-3765-85	
MB 310-422877/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-422877/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 422958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-1	MW-27	Total/NA	Water	I-3765-85	
310-282075-2	MWPz-8A	Total/NA	Water	I-3765-85	
310-282075-3	MWPz-8B2	Total/NA	Water	I-3765-85	
310-282075-6	MW-23	Total/NA	Water	I-3765-85	
310-282075-7	MW-25	Total/NA	Water	I-3765-85	
310-282075-8	MW-19	Total/NA	Water	I-3765-85	
310-282075-9	MWPz-16A	Total/NA	Water	I-3765-85	
310-282075-10	MW-12	Total/NA	Water	I-3765-85	
310-282075-12	MW-26	Total/NA	Water	I-3765-85	
MB 310-422958/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-422958/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 423000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282075-11	MW-18	Total/NA	Water	I-3765-85	
MB 310-423000/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423000/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-27
Lab Sample ID: 310-282075-1
Date Collected: 05/23/24 18:11
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424262	NFT2	EET CF	06/11/24 18:33
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MWPz-8A
Lab Sample ID: 310-282075-2
Date Collected: 05/23/24 14:18
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MWPz-8B2
Lab Sample ID: 310-282075-3
Date Collected: 05/23/24 15:27
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:17
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:31
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MW-22A
Lab Sample ID: 310-282075-4
Date Collected: 05/22/24 16:19
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:21
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:33
Total/NA	Analysis	I-3765-85		1	422877	HE7K	EET CF	05/28/24 13:38

Client Sample ID: MW-22B
Lab Sample ID: 310-282075-5
Date Collected: 05/22/24 17:19
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 09:43
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424262	NFT2	EET CF	06/11/24 18:43
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424361	NFT2	EET CF	06/12/24 15:08
Total/NA	Analysis	I-3765-85		1	422877	HE7K	EET CF	05/28/24 13:38

Lab Chronicle

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-23
Lab Sample ID: 310-282075-6
Date Collected: 05/23/24 17:23
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 10:05
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:28
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:46
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MW-25
Lab Sample ID: 310-282075-7
Date Collected: 05/23/24 13:16
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 10:26
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:46
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:48
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MW-19
Lab Sample ID: 310-282075-8
Date Collected: 05/23/24 11:53
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 10:48
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:50
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:50
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MWPz-16A
Lab Sample ID: 310-282075-9
Date Collected: 05/23/24 10:43
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 11:10
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:53
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:52
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Lab Chronicle

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-12
Lab Sample ID: 310-282075-10
Date Collected: 05/23/24 09:26
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 11:32
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 20:57
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:54
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MW-18
Lab Sample ID: 310-282075-11
Date Collected: 05/24/24 08:53
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 11:53
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 21:01
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 16:57
Total/NA	Analysis	I-3765-85		1	423000	HE7K	EET CF	05/29/24 13:05

Client Sample ID: MW-26
Lab Sample ID: 310-282075-12
Date Collected: 05/23/24 19:03
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 12:15
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424262	NFT2	EET CF	06/11/24 18:46
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424361	NFT2	EET CF	06/12/24 15:10
Total/NA	Analysis	I-3765-85		1	422958	HE7K	EET CF	05/29/24 09:32

Client Sample ID: MW-20
Lab Sample ID: 310-282075-13
Date Collected: 05/22/24 18:40
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 12:37
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 21:12
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 17:03
Total/NA	Analysis	I-3765-85		1	422877	HE7K	EET CF	05/28/24 13:38

Lab Chronicle

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Client Sample ID: MW-28
Lab Sample ID: 310-282075-14
Date Collected: 05/22/24 14:29
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 12:59
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424262	NFT2	EET CF	06/11/24 18:53
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	424361	NFT2	EET CF	06/12/24 15:14
Total/NA	Analysis	I-3765-85		1	422877	HE7K	EET CF	05/28/24 13:38

Client Sample ID: MW-D
Lab Sample ID: 310-282075-15
Date Collected: 05/22/24 18:40
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 13:21
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423728	NFT2	EET CF	06/05/24 21:19
Total/NA	Prep	3005A			422896	KM3E	EET CF	05/29/24 09:30
Total/NA	Analysis	6020B		1	423569	NFT2	EET CF	06/04/24 17:16
Total/NA	Analysis	I-3765-85		1	422877	HE7K	EET CF	05/28/24 13:38

Client Sample ID: Trip Blank 1
Lab Sample ID: 310-282075-16
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 08:16

Client Sample ID: Trip Blank 2
Lab Sample ID: 310-282075-17
Date Collected: 05/22/24 00:00
Matrix: Water
Date Received: 05/24/24 14:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	422834	WSE8	EET CF	05/29/24 08:37

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: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: SCS Engineers
Job ID: 310-282075-1
Project/Site: 1st 2024 Semi-Annual Sampling Kossuth County LF

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

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310-282075 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/24/24 TIME 1455 | Received By: GM

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 2

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

(TB-1) MW-22B, -23, -25, -19

Temperature Record

Coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Other: ☐ NONE

Thermometer ID: X | Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): | Corrected Temp (°C):

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:	1L Plastic	
Uncorrected Temp (°C):	-0.7	
Corrected Temp (°C):	-0.7	

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

MWPz-8A 250 nitric had no volume, MW-19 limited 1L plastic volume. and MWPz-8A

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/24/24 | TIME 1455 | Received By: GM

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☒ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 2

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

(TB-2) MW P2-16A, MW-12; -18, -24, -20, -28, -D

Temperature Record

Coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Other:_____ ☐ NONE

Thermometer ID: X | Correction Factor (°C): 0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): -0.4 | Corrected Temp (°C): -0.4

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Michael Morgan	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-93183-25576 1
Client Contact: Nathan Ohrt	Phone: 515 63 0778	E-Mail: Mary Yang@ET EurofinsUS com	State of Origin:	Page: Page 1 of 2
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			Preservation Codes: D - HNO3 N - None A - HCL
City: West Des Moines	TAT Requested (days):			
State Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 27223408.24			Other:
Email: nohrt@scsengineers.com	WO #:			
Project Name: 1st 2024 Semi-Annual Sampling Kossuth Co	Project #: 31016904			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - As, Ba, Cd, Co, Pb, Ni, Se, Zn	I_3765_85 - Residue, Non-filterable (TSS)	6020B - Appendix I	8260D - (MOD) Volatile Appendix 1 Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	A		
MW-27	5/23/24	1811		Water			X	X				
MWPz-8A	5/23/24	1418		Water			X	X				
MWPz-8B2	5/23/24	5.27		Water			X	X				
MW-22A	5/22/24	10.9		Water			X	X				
MW-22B	5/22/24	7 9		Water				X	X	X		
MW-23	5/23/24	7 23		Water			X	X		X		
MW-25	5/23/24	13 6		Water			X	X		X		
MW-19	5/23/24	5 53		Water			X	X		X		
MWPz-16A	5/23/24	0 43		Water			X	X		X		
MW-12	5/23/24	9 26		Water			X	X		X		
MW-18	5/24/24	8 53		Water			X	X		X		

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

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

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

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date	Time.	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Michael Morgan	5/24/24 11 30	SCS	ML	5-24-24 1455	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver 01/16/2019

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

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Michael Morgan	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-93183-25576 2
Client Contact: Nathan Ohrt	Phone: 515 63 0778	E-Mail: Mary Yang@ET EurofinsUS com	State of Origin:	Page: Page 2 of 2
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 27223408.24			
Email: nohrt@scsengineers.com	WO #:			
Project Name: 1st 2024 Semi-Annual Sampling Kossuth Co	Project #: 31016904			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
N - None
A - HCL
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - As, Ba, Cd, Co, Pb, Ni, Se, Zn	L_3765_85 - Residue, Non-filterable (TSS)	6020B - Appendix I	8260D - (MOD) Volatile Appendix 1 Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	D	A	X	
MW-26	5/23/24	19 03		Water				X	X	X		
MW-20	5/22/24	18 40		Water			X	X		X		
MW-28	5/22/24	6 29		Water				X	X	X		
MW-D	5/22/24	18 40		Water			X	X		X		
Trip Blank 1				Water						X		
Trip Blank 2				Water						X		

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

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

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

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Michael Morgan	5/24/24 11 30	SCS	ML	5-24-24 1455	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

6/12/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-282075-1

Login Number: 282075

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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	False	Limited volume for MWPz-8A and MW-19.
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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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/26/2024 12:50:37 PM

JOB DESCRIPTION

2nd 2024 Semi-Annual Sampling

JOB NUMBER

310-290613-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

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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9/26/2024 12:50:37 PM

Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

Table of Contents

Job Narrative
310-290613-1

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 9/13/2024 4:26 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 1.0°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-433388 recovered above the upper control limit for Dichlorodifluoromethane (105.1%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-433388/4).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-433388 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-433390 recovered above the upper control limit for Dichlorodifluoromethane (95.3%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-433390/4).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-433390 recovered outside control limits for the following analytes: Dichlorodifluoromethane. 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.

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.

Sample Summary

Client: SCS Engineers
Job ID: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-290613-1	MW-22B	Water	09/12/24 16:02	09/13/24 16:26
310-290613-2	MW-26	Water	09/12/24 15:30	09/13/24 16:26
310-290613-3	MW-28	Water	09/12/24 16:33	09/13/24 16:26
310-290613-4	MW-D	Water	09/12/24 16:02	09/13/24 16:26
310-290613-5	Trip Blank	Water	09/13/24 00:00	09/13/24 16:26

Detection Summary

Client: SCS Engineers
Job ID: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

Client Sample ID: MW-22B — Lab Sample ID: 310-290613-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.40		0.500		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	70.8		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	8.22		1.00		ug/L	1		8260D	Total/NA
Arsenic	0.00397		0.00200		mg/L	1		6020B	Total/NA
Barium	0.329		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.00215		0.000500		mg/L	1		6020B	Total/NA
Total Suspended Solids	17.3		5.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-26 — Lab Sample ID: 310-290613-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0953		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	2.0		1.9		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 310-290613-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0470		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	10.0		1.9		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D — Lab Sample ID: 310-290613-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.36		0.500		ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	67.1		1.00		ug/L	1		8260D	Total/NA
Vinyl chloride	7.43		1.00		ug/L	1		8260D	Total/NA
Arsenic	0.00331		0.00200		mg/L	1		6020B	Total/NA
Barium	0.315		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.00281		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.00696		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	21.5		7.5		mg/L	1		I-3765-85	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-290613-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-22B
Date Collected: 09/12/24 16:02
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 15:11	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 15:11	1
Benzene	**2.40**		0.500		ug/L			09/17/24 15:11	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 15:11	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 15:11	1
Bromoform	<5.00		5.00		ug/L			09/17/24 15:11	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 15:11	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 15:11	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 15:11	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 15:11	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 15:11	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 15:11	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 15:11	1
Chloroform	<3.00		3.00		ug/L			09/17/24 15:11	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 15:11	1
cis-1,2-Dichloroethene	**70.8**		1.00		ug/L			09/17/24 15:11	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:11	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 15:11	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 15:11	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 15:11	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:11	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:11	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 15:11	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 15:11	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 15:11	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 15:11	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 15:11	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 15:11	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 15:11	1
Styrene	<1.00		1.00		ug/L			09/17/24 15:11	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 15:11	1
Toluene	<1.00		1.00		ug/L			09/17/24 15:11	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 15:11	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 15:11	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:11	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:11	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 15:11	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 15:11	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 15:11	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 15:11	1
Vinyl chloride	**8.22**		1.00		ug/L			09/17/24 15:11	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*09/17/24 15:11*	*1*

Client Sample ID: MW-22B
Lab Sample ID: 310-290613-1
Date Collected: 09/12/24 16:02
Matrix: Water
Date Received: 09/13/24 16:26

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*09/17/24 15:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/17/24 15:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:17	1
Arsenic	**0.00397**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:17	1
Barium	**0.329**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:17	1
Beryllium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/23/24 17:41	1
Cadmium	<0.000200		0.000200		mg/L		09/18/24 09:00	09/23/24 17:41	1
Chromium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Cobalt	**0.00215**		0.000500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Copper	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Lead	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Nickel	<0.00500		0.00500		mg/L		09/18/24 09:00	09/23/24 17:41	1
Selenium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:17	1
Thallium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:17	1
Vanadium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:17	1
Zinc	<0.0200		0.0200		mg/L		09/18/24 09:00	09/19/24 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**17.3**		5.0		mg/L			09/17/24 20:21	1

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-26
Date Collected: 09/12/24 15:30
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 15:34	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 15:34	1
Benzene	<0.500		0.500		ug/L			09/17/24 15:34	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 15:34	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 15:34	1
Bromoform	<5.00		5.00		ug/L			09/17/24 15:34	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 15:34	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 15:34	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 15:34	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 15:34	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 15:34	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 15:34	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 15:34	1
Chloroform	<3.00		3.00		ug/L			09/17/24 15:34	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 15:34	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 15:34	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:34	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 15:34	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 15:34	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 15:34	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:34	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:34	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 15:34	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 15:34	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 15:34	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 15:34	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 15:34	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 15:34	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 15:34	1
Styrene	<1.00		1.00		ug/L			09/17/24 15:34	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 15:34	1
Toluene	<1.00		1.00		ug/L			09/17/24 15:34	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 15:34	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 15:34	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:34	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:34	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 15:34	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 15:34	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 15:34	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 15:34	1
Vinyl chloride	<1.00		1.00		ug/L			09/17/24 15:34	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/17/24 15:34*	*1*

Client: SCS Engineers
Job ID: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

Client Sample ID: MW-26
Lab Sample ID: 310-290613-2
Date Collected: 09/12/24 15:30
Matrix: Water
Date Received: 09/13/24 16:26

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*09/17/24 15:34*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/17/24 15:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:19	1
Arsenic	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:19	1
Barium	**0.0953**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:19	1
Beryllium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/23/24 17:44	1
Cadmium	<0.000200		0.000200		mg/L		09/18/24 09:00	09/23/24 17:44	1
Chromium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Cobalt	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Copper	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Lead	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Nickel	<0.00500		0.00500		mg/L		09/18/24 09:00	09/23/24 17:44	1
Selenium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:19	1
Thallium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:19	1
Vanadium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:19	1
Zinc	<0.0200		0.0200		mg/L		09/18/24 09:00	09/19/24 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.0**		1.9		mg/L			09/17/24 20:21	1

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-28
Date Collected: 09/12/24 16:33
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 15:57	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 15:57	1
Benzene	<0.500		0.500		ug/L			09/17/24 15:57	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 15:57	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 15:57	1
Bromoform	<5.00		5.00		ug/L			09/17/24 15:57	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 15:57	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 15:57	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 15:57	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 15:57	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 15:57	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 15:57	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 15:57	1
Chloroform	<3.00		3.00		ug/L			09/17/24 15:57	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 15:57	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 15:57	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:57	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 15:57	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 15:57	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 15:57	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:57	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 15:57	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 15:57	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 15:57	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 15:57	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 15:57	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 15:57	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 15:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 15:57	1
Styrene	<1.00		1.00		ug/L			09/17/24 15:57	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 15:57	1
Toluene	<1.00		1.00		ug/L			09/17/24 15:57	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 15:57	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 15:57	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 15:57	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 15:57	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 15:57	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 15:57	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 15:57	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 15:57	1
Vinyl chloride	<1.00		1.00		ug/L			09/17/24 15:57	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/17/24 15:57*	*1*

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-28
Date Collected: 09/12/24 16:33
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-3
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*73 - 130*		*09/17/24 15:57*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/17/24 15:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:21	1
Arsenic	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:21	1
Barium	**0.0470**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:21	1
Beryllium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/23/24 17:48	1
Cadmium	<0.000200		0.000200		mg/L		09/18/24 09:00	09/23/24 17:48	1
Chromium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Cobalt	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Copper	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Lead	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Nickel	<0.00500		0.00500		mg/L		09/18/24 09:00	09/23/24 17:48	1
Selenium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:21	1
Thallium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:21	1
Vanadium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:21	1
Zinc	<0.0200		0.0200		mg/L		09/18/24 09:00	09/19/24 13:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**10.0**		1.9		mg/L			09/17/24 20:21	1

Client Sample ID: MW-D
Date Collected: 09/12/24 16:02
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 16:19	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 16:19	1
Benzene	**2.36**		0.500		ug/L			09/17/24 16:19	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 16:19	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 16:19	1
Bromoform	<5.00		5.00		ug/L			09/17/24 16:19	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 16:19	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 16:19	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 16:19	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 16:19	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 16:19	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 16:19	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 16:19	1
Chloroform	<3.00		3.00		ug/L			09/17/24 16:19	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 16:19	1
cis-1,2-Dichloroethene	**67.1**		1.00		ug/L			09/17/24 16:19	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 16:19	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 16:19	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 16:19	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 16:19	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 16:19	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 16:19	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 16:19	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 16:19	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 16:19	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 16:19	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 16:19	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 16:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 16:19	1
Styrene	<1.00		1.00		ug/L			09/17/24 16:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 16:19	1
Toluene	<1.00		1.00		ug/L			09/17/24 16:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 16:19	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 16:19	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 16:19	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 16:19	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 16:19	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 16:19	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 16:19	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 16:19	1
Vinyl chloride	**7.43**		1.00		ug/L			09/17/24 16:19	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/17/24 16:19*	*1*

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-D
Date Collected: 09/12/24 16:02
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*09/17/24 16:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/17/24 16:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 13:25	1
Arsenic	**0.00331**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:25	1
Barium	**0.315**		0.00200		mg/L		09/18/24 09:00	09/19/24 13:25	1
Beryllium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/23/24 17:55	1
Cadmium	<0.000200		0.000200		mg/L		09/18/24 09:00	09/23/24 17:55	1
Chromium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Cobalt	**0.00281**		0.000500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Copper	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Lead	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Nickel	**0.00696**		0.00500		mg/L		09/18/24 09:00	09/23/24 17:55	1
Selenium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:25	1
Thallium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 13:25	1
Vanadium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 13:25	1
Zinc	<0.0200		0.0200		mg/L		09/18/24 09:00	09/19/24 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**21.5**		7.5		mg/L			09/17/24 20:21	1

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: Trip Blank
Date Collected: 09/13/24 00:00
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 23:51	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 23:51	1
Benzene	<0.500		0.500		ug/L			09/17/24 23:51	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 23:51	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 23:51	1
Bromoform	<5.00		5.00		ug/L			09/17/24 23:51	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 23:51	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 23:51	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 23:51	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 23:51	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 23:51	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 23:51	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 23:51	1
Chloroform	<3.00		3.00		ug/L			09/17/24 23:51	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 23:51	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 23:51	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 23:51	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 23:51	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 23:51	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 23:51	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 23:51	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 23:51	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 23:51	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 23:51	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 23:51	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 23:51	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 23:51	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 23:51	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 23:51	1
Styrene	<1.00		1.00		ug/L			09/17/24 23:51	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 23:51	1
Toluene	<1.00		1.00		ug/L			09/17/24 23:51	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 23:51	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 23:51	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 23:51	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 23:51	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 23:51	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 23:51	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 23:51	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 23:51	1
Vinyl chloride	<1.00		1.00		ug/L			09/17/24 23:51	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*09/17/24 23:51*	*1*

Client Sample ID: Trip Blank
Lab Sample ID: 310-290613-5
Date Collected: 09/13/24 00:00
Matrix: Water
Date Received: 09/13/24 16:26

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	104		73 - 130		09/17/24 23:51	1
Toluene-d8 (Surr)	99		80 - 120		09/17/24 23:51	1

Glossary

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

Surrogate Summary

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB	DBFM	TOL						
Lab Sample ID	Client Sample ID	(80-120)	(73-130)	(80-120)						
310-290613-1	MW-22B	104	106	99						
310-290613-2	MW-26	103	101	99						
310-290613-3	MW-28	105	102	100						
310-290613-4	MW-D	103	105	99						
310-290613-5	Trip Blank	105	104	99						
LCS 310-433388/6	Lab Control Sample	100	99	100						
LCS 310-433388/7	Lab Control Sample	103	103	99						
LCS 310-433390/6	Lab Control Sample	100	99	100						
LCS 310-433390/7	Lab Control Sample	104	101	98						
MB 310-433388/5	Method Blank	102	102	100						
MB 310-433390/5	Method Blank	103	103	100						

Surrogate Legend

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

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

Lab Sample ID: MB 310-433388/5
Matrix: Water
Analysis Batch: 433388

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 11:48	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 11:48	1
Benzene	<0.500		0.500		ug/L			09/17/24 11:48	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 11:48	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 11:48	1
Bromoform	<5.00		5.00		ug/L			09/17/24 11:48	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 11:48	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 11:48	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 11:48	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 11:48	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 11:48	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 11:48	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 11:48	1
Chloroform	<3.00		3.00		ug/L			09/17/24 11:48	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 11:48	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 11:48	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 11:48	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 11:48	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 11:48	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 11:48	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 11:48	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 11:48	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 11:48	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 11:48	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 11:48	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 11:48	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 11:48	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 11:48	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 11:48	1
Styrene	<1.00		1.00		ug/L			09/17/24 11:48	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 11:48	1
Toluene	<1.00		1.00		ug/L			09/17/24 11:48	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 11:48	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 11:48	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 11:48	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 11:48	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 11:48	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 11:48	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 11:48	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 11:48	1
Vinyl chloride	<1.00		1.00		ug/L			09/17/24 11:48	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 11:48	1

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

Lab Sample ID: MB 310-433388/5
Matrix: Water
Analysis Batch: 433388

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		09/17/24 11:48	1
Dibromofluoromethane (Surr)	102		73 - 130		09/17/24 11:48	1
Toluene-d8 (Surr)	100		80 - 120		09/17/24 11:48	1

Lab Sample ID: LCS 310-433388/6
Matrix: Water
Analysis Batch: 433388

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	34.21		ug/L		86	50 - 150
Acrylonitrile	200	186.7		ug/L		93	50 - 150
Benzene	20.0	18.75		ug/L		94	72 - 124
Bromochloromethane	20.0	18.36		ug/L		92	73 - 130
Bromodichloromethane	20.0	18.33		ug/L		92	74 - 122
Bromoform	20.0	17.98		ug/L		90	61 - 122
2-Butanone (MEK)	40.0	37.26		ug/L		93	50 - 150
Carbon disulfide	20.0	19.07		ug/L		95	59 - 135
Carbon tetrachloride	20.0	19.21		ug/L		96	67 - 132
Chlorobenzene	20.0	19.30		ug/L		96	76 - 120
Chlorodibromomethane	20.0	19.19		ug/L		96	71 - 121
Chloroform	20.0	17.76		ug/L		89	72 - 125
cis-1,2-Dichloroethene	20.0	18.66		ug/L		93	74 - 123
cis-1,3-Dichloropropene	20.0	17.53		ug/L		88	71 - 125
1,2-Dibromo-3-Chloropropane	20.0	18.29		ug/L		91	50 - 150
1,2-Dibromoethane (EDB)	20.0	18.91		ug/L		95	75 - 125
Dibromomethane	20.0	19.41		ug/L		97	74 - 125
1,2-Dichlorobenzene	20.0	19.08		ug/L		95	74 - 120
1,4-Dichlorobenzene	20.0	19.22		ug/L		96	72 - 120
1,1-Dichloroethane	20.0	18.76		ug/L		94	70 - 127
1,2-Dichloroethane	20.0	17.79		ug/L		89	71 - 125
1,1-Dichloroethene	20.0	19.39		ug/L		97	63 - 132
1,2-Dichloropropane	20.0	18.98		ug/L		95	73 - 124
Ethylbenzene	20.0	19.26		ug/L		96	74 - 122
2-Hexanone	40.0	39.42		ug/L		99	60 - 140
Iodomethane	20.0	14.17		ug/L		71	10 - 150
Methylene Chloride	20.0	19.33		ug/L		97	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	37.13		ug/L		93	60 - 139
Styrene	20.0	19.82		ug/L		99	74 - 121
1,1,1,2-Tetrachloroethane	20.0	17.42		ug/L		87	71 - 120
1,1,2,2-Tetrachloroethane	20.0	17.97		ug/L		90	68 - 124
Tetrachloroethene	20.0	19.56		ug/L		98	71 - 130
Toluene	20.0	19.08		ug/L		95	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.95		ug/L		95	50 - 150
trans-1,2-Dichloroethene	20.0	18.85		ug/L		94	70 - 126
trans-1,3-Dichloropropene	20.0	18.04		ug/L		90	69 - 123
1,1,1-Trichloroethane	20.0	19.17		ug/L		96	73 - 129
1,1,2-Trichloroethane	20.0	18.57		ug/L		93	73 - 123
Trichloroethene	20.0	17.63		ug/L		88	72 - 126

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

Lab Sample ID: LCS 310-433388/6
Matrix: Water
Analysis Batch: 433388

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	20.0	18.33		ug/L		92	65 - 127
Vinyl acetate	40.0	38.97		ug/L		97	50 - 150
Xylenes, Total	40.0	39.17		ug/L		98	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*73 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-433388/7
Matrix: Water
Analysis Batch: 433388

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	17.42		ug/L		87	23 - 150
Chloroethane	20.0	20.35		ug/L		102	54 - 136
Chloromethane	20.0	24.31		ug/L		122	38 - 150
Trichlorofluoromethane	20.0	21.50		ug/L		107	54 - 149
Vinyl chloride	20.0	24.08		ug/L		120	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-433390/5
Matrix: Water
Analysis Batch: 433390

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0		ug/L			09/17/24 22:43	1
Acrylonitrile	<5.00		5.00		ug/L			09/17/24 22:43	1
Benzene	<0.500		0.500		ug/L			09/17/24 22:43	1
Bromochloromethane	<5.00		5.00		ug/L			09/17/24 22:43	1
Bromodichloromethane	<1.00		1.00		ug/L			09/17/24 22:43	1
Bromoform	<5.00		5.00		ug/L			09/17/24 22:43	1
Bromomethane	<4.00		4.00		ug/L			09/17/24 22:43	1
2-Butanone (MEK)	<10.0		10.0		ug/L			09/17/24 22:43	1
Carbon disulfide	<1.00		1.00		ug/L			09/17/24 22:43	1
Carbon tetrachloride	<2.00		2.00		ug/L			09/17/24 22:43	1
Chlorobenzene	<1.00		1.00		ug/L			09/17/24 22:43	1
Chlorodibromomethane	<5.00		5.00		ug/L			09/17/24 22:43	1
Chloroethane	<4.00		4.00		ug/L			09/17/24 22:43	1
Chloroform	<3.00		3.00		ug/L			09/17/24 22:43	1
Chloromethane	<3.00		3.00		ug/L			09/17/24 22:43	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 22:43	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 22:43	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00		ug/L			09/17/24 22:43	1

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

Lab Sample ID: MB 310-433390/5
Matrix: Water
Analysis Batch: 433390

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			09/17/24 22:43	1
Dibromomethane	<1.00		1.00		ug/L			09/17/24 22:43	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 22:43	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			09/17/24 22:43	1
1,1-Dichloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
1,2-Dichloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
1,1-Dichloroethene	<2.00		2.00		ug/L			09/17/24 22:43	1
1,2-Dichloropropane	<1.00		1.00		ug/L			09/17/24 22:43	1
Ethylbenzene	<1.00		1.00		ug/L			09/17/24 22:43	1
2-Hexanone	<10.0		10.0		ug/L			09/17/24 22:43	1
Iodomethane	<10.0		10.0		ug/L			09/17/24 22:43	1
Methylene Chloride	<5.00		5.00		ug/L			09/17/24 22:43	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			09/17/24 22:43	1
Styrene	<1.00		1.00		ug/L			09/17/24 22:43	1
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
Tetrachloroethene	<1.00		1.00		ug/L			09/17/24 22:43	1
Toluene	<1.00		1.00		ug/L			09/17/24 22:43	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			09/17/24 22:43	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			09/17/24 22:43	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			09/17/24 22:43	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			09/17/24 22:43	1
Trichloroethene	<1.00		1.00		ug/L			09/17/24 22:43	1
Trichlorofluoromethane	<4.00		4.00		ug/L			09/17/24 22:43	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			09/17/24 22:43	1
Vinyl acetate	<10.0		10.0		ug/L			09/17/24 22:43	1
Vinyl chloride	<1.00		1.00		ug/L			09/17/24 22:43	1
Xylenes, Total	<3.00		3.00		ug/L			09/17/24 22:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*09/17/24 22:43*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*09/17/24 22:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/17/24 22:43*	*1*

Lab Sample ID: LCS 310-433390/6
Matrix: Water
Analysis Batch: 433390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	40.24		ug/L		101	50 - 150
Acrylonitrile	200	197.1		ug/L		99	50 - 150
Benzene	20.0	18.70		ug/L		93	72 - 124
Bromochloromethane	20.0	18.38		ug/L		92	73 - 130
Bromodichloromethane	20.0	18.38		ug/L		92	74 - 122
Bromoform	20.0	18.27		ug/L		91	61 - 122
2-Butanone (MEK)	40.0	39.13		ug/L		98	50 - 150
Carbon disulfide	20.0	18.87		ug/L		94	59 - 135

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

Lab Sample ID: LCS 310-433390/6
Matrix: Water
Analysis Batch: 433390

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	20.0	19.26		ug/L		96	67 - 132
Chlorobenzene	20.0	19.45		ug/L		97	76 - 120
Chlorodibromomethane	20.0	19.34		ug/L		97	71 - 121
Chloroform	20.0	17.95		ug/L		90	72 - 125
cis-1,2-Dichloroethene	20.0	18.50		ug/L		92	74 - 123
cis-1,3-Dichloropropene	20.0	17.46		ug/L		87	71 - 125
1,2-Dibromo-3-Chloropropane	20.0	20.02		ug/L		100	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.09		ug/L		95	75 - 125
Dibromomethane	20.0	19.15		ug/L		96	74 - 125
1,2-Dichlorobenzene	20.0	19.06		ug/L		95	74 - 120
1,4-Dichlorobenzene	20.0	18.95		ug/L		95	72 - 120
1,1-Dichloroethane	20.0	18.56		ug/L		93	70 - 127
1,2-Dichloroethane	20.0	18.14		ug/L		91	71 - 125
1,1-Dichloroethene	20.0	19.55		ug/L		98	63 - 132
1,2-Dichloropropane	20.0	19.72		ug/L		99	73 - 124
Ethylbenzene	20.0	19.03		ug/L		95	74 - 122
2-Hexanone	40.0	40.92		ug/L		102	60 - 140
Iodomethane	20.0	13.09		ug/L		65	10 - 150
Methylene Chloride	20.0	19.67		ug/L		98	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	39.27		ug/L		98	60 - 139
Styrene	20.0	19.43		ug/L		97	74 - 121
1,1,1,2-Tetrachloroethane	20.0	17.00		ug/L		85	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.64		ug/L		93	68 - 124
Tetrachloroethene	20.0	19.46		ug/L		97	71 - 130
Toluene	20.0	18.81		ug/L		94	74 - 123
trans-1,4-Dichloro-2-butene	20.0	17.83		ug/L		89	50 - 150
trans-1,2-Dichloroethene	20.0	18.74		ug/L		94	70 - 126
trans-1,3-Dichloropropene	20.0	17.78		ug/L		89	69 - 123
1,1,1-Trichloroethane	20.0	19.29		ug/L		96	73 - 129
1,1,2-Trichloroethane	20.0	18.62		ug/L		93	73 - 123
Trichloroethene	20.0	18.06		ug/L		90	72 - 126
1,2,3-Trichloropropane	20.0	18.55		ug/L		93	65 - 127
Vinyl acetate	40.0	36.59		ug/L		91	50 - 150
Xylenes, Total	40.0	38.73		ug/L		97	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*73 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-433390/7
Matrix: Water
Analysis Batch: 433390

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	18.26		ug/L		91	23 - 150
Chloroethane	20.0	22.03		ug/L		110	54 - 136
Chloromethane	20.0	24.05		ug/L		120	38 - 150

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

Lab Sample ID: LCS 310-433390/7
Matrix: Water
Analysis Batch: 433390

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	20.92		ug/L		105	54 - 149
Vinyl chloride	20.0	24.03		ug/L		120	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-433443/1-A
Matrix: Water
Analysis Batch: 433771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 12:36	1
Arsenic	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 12:36	1
Barium	<0.00200		0.00200		mg/L		09/18/24 09:00	09/19/24 12:36	1
Beryllium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 12:36	1
Chromium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Cobalt	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Copper	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Lead	<0.000500		0.000500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Selenium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 12:36	1
Thallium	<0.00100		0.00100		mg/L		09/18/24 09:00	09/19/24 12:36	1
Vanadium	<0.00500		0.00500		mg/L		09/18/24 09:00	09/19/24 12:36	1
Zinc	<0.0200		0.0200		mg/L		09/18/24 09:00	09/19/24 12:36	1

Lab Sample ID: MB 310-433443/1-A
Matrix: Water
Analysis Batch: 434059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 433443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.000200		0.000200		mg/L		09/18/24 09:00	09/23/24 16:50	1
Nickel	<0.00500		0.00500		mg/L		09/18/24 09:00	09/23/24 16:50	1
Silver	<0.00100		0.00100		mg/L		09/18/24 09:00	09/23/24 16:50	1

Lab Sample ID: LCS 310-433443/2-A
Matrix: Water
Analysis Batch: 433771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433443

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2206		mg/L		110	80 - 120
Arsenic	0.200	0.2209		mg/L		110	80 - 120
Barium	0.100	0.1070		mg/L		107	80 - 120
Beryllium	0.100	0.1064		mg/L		106	80 - 120
Chromium	0.100	0.09961		mg/L		100	80 - 120
Cobalt	0.100	0.1014		mg/L		101	80 - 120

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

Lab Sample ID: LCS 310-433443/2-A
Matrix: Water
Analysis Batch: 433771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Copper			0.200	0.2102		mg/L		105	80 - 120		
Lead			0.200	0.2130		mg/L		106	80 - 120		
Selenium			0.400	0.4106		mg/L		103	80 - 120		
Silver			0.100	0.1122		mg/L		112	80 - 120		
Thallium			0.100	0.1031		mg/L		103	80 - 120		
Vanadium			0.100	0.1062		mg/L		106	80 - 120		
Zinc			0.200	0.2045		mg/L		102	80 - 120		

Lab Sample ID: LCS 310-433443/2-A
Matrix: Water
Analysis Batch: 434059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 433443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cadmium			0.100	0.09573		mg/L		96	80 - 120		
Nickel			0.200	0.2031		mg/L		102	80 - 120		

Lab Sample ID: 310-290613-3 DU
Matrix: Water
Analysis Batch: 433771

Client Sample ID: MW-28
Prep Type: Total/NA
Prep Batch: 433443

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	<0.00200			<0.00200		mg/L				NC	20
Arsenic	<0.00200			<0.00200		mg/L				NC	20
Barium	0.0470			0.04609		mg/L				2	20
Chromium	<0.00500			<0.00500		mg/L				NC	20
Cobalt	<0.000500			<0.000500		mg/L				NC	20
Copper	<0.00500			<0.00500		mg/L				NC	20
Lead	<0.000500			<0.000500		mg/L				NC	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
Zinc	<0.0200			<0.0200		mg/L				NC	20

Lab Sample ID: 310-290613-3 DU
Matrix: Water
Analysis Batch: 434059

Client Sample ID: MW-28
Prep Type: Total/NA
Prep Batch: 433443

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Beryllium	<0.00100			<0.00100		mg/L				NC	20
Cadmium	<0.000200			<0.000200		mg/L				NC	20
Nickel	<0.00500			<0.00500		mg/L				NC	20

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

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

Lab Sample ID: MB 310-433449/1
Matrix: Water
Analysis Batch: 433449

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	<5.0		5.0		mg/L			09/17/24 20:21	1

Lab Sample ID: LCS 310-433449/2
Matrix: Water
Analysis Batch: 433449

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	102.0		mg/L		102	81 - 116

GC/MS VOA

Analysis Batch: 433388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-1	MW-22B	Total/NA	Water	8260D	
310-290613-2	MW-26	Total/NA	Water	8260D	
310-290613-3	MW-28	Total/NA	Water	8260D	
310-290613-4	MW-D	Total/NA	Water	8260D	
MB 310-433388/5	Method Blank	Total/NA	Water	8260D	
LCS 310-433388/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-433388/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 433390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-5	Trip Blank	Total/NA	Water	8260D	
MB 310-433390/5	Method Blank	Total/NA	Water	8260D	
LCS 310-433390/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-433390/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 433443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-1	MW-22B	Total/NA	Water	3005A	
310-290613-2	MW-26	Total/NA	Water	3005A	
310-290613-3	MW-28	Total/NA	Water	3005A	
310-290613-4	MW-D	Total/NA	Water	3005A	
MB 310-433443/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-433443/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-290613-3 DU	MW-28	Total/NA	Water	3005A	

Analysis Batch: 433771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-1	MW-22B	Total/NA	Water	6020B	433443
310-290613-2	MW-26	Total/NA	Water	6020B	433443
310-290613-3	MW-28	Total/NA	Water	6020B	433443
310-290613-4	MW-D	Total/NA	Water	6020B	433443
MB 310-433443/1-A	Method Blank	Total/NA	Water	6020B	433443
LCS 310-433443/2-A	Lab Control Sample	Total/NA	Water	6020B	433443
310-290613-3 DU	MW-28	Total/NA	Water	6020B	433443

Analysis Batch: 434059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-1	MW-22B	Total/NA	Water	6020B	433443
310-290613-2	MW-26	Total/NA	Water	6020B	433443
310-290613-3	MW-28	Total/NA	Water	6020B	433443
310-290613-4	MW-D	Total/NA	Water	6020B	433443
MB 310-433443/1-A	Method Blank	Total/NA	Water	6020B	433443
LCS 310-433443/2-A	Lab Control Sample	Total/NA	Water	6020B	433443
310-290613-3 DU	MW-28	Total/NA	Water	6020B	433443

General Chemistry

Analysis Batch: 433449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-1	MW-22B	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 433449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-290613-2	MW-26	Total/NA	Water	I-3765-85	
310-290613-3	MW-28	Total/NA	Water	I-3765-85	
310-290613-4	MW-D	Total/NA	Water	I-3765-85	
MB 310-433449/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-433449/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
Project/Site: 2nd 2024 Semi-Annual Sampling

Job ID: 310-290613-1

Client Sample ID: MW-22B
Date Collected: 09/12/24 16:02
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433388	FE5V	EET CF	09/17/24 15:11
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	434059	NFT2	EET CF	09/23/24 17:41
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	433771	NFT2	EET CF	09/19/24 13:17
Total/NA	Analysis	I-3765-85		1	433449	MDU9	EET CF	09/17/24 20:21

Client Sample ID: MW-26
Date Collected: 09/12/24 15:30
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433388	FE5V	EET CF	09/17/24 15:34
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	434059	NFT2	EET CF	09/23/24 17:44
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	433771	NFT2	EET CF	09/19/24 13:19
Total/NA	Analysis	I-3765-85		1	433449	MDU9	EET CF	09/17/24 20:21

Client Sample ID: MW-28
Date Collected: 09/12/24 16:33
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433388	FE5V	EET CF	09/17/24 15:57
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	434059	NFT2	EET CF	09/23/24 17:48
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	433771	NFT2	EET CF	09/19/24 13:21
Total/NA	Analysis	I-3765-85		1	433449	MDU9	EET CF	09/17/24 20:21

Client Sample ID: MW-D
Date Collected: 09/12/24 16:02
Date Received: 09/13/24 16:26

Lab Sample ID: 310-290613-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433388	FE5V	EET CF	09/17/24 16:19
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	434059	NFT2	EET CF	09/23/24 17:55
Total/NA	Prep	3005A			433443	F5MW	EET CF	09/18/24 09:00
Total/NA	Analysis	6020B		1	433771	NFT2	EET CF	09/19/24 13:25
Total/NA	Analysis	I-3765-85		1	433449	MDU9	EET CF	09/17/24 20:21

Lab Chronicle

Client: SCS Engineers
Job ID: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

Client Sample ID: Trip Blank
Lab Sample ID: 310-290613-5
Date Collected: 09/13/24 00:00
Matrix: Water
Date Received: 09/13/24 16:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	433390	FE5V	EET CF	09/17/24 23:51

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: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: SCS Engineers
Job ID: 310-290613-1
Project/Site: 2nd 2024 Semi-Annual Sampling

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

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310-290613 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 9/13/24 | TIME 1626 | Received By. XB

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☒ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler? ☒ Yes ☐ No *If yes:* Cooler ID:

Multiple Coolers? ☐ Yes ☒ No *If yes:* Cooler # _____ of _____

Cooler Custody Seals Present? ☐ Yes ☒ No *If yes:* Cooler custody seals intact? ☐ Yes ☐ No

Sample Custody Seals Present? ☐ Yes ☒ No *If yes:* Sample custody seals intact? ☐ Yes ☐ No

Trip Blank Present? ☒ Yes ☐ No *If yes:* Which VOA samples are in cooler? ↓

all

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | Correction Factor (°C): 0

• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.0 | Corrected Temp (°C): 1.0

• Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

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Client Information	Sampler: Konner Roth	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-96308-26494 1
Client Contact: Nathan Ohrt	Phone:	E-Mail: Mary Yang@ET EurofinsUS.com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone: 319-331-9613(Tel)	PO #: 27223408 25			
Email: nohrt@scsengineers.com	WO #:			
Project Name: 2nd 2024 Semi-Annual Sampling	Project #: 31016904			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
N - None
A - HCL
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - Appendix I	I_3765_85 - Residue, Non-filterable (TSS)	8260D - (MOD) Volatile Appendix 1 Sublist	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	A		
MW-22B	9-12-24	1602	G	Water			X	X	X		
MW-26	9-12-24	1530	G	Water			X	X	X		
MW-28	9-12-24	1633	G	Water			X	X	X		
MW-D	9-12-24	1602	G	Water			X	X	X		
Trip Blank				Water					X		

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

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

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

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Konner Roth	9-13-24 / 10:00am	SCS	CGC	9-13-24 1626	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver 05/06/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-290613-1

Login Number: 290613

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Collins, Charlotte

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/18/2024 8:59:09 AM

JOB DESCRIPTION

Kossuth County Landfill

JOB NUMBER

310-294910-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

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Job Notes

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Authorization

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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

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Job Narrative
310-294910-1

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 11/8/2024 4:25 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 1.2°C.

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.

Sample Summary

Client: SCS Engineers
Project/Site: Kossuth County Landfill

Job ID: 310-294910-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-294910-3	MWPz-8B2	Water	11/06/24 12:52	11/08/24 16:25
310-294910-4	MW-19	Water	11/06/24 11:50	11/08/24 16:25

Detection Summary

Client: SCS Engineers
Project/Site: Kossuth County Landfill

Job ID: 310-294910-1

Client Sample ID: MWPz-8B2 — Lab Sample ID: 310-294910-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0157		0.00200		mg/L	1		6020B	Total/NA
Barium	0.159		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.00563		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.0124		0.000500		mg/L	1		6020B	Total/NA
Lead	0.0134		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.249		0.00500		mg/L	1		6020B	Total/NA
Selenium	0.0224		0.00500		mg/L	1		6020B	Total/NA
Zinc	0.0337		0.0200		mg/L	1		6020B	Total/NA
Total Suspended Solids	664		30.0		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-19 — Lab Sample ID: 310-294910-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.130		0.00200		mg/L	1		6020B	Total/NA
Barium	1.19		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000405		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.00441		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.0311		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	164		30.0		mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SCS Engineers
Project/Site: Kossuth County Landfill

Job ID: 310-294910-1

Client Sample ID: MWPz-8B2

Date Collected: 11/06/24 12:52
Date Received: 11/08/24 16:25

Lab Sample ID: 310-294910-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0157		0.00200		mg/L		11/15/24 09:30	11/15/24 17:07	1
Barium	0.159		0.00200		mg/L		11/15/24 09:30	11/15/24 17:07	1
Cadmium	0.00563		0.000200		mg/L		11/15/24 09:30	11/15/24 17:07	1
Cobalt	0.0124		0.000500		mg/L		11/15/24 09:30	11/15/24 17:07	1
Lead	0.0134		0.000500		mg/L		11/15/24 09:30	11/15/24 17:07	1
Nickel	0.249		0.00500		mg/L		11/15/24 09:30	11/15/24 17:07	1
Selenium	0.0224		0.00500		mg/L		11/15/24 09:30	11/15/24 17:07	1
Zinc	0.0337		0.0200		mg/L		11/15/24 09:30	11/15/24 17:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	664		30.0		mg/L			11/12/24 16:31	1

Client: SCS Engineers
Project/Site: Kossuth County Landfill

Job ID: 310-294910-1

Client Sample ID: MW-19

Date Collected: 11/06/24 11:50
Date Received: 11/08/24 16:25

Lab Sample ID: 310-294910-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.130**		0.00200		mg/L		11/15/24 09:30	11/15/24 17:09	1
Barium	**1.19**		0.00200		mg/L		11/15/24 09:30	11/15/24 17:09	1
Cadmium	**0.000405**		0.000200		mg/L		11/15/24 09:30	11/15/24 17:09	1
Cobalt	**0.00441**		0.000500		mg/L		11/15/24 09:30	11/15/24 17:09	1
Lead	<0.000500		0.000500		mg/L		11/15/24 09:30	11/15/24 17:09	1
Nickel	**0.0311**		0.00500		mg/L		11/15/24 09:30	11/15/24 17:09	1
Selenium	<0.00500		0.00500		mg/L		11/15/24 09:30	11/15/24 17:09	1
Zinc	<0.0200		0.0200		mg/L		11/15/24 09:30	11/15/24 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**164**		30.0		mg/L			11/12/24 16:31	1

Definitions/Glossary

Client: SCS Engineers
Job ID: 310-294910-1
Project/Site: Kossuth County Landfill

Glossary

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

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-439749/1-A
Matrix: Water
Analysis Batch: 440003

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 439749

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200		mg/L		11/15/24 09:30	11/15/24 16:26	1
Barium	<0.00200		0.00200		mg/L		11/15/24 09:30	11/15/24 16:26	1
Cadmium	<0.000200		0.000200		mg/L		11/15/24 09:30	11/15/24 16:26	1
Cobalt	<0.000500		0.000500		mg/L		11/15/24 09:30	11/15/24 16:26	1
Lead	<0.000500		0.000500		mg/L		11/15/24 09:30	11/15/24 16:26	1
Nickel	<0.00500		0.00500		mg/L		11/15/24 09:30	11/15/24 16:26	1
Selenium	<0.00500		0.00500		mg/L		11/15/24 09:30	11/15/24 16:26	1
Zinc	<0.0200		0.0200		mg/L		11/15/24 09:30	11/15/24 16:26	1

Lab Sample ID: LCS 310-439749/2-A
Matrix: Water
Analysis Batch: 440003

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 439749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2006		mg/L		100	80 - 120
Barium	0.100	0.1030		mg/L		103	80 - 120
Cadmium	0.100	0.09884		mg/L		99	80 - 120
Cobalt	0.100	0.1007		mg/L		101	80 - 120
Lead	0.200	0.2016		mg/L		101	80 - 120
Nickel	0.200	0.1925		mg/L		96	80 - 120
Selenium	0.400	0.3948		mg/L		99	80 - 120
Zinc	0.200	0.1857		mg/L		93	80 - 120

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

Lab Sample ID: MB 310-439468/1
Matrix: Water
Analysis Batch: 439468

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	<5.0		5.0		mg/L			11/12/24 16:31	1

Lab Sample ID: LCS 310-439468/2
Matrix: Water
Analysis Batch: 439468

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	107.0		mg/L		107	81 - 116

QC Association Summary

Client: SCS Engineers
Job ID: 310-294910-1
Project/Site: Kossuth County Landfill

Metals

Prep Batch: 439749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294910-3	MWPz-8B2	Total/NA	Water	3005A	
310-294910-4	MW-19	Total/NA	Water	3005A	
MB 310-439749/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-439749/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 440003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294910-3	MWPz-8B2	Total/NA	Water	6020B	439749
310-294910-4	MW-19	Total/NA	Water	6020B	439749
MB 310-439749/1-A	Method Blank	Total/NA	Water	6020B	439749
LCS 310-439749/2-A	Lab Control Sample	Total/NA	Water	6020B	439749

General Chemistry

Analysis Batch: 439468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-294910-3	MWPz-8B2	Total/NA	Water	I-3765-85	
310-294910-4	MW-19	Total/NA	Water	I-3765-85	
MB 310-439468/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-439468/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
Project/Site: Kossuth County Landfill

Job ID: 310-294910-1

Client Sample ID: MWPz-8B2

Lab Sample ID: 310-294910-3

Date Collected: 11/06/24 12:52

Matrix: Water

Date Received: 11/08/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439749	F5MW	EET CF	11/15/24 09:30
Total/NA	Analysis	6020B		1	440003	A6US	EET CF	11/15/24 17:07
Total/NA	Analysis	I-3765-85		1	439468	MDU9	EET CF	11/12/24 16:31

Client Sample ID: MW-19

Lab Sample ID: 310-294910-4

Date Collected: 11/06/24 11:50

Matrix: Water

Date Received: 11/08/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			439749	F5MW	EET CF	11/15/24 09:30
Total/NA	Analysis	6020B		1	440003	A6US	EET CF	11/15/24 17:09
Total/NA	Analysis	I-3765-85		1	439468	MDU9	EET CF	11/12/24 16:31

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: 310-294910-1
Project/Site: Kossuth 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

Method Summary

Client: SCS Engineers
Job ID: 310-294910-1
Project/Site: Kossuth County Landfill

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	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

eurofins | Environment Testing America

310-294910 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11.08.24 | TIME 1625 | Received By: CGC

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee
☑ Lab Courier ☐ Lab Field Services ☐ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☑ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☑ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present? No	☐ Yes	☑ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present? No	☐ Yes	☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☑ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 9 | Correction Factor (°C): 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): 1.2 | Corrected Temp (°C): 1.2

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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

Chain of Custody Record

TestAmerica Des Moines SC

eurofins

Client Information	Sampler: KonnerRoth	Lab PM: Miller, Samuel	Carrier Tracking No(s):	COC No: 310-99531-26979 1
Client Contact: Nathan Ohrt	Phone:	E-Mail: Samuel Miller@et.eurofinsus com	State of Origin:	Page: Page 1 of 1
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested.			
City: West Des Moines	TAT Requested (days).			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone: 319-331-9613(Tel)	PO #: Purchase Order not required			
Email: nohrt@scsengineers.com	WO #:			
Project Name: Kossuth County Landfill	Project #: 31016904			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
D - HNO3
N - None
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - As, Ba, Cd, Co, Pb, Ni, Se, Zn	I_3765_85 - Residue, Non-filterable (TSS)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
MW-12				Water						
MWPz-8A				Water						
MWPz-8B2	11-6-24	12:52	G	Water						
MW-19	11-6-24	11 50	G	Water						

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

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

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

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	KonnerRoth	11-8-24/12.00	SCS		11/8/24 12:00	
2				CGC	11-08-24 1625	Eurofins
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

11/18/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-294910-1

Login Number: 294910

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Collins, Charlotte G

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	

Appendix B-2
Data Validation Documentation

Completed by: Michael Morgan
Sample Date: 5/22/2024
Lab Report Date: 6/12/2024
Site Name: Kossuth County Sanitary Landfill
Project Type: 1st 2024 HMSP
Lab Report Number: 310-282075-1

	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			No detections
Trip Blank Detections	X			No detections
Accuracy				
ICV/CCV	X			
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			Sample MW-20 and duplicate sample MW-D had <50% RPD for analyzed parameters.

Completed by: Michael Morgan
Sample Date: 9/12/2024
Lab Report Date: 9/26/2024
Site Name: Kossuth County Sanitary Landfill
Project Type: 2nd 2024 HMSP
Lab Report Number: 310-290613-1

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition				
Case Narrative	X			
Holding Times	X			
Analytical Sensitivity and Blanks				
Method Blank Detections	X			No detections
Trip Blank Detections	X			No detections
Accuracy				
ICV/CCV		X		Method 8260D: The CCV associated with batch 310-433388 recovered above the upper control limit for Dichlorodifluoromethane (105.1%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. Method 8260D: The continuing calibration verification (CCV) associated with batch 310-433390 recovered above the upper control limit for Dichlorodifluoromethane (95.3%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.
LCS/LCSD		X		Method 8260D: The laboratory control sample (LCS) for analytical batch 310-433388 recovered outside control limits for Dichlorodifluoromethane.; this analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. Method 8260D: The LCS for analytical batch 310-433390 recovered outside control limits for Dichlorodifluoromethane; this analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			Sample MW-22B and duplicate sample MW-D had <50% RPD for analyzed parameters.

Completed by: Michael Morgan
Sample Date: 11/6/2024
Lab Report Date: 11/18/2024
Site Name: Kossuth County Sanitary Landfill
Project Type: November Resample HMSP
Lab Report Number: 310-294910-1

	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			No detections
Trip Blank Detections			X	
Accuracy				
ICV/CCV	X			
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates			X	

Appendix C
Summary of Groundwater Chemistry

SCS ENGINEERS

Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Antimony, mg/L (CAS NO - 7440-36-0)	3/17/2009	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A
	10/27/2009	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006
	5/14/2013	N/A	< 0.006	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A
	7/23/2013	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006
	5/21/2014	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006
	5/4/2015	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	11/10/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2017	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/14/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00369	< 0.001	< 0.001	< 0.001	< 0.001
	7/17/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	11/7/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00106	< 0.001	< 0.001	< 0.001	< 0.001
	2/5/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	5/15/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/27/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2020	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/13/2021	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/23/2021	N/A	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/23/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/15/2022	N/A	< 0.002	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/22/2023	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
Arsenic, mg/L (CAS NO - 7440-38-2)	3/17/2009	0.00282	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001
	5/4/2009	0.00189	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
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00904	0.022	0.00446	N/A	N/A	N/A
	10/27/2009	N/A	0.0031	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	0.00136	N/A	0.00163	N/A	N/A	N/A	N/A	N/A	0.00206	0.00128	< 0.001	N/A	N/A	N/A
	4/28/2010	0.00276	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	0.0011	< 0.001	N/A	N/A	N/A
	7/28/2010	N/A	0.00182	< 0.001	N/A	N/A	N/A	N/A	N/A	0.00146	0.00174	< 0.001	N/A	N/A	N/A
	7/28/2010	N/A	0.00189	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	0.00196	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.00686	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.00661	0.00126	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	1/11/2012	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.002	N/A	N/A	N/A
	5/9/2012	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.003	N/A	< 0.001	< 0.003	< 0.002	N/A	N/A	< 0.001
	5/13/2013	< 0.001	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001
	5/14/2013	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A	0.00134	N/A	N/A	N/A	< 0.001	N/A	N/A
	7/23/2013	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	0.00101	0.001	N/A	N/A	< 0.001	0.00408	N/A	< 0.001	< 0.002	< 0.002	< 0.002	< 0.001	N/A	< 0.002

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	5/21/2014	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/4/2015	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	0.00272	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	11/10/2015	< 0.002	0.00226	< 0.002	< 0.002	< 0.002	0.00232	0.00409	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/5/2016	< 0.002	< 0.002	< 0.002	0.0249	< 0.002	< 0.002	0.00777	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/7/2016	0.00243	0.00211	< 0.002	0.0386	< 0.002	< 0.002	0.00471	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/16/2017	< 0.002	< 0.002	< 0.002	0.0379	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/7/2017	< 0.002	0.00238	N/A	0.0238	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/14/2018	< 0.002	< 0.002	< 0.002	0.0425	< 0.002	< 0.002	0.0031	< 0.002	< 0.002	0.00537	< 0.002	< 0.002	< 0.002	< 0.002
	11/7/2018	0.00254	0.00206	< 0.002	0.00975	< 0.002	< 0.002	0.0092	0.00204	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/15/2019	0.003	< 0.002	< 0.002	0.0238	< 0.002	< 0.002	0.017	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/19/2019	0.00209	0.0028	< 0.002	0.0203	< 0.002	0.00292	0.00358	0.00208	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/27/2020	0.0036	0.00233	< 0.002	0.0436	< 0.002	< 0.002	0.0177	0.00229	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/18/2020	N/A	0.00285	N/A	N/A	N/A	N/A	0.0271	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/13/2021	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	0.00977	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/23/2021	N/A	< 0.002	N/A	< 0.002	< 0.002	0.00209	0.0376	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/23/2022	0.00377	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.0361	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/15/2022	N/A	0.00252	N/A	N/A	N/A	N/A	0.0694	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/22/2023	0.00313	< 0.002	N/A	< 0.002	< 0.002	< 0.002	0.0566	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	5/22/2024	0.00219	< 0.002	N/A	0.0089	< 0.002	0.00471	0.0968	0.00212	0.00394	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00214	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00331	N/A	N/A	< 0.002	< 0.002	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00397	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.0157	N/A	N/A	0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barium, mg/L (CAS NO - 7440-39-3)	3/17/2009	0.333	N/A	0.151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.119	N/A	0.313
	5/4/2009	0.166	N/A	0.114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.113	N/A	0.273
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.369	0.999	0.262	N/A	N/A	N/A
	10/27/2009	N/A	0.134	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	0.18	N/A	0.149	N/A	N/A	N/A	N/A	N/A	0.333	0.526	0.0915	0.108	N/A	0.282
	4/28/2010	0.124	0.0439	0.0934	N/A	N/A	N/A	N/A	0.0735	0.289	0.492	0.134	0.0652	N/A	0.26
	7/28/2010	N/A	0.0519	N/A	N/A	N/A	N/A	N/A	0.0941	0.229	0.559	0.0995	N/A	N/A	N/A
	7/28/2010	N/A	0.0793	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	0.075	N/A	N/A	N/A	N/A	N/A	0.134	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	0.397	0.091	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	0.183	0.185	0.452	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	N/A	N/A	N/A	N/A	0.208	0.108	0.394	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.744	0.0519	0.288	N/A	0.21	0.0983	N/A	0.128	0.357	0.473	0.158	0.121	N/A	0.306
	1/11/2012	0.217	0.11	N/A	N/A	0.383	0.101	N/A	0.109	0.442	0.474	0.145	0.103	N/A	0.313
	5/9/2012	0.219	0.09	N/A	N/A	0.187	0.0975	0.411	0.112	0.426	0.496	0.102	0.0894	N/A	0.296
	5/13/2013	0.155	N/A	N/A	N/A	0.209	N/A	N/A	N/A	0.338	0.323	0.0743	N/A	N/A	0.313
	5/14/2013	N/A	0.0342	N/A	N/A	N/A	0.0769	N/A	0.0578	N/A	N/A	N/A	0.131	N/A	N/A
	7/23/2013	N/A	N/A	0.093	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	0.265	0.0562	N/A	N/A	0.292	0.0959	N/A	0.0533	0.365	0.374	0.0739	0.102	N/A	0.296
	5/21/2014	0.209	0.0503	N/A	N/A	0.212	0.0704	N/A	0.0667	0.372	0.442	0.0836	0.0961	N/A	0.31
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.321	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	0.175	0.0482	N/A	N/A	0.19	0.101	N/A	0.0588	0.351	0.421	0.0819	0.0847	N/A	0.296
	5/4/2015	0.127	0.0378	0.0908	N/A	0.199	0.101	0.388	0.0776	0.348	0.409	0.0747	0.0786	N/A	0.291
	11/10/2015	0.24	0.0542	0.103	0.534	0.212	0.103	0.419	0.0626	0.275	0.397	0.0924	0.104	0.0547	0.31
	5/5/2016	0.211	0.0371	0.103	0.139	0.204	0.0901	0.382	0.102	0.334	0.48	0.085	0.0716	0.0507	0.293
	11/7/2016	0.143	0.0518	0.109	0.125	0.227	0.0904	0.399	0.116	0.278	0.581	0.0981	0.0899	0.0502	0.309
	5/16/2017	0.135	0.0389	0.114	0.12	0.231	0.0871	0.403	0.112	0.313	0.556	0.116	0.0697	0.0661	0.284
	11/7/2017	0.173	0.0493	N/A	0.164	0.179	0.0875	N/A	0.089	0.319	0.475	0.117	0.0985	0.0476	0.319
	5/14/2018	0.136	0.0314	0.0876	0.787	0.219	0.0762	0.495	0.0853	0.335	0.429	0.0769	0.0716	0.0549	0.288

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Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Barium, mg/L (CAS NO - 7440-39-3)	11/7/2018	0.126	0.0429	0.114	0.101	0.211	0.12	0.595	0.126	0.272	0.476	0.0951	0.0938	0.0556	0.273
	5/15/2019	0.121	0.029	0.104	0.0994	0.222	0.0968	0.797	0.0828	0.293	0.405	0.0861	0.0787	0.0585	0.3
	7/16/2019	N/A	N/A	N/A	N/A	N/A	N/A	0.611	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2019	0.122	0.0389	0.0995	0.0943	0.179	0.0851	0.657	0.103	0.248	0.403	0.11	0.0927	0.0518	0.293
	5/27/2020	0.116	0.0352	0.0932	0.0984	0.212	0.0931	0.787	0.141	0.316	0.212	0.1	0.0816	0.0468	0.306
	11/18/2020	N/A	0.0462	N/A	N/A	N/A	N/A	0.905	0.0929	0.317	0.393	0.0936	0.0919	0.0451	0.314
	5/13/2021	N/A	0.037	N/A	N/A	0.191	0.0596	0.77	0.0787	0.31	0.393	0.0929	0.0974	0.0524	0.322
	11/23/2021	N/A	0.0694	N/A	0.0534	0.19	0.089	0.859	0.0929	0.33	0.39	0.11	0.119	0.0493	0.304
	5/23/2022	0.147	0.038	0.0978	0.0994	0.209	0.0711	0.87	0.0759	0.425	0.506	0.0744	0.0867	0.0614	0.326
	8/3/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.39	0.385	N/A	N/A	N/A	N/A
	11/15/2022	N/A	0.0508	N/A	N/A	N/A	N/A	0.962	0.0638	0.326	0.389	0.0835	0.0947	0.046	0.31
	5/22/2023	0.118	0.0315	N/A	0.0835	0.186	0.0801	0.912	0.0657	0.333	0.389	0.0486	0.0732	0.0435	0.291
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.321	N/A	N/A	0.0804	0.0702	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.323	N/A	N/A	N/A	N/A	N/A
	5/22/2024	0.237	0.0479	N/A	0.243	0.225	0.423	1.36	0.0896	0.345	0.369	0.0894	0.0851	0.0715	0.312
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0911	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.315	N/A	N/A	0.0953	0.047	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.329	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.159	N/A	N/A	1.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium, mg/L (CAS NO - 7440-41-7)	3/17/2009	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.00112	0.00101	N/A	N/A	N/A
	10/27/2009	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	N/A	N/A
	7/28/2010	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A
	1/11/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A
	5/9/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	N/A
	5/13/2013	< 0.001	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001
	5/14/2013	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A	N/A
	7/23/2013	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/21/2014	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/4/2015	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	11/10/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2017	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/14/2018	< 0.001	< 0.001	< 0.001	0.00242	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/15/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/27/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2020	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/13/2021	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/23/2021	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/23/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/22/2023	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Beryllium, mg/L (CAS NO - 7440-41-7)	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Cadmium, mg/L (CAS NO - 7440-43-9)	3/17/2009	0.000963	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000506	N/A	< 0.0005
	5/4/2009	< 0.0005	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
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000638	0.00234	0.000581	N/A	N/A	N/A
	10/27/2009	N/A	0.00188	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	< 0.0005	N/A	0.00107	N/A	N/A	N/A	N/A	N/A	0.00112	0.000616	< 0.0005	< 0.0005	N/A	N/A
	4/28/2010	< 0.0005	0.000893	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	0.000509	0.000598	< 0.0005	< 0.0005	N/A	N/A
	7/28/2010	N/A	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	7/28/2010	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	0.000991	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	N/A	N/A	N/A	N/A	0.000787	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.00547	< 0.0005	0.00131	N/A	0.000744	N/A	N/A	N/A	0.000604	0.000837	0.000527	< 0.0005	N/A	N/A
	10/26/2011	0.00249	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
	1/11/2012	< 0.0005	< 0.0005	N/A	N/A	0.00121	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	5/9/2012	< 0.0005	0.00111	N/A	N/A	< 0.0005	N/A	N/A	N/A	0.000526	0.000505	< 0.0005	< 0.0005	N/A	0.000513
	5/13/2013	< 0.0005	N/A	N/A	N/A	0.000775	N/A	N/A	N/A	0.00102	< 0.0005	< 0.0005	N/A	N/A	0.000504
	5/14/2013	N/A	< 0.0005	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	< 0.0005	N/A	N/A
	7/23/2013	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.0005	< 0.0005	N/A	N/A	0.00161	< 0.0005	N/A	< 0.0005	0.000636	0.000803	< 0.0005	< 0.0005	N/A	< 0.0005
	5/21/2014	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	0.000852	< 0.0005	< 0.0005	N/A	< 0.0005
	5/4/2015	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000512	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005
	11/10/2015	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/5/2016	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000533	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2016	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/16/2017	< 0.0005	0.000549	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2017	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/14/2018	< 0.0005	< 0.0005	< 0.0005	0.00231	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00102	0.000548	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000605	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/15/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/19/2019	0.000232	0.00215	0.000147	0.000271	0.000139	0.000113	0.000643	0.000156	0.000493	0.000103	0.000444	< 0.0001	0.000211	0.000162
	5/27/2020	0.000257	0.000182	0.000192	0.000162	0.000394	0.000129	0.000251	0.000303	0.0013	0.000551	0.000682	0.000125	0.000346	0.000211
	11/18/2020	N/A	0.0001	N/A	N/A	N/A	N/A	0.00075	< 0.0001	0.000597	0.000136	0.000188	< 0.0001	0.000182	0.000116
	5/13/2021	N/A	0.000598	N/A	N/A	< 0.0001	< 0.0001	< 0.0001	0.000128	0.000714	0.000244	0.000306	< 0.0001	0.000113	0.000128
	11/23/2021	N/A	< 0.0001	N/A	0.00024	< 0.0001	< 0.0001	0.00103	0.000108	0.000273	< 0.0001	0.000164	< 0.0001	0.000205	0.000636
	5/23/2022	0.000158	0.000118	0.000134	0.000334	0.000173	< 0.0001	0.000163	0.000115	0.000502	0.000167	0.000217	< 0.0001	0.000134	< 0.0001
	11/15/2022	N/A	0.00013	N/A	N/A	N/A	N/A	< 0.0001	< 0.0001	0.000704	0.000125	0.000248	< 0.0001	0.000172	0.000266
	5/22/2023	0.000249	< 0.0002	N/A	0.000297	0.000451	0.000409	< 0.0002	0.00025	0.000932	< 0.0002	< 0.0002	< 0.0002	0.000302	< 0.0002
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000746	N/A	N/A	< 0.0002	< 0.0002	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000359	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.0002	< 0.0002	N/A	0.00109	< 0.0002	0.000483	0.000951	< 0.0002	< 0.0002	0.000208	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	< 0.0002	< 0.0002	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.00563	N/A	N/A	0.000405	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium, mg/L (CAS NO - 7440-47-3)	3/17/2009	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	10/27/2009	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chromium, mg/L (CAS NO - 7440-47-3)	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02
	5/14/2013	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/23/2013	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/21/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/4/2015	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	11/10/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2017	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/14/2018	< 0.005	< 0.005	< 0.005	0.0585	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/15/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/27/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/18/2020	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/13/2021	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/23/2021	N/A	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/23/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/22/2023	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00608**	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Cobalt, mg/L (CAS NO - 7440-48-4)	3/17/2009	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	10/27/2009	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.007	N/A	N/A	N/A	< 0.007	N/A	N/A	N/A	< 0.007	< 0.007	< 0.007	N/A	N/A	< 0.007
	5/14/2013	N/A	< 0.007	N/A	N/A	N/A	< 0.007	N/A	< 0.007	N/A	N/A	N/A	< 0.007	N/A	N/A
	7/23/2013	N/A	N/A	< 0.007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.007	< 0.007	N/A	N/A	< 0.007	< 0.007	N/A	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	N/A	< 0.007
	5/21/2014	< 0.007	< 0.007	N/A	N/A	< 0.007	< 0.007	N/A	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	N/A	< 0.007
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.007	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.007	< 0.007	N/A	N/A	< 0.007	< 0.007	N/A	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	N/A	< 0.007
	5/4/2015	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	**0.0014**	< 0.0005	**0.00193**	**0.00167**	< 0.0005	< 0.0005	N/A	< 0.0005
	11/10/2015	**0.000825**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00638**	< 0.0005	**0.000883**	**0.00171**	< 0.0005	< 0.0005	< 0.0005	**0.00211**
	5/5/2016	< 0.0005	< 0.0005	< 0.0005	**0.000777**	< 0.0005	< 0.0005	**0.00124**	< 0.0005	**0.00145**	**0.00578**	< 0.0005	< 0.0005	< 0.0005	**0.000656**
	11/7/2016	**0.000635**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00106**	< 0.0005	**0.0011**	**0.00484**	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/16/2017	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000647**	< 0.0005	< 0.0005	**0.00438**	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2017	< 0.0005	< 0.0005	N/A	**0.00126**	< 0.0005	< 0.0005	N/A	< 0.0005	**0.000775**	**0.00265**	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/14/2018	< 0.0005	< 0.0005	< 0.0005	0.0328	< 0.0005	< 0.0005	**0.000632**	< 0.0005	**0.00145**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2018	< 0.0005	< 0.0005	< 0.0005	**0.00111**	< 0.0005	< 0.0005	**0.00148**	< 0.0005	**0.00143**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	2/5/2019	N/A	N/A	N/A	N/A	N/A	N/A	**0.00122**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2019	< 0.0005	< 0.0005	< 0.0005	**0.000619**	< 0.0005	< 0.0005	**0.00113**	< 0.0005	**0.000729**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/19/2019	< 0.0005	< 0.0005	< 0.0005	**0.000769**	< 0.0005	< 0.0005	**0.0012**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/27/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0031**	< 0.0005	**0.0011**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/18/2020	N/A	< 0.0005	N/A	N/A	N/A	N/A	**0.00428**	< 0.0005	**0.00146**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00183	N/A	N/A	N/A	N/A	N/A
	5/13/2021	N/A	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	0.00155	< 0.0005	0.000608	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/23/2021	N/A	< 0.0005	N/A	0.00313	< 0.0005	< 0.0005	0.00272	< 0.0005	0.00413	< 0.0005	0.000607	< 0.0005	< 0.0005	< 0.0005
	1/31/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0065	N/A	N/A	N/A	N/A	N/A
	5/23/2022	0.00112	< 0.0005	< 0.0005	0.00208	< 0.0005	< 0.0005	0.00195	< 0.0005	0.00347	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/15/2022	N/A	< 0.0005	N/A	N/A	N/A	N/A	0.00267	< 0.0005	0.00104	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/22/2023	< 0.0005	< 0.0005	N/A	0.000768	< 0.0005	< 0.0005	0.00245	< 0.0005	0.0014	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00323	N/A	N/A	< 0.0005	0.000506	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00297	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.0005	< 0.0005	N/A	0.0112	0.00784	0.0367	0.00535	< 0.0005	0.00338	0.00147	< 0.0005	< 0.0005	< 0.0005	0.00071
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00281	N/A	N/A	< 0.0005	< 0.0005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00215	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.0124	N/A	N/A	0.00441	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper, mg/L (CAS NO - 7440-50-8)	3/17/2009	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0223	< 0.02	N/A	N/A	N/A
	10/27/2009	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	0.0219	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	< 0.02	N/A	N/A	< 0.02	N/A	0.0247	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	< 0.02	< 0.02	N/A	N/A	0.0443	N/A	0.209	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.0345	< 0.02	0.0239	N/A	< 0.02	N/A	N/A	N/A	N/A	0.0224	N/A	N/A	N/A	N/A
	1/11/2012	< 0.02	< 0.02	N/A	N/A	0.0246	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	5/9/2012	< 0.02	< 0.02	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	5/13/2013	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02
	5/14/2013	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/23/2013	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/21/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/4/2015	< 0.002	< 0.002	< 0.002	N/A	0.00357	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	11/10/2015	< 0.002	< 0.002	0.00257	< 0.002	< 0.002	0.00211	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00563	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2017	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/14/2018	< 0.005	< 0.005	< 0.005	0.0857	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/15/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/27/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/18/2020	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/13/2021	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/23/2021	N/A	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/23/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/22/2023	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Lead, mg/L (CAS NO - 7439-92-1)	3/17/2009	0.00754	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004
	5/4/2009	< 0.004	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
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	< 0.004	0.00528	N/A	N/A	N/A
	10/27/2009	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	4/28/2010	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	0.00451	N/A	N/A	N/A
	7/28/2010	N/A	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.00802	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	1/11/2012	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	5/9/2012	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	5/13/2013	< 0.004	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004	N/A	N/A	< 0.004
	5/14/2013	N/A	< 0.004	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	< 0.004	N/A	N/A
	7/23/2013	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.004	< 0.004	N/A	N/A	< 0.004	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004
	5/21/2014	< 0.004	< 0.004	N/A	N/A	< 0.004	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.004	< 0.004	N/A	N/A	< 0.004	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004
	5/4/2015	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000519	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005
	11/10/2015	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000523	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00057	< 0.0005	< 0.0005	< 0.0005
	5/5/2016	< 0.0005	< 0.0005	< 0.0005	0.00174	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2016	0.000934	0.000502	0.00063	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/16/2017	< 0.0005	< 0.0005	< 0.0005	0.000674	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000596	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2017	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/14/2018	< 0.0005	< 0.0005	< 0.0005	0.0338	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/7/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/15/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000763	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/19/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000947	< 0.0005	< 0.0005
	5/27/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/18/2020	N/A	< 0.0005	N/A	N/A	N/A	N/A	0.000638	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/13/2021	N/A	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000792	< 0.0005	< 0.0005	< 0.0005
	11/23/2021	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	0.000502	< 0.0005	< 0.0005	< 0.0005	0.00194	< 0.0005	< 0.0005	< 0.0005
	5/23/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	11/15/2022	N/A	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/22/2023	0.000618	< 0.0005	N/A	< 0.0005	< 0.0005	0.0007	< 0.0005	< 0.0005	0.00136	< 0.0005	< 0.0005	< 0.0005	0.000847	< 0.0005
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	< 0.0005	0.000622	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.0005	< 0.0005	N/A	0.0081	0.00104	0.000756	0.00053	< 0.0005	< 0.0005	0.00144	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.0134	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury, mg/L (CAS NO - 7439-97-6)	3/17/2009	< 0.0002	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A
	10/27/2009	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	< 0.0002
	5/14/2013	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A
	7/23/2013	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	< 0.0002
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	< 0.0002

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Nickel, mg/L (CAS NO - 7440-02-0)	3/17/2009	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A
	10/27/2009	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	0.0644	< 0.05	< 0.05	N/A	N/A	< 0.05
	5/14/2013	N/A	< 0.05	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/23/2013	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	5/21/2014	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	5/4/2015	< 0.005	< 0.005	< 0.005	N/A	0.00688	< 0.005	0.0154	< 0.005	0.0186	0.0159	< 0.005	< 0.005	N/A	0.0065
	11/10/2015	0.0073	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0297	< 0.005	0.0115	0.0199	< 0.005	< 0.005	< 0.005	0.00626
	5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	0.00536	< 0.005	0.0104	< 0.005	0.0177	0.0281	< 0.005	< 0.005	< 0.005	0.00519
	11/7/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00948	< 0.005	0.0197	0.0249	< 0.005	0.00529	< 0.005	< 0.005
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	0.00506	< 0.005	0.0113	< 0.005	0.0147	0.0324	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2017	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	< 0.005	0.0125	0.0229	< 0.005	< 0.005	< 0.005	< 0.005
	5/14/2018	< 0.005	< 0.005	< 0.005	0.1	< 0.005	< 0.005	0.0147	< 0.005	0.0239	0.00977	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.00595	< 0.005	0.019	< 0.005	0.0134	0.0157	< 0.005	< 0.005	< 0.005	< 0.005
	5/15/2019	< 0.005	< 0.005	< 0.005	< 0.005	0.00624	< 0.005	0.0198	< 0.005	0.0184	0.00724	< 0.005	< 0.005	< 0.005	< 0.005
	11/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0207	< 0.005	0.0186	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/27/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0164	< 0.005	0.0177	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/18/2020	N/A	< 0.005	N/A	N/A	N/A	N/A	0.0264	< 0.005	0.0156	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/13/2021	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	0.0198	< 0.005	0.0122	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/23/2021	N/A	< 0.005	N/A	0.0126	< 0.005	< 0.005	0.0245	< 0.005	0.0142	< 0.005	< 0.005	< 0.005	< 0.005	0.0052
	1/31/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0147	N/A	N/A	N/A	N/A	N/A
	5/23/2022	< 0.005	< 0.005	< 0.005	0.0109	< 0.005	< 0.005	0.0204	< 0.005	0.0248	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	0.0216	< 0.005	0.0167	< 0.005	< 0.005	< 0.005	< 0.005	0.00506
	5/22/2023	< 0.005	< 0.005	N/A	0.011	< 0.005	< 0.005	0.0227	< 0.005	0.0161	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0141	N/A	N/A	< 0.005	< 0.005	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0141	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.005	0.00534	N/A	0.144	0.273	0.0151	0.0424	< 0.005	0.0148	0.0108	< 0.005	< 0.005	< 0.005	< 0.005
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00696	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.249	N/A	N/A	0.0311	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, mg/L (CAS NO - 7782-49-2)	3/17/2009	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/27/2009	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00611	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	1/11/2012	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2012	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005
	5/14/2013	N/A	0.00568	N/A	N/A	N/A	0.00805	N/A	0.00531	N/A	N/A	N/A	0.00591	N/A	N/A
	7/23/2013	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	0.011	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	5/21/2014	< 0.005	0.00523	N/A	N/A	< 0.005	< 0.005	N/A	0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	0.0136	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Selenium, mg/L (CAS NO - 7782-49-2)	2/11/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00731**	N/A	N/A	N/A	N/A	N/A	N/A
	5/4/2015	< 0.005	< 0.005	< 0.005	N/A	< 0.005	**0.00738**	< 0.005	**0.00515**	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	6/29/2015	N/A	N/A	N/A	N/A	N/A	**0.00703**	N/A	**0.00947**	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0074**	< 0.005	< 0.005	**0.00571**	< 0.005	< 0.005	< 0.005
	1/5/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00932**	< 0.005	< 0.005	**0.00614**	< 0.005	< 0.005	< 0.005
	6/29/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00689**	N/A	N/A	N/A
	11/7/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00551**	< 0.005	< 0.005	< 0.005
	11/7/2017	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	**0.00506**	< 0.005	< 0.005	< 0.005
	5/14/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00522**	< 0.005	**0.00526**	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/15/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00552**	< 0.005	< 0.005	< 0.005
	5/27/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00794**	< 0.005	**0.0072**	< 0.005	< 0.005	**0.00536**	< 0.005	< 0.005	< 0.005
	7/22/2020	N/A	N/A	N/A	N/A	N/A	**0.00672**	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2020	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/13/2021	N/A	**0.00904**	N/A	N/A	< 0.005	**0.00533**	< 0.005	**0.00724**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/23/2021	N/A	< 0.005	N/A	< 0.005	< 0.005	**0.00662**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/23/2022	< 0.005	**0.00526**	< 0.005	< 0.005	< 0.005	**0.00565**	< 0.005	**0.0108**	< 0.005	< 0.005	< 0.005	**0.00507**	< 0.005	< 0.005
	8/3/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0142**	N/A	N/A	N/A	N/A	N/A	N/A
	11/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	**0.00682**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/22/2023	< 0.005	**0.00629**	N/A	< 0.005	< 0.005	**0.00951**	< 0.005	**0.00799**	< 0.005	< 0.005	< 0.005	< 0.005	**0.00636**	< 0.005
	8/10/2023	N/A	N/A	N/A	N/A	N/A	**0.00556**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.005	**0.00592**	N/A	< 0.005	< 0.005	< 0.005	< 0.005	**0.00688**	< 0.005	< 0.005	< 0.005	**0.00832**	< 0.005	< 0.005
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00701**	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.0224	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silver, mg/L (CAS NO - 7440-22-4)	3/17/2009	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	10/27/2009	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02
	5/14/2013	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/23/2013	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/21/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/4/2015	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	11/10/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2017	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/14/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/15/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/27/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2020	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Silver, mg/L (CAS NO - 7440-22-4)	5/13/2021	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/23/2021	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/23/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00134**	< 0.001	< 0.001	< 0.001	**0.00134**	< 0.001
	8/3/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A
	11/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/22/2023	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Thallium, mg/L (CAS NO - 7440-28-0)	3/17/2009	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	10/27/2009	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002
	5/14/2013	N/A	< 0.002	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A
	7/23/2013	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	5/21/2014	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	5/4/2015	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	11/10/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2017	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/14/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/7/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/15/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/27/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2020	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	**0.00196**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/13/2021	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/23/2021	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/23/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/22/2023	< 0.001	< 0.001	N/A	< 0.001	< 0.001	**0.00456**	< 0.001	< 0.001	**0.00284**	< 0.001	< 0.001	< 0.001	**0.00437**	< 0.001
	8/10/2023	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Tin, mg/L (CAS NO - 7440-31-5)	3/17/2009	< 0.1	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	< 0.1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A
	10/27/2009	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Tin, mg/L (CAS NO - 7440-31-5)	5/13/2013	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	N/A	N/A	< 0.1
	5/14/2013	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A
	7/23/2013	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005
Vanadium, mg/L (CAS NO - 7440-62-2)	3/17/2009	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A
	10/27/2009	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	N/A	N/A	< 0.05
	5/14/2013	N/A	< 0.05	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/23/2013	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	5/21/2014	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05
	5/4/2015	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	11/10/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2017	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/14/2018	< 0.005	< 0.005	< 0.005	0.124	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/7/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00589**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	2/5/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00503**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	1/30/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/27/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00636**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	7/22/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00564**	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2020	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/13/2021	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/23/2021	N/A	< 0.005	N/A	< 0.005	< 0.005	**0.00505**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	1/31/2022	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/23/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/22/2023	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	**0.00512**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	8/10/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Zinc, mg/L (CAS NO - 7440-66-6)	3/17/2009	**0.075**	N/A	**0.0535**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0605**	N/A	**0.0516**
	5/4/2009	< 0.02	N/A	**0.0354**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0719**	N/A	**0.0482**
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0915**	**0.239**	**0.098**	N/A	N/A	N/A
	10/27/2009	N/A	**0.0733**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	**0.0293**	N/A	**0.0671**	N/A	N/A	N/A	N/A	N/A	**0.411**	**0.119**	**0.031**	**0.0729**	N/A	**0.0489**
	4/28/2010	< 0.02	**0.0514**	< 0.02	N/A	N/A	N/A	N/A	< 0.02	**0.0314**	**0.0533**	**0.0297**	< 0.02	N/A	**0.0309**
	7/28/2010	N/A	< 0.02	**0.0348**	N/A	N/A	N/A	N/A	N/A	**0.0427**	**0.0586**	**0.0266**	N/A	N/A	N/A
	7/28/2010	N/A	**0.0555**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	**0.032**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	**0.121**	**0.032**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Zinc, mg/L (CAS NO - 7440-66-6)	4/28/2011	N/A	N/A	N/A	N/A	< 0.02	0.0363	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	0.0836	< 0.02	0.0215	N/A	< 0.02	< 0.02	N/A	N/A	0.0381	0.0296	0.0502	< 0.02	N/A	< 0.02
	1/11/2012	< 0.02	< 0.02	N/A	N/A	0.0244	< 0.02	N/A	N/A	0.0235	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/9/2012	< 0.02	0.0234	N/A	N/A	< 0.02	0.0584	N/A	N/A	0.0558	0.0281	< 0.02	< 0.02	N/A	0.0219
	5/13/2013	0.0345	N/A	N/A	N/A	0.0637	N/A	N/A	N/A	0.0934	0.0734	0.0264	N/A	N/A	0.0685
	5/14/2013	N/A	0.0369	N/A	N/A	N/A	0.0369	N/A	< 0.02	N/A	N/A	N/A	0.0572	N/A	N/A
	7/23/2013	N/A	N/A	0.0495	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	0.184	0.076	N/A	N/A	0.18	0.0916	N/A	0.123	0.138	0.132	0.127	0.131	N/A	0.151
	5/21/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.04	< 0.02	< 0.02	N/A	< 0.04
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02
	5/4/2015	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	< 0.01	< 0.01	0.0373	0.0109	< 0.01	< 0.01	N/A	< 0.01
	11/10/2015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0146	< 0.01	< 0.01	< 0.01	< 0.01
	5/5/2016	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.083	< 0.01	< 0.01
	11/7/2016	< 0.01	< 0.01	< 0.01	< 0.01	0.0111	< 0.01	< 0.01	< 0.01	< 0.01	0.0102	< 0.01	< 0.01	< 0.01	< 0.01
	5/16/2017	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0893	< 0.02	< 0.02	< 0.02	< 0.02
	7/19/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	11/7/2017	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/14/2018	< 0.02	< 0.02	< 0.02	0.28	< 0.02	< 0.02	< 0.02	0.0224	0.0333	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/7/2018	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/15/2019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0265	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0443	< 0.02
	11/19/2019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/27/2020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/18/2020	N/A	< 0.02	N/A	N/A	N/A	N/A	0.0299	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/13/2021	N/A	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/23/2021	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	0.0318	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/23/2022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/15/2022	N/A	< 0.02	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/22/2023	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0228	N/A	N/A	< 0.02	< 0.02	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	5/22/2024	< 0.02	< 0.02	N/A	0.0584	< 0.02	< 0.02	0.0364	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	0.0337	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/L (CAS NO - TSS)	11/10/2014	190	24	N/A	N/A	71	142	N/A	24.8	5	292	199	5.1	N/A	10.9
	2/11/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	90	N/A	N/A	N/A	N/A	N/A	N/A
	5/4/2015	101	11	21.1	N/A	101	66.6	44	10.6	12.4	124	297	45.3	N/A	15.5
	6/29/2015	N/A	N/A	N/A	N/A	N/A	146	67	50.3	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2015	114	132	2690	157	157	74.9	208	20.1	6.1	75.3	834	67.1	321	8.4
	1/5/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	70.8	N/A	N/A	N/A
	5/5/2016	159	2.8	19.8	122	16.1	45.6	15	2.9	10.6	30.8	11.9	3.1	33	6.5
	6/29/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	83.9	47	N/A	N/A	N/A
	11/7/2016	174	4	58.7	168	22.5	32.6	31	4.6	6.4	121	215	10.9	44.7	5.4
	5/16/2017	135	< 1.9	35	836	42	54.4	25	2.1	4.4	127	319	6.5	47.5	10.4
	7/19/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	58.5	N/A	N/A	N/A	N/A
	11/7/2017	91.3	26.5	N/A	329	123	11	N/A	12.4	4.9	50.7	476	8.7	24.5	4.2
	5/14/2018	24.1	2.6	13	13400	9.1	22	32	< 1.9	4.4	44.7	7	4.8	25.6	5.3
	7/17/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	135	N/A	N/A	N/A	N/A
	11/7/2018	35.8	3.6	17.1	920	55.4	55	12.7	2.6	1.9	143	275	15.8	7.5	5.9
	2/5/2019	N/A	N/A	N/A	N/A	N/A	N/A	38	5	N/A	154	N/A	N/A	N/A	N/A
	5/15/2019	14.4	< 1.9	21.1	836	27.9	150	38	< 1.9	7.2	116	47.6	5.3	4.9	9.8
	7/16/2019	N/A	N/A	N/A	N/A	N/A	N/A	17.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2019	93.5	< 1.9	106	420	115	99.3	12.3	3.4	2.6	44.1	262	48	29	7.6

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Total Metals Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Total Suspended Solids, mg/L (CAS NO - TSS)	1/30/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.9	N/A	N/A	N/A	N/A	N/A	N/A
	5/27/2020	6.1	< 1.9	6.9	45.5	5.7	23.9	21.3	< 1.9	2.1	19.8	6.9	3.8	2.1	13.1
	7/22/2020	N/A	N/A	N/A	N/A	N/A	23.4	N/A	< 1.9	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2020	N/A	29.5	N/A	N/A	N/A	N/A	68	6.5	8.6	13.3	28.8	100	65.4	28.4
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.9	N/A	N/A	N/A	N/A	N/A
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.9	N/A	N/A	N/A	N/A	N/A
	5/13/2021	N/A	18.8	N/A	N/A	216	30.9	77	7.5	3.3	40.2	51.6	39.6	44.4	39.6
	11/23/2021	N/A	253	N/A	38	120	106	70	12.5	5.3	19.4	1750	40	23.4	3.8
	1/31/2022	N/A	N/A	N/A	N/A	N/A	19.7	N/A	N/A	5.7	N/A	N/A	N/A	N/A	N/A
	5/23/2022	52.1	10.3	50.3	35.3	118	141	34.5	4	12.1	150	714	25.4	20.9	5.5
	8/3/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.5	6.4	59.8	N/A	N/A	8.3	N/A
	11/15/2022	N/A	14.3	N/A	N/A	N/A	N/A	67	23.1	2	48.3	7.9	232	82.8	15.3
	5/22/2023	69.3	18.6	N/A	80.3	41.3	50.6	32.3	2.3	8.5	52.9	148	24.5	20.9	9.5
	8/10/2023	N/A	N/A	N/A	N/A	N/A	33.3	N/A	6.4	1.9	N/A	N/A	N/A	14.1	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.5	N/A	N/A	16.6	114	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.3	N/A	N/A	N/A	N/A	N/A
	5/22/2024	4.4	182	10500	4450	666	79	11700	< 1.9	29	297	70.6	< 1.9	33.1	27
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.9	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.5	N/A	N/A	2	10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.3	N/A	N/A	N/A	N/A	N/A
	11/6/2024	N/A	N/A	N/A	664	N/A	N/A	164	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: * indicates 'J 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.

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	3.04
	5/4/2009	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	2.47
	7/10/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	2.15
	7/28/2010	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	1.88
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	10/26/2011	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	2.49
	1/11/2012	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	1.7
	5/9/2012	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	2.63
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	2.56
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	2.33
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	2.1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	1.85
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.89
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.9
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.21
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.37
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.72

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Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	1.96
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	3.17	< 1	< 1	< 1	< 1	< 1	< 1	2.44
	7/17/2018	N/A	N/A	N/A	N/A	N/A	N/A	2.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	2.89	< 1	< 1	< 1	< 1	< 1	< 1	2.17
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	4.08	< 1	< 1	< 1	< 1	< 1	< 1	2.15
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	4.08	< 1	< 1	< 1	< 1	< 1	< 1	1.87
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	3.36	< 1	< 1	< 1	< 1	< 1	< 1	1.57
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	3.49	< 1	< 1	< 1	< 1	< 1	< 1	1.42
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	3.93	< 1	< 1	< 1	< 1	< 1	< 1	1.78
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	3.57	< 1	< 1	< 1	< 1	< 1	< 1	1.51
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	3.94	< 1	< 1	< 1	< 1	< 1	< 1	1.58
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	4.34	< 1	< 1	< 1	< 1	< 1	< 1	1.49
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	5.06	< 1	< 1	< 1	< 1	< 1	< 1	2.14
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	3.51	< 1	< 1	< 1	< 1	< 1	< 1	1.7
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/21/2014	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/4/2015	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/16/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2017	< 2	< 2	N/A	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/14/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/15/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/19/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/27/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/18/2020	N/A	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/13/2021	N/A	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/23/2021	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/23/2022	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/15/2022	N/A	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/22/2023	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	< 2	< 2	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	< 2	< 2	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	7/28/2010	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	1.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	2/11/2015	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
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/29/2015	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
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	<1	<1	< 1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	7/28/2010	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
2-Butanone, ug/L (CAS NO - 78-93-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
2-Butanone, ug/L (CAS NO - 78-93-3)	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
2-Hexanone, ug/L (CAS NO - 591-78-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Acetone, ug/L (CAS NO - 67-64-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	10.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	43.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/11/2012	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2012	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	11.8	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	7/17/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Acetone, ug/L (CAS NO - 67-64-1)	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	26.7	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	7/16/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	35.8	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/2/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	10.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	12.5	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	10.7	< 10	< 10	10.6	< 10	< 10	< 10	< 10	< 10
	8/10/2023	N/A	N/A	N/A	N/A	N/A	12	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	45.7	24.3	< 10	14	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Acrylonitrile, ug/L (CAS NO - 107-13-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Benzene, ug/L (CAS NO - 71-43-2)	3/17/2009	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.06	< 0.5	< 0.5	N/A	N/A	N/A
	10/27/2009	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.38	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	0.93	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	2.08	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	1.87	N/A	N/A	N/A	N/A	N/A
	1/11/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.71	N/A	N/A	N/A	N/A	N/A
	5/9/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	11/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5
	5/14/2013	N/A	< 0.5	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A
	7/23/2013	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5
	5/21/2014	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	N/A	< 0.5	1.52	< 0.5	< 0.5	< 0.5	N/A	< 0.5
	5/4/2015	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	0.632	< 0.5	< 0.5	< 0.5	N/A	< 0.5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.09	< 0.5	< 0.5	< 0.5	< 0.5
	6/29/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A	N/A
	11/7/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.39	< 0.5	< 0.5	< 0.5	< 0.5
	5/16/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.06	< 0.5	< 0.5	< 0.5	< 0.5
	11/7/2017	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	N/A	< 0.5	1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/14/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/7/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/15/2019	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.56	< 0.5	0.621	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/18/2020	N/A	< 0.5	N/A	N/A	N/A	N/A	0.57	< 0.5	1.08	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/13/2021	N/A	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/23/2021	N/A	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.83	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/23/2022	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.13	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/15/2022	N/A	< 0.5	N/A	N/A	N/A	N/A	0.907	< 0.5	1.24	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/22/2023	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	0.785	< 0.5	1.71	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.42	N/A	N/A	< 0.5	< 0.5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.4	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	2.31	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.36	N/A	N/A	< 0.5	< 0.5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.4	N/A	N/A	N/A	N/A	N/A
Bromochloromethane, ug/L (CAS NO - 74-97-5)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Bromoform, ug/L (CAS NO - 75-25-2)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Bromomethane, ug/L (CAS NO - 74-83-9)	3/17/2009	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/27/2009	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	< 4
	5/14/2013	N/A	< 4	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/23/2013	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/21/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/4/2015	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	11/10/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Bromomethane, ug/L (CAS NO - 74-83-9)	11/7/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/16/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2017	< 4	< 4	N/A	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/14/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/15/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/19/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/27/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/18/2020	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/13/2021	N/A	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/23/2021	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/23/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2023	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	**2.9**	< 1	< 1	< 1	< 1	< 1	**1.66**	< 1
	7/19/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	**4.76**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	2/5/2019	N/A	N/A	N/A	N/A	N/A	N/A	**5.13**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	**1.74**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/21/2014	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/4/2015	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/16/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2017	< 2	< 2	N/A	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/14/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/7/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/15/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/19/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/27/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/18/2020	N/A	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/13/2021	N/A	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/23/2021	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/23/2022	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/15/2022	N/A	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/22/2023	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	< 2	< 2	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	< 2	< 2	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
Chlorobenzene, ug/L (CAS NO - 108-90-7)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	3/17/2009	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.34	< 4	< 4	N/A	N/A	N/A
	10/27/2009	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.94	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	5.14	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	7.79	N/A	N/A	N/A	N/A	N/A
	10/28/2010	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	6.54	N/A	N/A	N/A	N/A	N/A
	1/11/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/9/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	11/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	< 4
	5/14/2013	N/A	< 4	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/23/2013	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/21/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/4/2015	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	11/10/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/16/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2017	< 4	< 4	N/A	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/14/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/15/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/19/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/27/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/18/2020	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/13/2021	N/A	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/23/2021	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/23/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2023	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Chloroform, ug/L (CAS NO - 67-66-3)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chloroform, ug/L (CAS NO - 67-66-3)	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/15/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/19/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/27/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/18/2020	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/13/2021	N/A	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/23/2021	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/23/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2023	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
Chloromethane, ug/L (CAS NO - 74-87-3)	3/17/2009	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	< 3
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	10/27/2009	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	< 3
	5/14/2013	N/A	< 3	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	7/23/2013	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/21/2014	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/4/2015	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/16/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2017	< 3	< 3	N/A	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/14/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/15/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/19/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/27/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/18/2020	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/13/2021	N/A	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/23/2021	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/23/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2023	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	5/22/2024	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	**4.35**
	5/4/2009	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	**2.16**
	7/10/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	**118**	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**199**	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	**115**	N/A	N/A	N/A	N/A	**2.55**
	7/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	**190**	N/A	N/A	N/A	N/A	**2.24**
	10/28/2010	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	N/A
	1/13/2011	N/A	N/A	N/A	N/A	**1.61**	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	< 1	N/A	N/A	**2.09**	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2011	N/A	< 1	N/A	N/A	**2.63**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	< 1	< 1	N/A	**2.22**	N/A	N/A	N/A	**159**	N/A	N/A	N/A	N/A	**4.08**
	1/11/2012	N/A	< 1	N/A	N/A	**1.35**	N/A	N/A	N/A	**91.4**	N/A	N/A	N/A	N/A	**3.67**
	5/9/2012	N/A	< 1	N/A	N/A	**3.6**	N/A	N/A	N/A	**67.5**	N/A	N/A	N/A	N/A	**4.56**
	11/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**44.2**	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 1	N/A	N/A	N/A	**1.88**	N/A	N/A	N/A	**10.8**	< 1	< 1	N/A	N/A	**3.92**
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	**29**	< 1	< 1	< 1	N/A	**4.45**
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	**24.5**	< 1	< 1	< 1	N/A	**4.03**
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	**151**	< 1	< 1	< 1	N/A	**4.72**
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	**66.6**	< 1	< 1	< 1	N/A	**3.11**
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**25.3**	< 1	< 1	< 1	< 1	**2.88**
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**9.11**	< 1	< 1	< 1	< 1	**3.71**
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**13.2**	< 1	< 1	< 1	< 1	**3.82**
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**10.9**	< 1	< 1	< 1	< 1	**3.08**
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	**99.5**	< 1	< 1	< 1	< 1	**3.06**
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**24.8**	< 1	< 1	< 1	< 1	**4.03**
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**70.3**	< 1	< 1	< 1	< 1	**2.68**
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**27.5**	< 1	< 1	< 1	< 1	**2.93**
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**33.5**	< 1	< 1	< 1	< 1	**2.89**
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**43.3**	< 1	< 1	< 1	< 1	**2.51**
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	**44.5**	< 1	< 1	< 1	< 1	**3.32**
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	**37.3**	< 1	< 1	< 1	< 1	**2.97**
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	**54.9**	< 1	< 1	< 1	< 1	**2.54**
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**54.4**	< 1	< 1	< 1	< 1	**2.47**
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	**55.1**	< 1	< 1	< 1	< 1	**2.59**
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	**67.8**	< 1	< 1	< 1	< 1	**3.28**
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**129**	N/A	N/A	< 1	< 1	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**125**	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	**77.6**	< 1	< 1	< 1	< 1	**2.49**
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**67.1**	N/A	N/A	< 1	< 1	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**70.8**	N/A	N/A	N/A	N/A	N/A
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Ethylbenzene, ug/L (CAS NO - 100-41-4)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Ethylbenzene, ug/L (CAS NO - 100-41-4)	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Iodomethane, ug/L (CAS NO - 74-88-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/19/2019	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Methylene Bromide, ug/L (CAS NO - 74-95-3)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Methylene Bromide, ug/L (CAS NO - 74-95-3)	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Methylene Chloride, ug/L (CAS NO - 75-09-2)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Styrene, ug/L (CAS NO - 100-42-5)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.15	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	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
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/28/2010	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	N/A
	1/13/2011	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	10/26/2011	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	1/11/2012	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
	5/9/2012	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
	11/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.13	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Toluene, ug/L (CAS NO - 108-88-3)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Toluene, ug/L (CAS NO - 108-88-3)	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	7.72	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.45	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.58	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.33	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	1.83	N/A	N/A	N/A	N/A	N/A
	10/28/2010	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	N/A
	1/13/2011	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	10/26/2011	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	1.72	N/A	N/A	N/A	N/A	N/A
	1/11/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.07	N/A	N/A	N/A	N/A	N/A
	5/9/2012	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
	11/6/2012	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	1.46	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	1.18	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	1.35	< 1	< 1	< 1	< 1	< 1
	1/31/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A	N/A	N/A
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	1.03	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.76	N/A	N/A	< 1	< 1	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.22	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	1.08	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/21/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/4/2015	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2017	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/14/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/7/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/15/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/27/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/18/2020	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/13/2021	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/23/2021	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/23/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2023	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	< 5	< 5	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/21/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Trichloroethene, ug/L (CAS NO - 79-01-6)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	7/28/2010	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	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
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	9/12/2024	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
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	3/17/2009	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/27/2009	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	< 4
	5/14/2013	N/A	< 4	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/23/2013	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/21/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/4/2015	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/16/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2017	< 4	< 4	N/A	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/14/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/7/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/15/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/19/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/27/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/18/2020	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/13/2021	N/A	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/23/2021	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/23/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2023	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	< 4	< 4	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/21/2014	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/4/2015	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	11/10/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2017	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/14/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/7/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/15/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/27/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/18/2020	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	5/13/2021	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/23/2021	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/23/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2023	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	< 10	< 10	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**2.32**	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**3.15**	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	**2.76**	N/A	N/A	N/A	N/A	N/A
	7/28/2010	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	**3.44**	N/A	N/A	N/A	N/A	N/A
	10/28/2010	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	N/A
	1/13/2011	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	10/26/2011	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	**2.29**	N/A	N/A	N/A	N/A	N/A
	1/11/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.08**	N/A	N/A	N/A	N/A	N/A
	5/9/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.09**	N/A	N/A	N/A	N/A	N/A
	11/6/2012	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	11/19/2013	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/21/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	6/24/2014	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
	11/10/2014	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	**2.47**	< 1	< 1	< 1	N/A	< 1
	5/4/2015	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	**1.59**	< 1	< 1	< 1	N/A	< 1
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2017	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	**2.91**	< 1	< 1	< 1	< 1	< 1
	5/14/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/7/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.33**	< 1	< 1	< 1	< 1	< 1
	5/15/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/19/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/27/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**2.55**	< 1	< 1	< 1	< 1	< 1
	11/18/2020	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	**2.01**	< 1	< 1	< 1	< 1	< 1
	5/13/2021	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	**1.38**	< 1	< 1	< 1	< 1	< 1
	11/23/2021	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	**5.43**	< 1	< 1	< 1	< 1	< 1
	5/23/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**5.17**	< 1	< 1	< 1	< 1	< 1
	11/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	**3.46**	< 1	< 1	< 1	< 1	< 1
	5/22/2023	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	**4.63**	< 1	< 1	< 1	< 1	< 1
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**7.35**	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	**5.71**	< 1	< 1	< 1	< 1	< 1
	5/22/2024	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
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**7.43**	N/A	N/A	< 1	< 1	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**8.22**	N/A	N/A	N/A	N/A	N/A
Xylenes, total, ug/L (CAS NO - 1330-20-7)	3/17/2009	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	< 3
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Appendix I VOC Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	10/27/2009	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	< 3
	5/14/2013	N/A	< 3	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	7/23/2013	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/21/2014	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/4/2015	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	11/10/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/16/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2017	< 3	< 3	N/A	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/14/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/7/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/15/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/19/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/27/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/18/2020	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/13/2021	N/A	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/23/2021	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/23/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2023	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	11/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	5/22/2024	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/22/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	< 3	< 3	N/A
	9/12/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
M&P-Xylene, ug/L (CAS NO - 179601-23-1)	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2
O-Xylene, ug/L (CAS NO - 95-47-6)	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1

Note: * indicates 'J 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.

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1
1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	3/17/2009	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/27/2009	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	< 4	< 4	< 4	N/A	N/A	< 4
	5/14/2013	N/A	< 4	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/23/2013	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	3/17/2009	< 0.2	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 0.2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.27	< 0.2	N/A	N/A	N/A
	10/27/2009	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 1.02	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	< 1.02	< 1.03	< 1.04	N/A	N/A	< 1.01
	5/14/2013	N/A	< 1.02	N/A	N/A	N/A	< 1.02	N/A	< 1.02	N/A	N/A	N/A	< 1.01	N/A	N/A
	7/23/2013	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1.01	< 1.02	< 1.01	< 1	< 1.01	< 1.02	N/A	N/A	< 1.01
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.957	< 0.975	< 0.957	< 0.962	< 0.958	N/A	N/A	N/A	< 0.958
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	3/17/2009	< 0.2	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 0.2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.27	< 0.2	N/A	N/A	N/A
	10/27/2009	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 1.02	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	< 1.02	< 1.03	< 1.04	N/A	N/A	< 1.01
	5/14/2013	N/A	< 1.02	N/A	N/A	N/A	< 1.02	N/A	< 1.02	N/A	N/A	N/A	< 1.01	N/A	N/A
	7/23/2013	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1.01	< 1.02	< 1.01	< 1	< 1.01	< 1.02	N/A	N/A	< 1.01
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.957	< 0.975	< 0.957	< 0.962	< 0.958	N/A	N/A	N/A	< 0.958

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,4-D [2C], ug/L (CAS NO - 94-75-7)	3/17/2009	< 0.99	N/A	< 0.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 0.99
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1.4	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 0.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1.02	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	< 1.02	< 1.03	< 1.04	N/A	N/A	< 1.01
	5/14/2013	N/A	< 1.02	N/A	N/A	N/A	< 1.02	N/A	< 1.02	N/A	N/A	N/A	< 1.01	N/A	N/A
	7/23/2013	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1.01	< 1.02	< 1.01	< 1	< 1.01	< 1.02	N/A	N/A	< 1.01
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.957	< 0.975	< 0.957	< 0.962	< 0.958	N/A	N/A	N/A	< 0.958
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	3/17/2009	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 20.2	N/A	N/A	N/A	< 20	N/A	N/A	N/A	< 20.2	< 20	< 20.2	N/A	N/A	< 20
	5/14/2013	N/A	< 20	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	< 20.2	N/A	N/A
	7/23/2013	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 20.2	< 20.2	< 20.2	< 20.2	< 20.2	< 20.2	N/A	N/A	< 20.2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 75.5	< 85.1	< 75.5	< 75.5	< 75.5	N/A	N/A	N/A	< 74.1
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Methylphenol, ug/L (CAS NO - 95-48-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
2-Naphthylamine, ug/L (CAS NO - 91-59-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	3/17/2009	< 85	N/A	< 85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 85	N/A	< 85
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 50.5	N/A	N/A	N/A	< 50	N/A	N/A	N/A	< 50.5	< 50	< 50.5	N/A	N/A	< 50
	5/14/2013	N/A	< 50	N/A	N/A	N/A	< 50	N/A	< 50	N/A	N/A	N/A	< 50.5	N/A	N/A
	7/23/2013	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	3/17/2009	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
3-Chloropropene, ug/L (CAS NO - 107-05-1)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4,4`-DDD, ug/L (CAS NO - 72-54-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
4,4`-DDD, ug/L (CAS NO - 72-54-8)	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	0.135	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
	8/10/2023	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4`-DDE, ug/L (CAS NO - 72-55-9)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
4,4`-DDT, ug/L (CAS NO - 50-29-3)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	3/17/2009	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
4-Nitrophenol, ug/L (CAS NO - 100-02-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Acenaphthene, ug/L (CAS NO - 83-32-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Acenaphthylene, ug/L (CAS NO - 208-96-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Acenaphthylene, ug/L (CAS NO - 208-96-8)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Acetonitrile, ug/L (CAS NO - 75-05-8)	3/17/2009	< 10000	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	< 10000
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	N/A	N/A	N/A
	10/27/2009	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10000	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	< 10000	< 10000	< 10000	N/A	N/A	< 10000
	5/14/2013	N/A	< 10000	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	N/A	< 10000	N/A	N/A
	7/23/2013	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000	N/A	N/A	< 10000
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	< 10000	< 10000	N/A	N/A	N/A	< 10000
Acetophenone, ug/L (CAS NO - 98-86-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Acrolein, ug/L (CAS NO - 107-02-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10
Aldrin, ug/L (CAS NO - 309-00-2)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Aldrin, ug/L (CAS NO - 309-00-2)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Anthracene, ug/L (CAS NO - 120-12-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Alpha-BHC, ug/L (CAS NO - 319-84-6)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Beta-BHC, ug/L (CAS NO - 319-85-7)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Delta-BHC, ug/L (CAS NO - 319-86-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Delta-BHC, ug/L (CAS NO - 319-86-8)	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 6.06	< 6.06	< 6.06	< 6.06	< 6.06	< 6.06	N/A	N/A	< 6.06
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 22.6	< 25.5	< 22.6	< 22.6	< 22.6	N/A	N/A	N/A	< 22.2
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Chlordane, ug/L (CAS NO - 57-74-9)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2.02	< 20.2	< 2.02	< 2.02	< 2.02	< 2.02	N/A	N/A	< 2.02
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1.89	< 1.85	< 1.85	< 1.85	< 1.85	N/A	N/A	N/A	< 1.85
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Chloroprene, ug/L (CAS NO - 126-99-8)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Chloroprene, ug/L (CAS NO - 126-99-8)	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1
Chrysene, ug/L (CAS NO - 218-01-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Cyanide, ug/L (CAS NO - 57-12-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	13.1	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dibenzofuran, ug/L (CAS NO - 132-64-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Dibenzofuran, ug/L (CAS NO - 132-64-9)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	3/17/2009	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	**3.51**
	5/4/2009	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
	7/10/2009	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	10/27/2009	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	< 3	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3
	7/28/2010	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3
	1/13/2011	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2011	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3
	1/11/2012	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
	5/9/2012	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
	5/13/2013	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	< 3	< 3	< 3	N/A	N/A	< 3
	5/14/2013	N/A	< 3	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	7/23/2013	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2013	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3
	5/21/2014	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/10/2014	< 3	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3
Dieldrin, ug/L (CAS NO - 60-57-1)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dimethoate, ug/L (CAS NO - 60-51-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Dimethoate, ug/L (CAS NO - 60-51-5)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 20.2	N/A	N/A	N/A	< 20	N/A	N/A	N/A	< 20.2	< 20	< 20.2	N/A	N/A	< 20
	5/14/2013	N/A	< 20	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	< 20.2	N/A	N/A
	7/23/2013	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 20.2	< 20.2	< 20.2	< 20.2	< 20.2	< 20.2	N/A	N/A	< 20.2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 75.5	< 85.1	< 75.5	< 75.5	< 75.5	N/A	N/A	N/A	< 74.1
Dinoseb, ug/L (CAS NO - 88-85-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Diphenylamine, ug/L (CAS NO - 122-39-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Disulfoton, ug/L (CAS NO - 298-04-4)	3/17/2009	< 70	N/A	< 70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 70	N/A	< 70
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 70	< 70	< 70	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Endosulfan I, ug/L (CAS NO - 959-98-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Endosulfan II, ug/L (CAS NO - 33213-65-9)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Endosulfan II, ug/L (CAS NO - 33213-65-9)	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Endrin, ug/L (CAS NO - 72-20-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Famphur, ug/L (CAS NO - 52-85-7)	3/17/2009	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 20.2	N/A	N/A	N/A	< 20	N/A	N/A	N/A	< 20.2	< 20	< 20.2	N/A	N/A	< 20
	5/14/2013	N/A	< 20	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	< 20.2	N/A	N/A
	7/23/2013	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Fluoranthene, ug/L (CAS NO - 206-44-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Fluorene, ug/L (CAS NO - 86-73-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Heptachlor, ug/L (CAS NO - 76-44-8)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Heptachlor, ug/L (CAS NO - 76-44-8)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 20.2	N/A	N/A	N/A	< 20	N/A	N/A	N/A	< 20.2	< 20	< 20.2	N/A	N/A	< 20
	5/14/2013	N/A	< 20	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	< 20.2	N/A	N/A
	7/23/2013	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Hexachloroethane, ug/L (CAS NO - 67-72-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Hexachloroethane, ug/L (CAS NO - 67-72-1)	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Isobutanol, ug/L (CAS NO - 78-83-1)	3/17/2009	< 10000	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	< 10000
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	N/A	N/A	N/A
	10/27/2009	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10000	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	< 10000	< 10000	< 10000	N/A	N/A	< 10000
	5/14/2013	N/A	< 10000	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	N/A	< 10000	N/A	N/A
	7/23/2013	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	< 10000	< 10000	< 10000	N/A	N/A	< 10000
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	< 10000	< 10000	< 10000	N/A	N/A	N/A	< 10000
Isodrin, ug/L (CAS NO - 465-73-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Isophorone, ug/L (CAS NO - 78-59-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Isophorone, ug/L (CAS NO - 78-59-1)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Isosafrole, ug/L (CAS NO - 120-58-1)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Kepone, ug/L (CAS NO - 143-50-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Methacrylonitrile, ug/L (CAS NO - 126-98-7)	3/17/2009	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/27/2009	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	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
	1/13/2011	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	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
	5/13/2013	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1
	5/14/2013	N/A	< 1	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/23/2013	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	N/A
	6/24/2014	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
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10
Methapyrilene, ug/L (CAS NO - 91-80-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Methapyrilene, ug/L (CAS NO - 91-80-5)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Methoxychlor, ug/L (CAS NO - 72-43-5)	3/17/2009	< 0.032	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	< 0.032
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/27/2009	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	< 0.032
	5/14/2013	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/23/2013	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.0323	< 0.323	< 0.0323	< 0.0323	< 0.0323	< 0.0323	N/A	N/A	< 0.0323
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.0604	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	< 0.0593
Methyl Methacrylate, ug/L (CAS NO - 80-62-6)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2
Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Naphthalene, ug/L (CAS NO - 91-20-3)	3/17/2009	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/27/2009	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	< 5	< 5	< 5	N/A	N/A	< 5
	5/14/2013	N/A	< 5	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/23/2013	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5
Nitrobenzene, ug/L (CAS NO - 98-95-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Nitrobenzene, ug/L (CAS NO - 98-95-3)	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	3/17/2009	< 30	N/A	< 30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 30	N/A	< 30
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 30	< 30	< 30	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
O-Toluidine, ug/L (CAS NO - 95-53-4)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
PCB-1016, ug/L (CAS NO - 12674-11-2)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1221, ug/L (CAS NO - 11104-28-2)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
PCB-1221, ug/L (CAS NO - 11104-28-2)	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1232, ug/L (CAS NO - 11141-16-5)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1242, ug/L (CAS NO - 53469-21-9)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1248, ug/L (CAS NO - 12672-29-6)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1254, ug/L (CAS NO - 11097-69-1)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
PCB-1260, ug/L (CAS NO - 11096-82-5)	3/17/2009	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
PCB-1260, ug/L (CAS NO - 11096-82-5)	10/27/2009	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	< 0.8	< 0.808	< 0.8	N/A	N/A	< 0.8
	5/14/2013	N/A	< 0.8	N/A	N/A	N/A	< 0.808	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/23/2013	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.816	< 0.808	< 0.825	< 0.833	< 0.816	N/A	N/A	< 0.816
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 0.755	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	< 0.741
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Phenacetin, ug/L (CAS NO - 62-44-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Phenacetin, ug/L (CAS NO - 62-44-2)	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Phenanthrene, ug/L (CAS NO - 85-01-8)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Phenol, ug/L (CAS NO - 108-95-2)	3/17/2009	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Phorate, ug/L (CAS NO - 298-02-2)	3/17/2009	< 60	N/A	< 60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 60	N/A	< 60
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 60	< 60	< 60	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Pronamide, ug/L (CAS NO - 23950-58-5)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Propionitrile, ug/L (CAS NO - 107-12-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Propionitrile, ug/L (CAS NO - 107-12-0)	5/13/2013	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10
Pyrene, ug/L (CAS NO - 129-00-0)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Safrole, ug/L (CAS NO - 94-59-7)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Sulfide, ug/L (CAS NO - 18496-25-8)	3/17/2009	< 5000	N/A	< 5000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5000	N/A	< 5000
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1000	< 1000	< 1000	N/A	N/A	N/A
	10/27/2009	N/A	< 1000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1000	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 1000	< 1000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 1000	N/A	N/A	N/A	< 1000	N/A	N/A	N/A	< 1000	< 1000	< 1000	N/A	N/A	< 1000
	5/14/2013	N/A	< 1000	N/A	N/A	N/A	< 1000	N/A	< 1000	N/A	N/A	N/A	< 1000	N/A	N/A
	7/23/2013	N/A	N/A	< 1000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	6080	3760	< 1000	1200	1250	< 1000	N/A	N/A	4420
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1000	< 1000	< 1000	< 1000	< 1000	N/A	N/A	N/A	< 1000
Thionazin, ug/L (CAS NO - 297-97-2)	3/17/2009	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/27/2009	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10.1	< 10	< 10.1	N/A	N/A	< 10
	5/14/2013	N/A	< 10	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10.1	N/A	N/A
	7/23/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	< 10.1	N/A	N/A	< 10.1
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 37.7	< 42.6	< 37.7	< 37.7	< 37.7	N/A	N/A	N/A	< 37
Toxaphene, ug/L (CAS NO - 8001-35-2)	3/17/2009	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2
	7/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Kossuth County Sanitary Landfill - 55-SDP-01-75C

Other Constituents	Sample Date	MW-22A UPG	MW-27 UPG	MWPz-8A UPG	MWPz-8B2 UPG	MW-12 DNG	MW-18 DNG	MW-19 DNG	MW-20 DNG	MW-22B DNG	MW-23 DNG	MW-25 DNG	MW-26 DNG	MW-28 DNG	MWPz-16A DNG
Toxaphene, ug/L (CAS NO - 8001-35-2)	10/27/2009	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	1/13/2011	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/28/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/2013	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	< 2	< 2	< 2	N/A	N/A	< 2
	5/14/2013	N/A	< 2	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/23/2013	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/24/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/14/2018	N/A	N/A	N/A	N/A	N/A	< 2.02	< 20.2	< 2.02	< 2.02	< 2.02	< 2.02	N/A	N/A	< 2.02
	5/22/2023	N/A	N/A	N/A	N/A	N/A	< 1.89	< 1.85	< 1.85	< 1.85	< 1.85	N/A	N/A	N/A	< 1.85

Note: * indicates 'J 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 Kossuth County Sanitary Landfill (Landfill).

Diagnostic and Exploratory Evaluations and Tests of Assumptions

The detection and assessment/corrective action 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 (½) 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 for 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 as 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 ≥ 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 ≥ the PQL:
  - If ≥ 50% of the background dataset has detections ≥ the method detection limit (MDL), any value ≥ two times the PQL of background is considered an outlier.
  - If < 50% of the background dataset has detections ≥ the MDL, any value ≥ the PQL of background is considered an outlier.
- Two or more detections ≥ the PQL:
  - If ≥ 50% of the background dataset has detections ≥ the MDL, any value ≥ three times the PQL of background is considered an outlier.
  - If < 50% of the background dataset has detections ≥ the MDL, any value ≥ 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 prediction limits with retesting were selected as the appropriate statistical methods for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historical detections in background. Prediction limits are established using the process below. Data from the most recent sampling event is compared to the prediction limits for the determination of SSIs.

Interwell Prediction Limits with Retesting

- 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 have 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 prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If the retesting result is above 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.

Double Quantification Rule

The quasi-statistical "double quantification" rule is used for constituents not detected in the associated background data set. 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.

If 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. An ACM dated July 17, 2014 (Doc #80880) and an addendum dated December 23, 2014 (Doc #82187) were approved in correspondence dated April 22, 2015 (Doc #83119).

Statistical Software Output

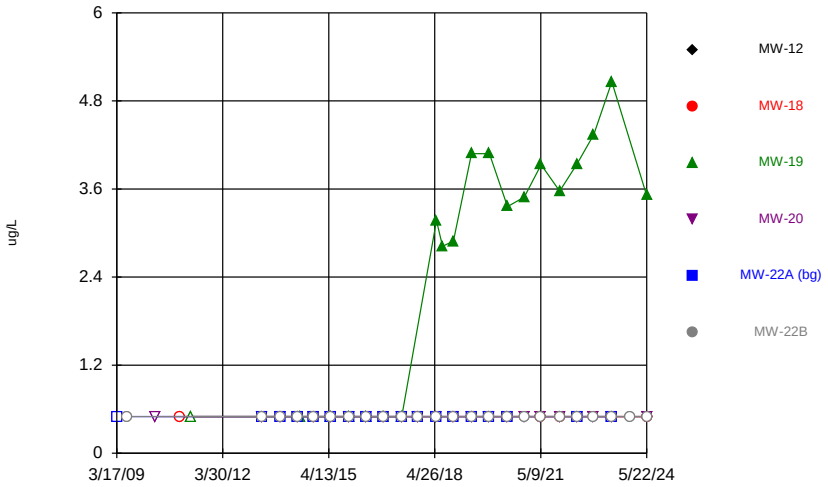
Sanitas™ statistical software is used to perform the statistical evaluations. Graphical output for the 1st and 2nd 2024 statistical evaluations is included in Attachments A and B of this appendix, respectively.

Attachment A
1st 2024 Statistical Output

Time Series Plots

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

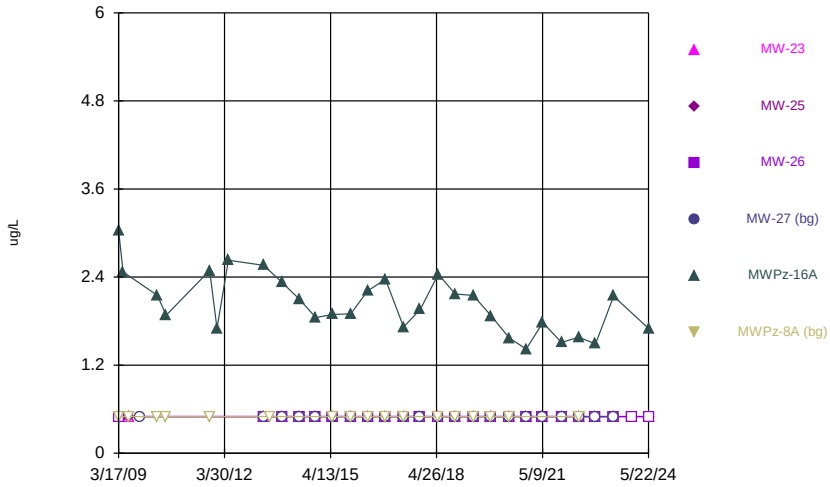
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

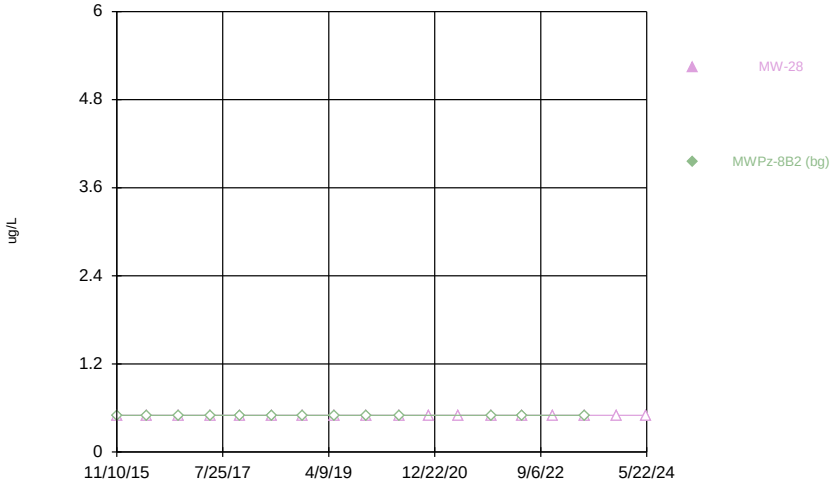
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

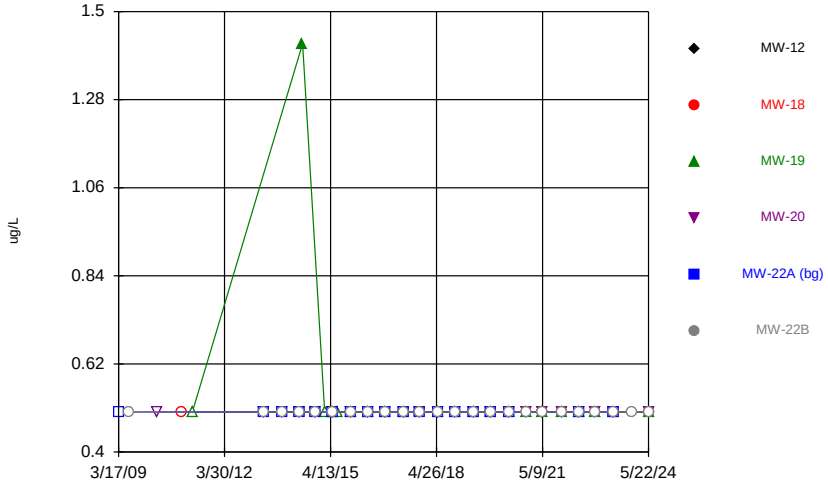
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

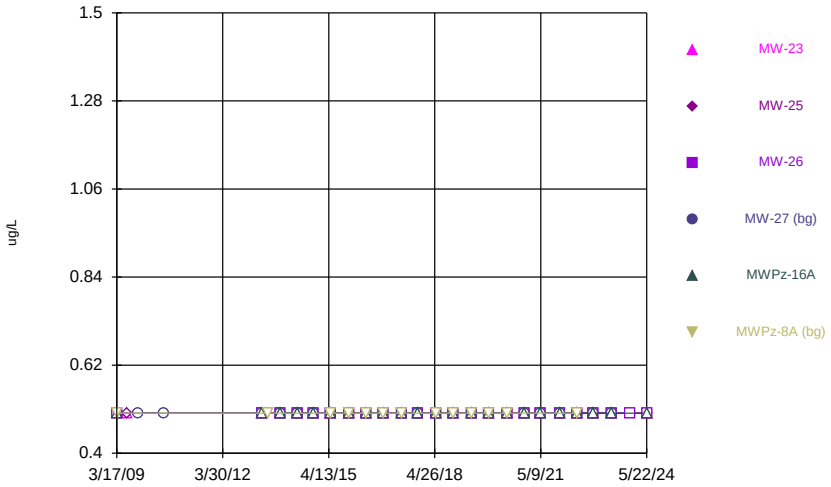
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

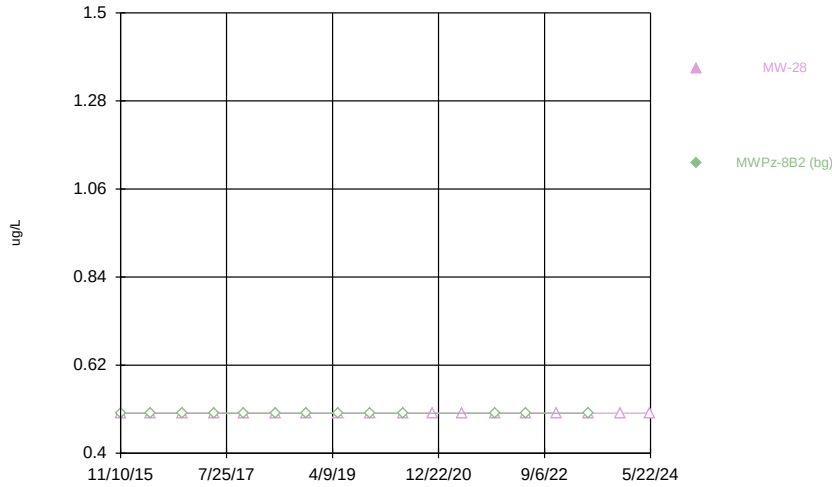
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

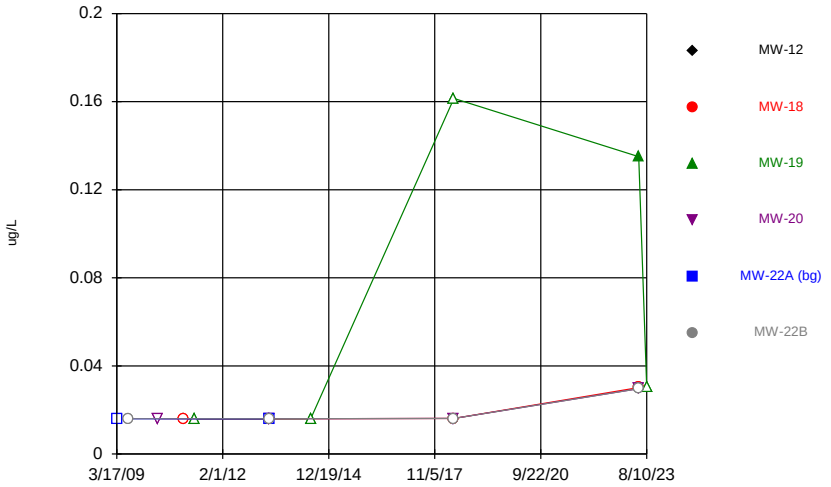
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: 4,4`-DDD Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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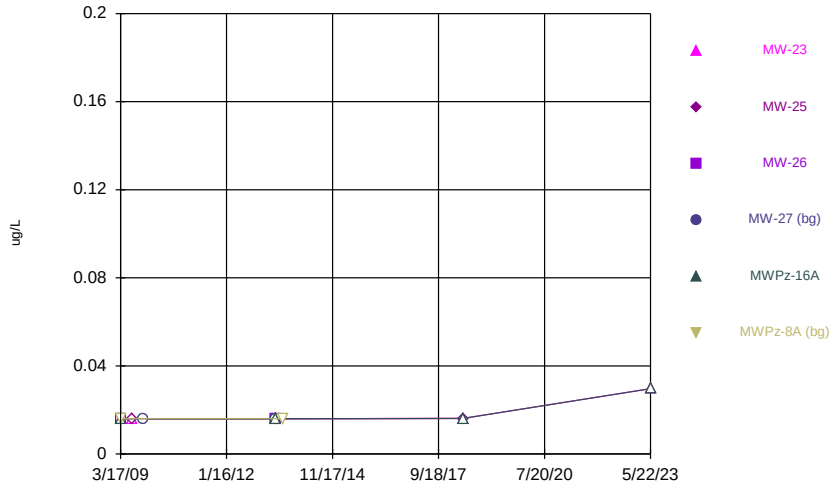
Hollow symbols indicate censored values.

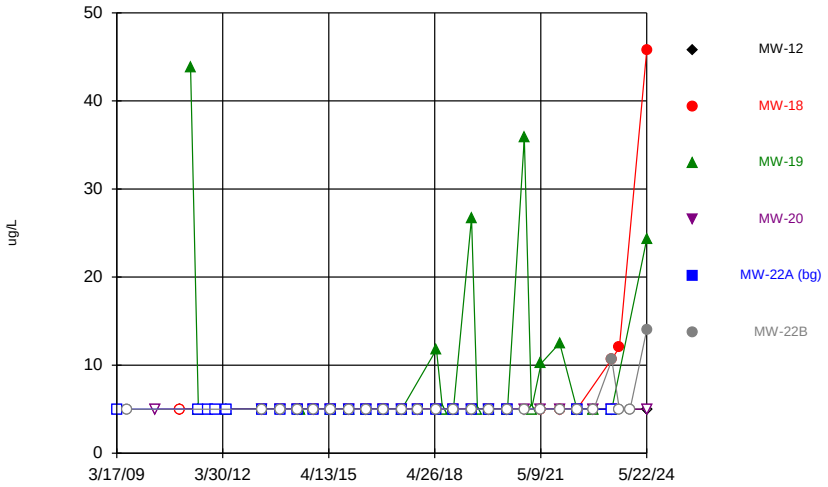
Time Series



Constituent: 4,4`-DDD Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Acetone Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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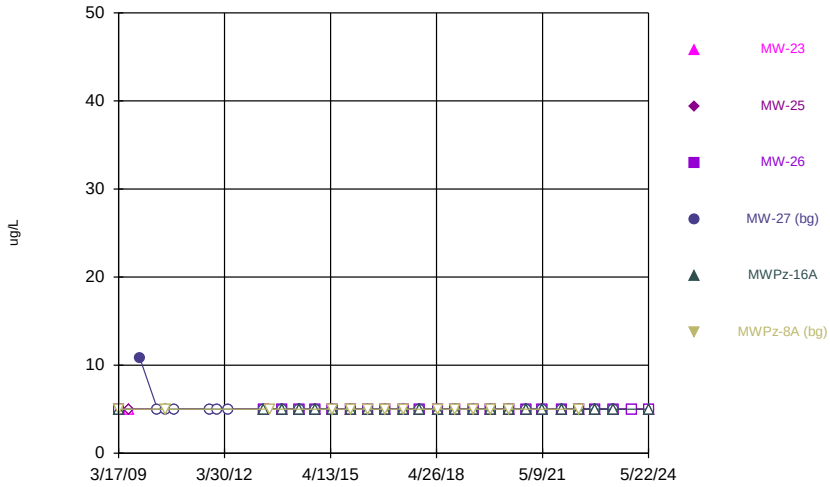
Hollow symbols indicate censored values.

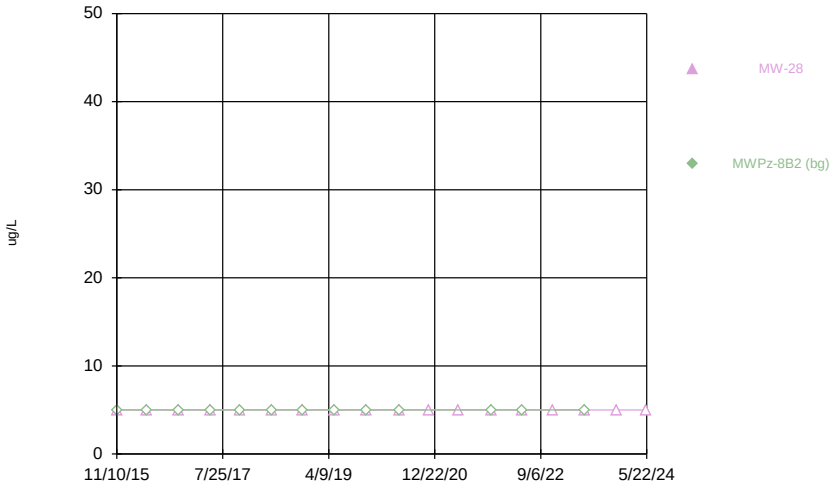
Time Series



Constituent: Acetone Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

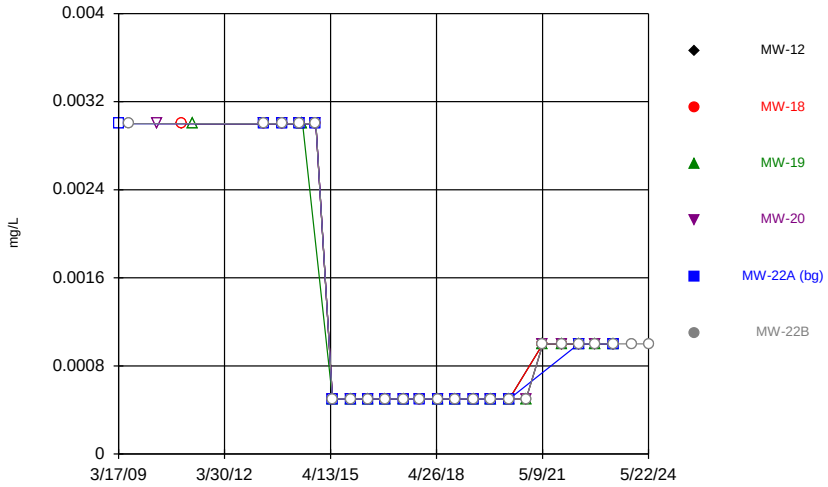
Time Series



Constituent: Acetone Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

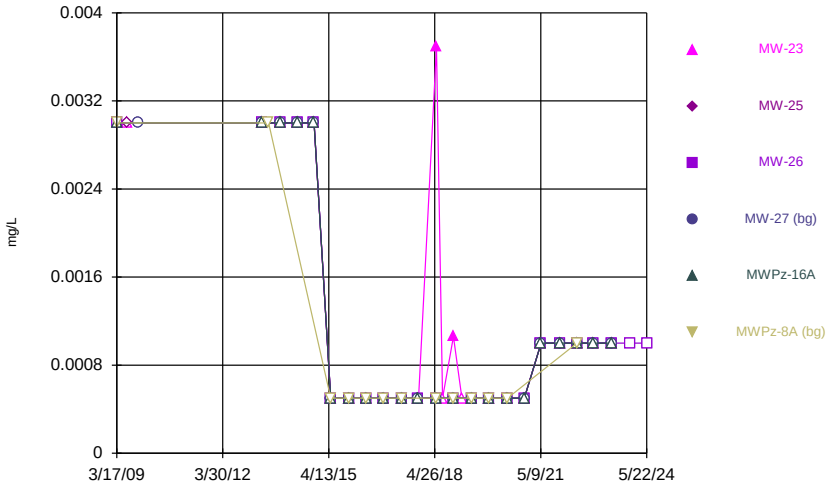
Time Series



Constituent: Antimony Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

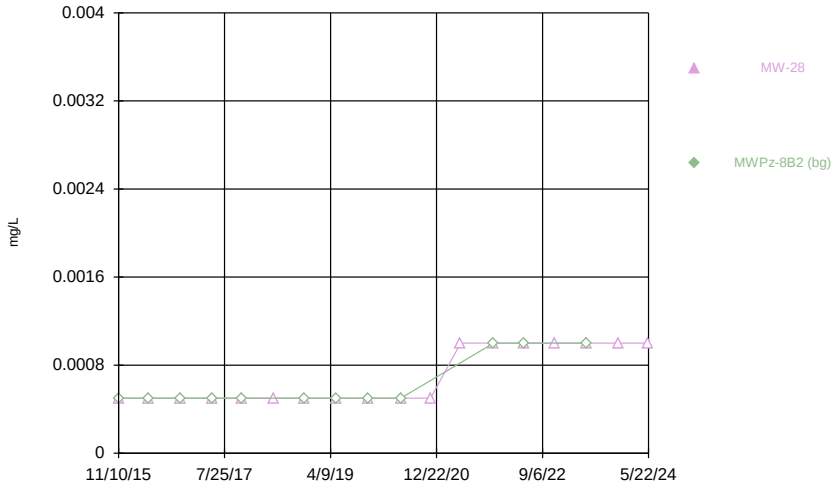
Time Series



Constituent: Antimony Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

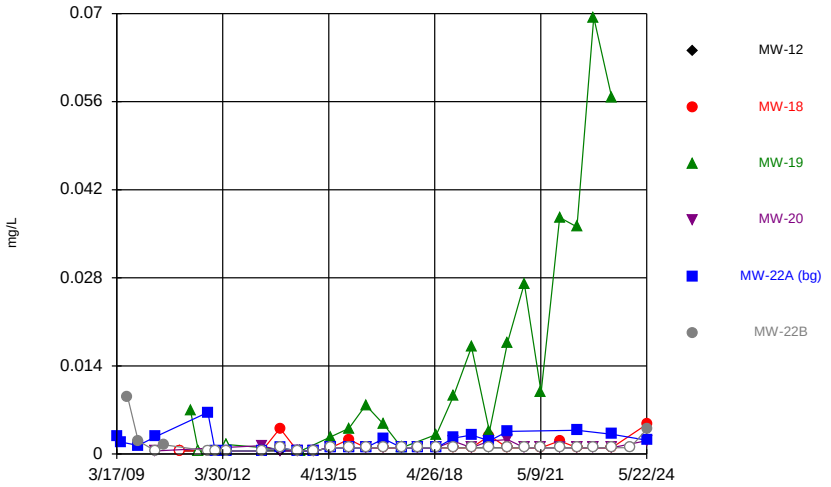
Time Series



Constituent: Antimony Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

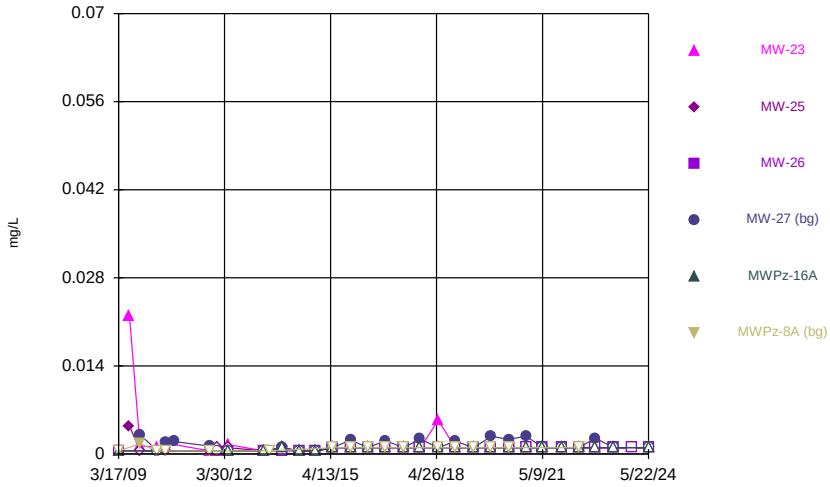
Time Series



Constituent: Arsenic Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

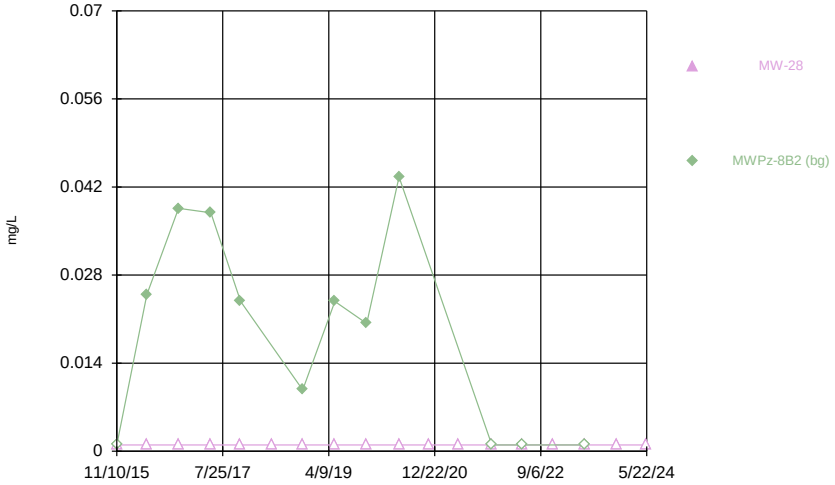
Time Series



Constituent: Arsenic Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

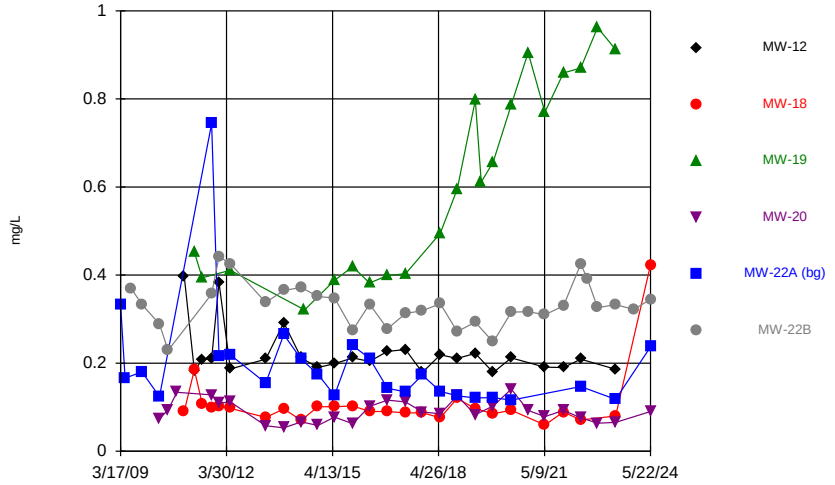
Time Series



Constituent: Arsenic Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

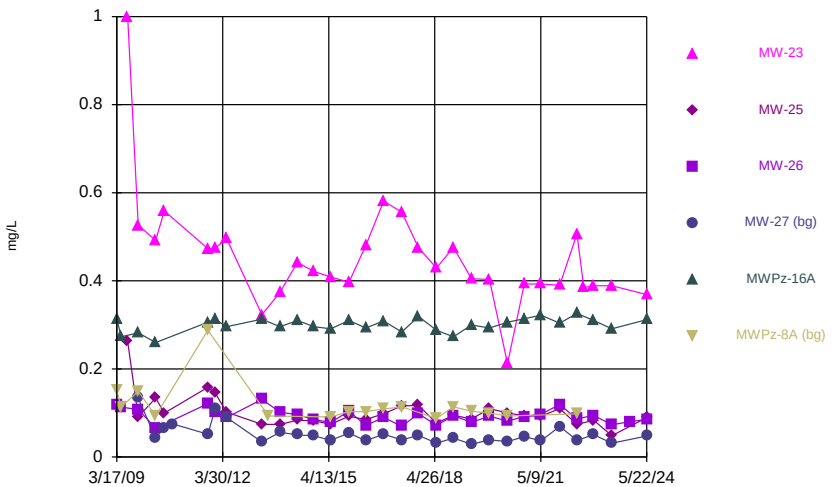
Time Series



Constituent: Barium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

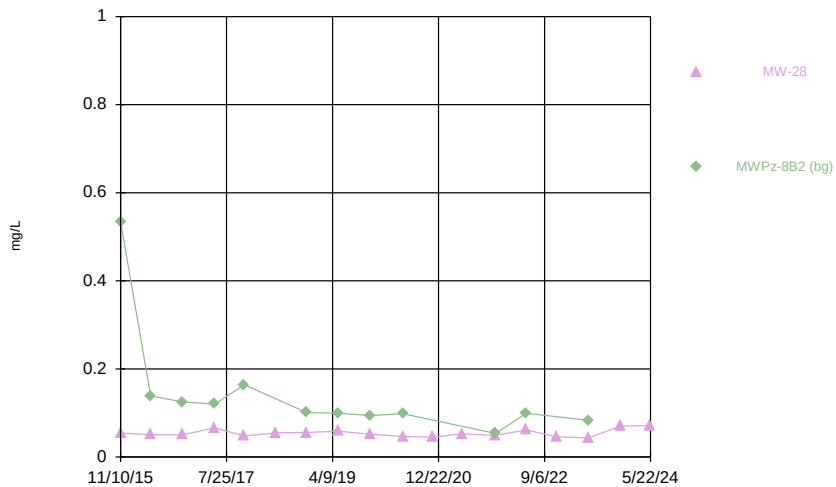
Time Series



Constituent: Barium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

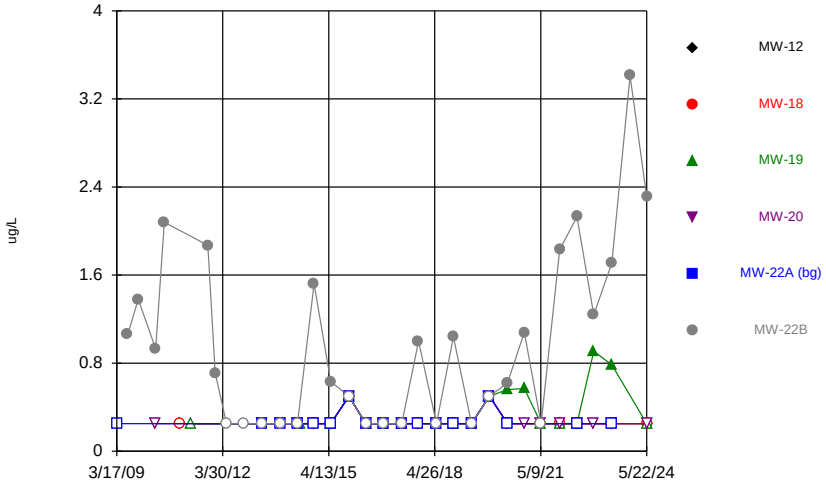
Time Series



Constituent: Barium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Benzene Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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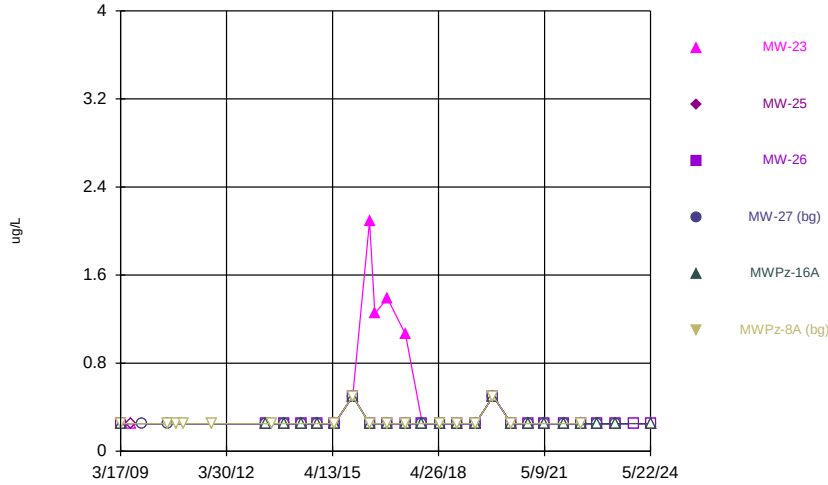
Hollow symbols indicate censored values.

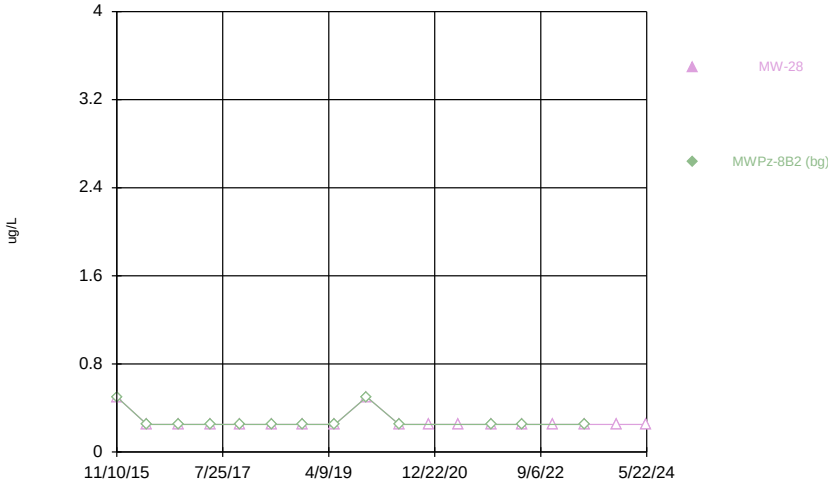
Time Series



Constituent: Benzene Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

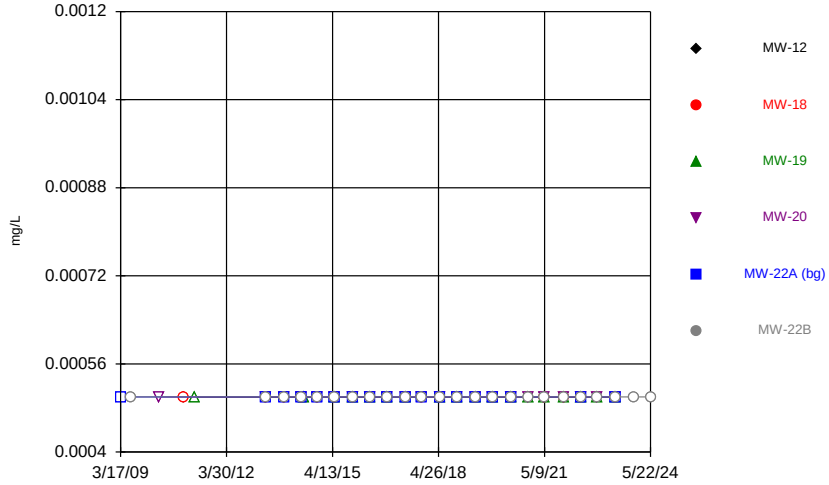
Time Series



Constituent: Benzene Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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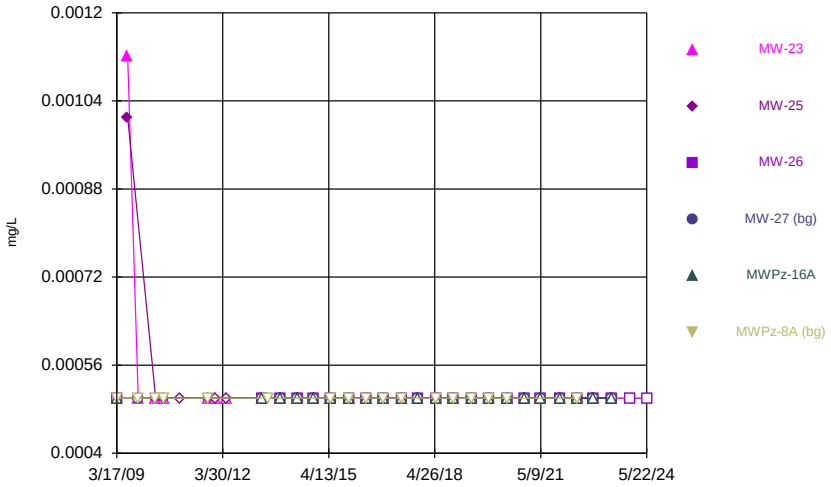
Hollow symbols indicate censored values.

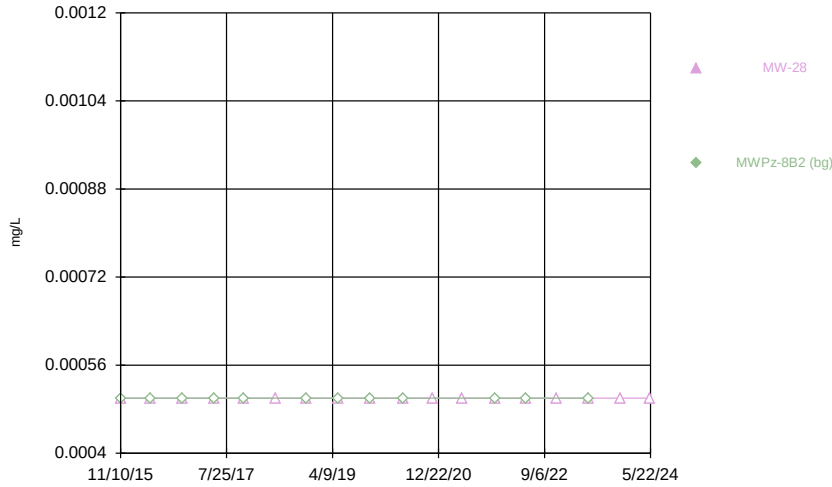
Time Series



Constituent: Beryllium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

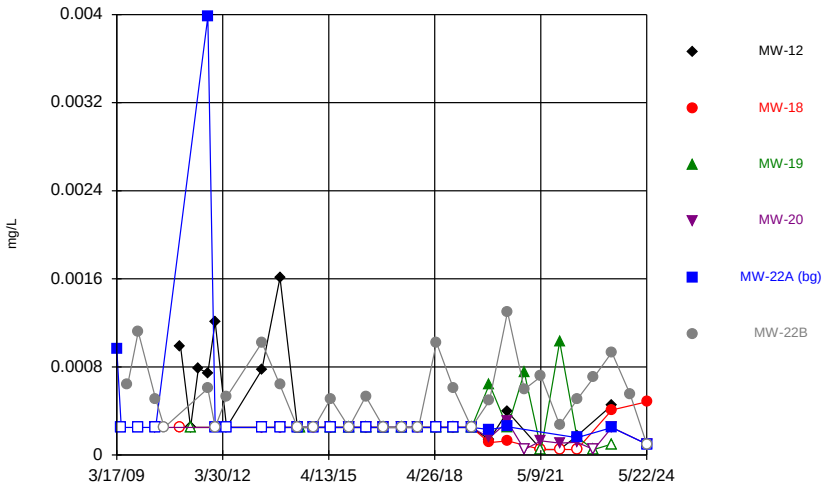
Time Series



Constituent: Beryllium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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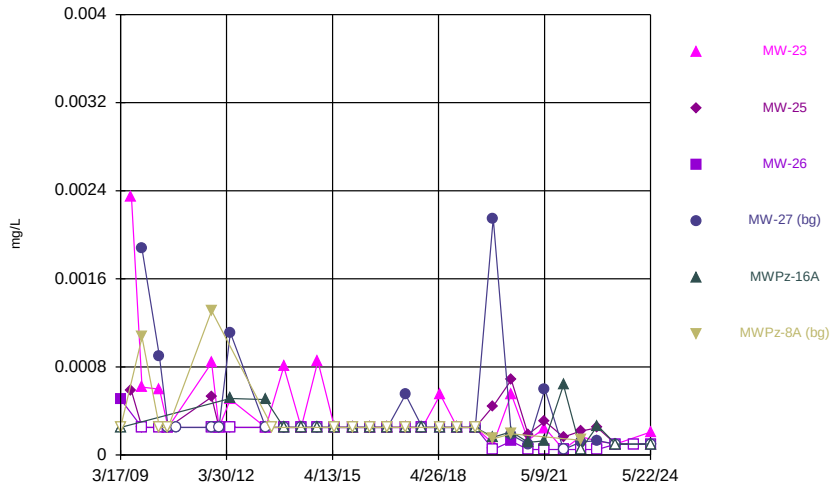
Hollow symbols indicate censored values.

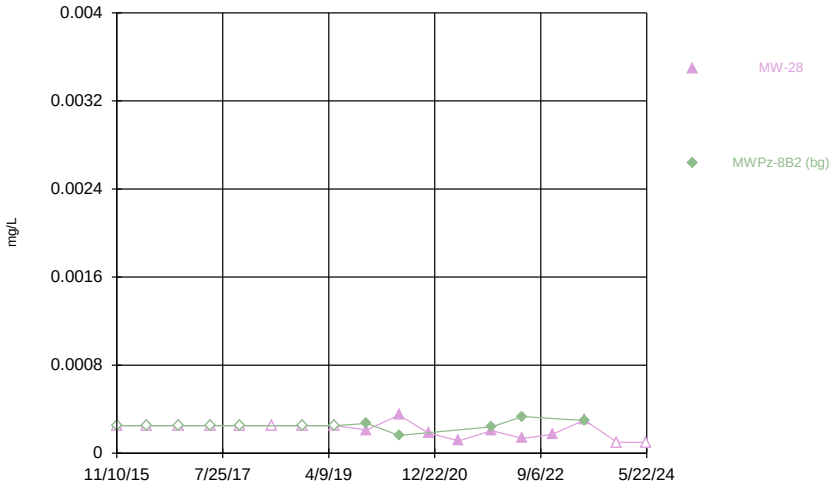
Time Series



Constituent: Cadmium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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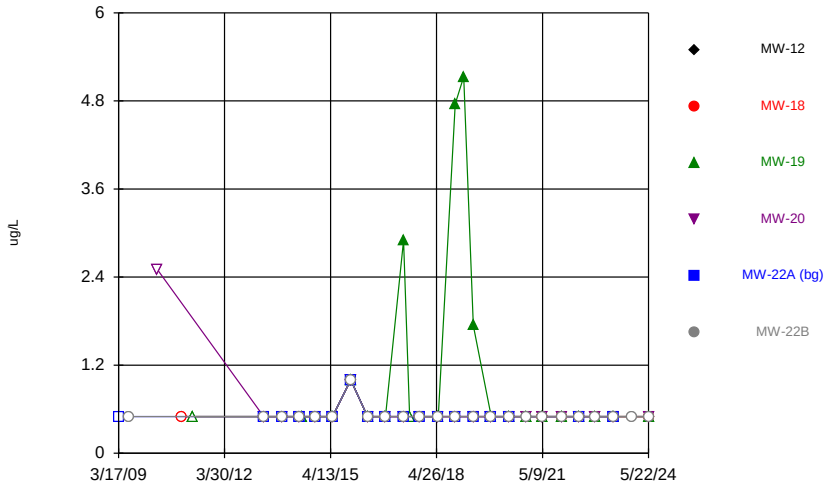
Hollow symbols indicate censored values.

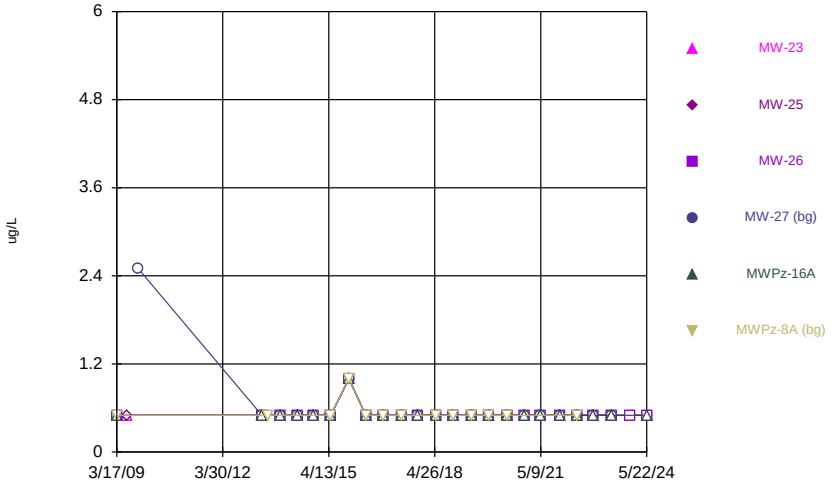
Time Series



Constituent: Carbon Disulfide Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

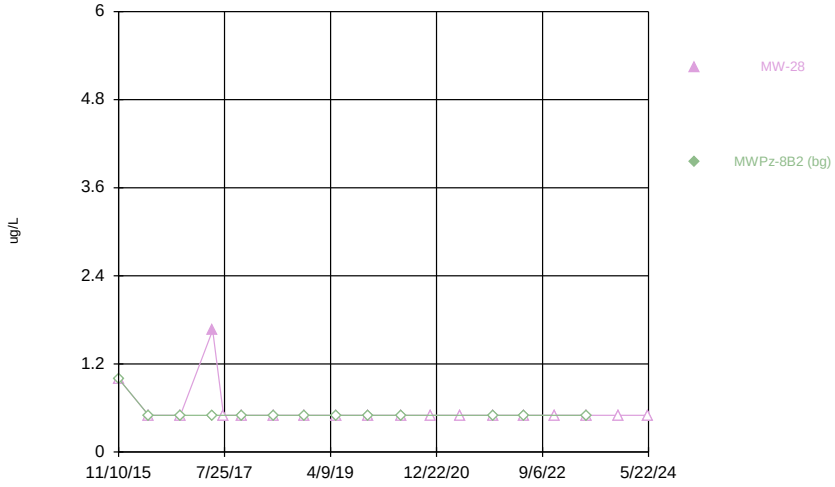
Time Series



Constituent: Carbon Disulfide Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Carbon Disulfide Analysis Run 10/17/2024 11:33 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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Hollow symbols indicate censored values.

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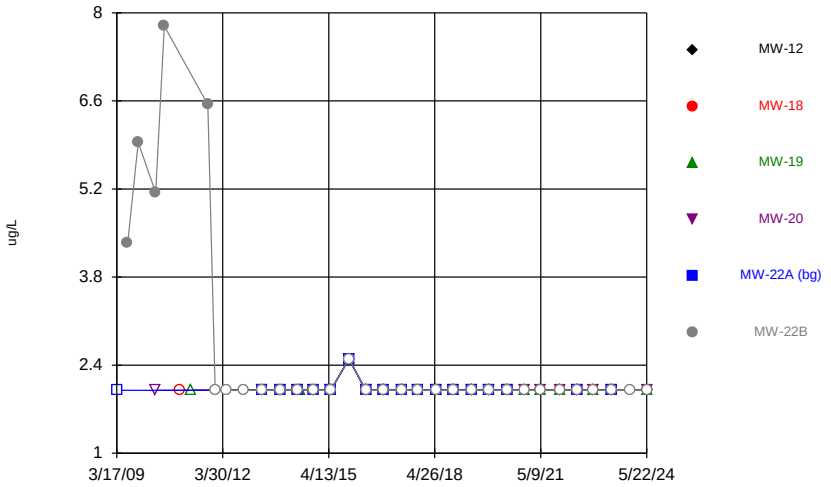

Constituent: Chloroethane Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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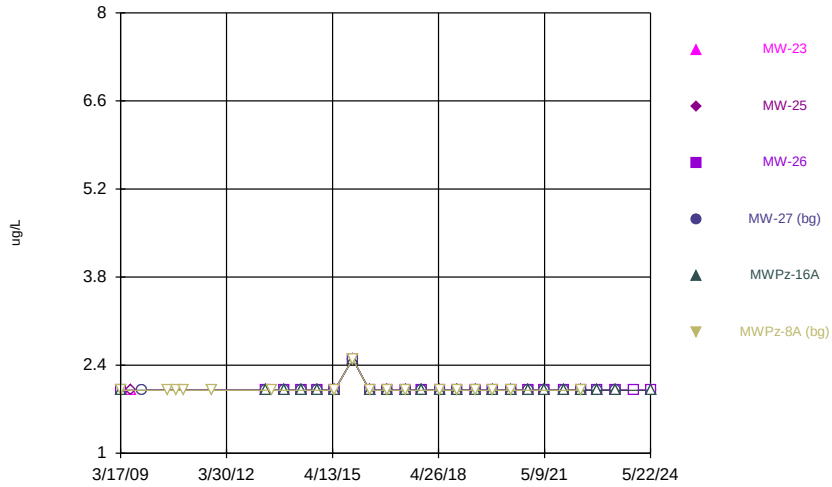
Hollow symbols indicate censored values.

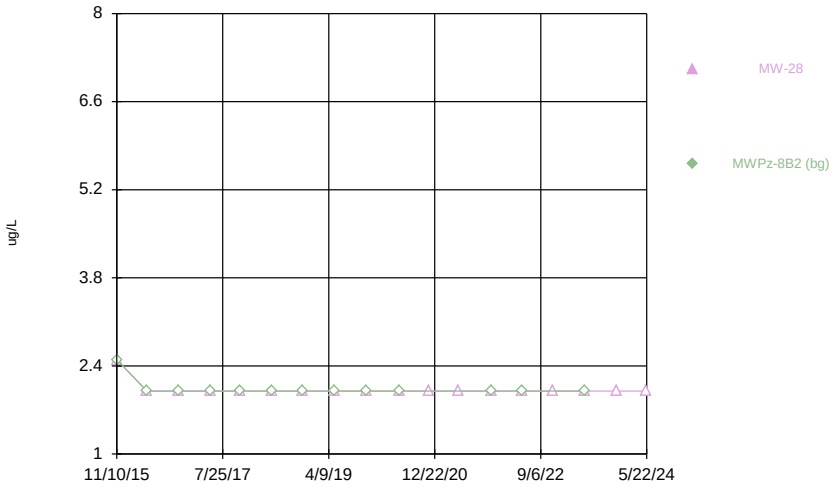
Time Series



Constituent: Chloroethane Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

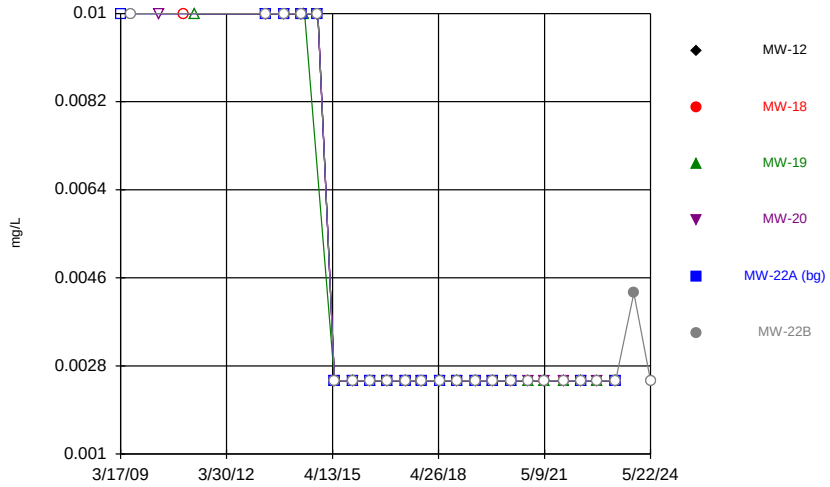
Time Series



Constituent: Chloroethane Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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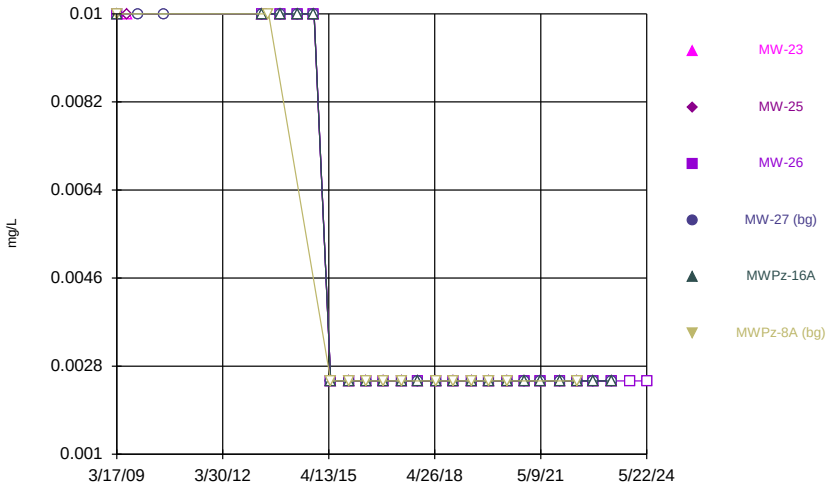
Hollow symbols indicate censored values.

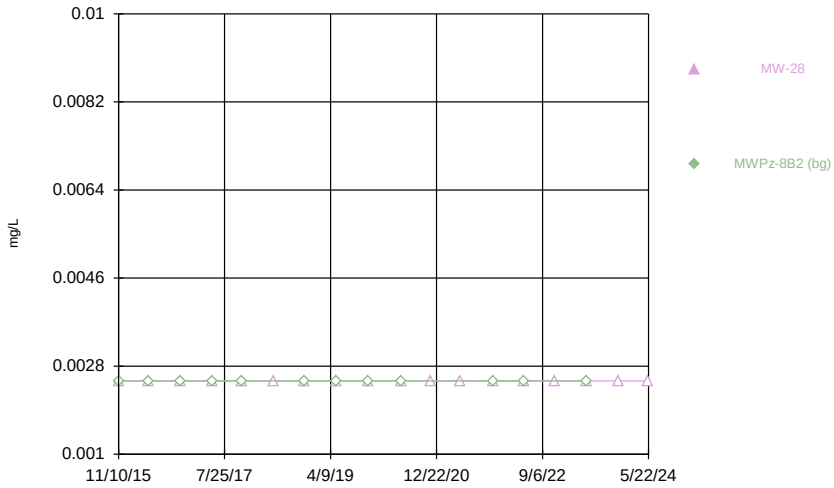
Time Series



Constituent: Chromium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

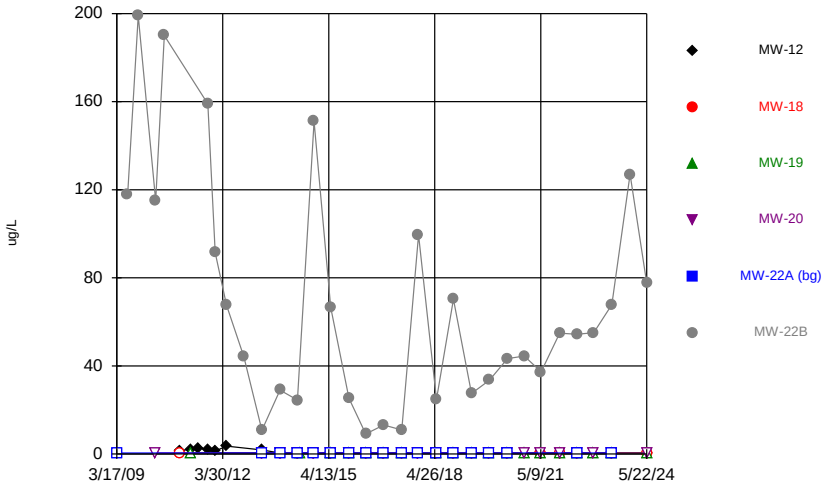
Time Series



Constituent: Chromium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

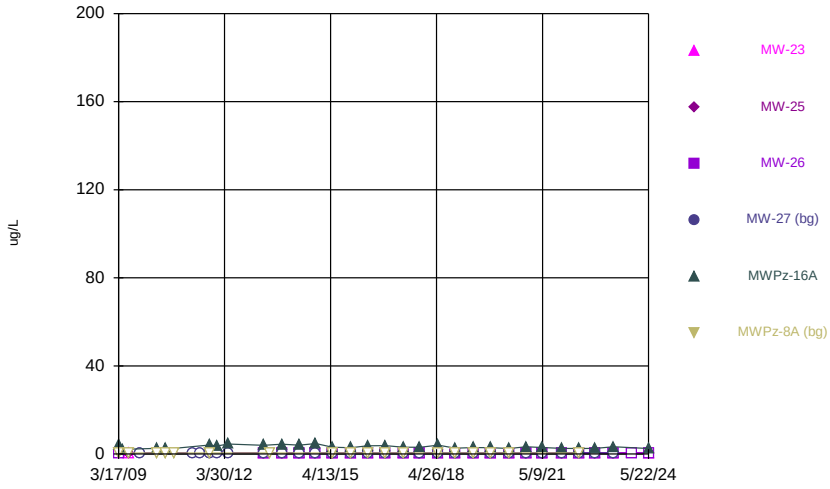
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

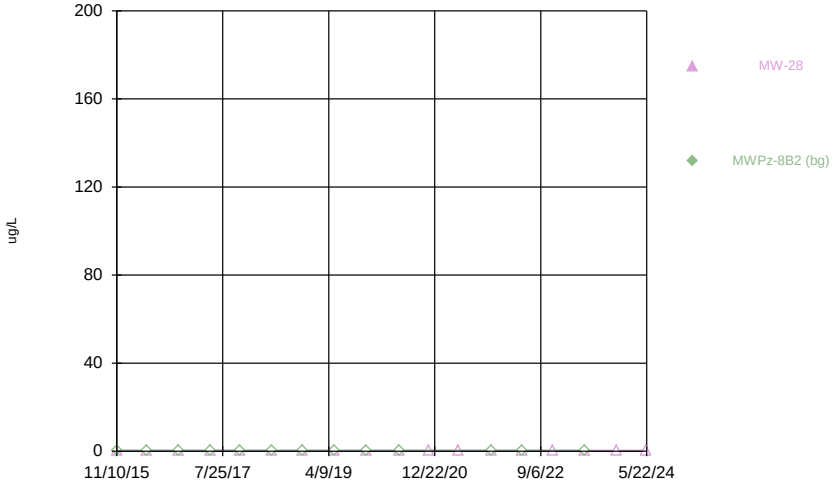
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

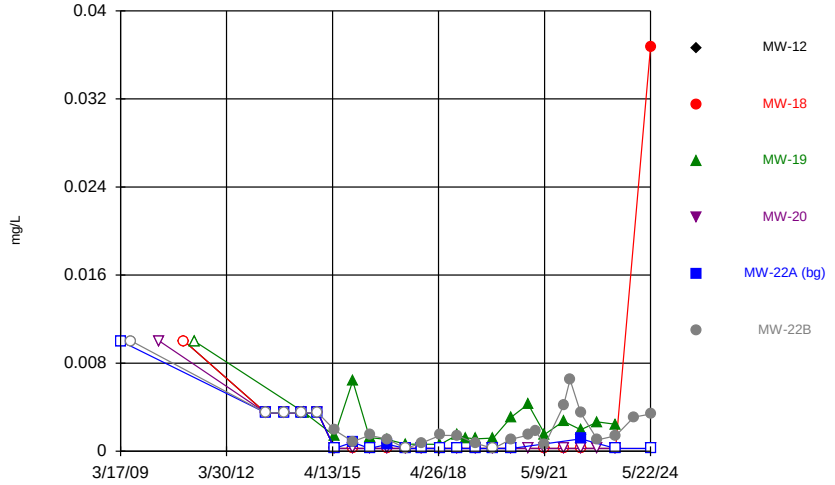
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

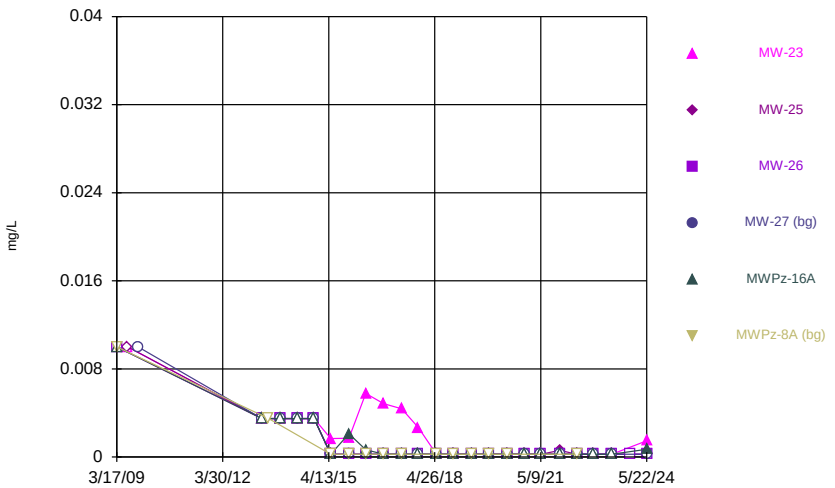
Time Series



Constituent: Cobalt Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

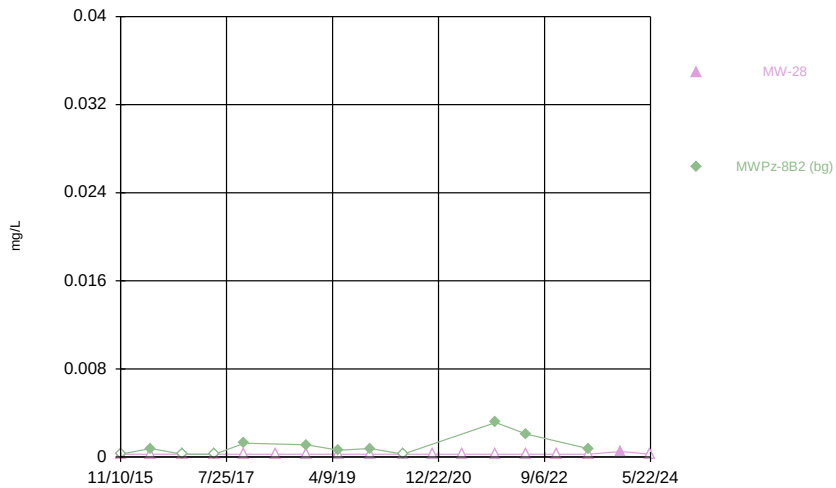
Time Series



Constituent: Cobalt Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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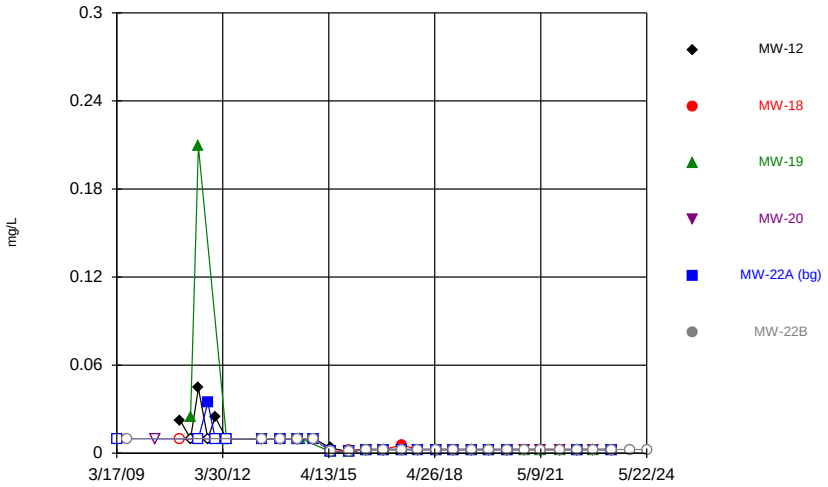
Hollow symbols indicate censored values.

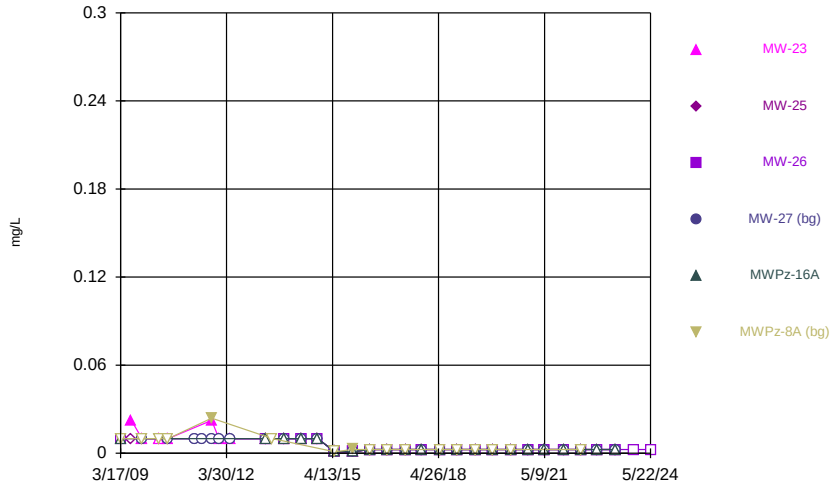
Time Series



Constituent: Copper Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

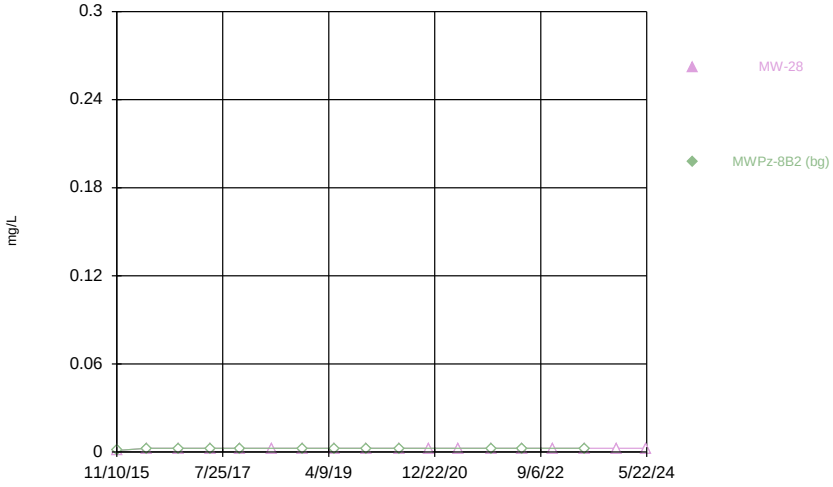
Time Series



Constituent: Copper Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

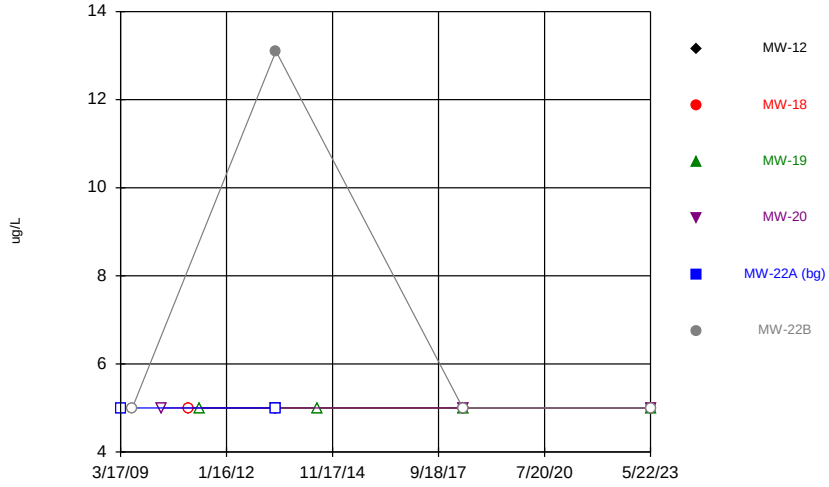
Time Series



Constituent: Copper Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

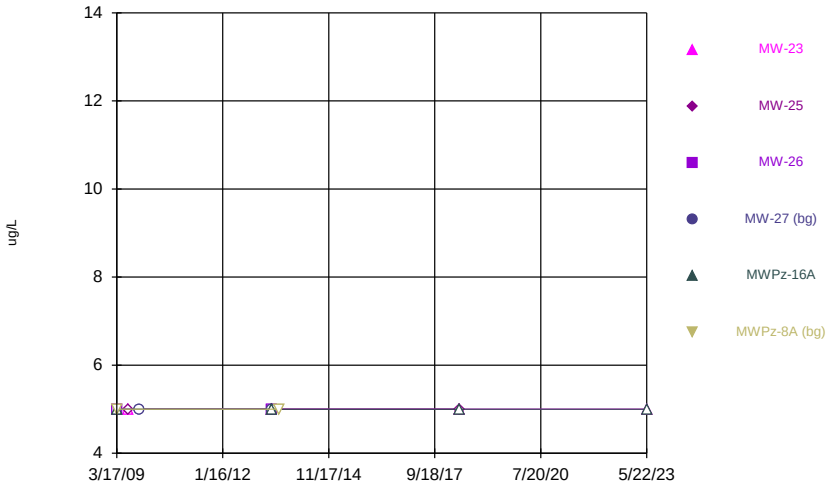
Time Series



Constituent: Cyanide Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

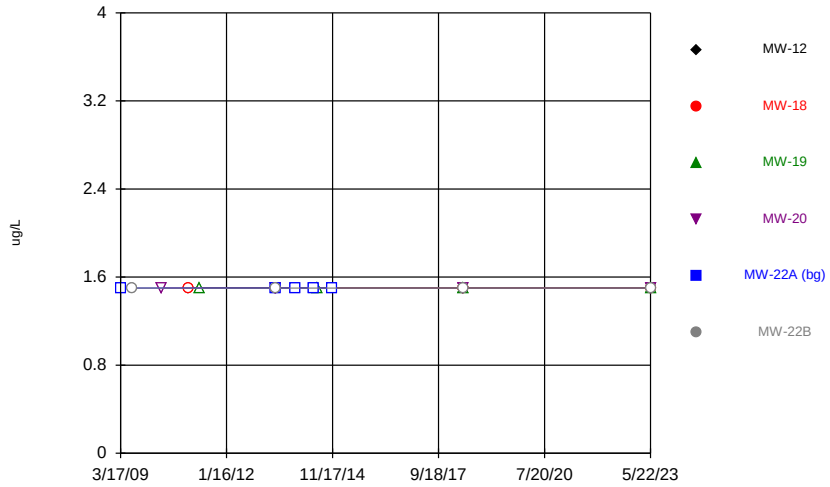
Time Series



Constituent: Cyanide Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

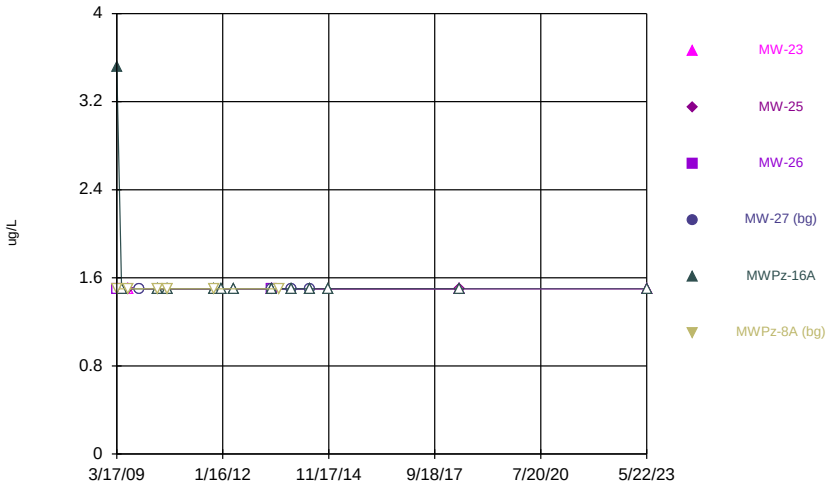
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

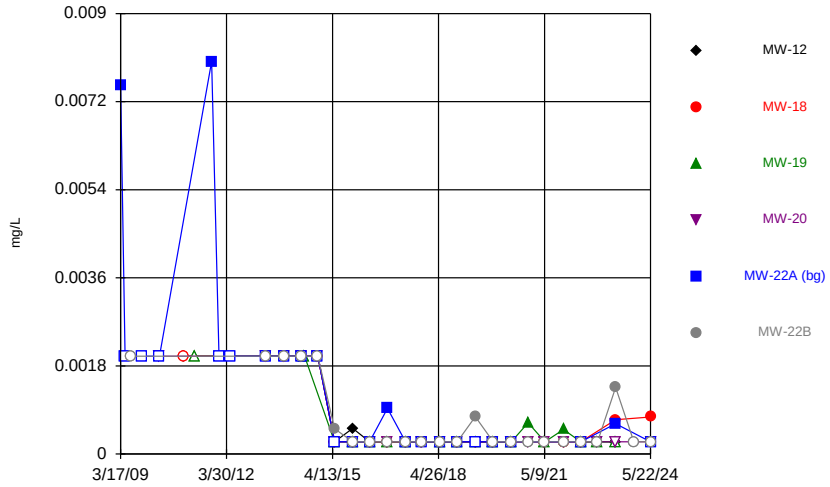
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

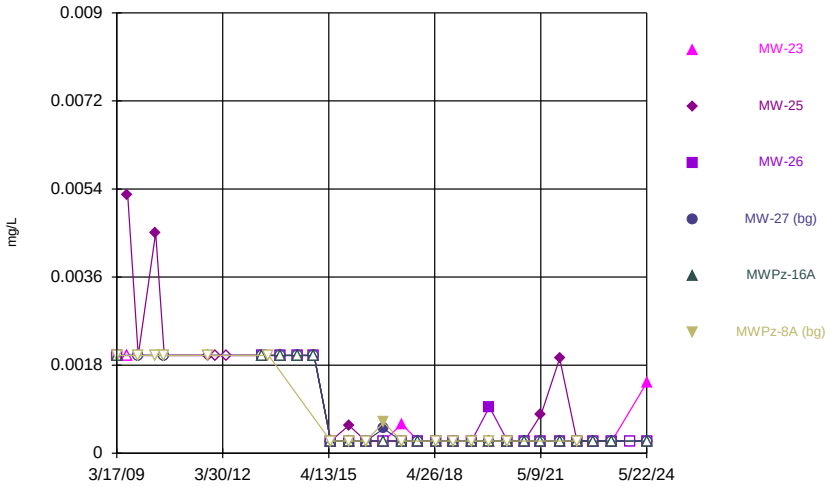
Time Series



Constituent: Lead Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

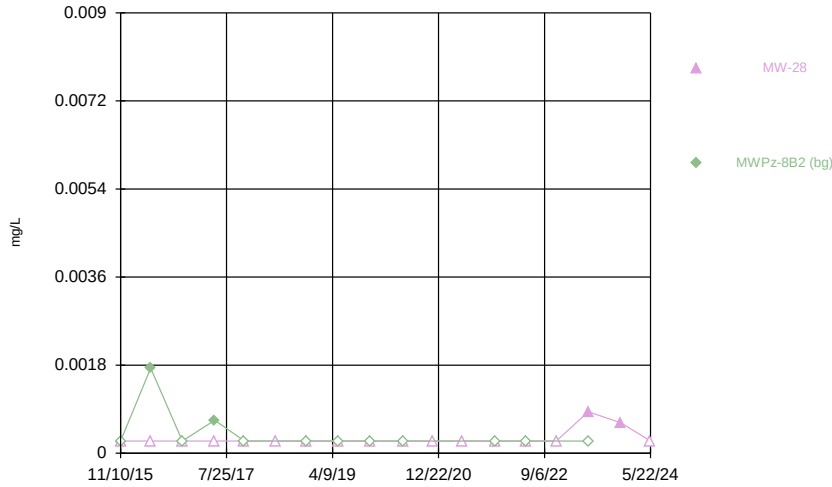
Time Series



Constituent: Lead Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

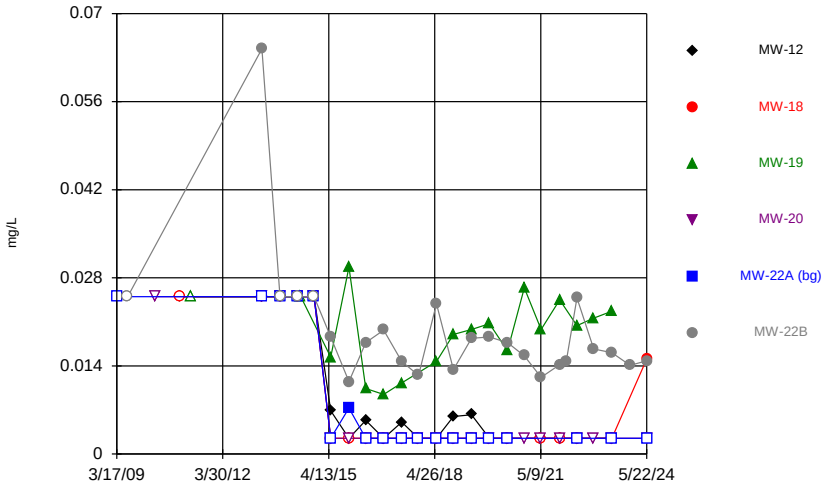
Time Series



Constituent: Lead Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

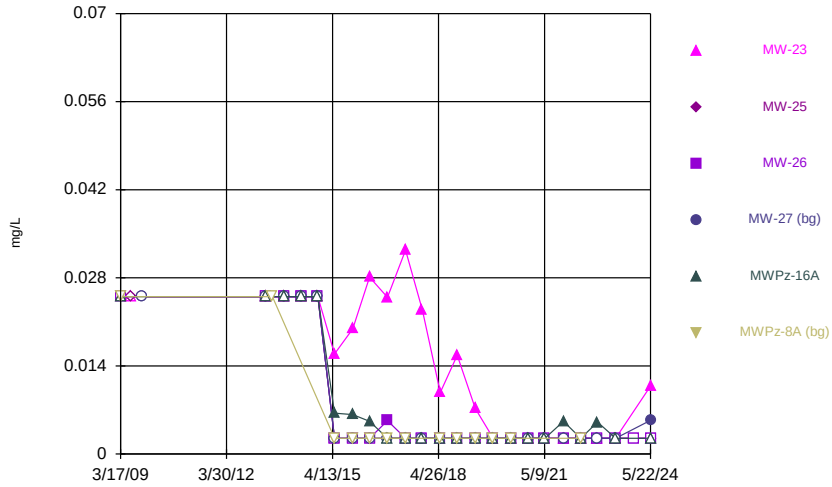
Time Series



Constituent: Nickel Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

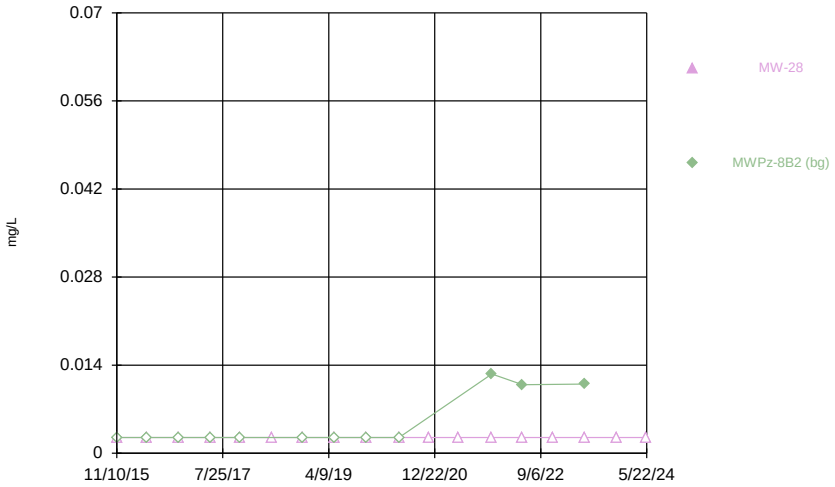
Time Series



Constituent: Nickel Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

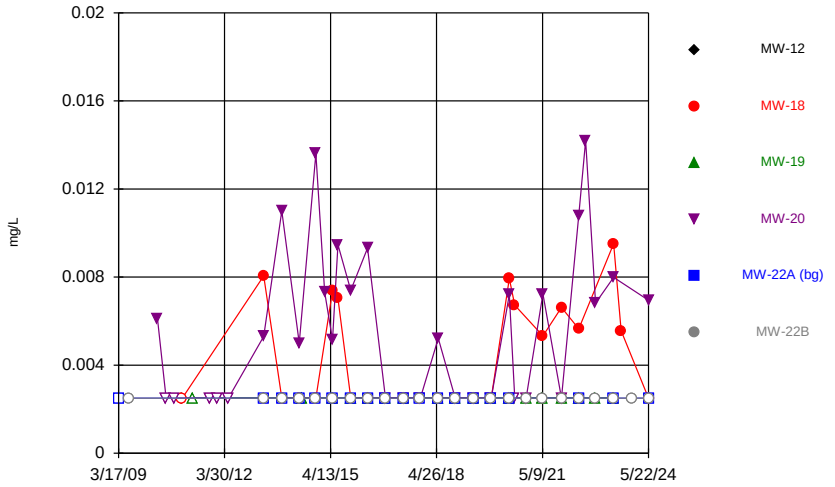
Time Series



Constituent: Nickel Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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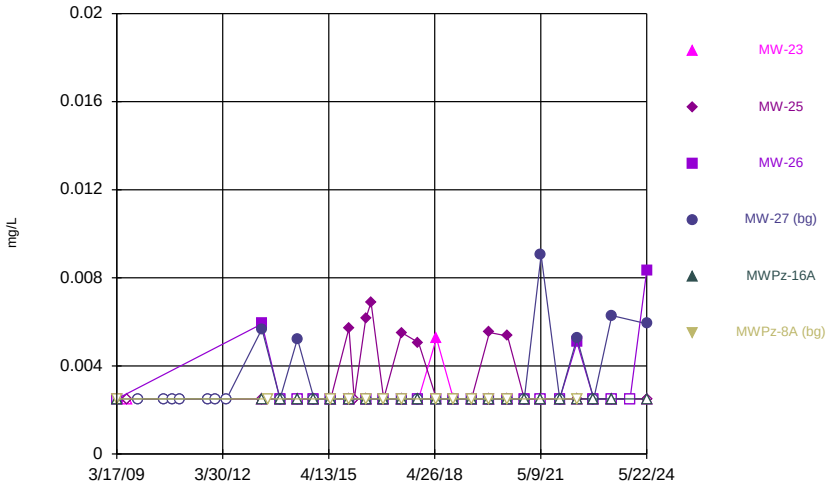
Hollow symbols indicate censored values.

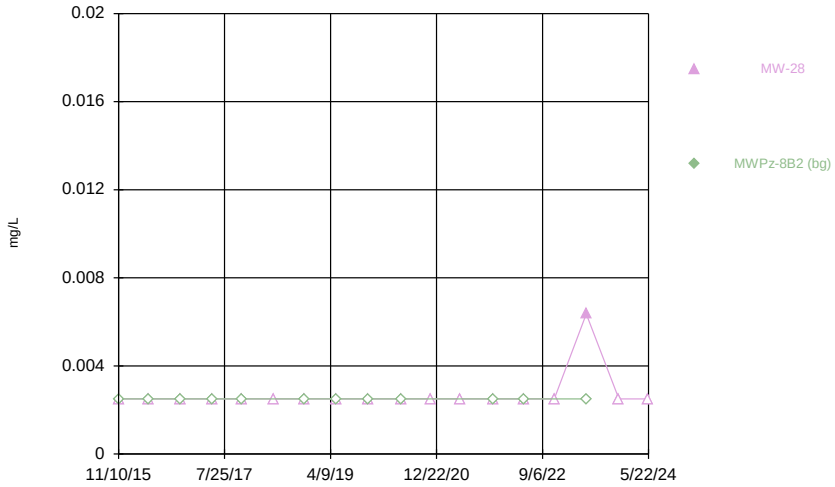
Time Series



Constituent: Selenium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

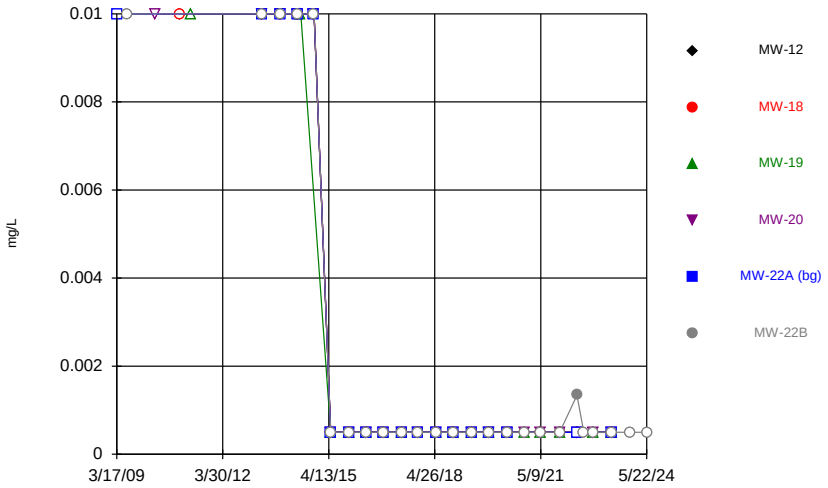
Time Series



Constituent: Selenium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

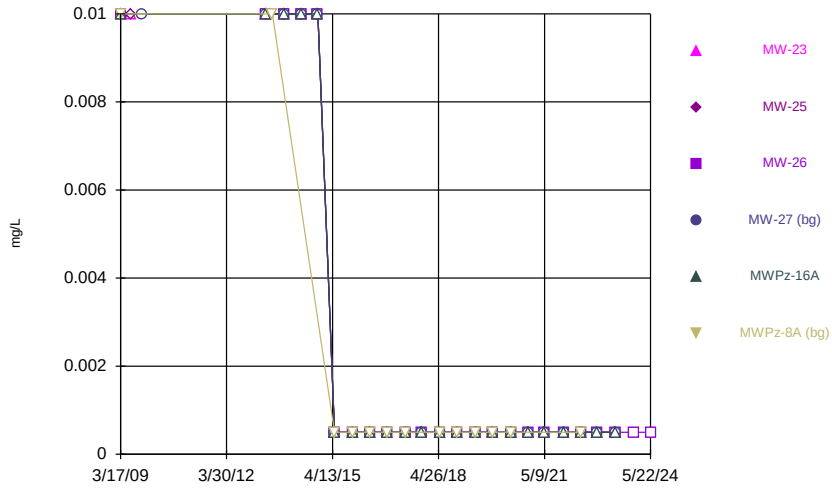
Time Series



Constituent: Silver Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

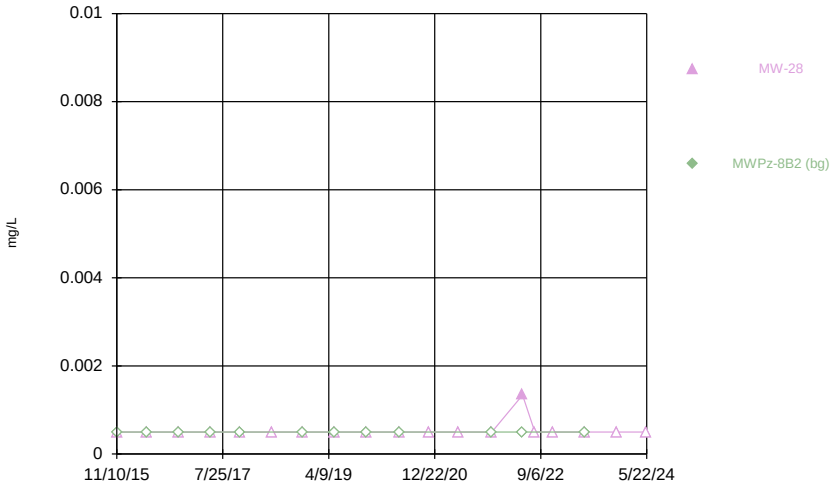
Time Series



Constituent: Silver Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

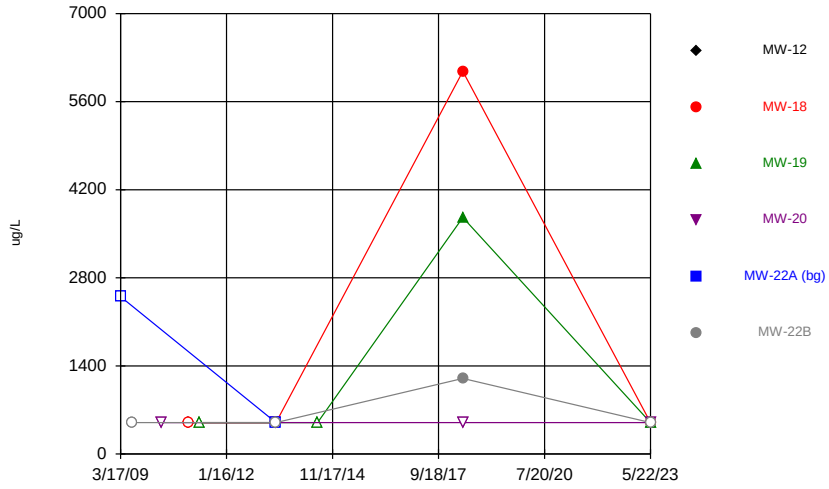
Time Series



Constituent: Silver Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

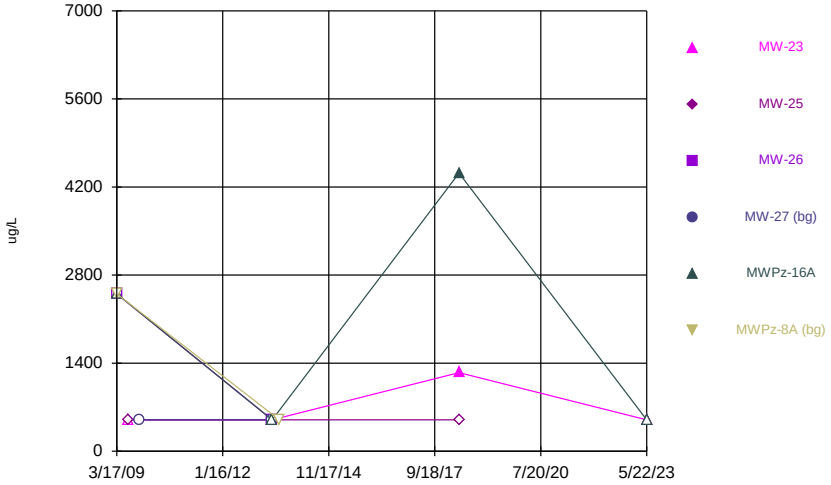
Time Series



Constituent: Sulfide Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

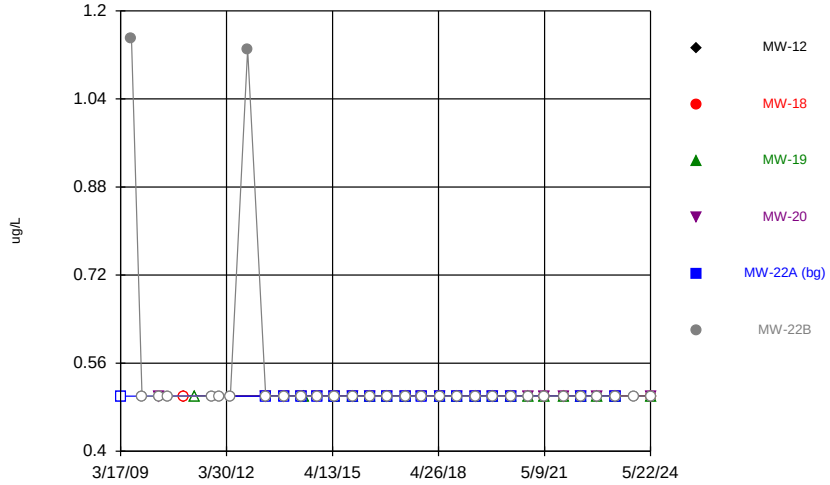
Time Series



Constituent: Sulfide Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

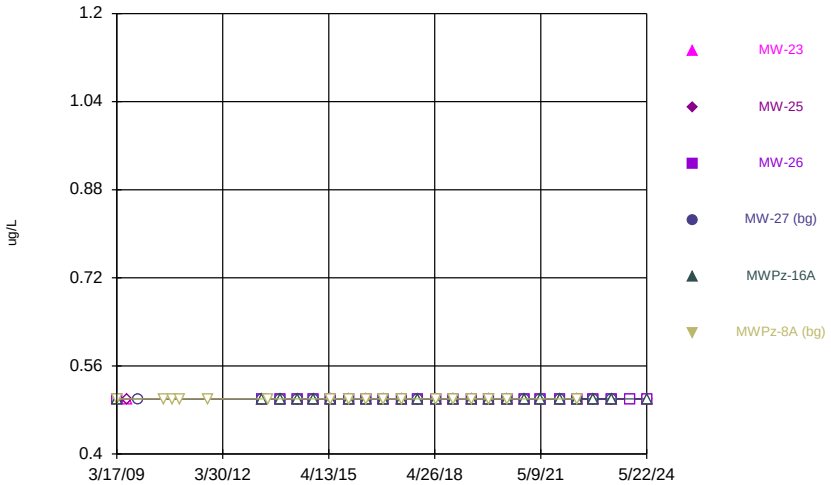
Time Series



Constituent: Tetrachloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

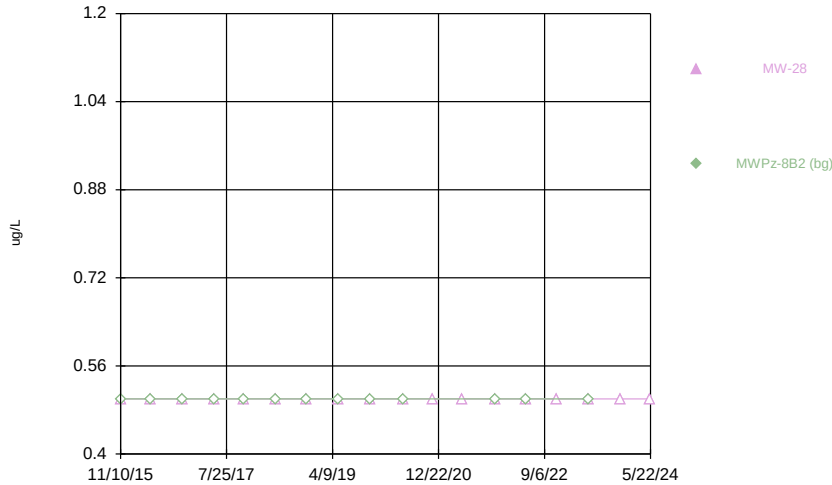
Time Series



Constituent: Tetrachloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

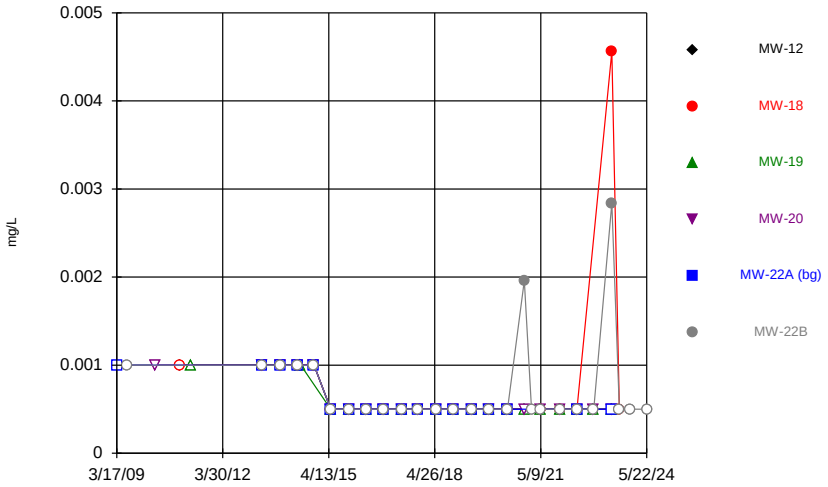
Time Series



Constituent: Tetrachloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

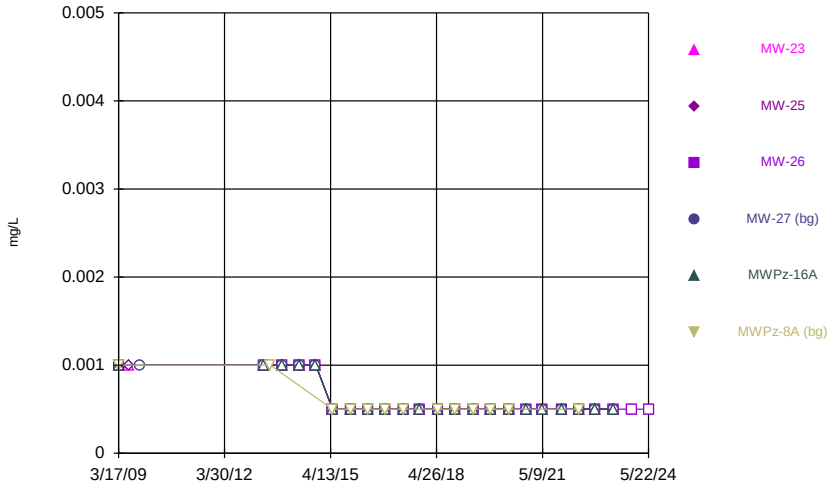
Time Series



Constituent: Thallium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

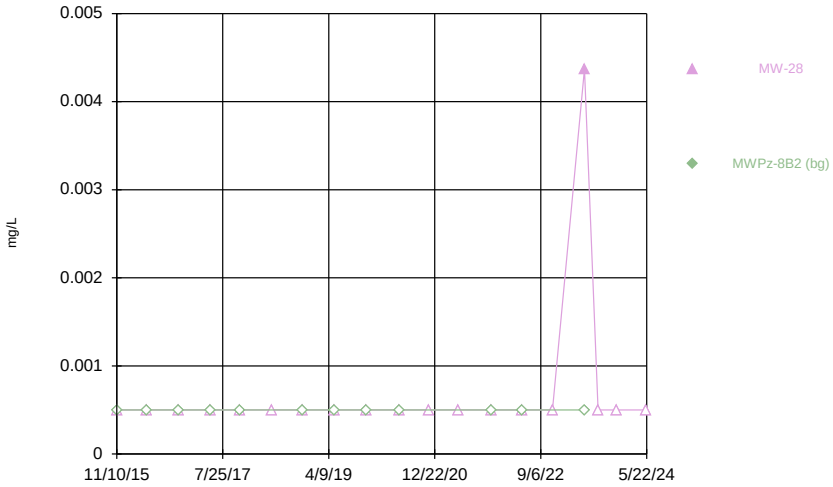
Time Series



Constituent: Thallium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

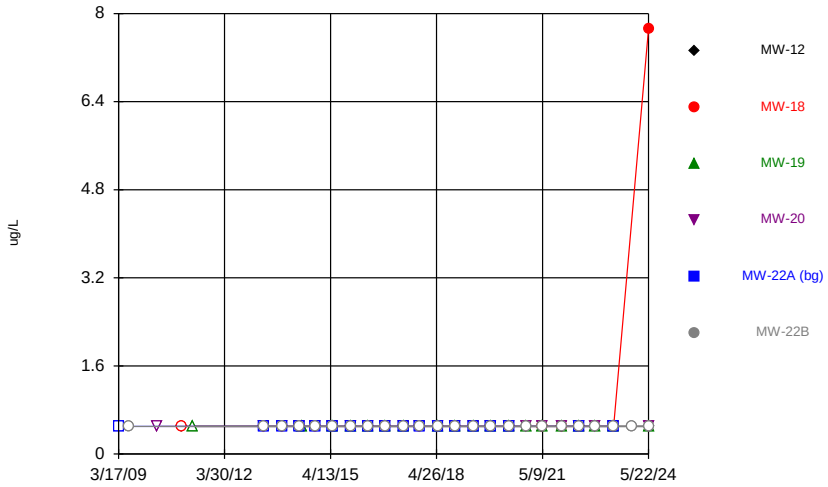
Time Series



Constituent: Thallium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

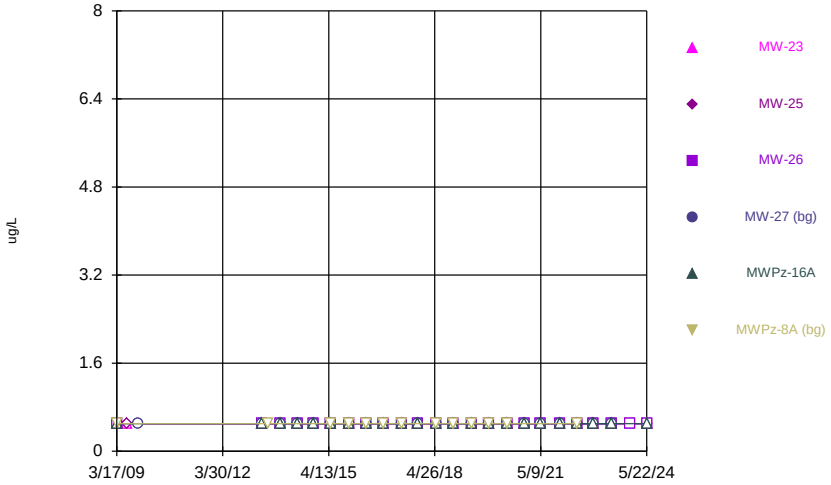
Time Series



Constituent: Toluene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

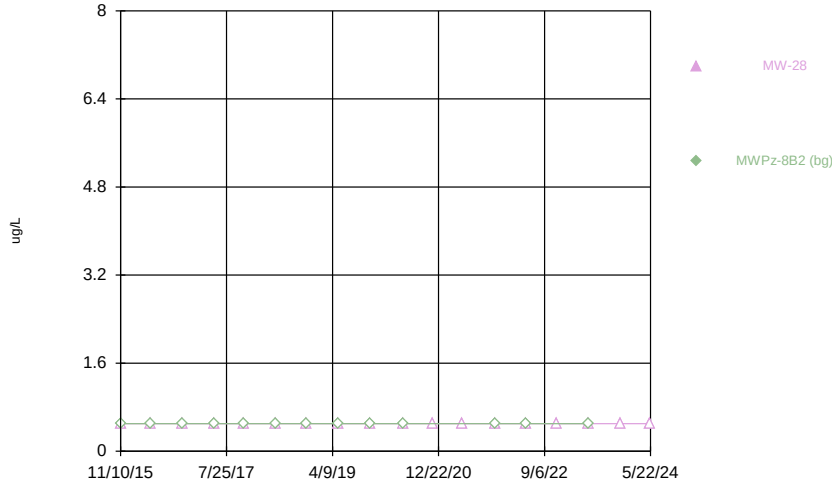
Time Series



Constituent: Toluene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

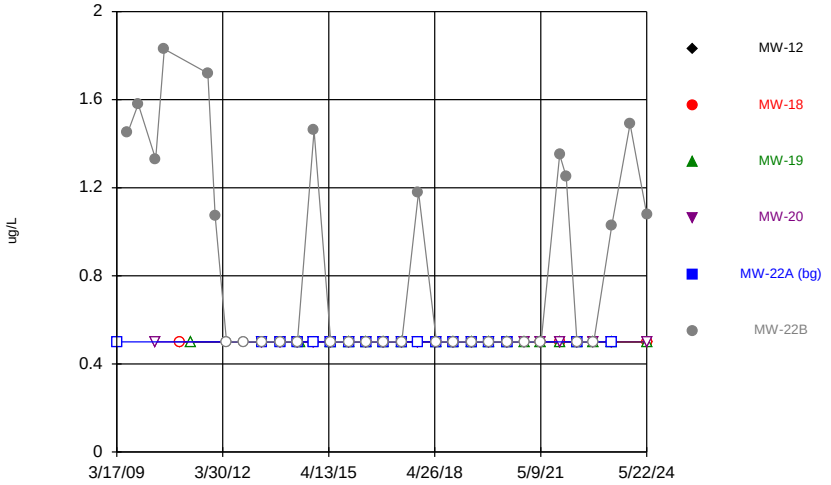
Time Series



Constituent: Toluene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

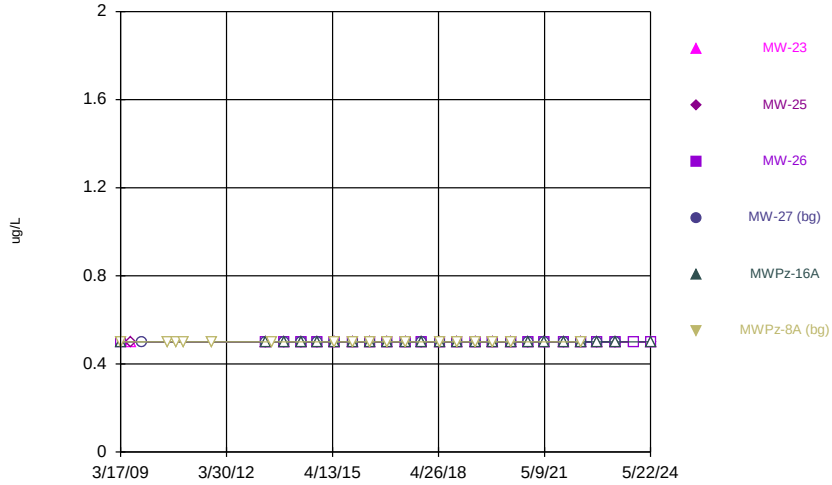
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

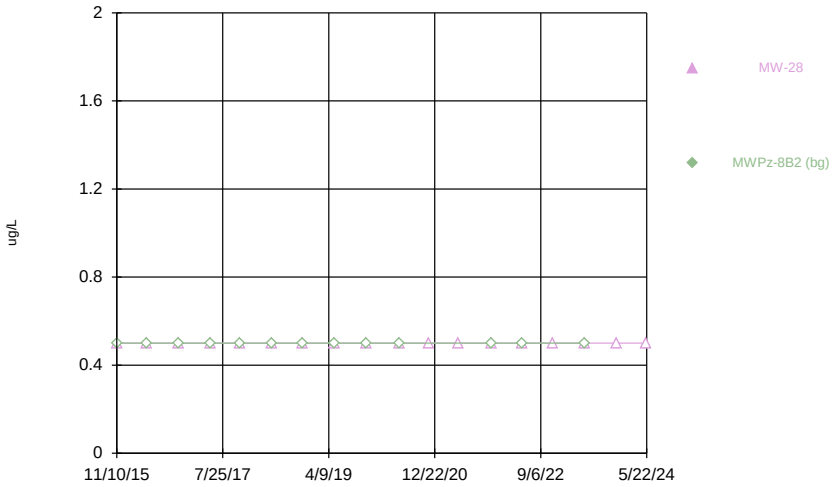
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

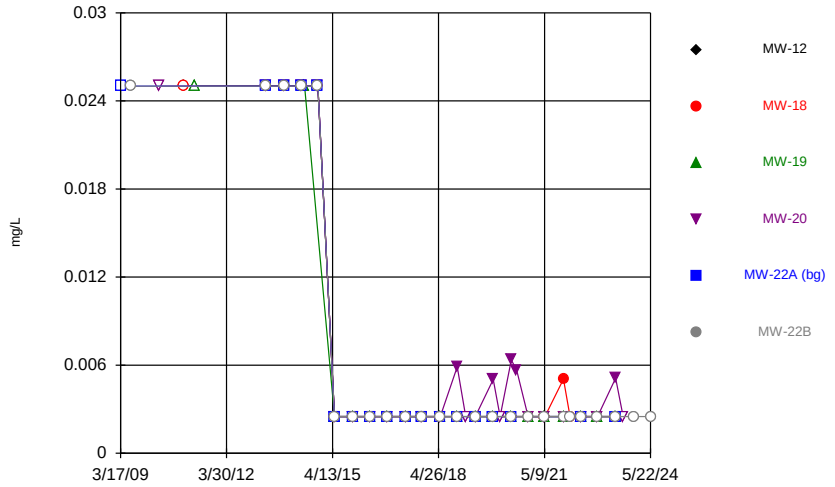
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

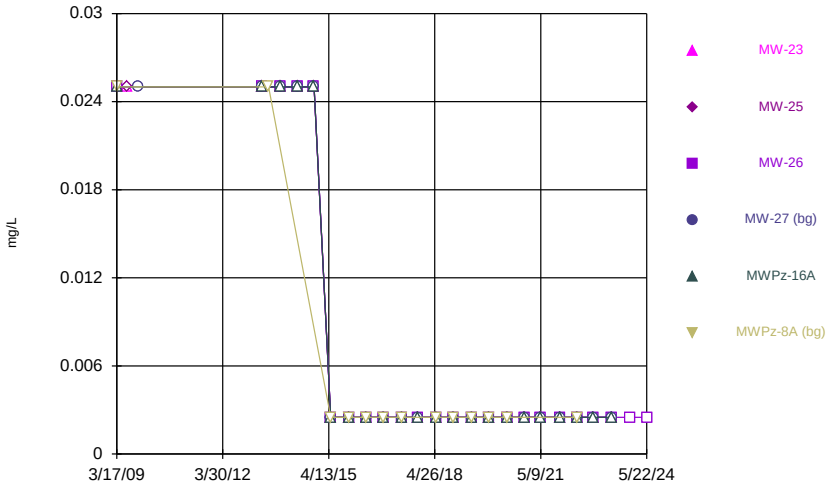
Time Series



Constituent: Vanadium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

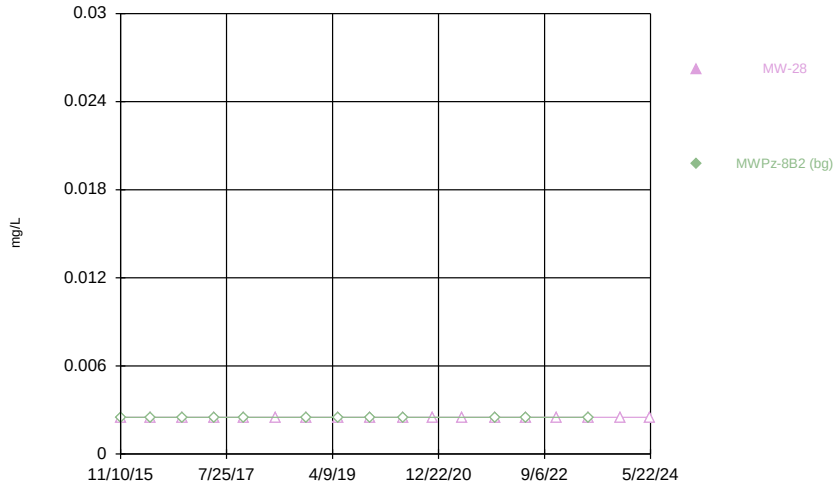
Time Series



Constituent: Vanadium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

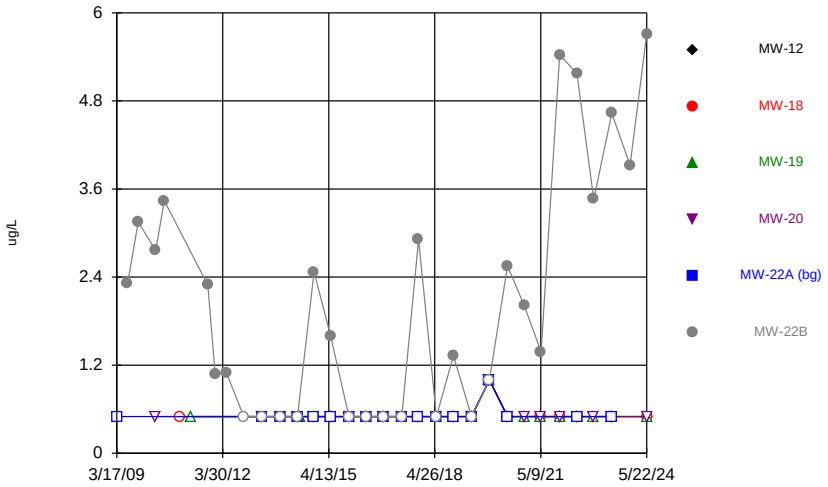
Time Series



Constituent: Vanadium Analysis Run 10/17/2024 11:34 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

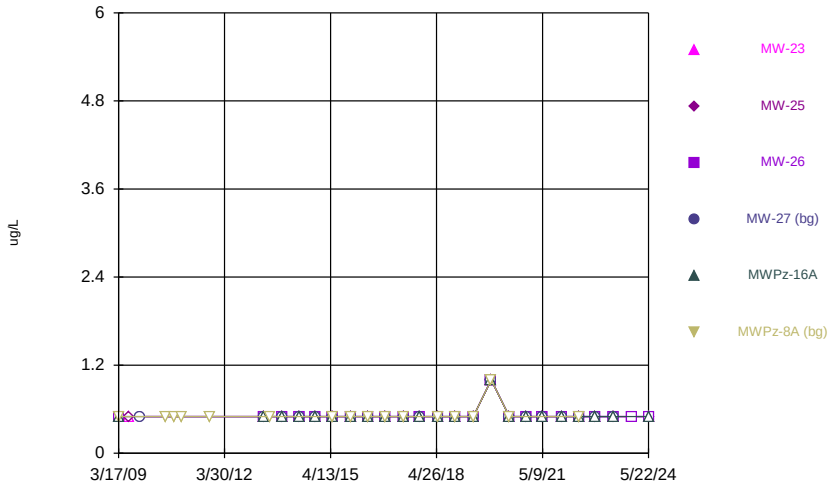
Time Series



Constituent: Vinyl Chloride Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

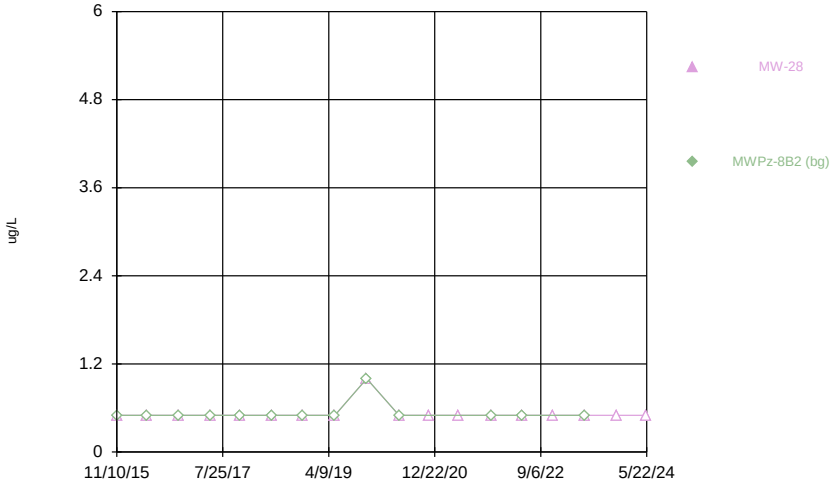
Time Series



Constituent: Vinyl Chloride Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

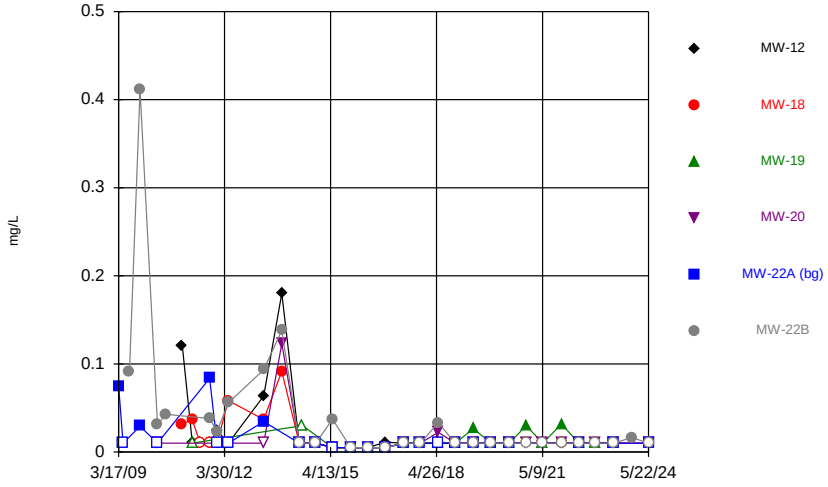
Time Series



Constituent: Vinyl Chloride Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

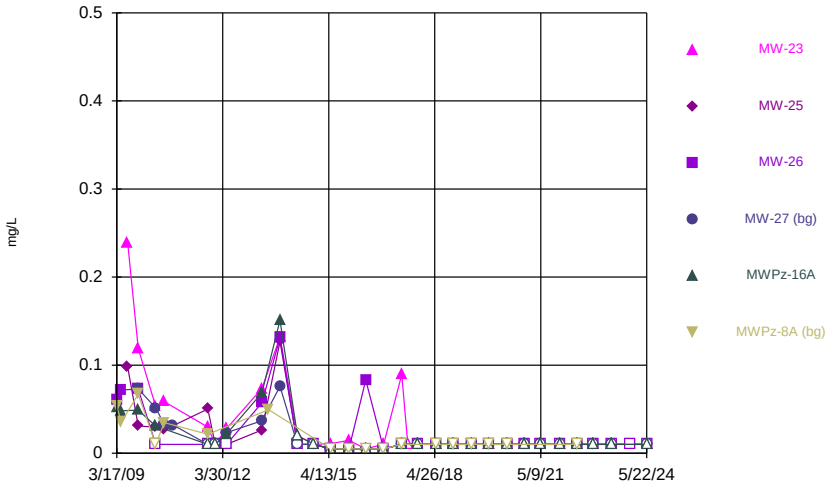
Time Series



Constituent: Zinc Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

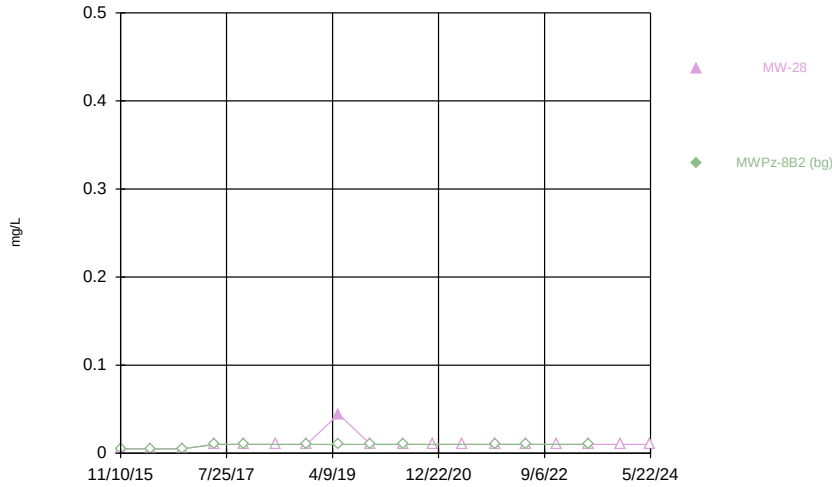
Time Series



Constituent: Zinc Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 10/17/2024 11:35 AM View: 2024SSN -Time Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Outliers Summary Table and Graphs

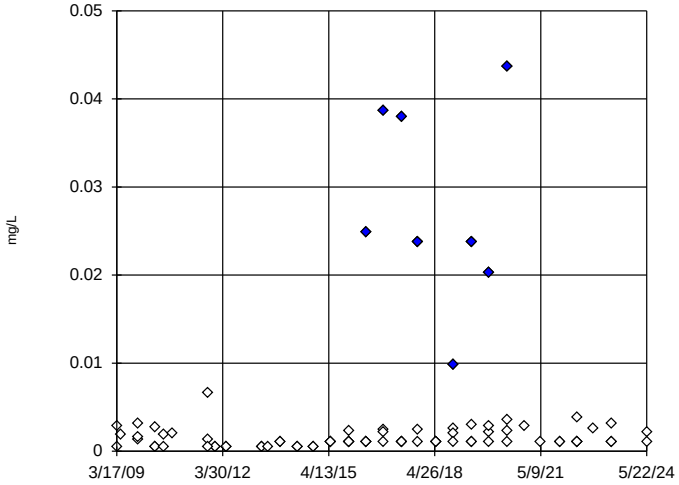
BG Outlier Analysis

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas Printed 10/17/2024, 11:46 AM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Arsenic (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.0249,0.0386,0.0379,0.0238,0.0238,0.00975,0.0203**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**83**	**0.003988**	**0.008558**	**unknown**	**ShapiroFrancia**
Barium (mg/L)	MW-27,MWPz-8B2,MW...	No	n/a	n/a w/combined bg	EPA/OH	0.05	83	0.1227	0.1047	ln(x)	ShapiroFrancia
Cadmium (mg/L)	MW-22A,MW-27,MWPz...	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	83	0.0003772	0.0005264	unknown	ShapiroFrancia
Cobalt (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.01,0.01,0.0035,0.0035,0.0035,0.0035,0.0035,0.00**	**n/a w/combined bg**	**OH**	**NaN**	**67**	**0.001278**	**0.002219**	**n/a**	**n/a**
Copper (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.0345,0.0239,0.01,0.01,0.01,0.01,0.01,0.01,0.01,**	**n/a w/combined bg**	**OH**	**NaN**	**79**	**0.005341**	**0.00532**	**n/a**	**n/a**
Lead (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.00802,0.00754,0.002,0.002,0.002,0.002,0.002,0.0**	**n/a w/combined bg**	**OH**	**NaN**	**78**	**0.0009604**	**0.001356**	**n/a**	**n/a**
Nickel (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.025,0.025,0.025,0.025,0.025,0.025,0.025,0.025**	**n/a w/combined bg**	**OH**	**NaN**	**67**	**0.007047**	**0.008674**	**n/a**	**n/a**
Selenium (mg/L)	MW-22A,MW-27,MWPz...	No	n/a	n/a w/combined bg	OH	NaN	73	0.002807	0.0011	n/a	n/a
Zinc (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.0836,0.076,0.075,0.0733,0.0671,0.0535,0.0514,0.**	**n/a w/combined bg**	**OH**	**NaN**	**83**	**0.01681**	**0.01822**	**n/a**	**n/a**

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.00672, low cutoff = -0.00329, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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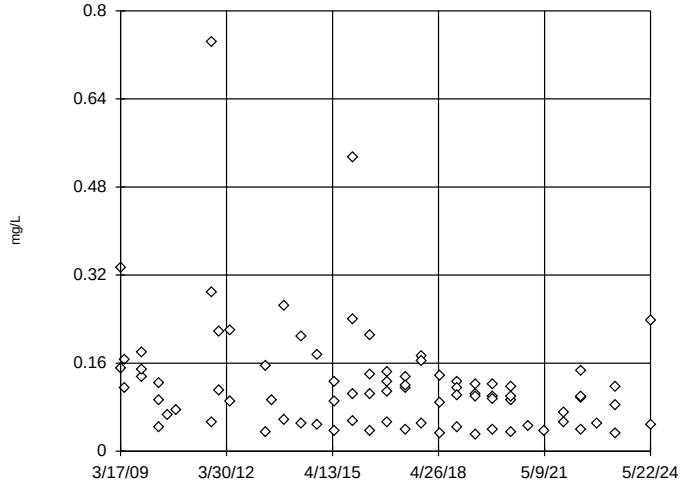
EPA Screening (suspected outliers for Rosner's Test)

MW-27,MWPz-8B2,MWPz-8A,MW-22A



n = 83

Rosner's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.1227, std. dev. 0.1047, critical Tn 3.143

Normality test used:
Shapiro Francia@alpha = 0.01
Calculated = 0.9667
Critical = 0.96 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Barium Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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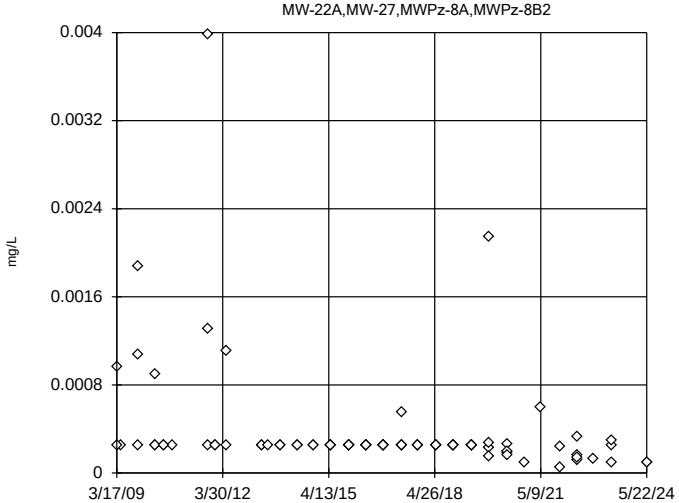
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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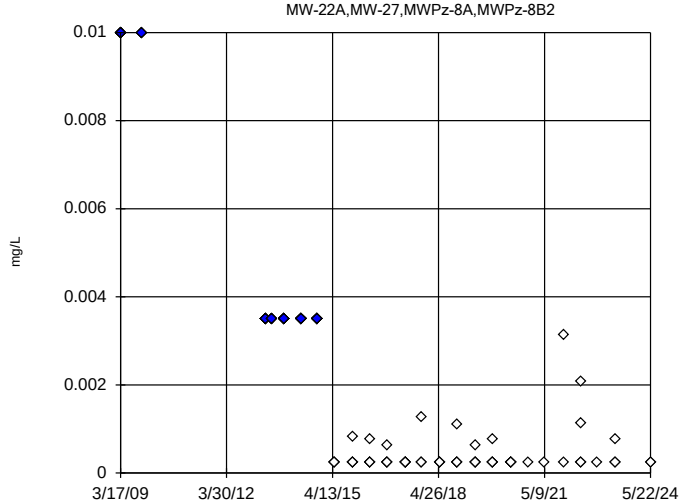
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



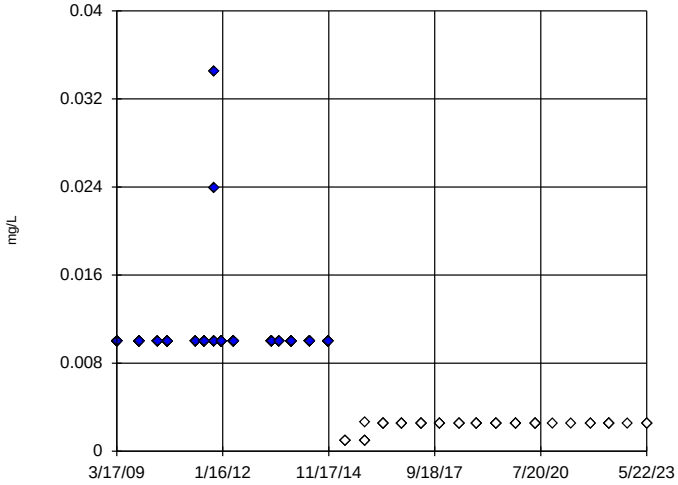
n = 67

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Cobalt Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 79

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Copper Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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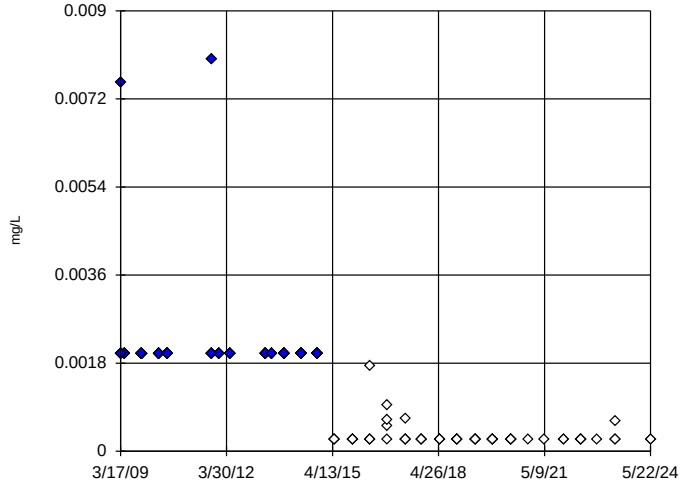
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 78

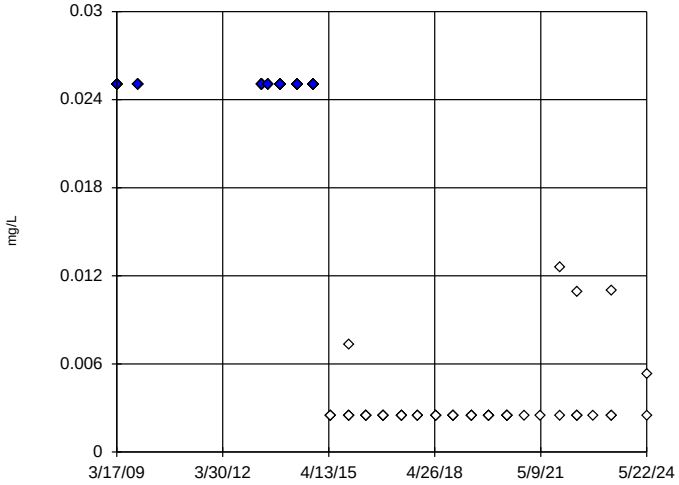
Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Lead Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 67

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Nickel Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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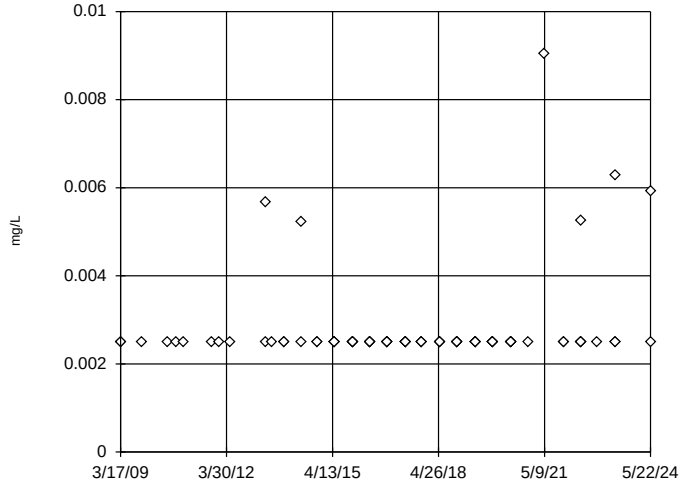
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



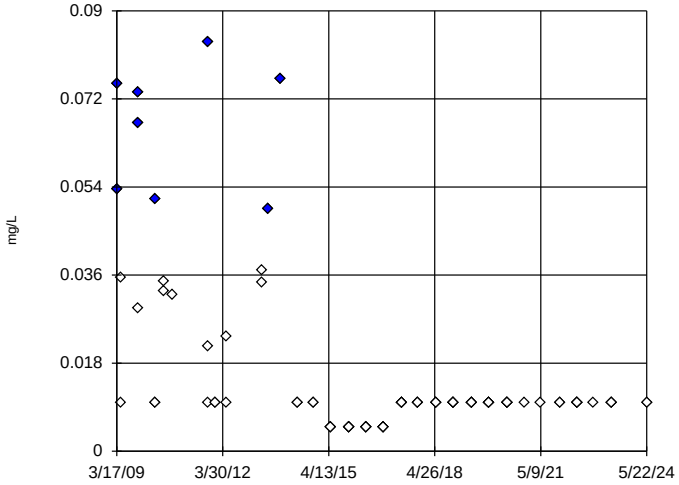
n = 73

No statistical outliers.

Constituent: Selenium Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Zinc Analysis Run 10/17/2024 11:41 AM View: 2024SSN - BG Outliers

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Prediction Limits Summary Table and Graphs

Prediction Limit

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas Printed 10/17/2024, 12:15 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	MW-18	0.0436	n/a	5/22/2024	0.00471	No	83	56.63	n/a	0.0002789	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-20	0.0436	n/a	5/22/2024	0.00213	No	83	56.63	n/a	0.0002789	NP Inter (NDs) 1 of 2
Arsenic (mg/L)	MW-22B	0.0436	n/a	5/22/2024	0.00394	No	83	56.63	n/a	0.0002789	NP Inter (NDs) 1 of 2
Barium (mg/L)	**MW-18**	**0.3781**	**n/a**	**5/22/2024**	**0.423**	**Yes**	**83**	**0**	**ln(x)**	**0.0005852**	**Param Inter 1 of 2**
Barium (mg/L)	MW-20	0.3781	n/a	5/22/2024	0.09035	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MW-22B	0.3781	n/a	5/22/2024	0.345	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MW-23	0.3781	n/a	5/22/2024	0.369	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MW-25	0.3781	n/a	5/22/2024	0.0894	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MW-26	0.3781	n/a	5/22/2024	0.0851	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MWPz-16A	0.3781	n/a	5/22/2024	0.312	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Barium (mg/L)	MW-28	0.3781	n/a	5/22/2024	0.0715	No	83	0	ln(x)	0.0005852	Param Inter 1 of 2
Cadmium (mg/L)	MW-18	0.00398	n/a	5/22/2024	0.000483	No	83	68.67	n/a	0.0002789	NP Inter (NDs) 1 of 2
Cadmium (mg/L)	MW-23	0.00398	n/a	5/22/2024	0.000208	No	83	68.67	n/a	0.0002789	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	**MW-18**	**0.01**	**n/a**	**5/22/2024**	**0.0367**	**Yes**	**67**	**83.58**	**n/a**	**0.0004243**	**NP Inter (NDs) 1 of 2**
Cobalt (mg/L)	MW-22B	0.01	n/a	5/22/2024	0.00338	No	67	83.58	n/a	0.0004243	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-23	0.01	n/a	5/22/2024	0.00147	No	67	83.58	n/a	0.0004243	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MWPz-16A	0.01	n/a	5/22/2024	0.00071	No	67	83.58	n/a	0.0004243	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-18	0.00802	n/a	5/22/2024	0.000756	No	78	89.74	n/a	0.0003146	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-23	0.00802	n/a	5/22/2024	0.00144	No	78	89.74	n/a	0.0003146	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-18	0.025	n/a	5/22/2024	0.0151	No	67	92.54	n/a	0.0004243	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-22B	0.025	n/a	5/22/2024	0.0148	No	67	92.54	n/a	0.0004243	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-23	0.025	n/a	5/22/2024	0.0108	No	67	92.54	n/a	0.0004243	NP Inter (NDs) 1 of 2
Selenium (mg/L)	MW-20	0.00904	n/a	5/22/2024	0.006945	No	73	91.78	n/a	0.0003584	NP Inter (NDs) 1 of 2
Selenium (mg/L)	MW-26	0.00904	n/a	5/22/2024	0.00832	No	73	91.78	n/a	0.0003584	NP Inter (NDs) 1 of 2

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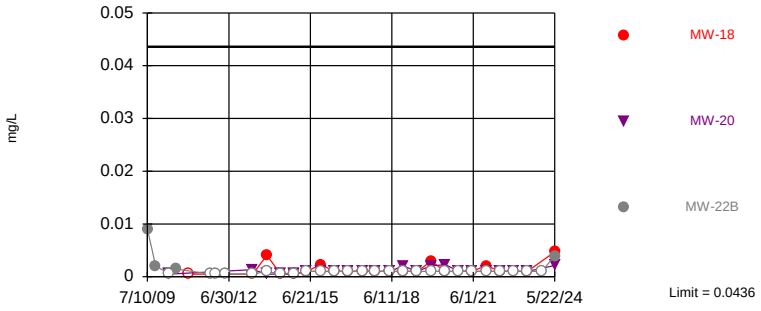
Hollow symbols indicate censored values.

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 83 background values. 56.63% NDs. Annual per-constituent alpha = 0.005563. Individual comparison alpha = 0.0002789 (1 of 2). Comparing 3 points to limit. Assumes 7 future values.

Constituent: Arsenic Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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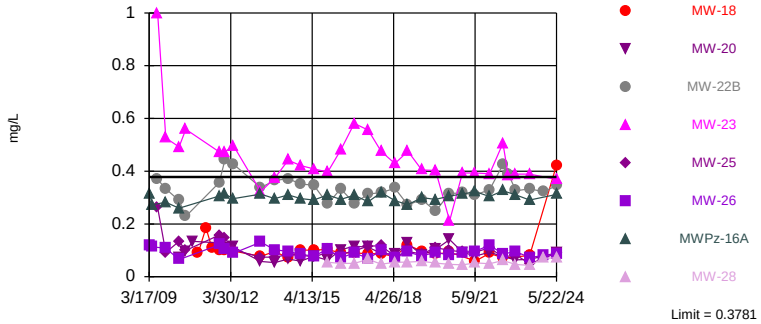
Exceeds Limit: MW-18

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-2.332, Std. Dev.=0.6645, n=83. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9667, critical = 0.96. Kappa = 2.045 (c=9, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.005836. Individual comparison alpha = 0.0005852. Comparing 8 points to limit. Assumes 2 future values.

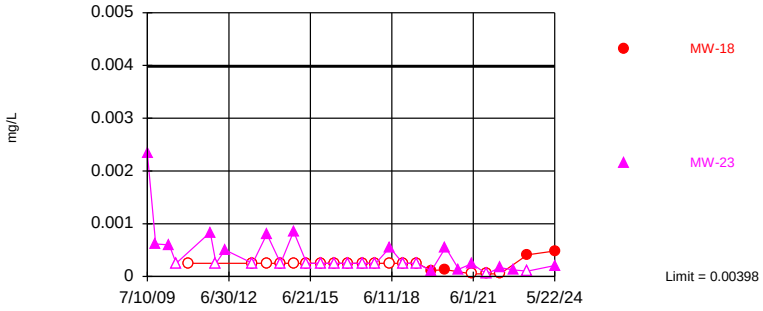
Constituent: Barium Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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 83 background values. 68.67% NDs. Annual per-constituent alpha = 0.005563. Individual comparison alpha = 0.0002789 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

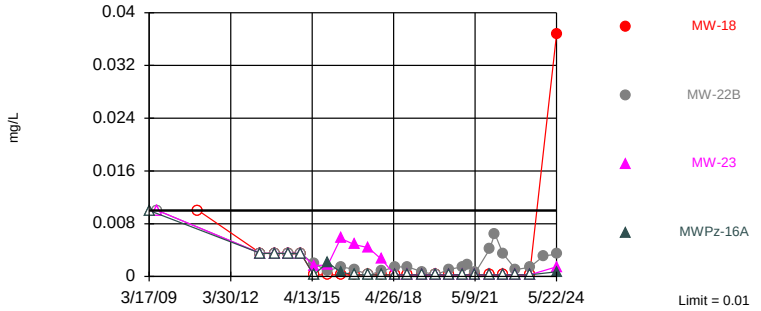
Constituent: Cadmium Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Exceeds Limit: MW-18

Prediction Limit

Interwell Non-parametric



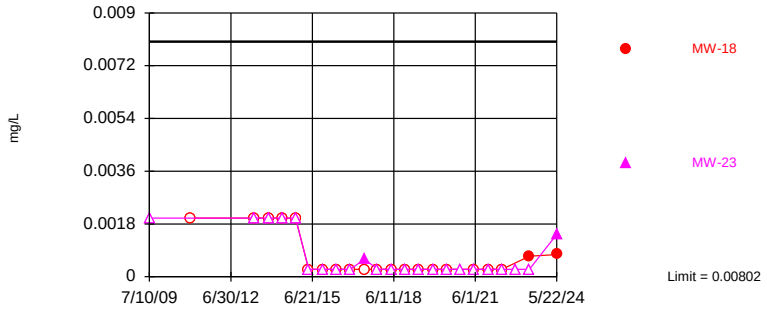
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 67 background values. 83.58% NDs. Annual per-constituent alpha = 0.008453. Individual comparison alpha = 0.0004243 (1 of 2). Comparing 4 points to limit. Assumes 6 future values.

Constituent: Cobalt Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



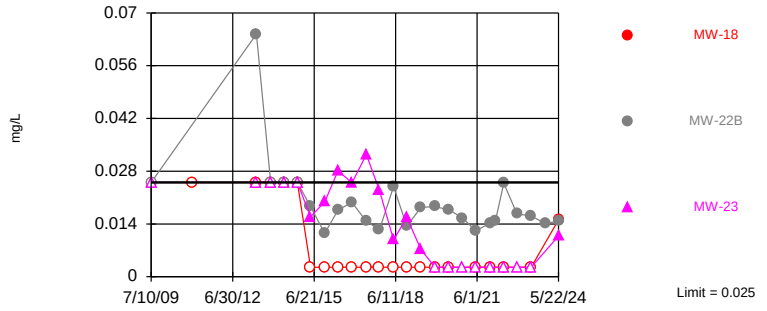
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 78 background values. 89.74% NDs. Annual per-constituent alpha = 0.006274. Individual comparison alpha = 0.0003146 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

Constituent: Lead Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
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 67 background values. 92.54% NDs. Annual per-constituent alpha = 0.008453. Individual comparison alpha = 0.0004243 (1 of 2). Comparing 3 points to limit. Assumes 7 future values.

Constituent: Nickel Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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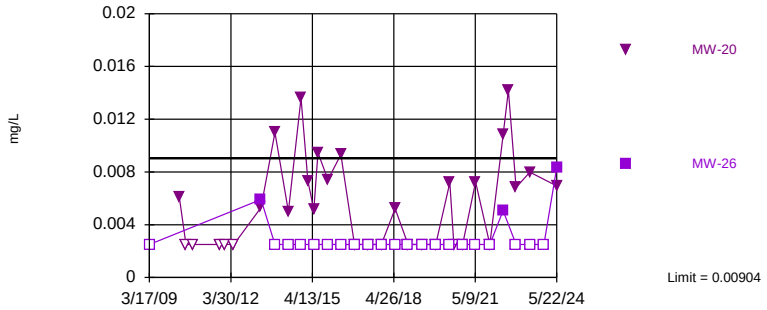
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 73 background values. 91.78% NDs. Annual per-constituent alpha = 0.007143. Individual comparison alpha = 0.0003584 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

Constituent: Selenium Analysis Run 10/17/2024 12:14 PM View: 2024SSN - DM and AM PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Mann-Kendall Trend Test Summary Table and Graphs

Trend Test

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM Printed 10/17/2024, 12:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,1-Dichloroethane (ug/L)	MW-19	0.2948	16	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MWPz-16A	0.06806	8	21	No	8	0	0.01	NP
4,4`-DDD (ug/L)	MW-19	0.001355	3	12	No	5	80	0.01	NP
Acetone (ug/L)	MW-18	2.5	18	21	No	8	62.5	0.01	NP
Acetone (ug/L)	MW-19	0	-4	-21	No	8	50	0.01	NP
Acetone (ug/L)	MW-22B	0	9	21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-18	0	4	21	No	8	62.5	0.01	NP
Arsenic (mg/L)	MW-19	0.01601	20	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-20	0	-1	-21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-22B	0	7	21	No	8	87.5	0.01	NP
Barium (mg/L)	MW-18	-0.002086	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-19	0.07048	18	21	No	8	0	0.01	NP
Barium (mg/L)	MW-20	-0.01106	-15	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-22B	0.003357	2	21	No	8	0	0.01	NP
Barium (mg/L)	MW-23	-0.003823	-16	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-25	-0.00703	-14	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-28	0.006043	10	21	No	8	0	0.01	NP
Barium (mg/L)	MWPz-16A	-0.0009547	-2	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-19	0	0	21	No	8	50	0.01	NP
Benzene (ug/L)	MW-22B	0.6681	16	21	No	8	12.5	0.01	NP
Cadmium (mg/L)	MW-18	0.00001537	3	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-19	-0.0001181	-9	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-20	-0.000008374	-5	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-22B	-0.0000388	-4	-21	No	8	12.5	0.01	NP
Cadmium (mg/L)	MW-23	-0.00005786	-8	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-25	-0.00006327	-15	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-28	-0.00001105	-7	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MWPz-16A	-0.00001154	-7	-21	No	8	37.5	0.01	NP
Chromium (mg/L)	MW-22B	0	5	21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	**MW-22B**	**11.7**	**22**	**21**	**Yes**	**8**	**0**	**0.01**	**NP**
cis-1,2-Dichloroethene (ug/L)	MWPz-16A	-0.01799	-4	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-19	0.00009251	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-22B	0.0001206	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-25	0	-1	-21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-28	0	5	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MWPz-16A	0	7	21	No	8	87.5	0.01	NP
Cyanide (ug/L)	MW-22B	0	-1	-8	No	4	75	0.01	NP
Lead (mg/L)	MW-18	0	13	21	No	8	75	0.01	NP
Lead (mg/L)	MW-19	0	-3	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-22B	0	3	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-25	0	-3	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-28	0	7	21	No	8	75	0.01	NP
Nickel (mg/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
Nickel (mg/L)	MW-19	0.0008882	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-22B	0.0008019	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Nickel (mg/L)	MWPz-16A	0	1	21	No	8	75	0.01	NP

Trend Test

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM Printed 10/17/2024, 12:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Selenium (mg/L)	MW-18	-0.0008133	-12	-21	No	8	12.5	0.01	NP
Selenium (mg/L)	MW-20	0.001524	7	21	No	8	25	0.01	NP
Selenium (mg/L)	MW-25	0	-7	-21	No	8	87.5	0.01	NP
Selenium (mg/L)	MW-28	0	3	21	No	8	87.5	0.01	NP
Silver (mg/L)	MW-22B	0	-3	-21	No	8	87.5	0.01	NP
Silver (mg/L)	MW-28	0	-3	-21	No	8	87.5	0.01	NP
Sulfide (ug/L)	MW-18	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-19	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-22B	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-23	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MWPz-16A	-70.48	-1	-8	No	4	75	0.01	NP
Thallium (mg/L)	MW-18	0	5	21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-22B	0	1	21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-28	0	1	21	No	8	87.5	0.01	NP
Toluene (ug/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-22B	0.0596	5	21	No	8	37.5	0.01	NP
Vanadium (mg/L)	MW-18	0	1	21	No	8	87.5	0.01	NP
Vanadium (mg/L)	MW-20	0	-3	-21	No	8	75	0.01	NP
Vinyl Chloride (ug/L)	MW-22B	0.8629	10	21	No	8	0	0.01	NP
Zinc (mg/L)	MW-19	0	-1	-21	No	8	75	0.01	NP
Zinc (mg/L)	MW-22B	0	5	21	No	8	87.5	0.01	NP

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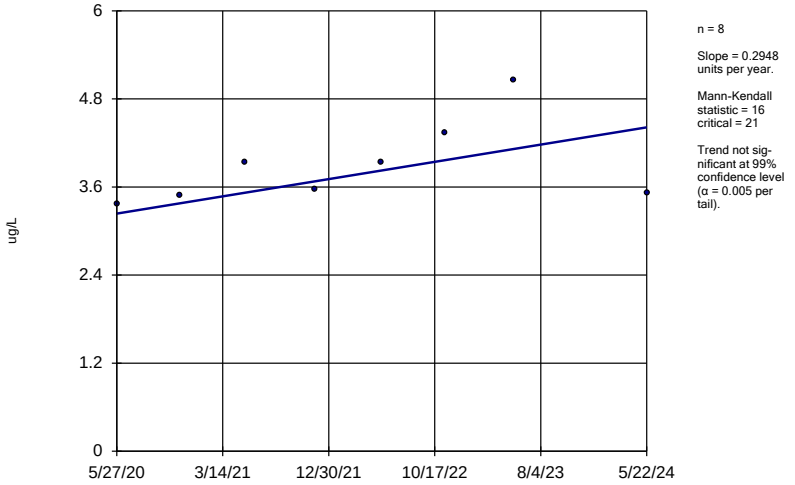
Sen's Slope Estimator

MW-19



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2024 12:29 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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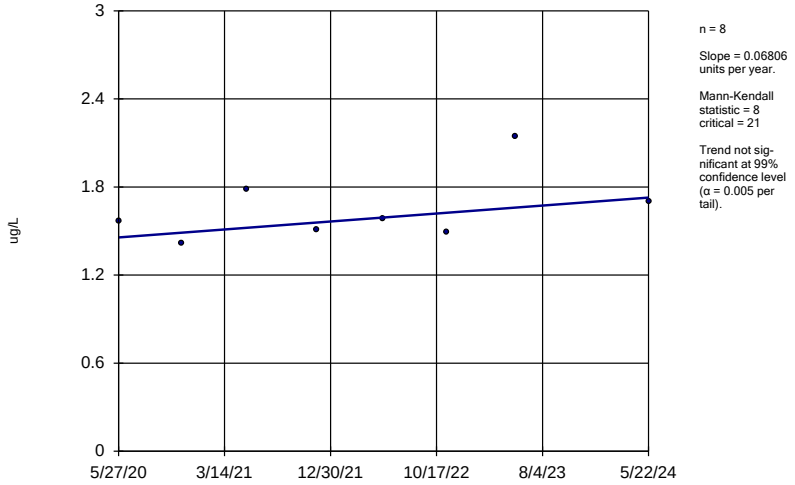
Sen's Slope Estimator

MWPz-16A



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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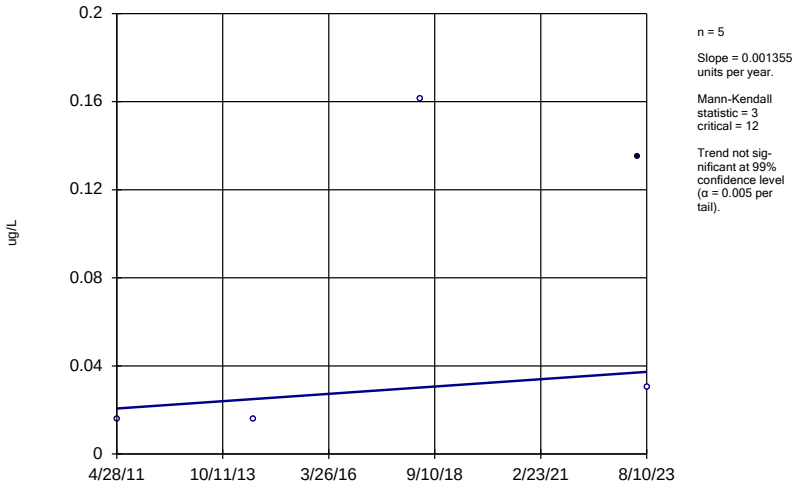
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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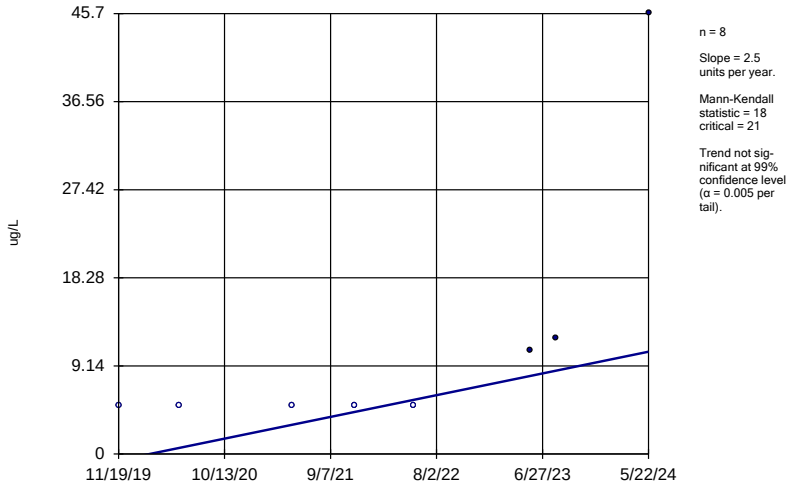
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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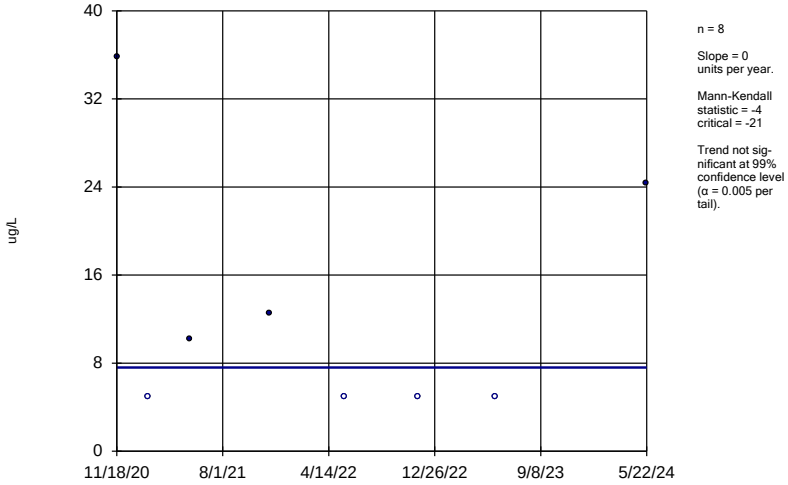
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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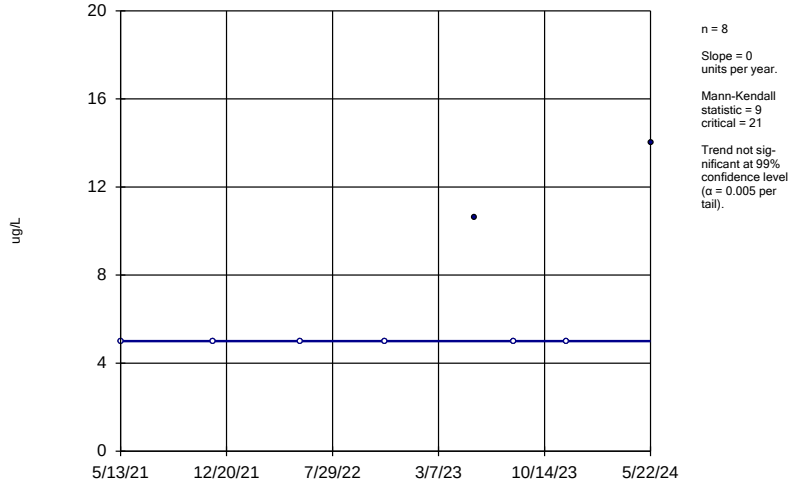
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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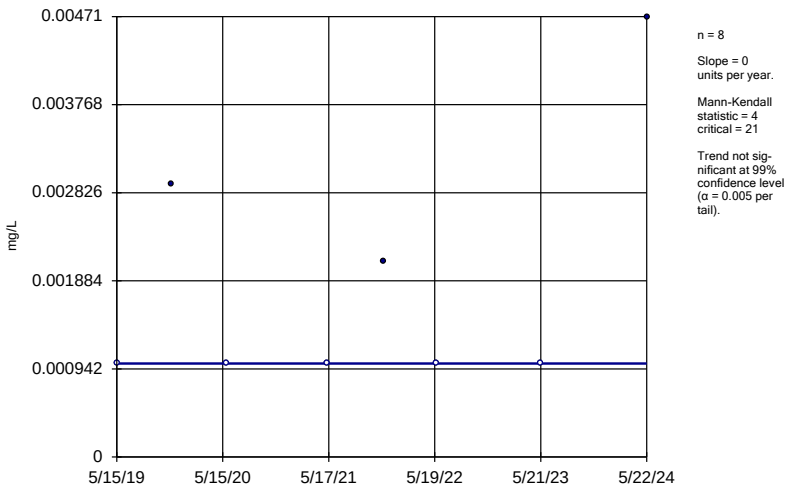
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



Constituent: Arsenic Analysis Run 10/17/2024 12:29 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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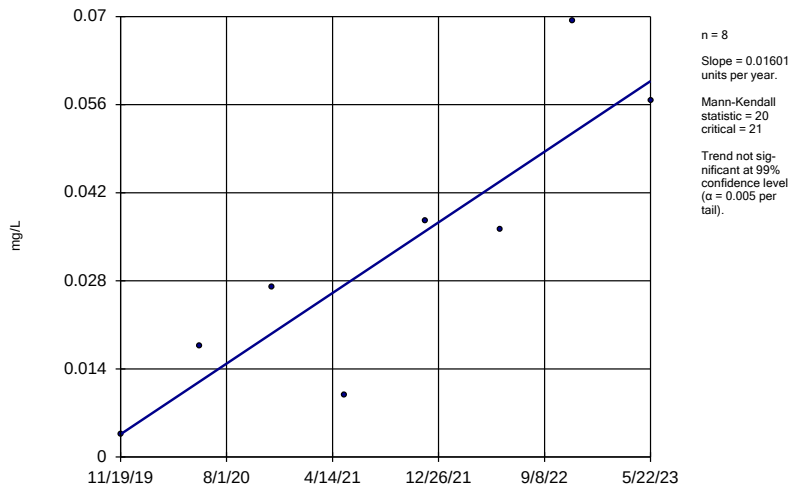
Sen's Slope Estimator

MW-19



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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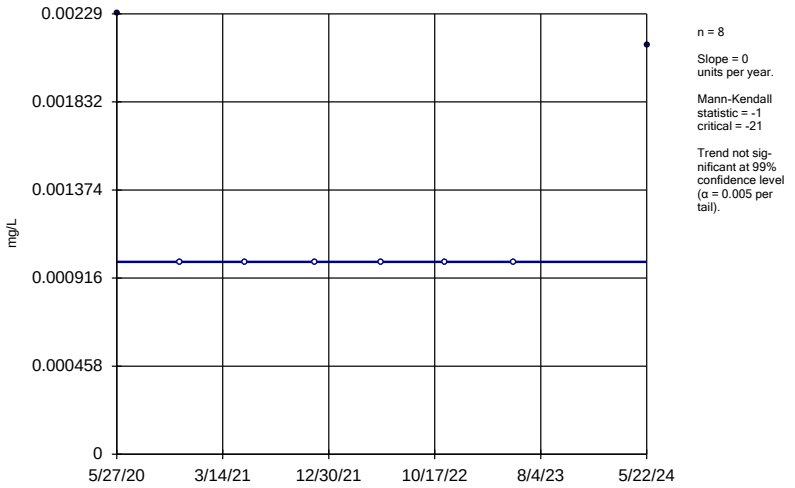
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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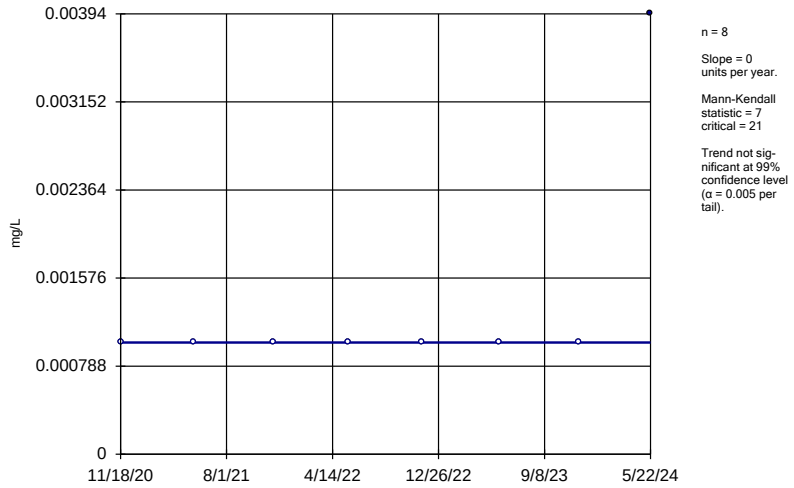
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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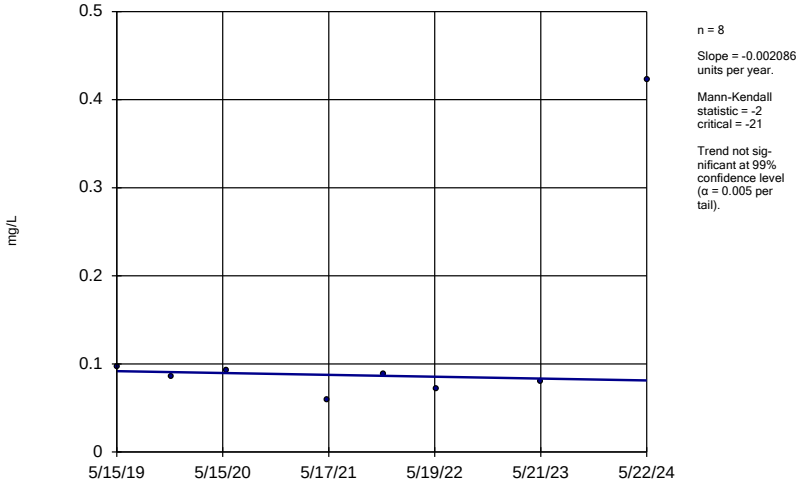
Sen's Slope Estimator

MW-18



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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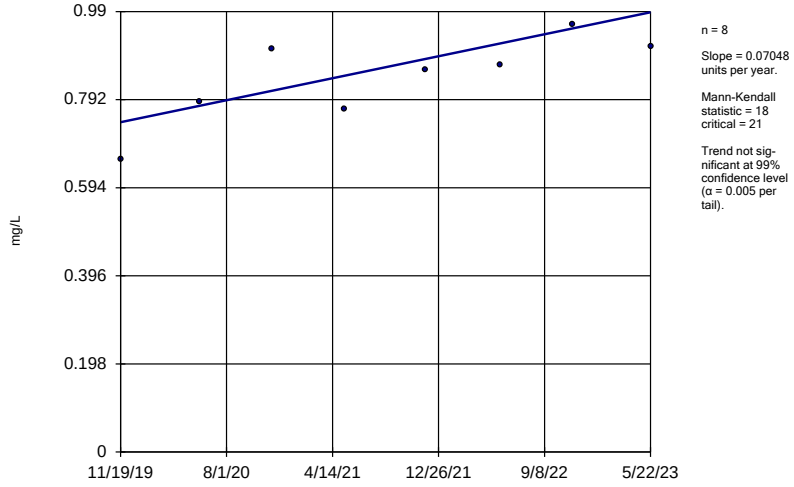
Sen's Slope Estimator

MW-19



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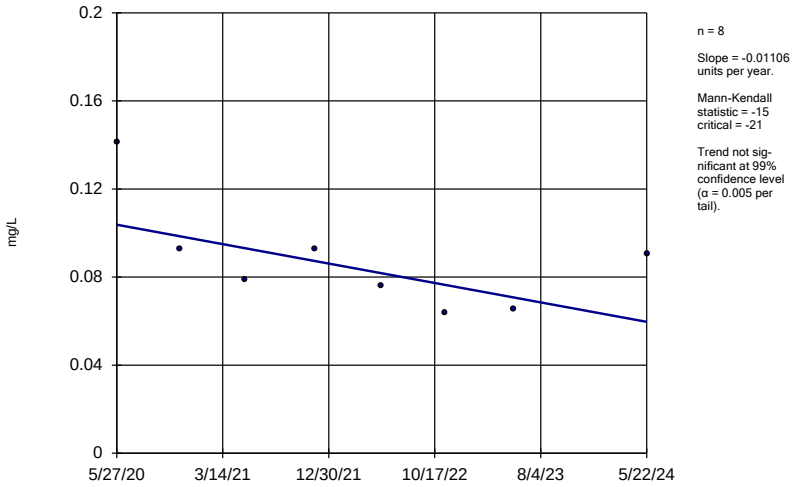
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sen's Slope Estimator

MW-20



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Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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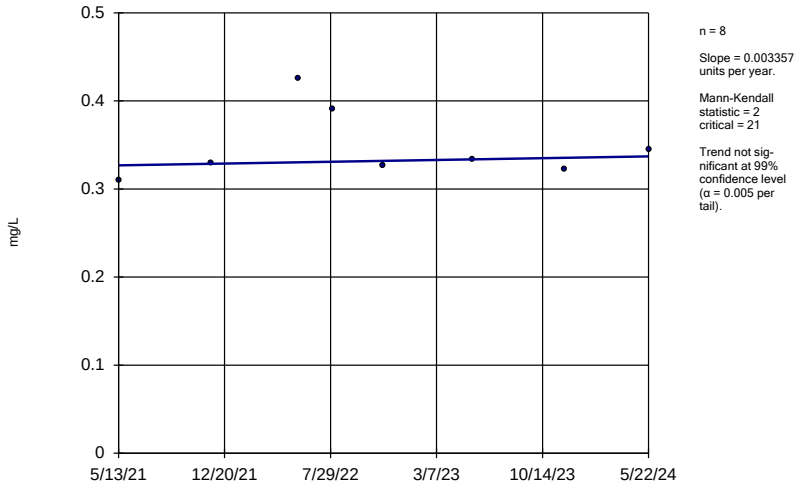
Sen's Slope Estimator

MW-22B



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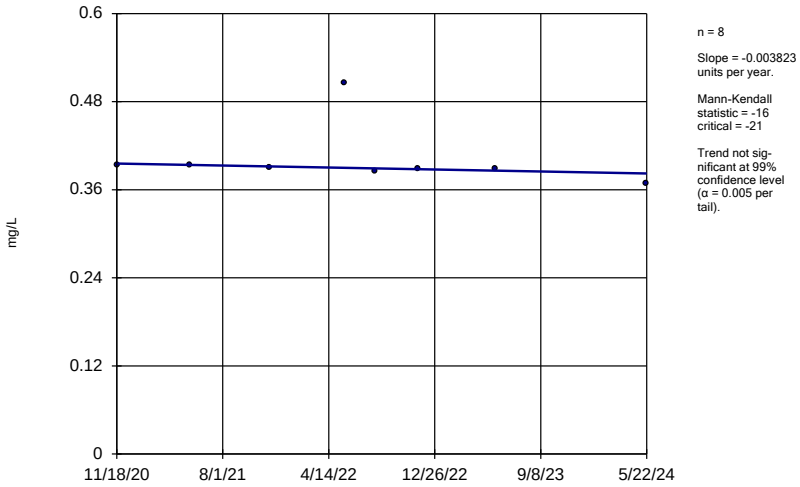
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-23



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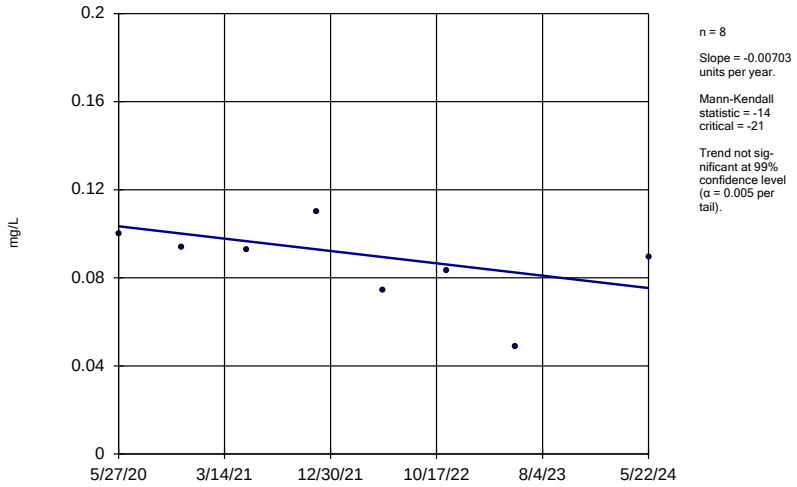
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-25



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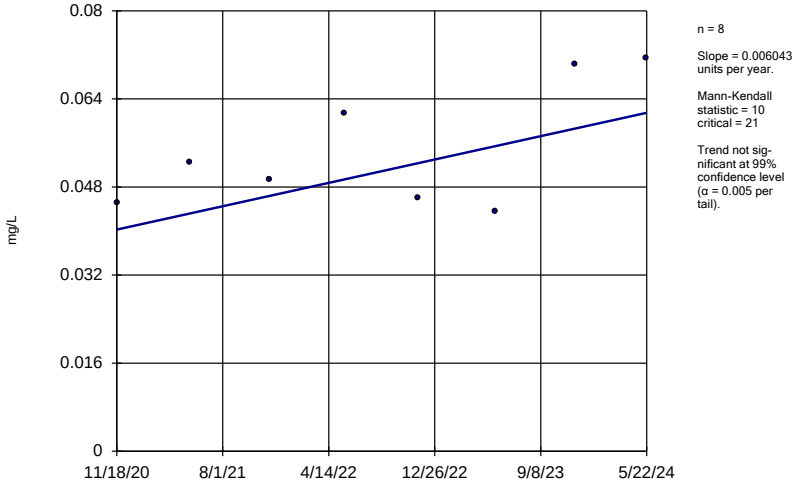
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sen's Slope Estimator

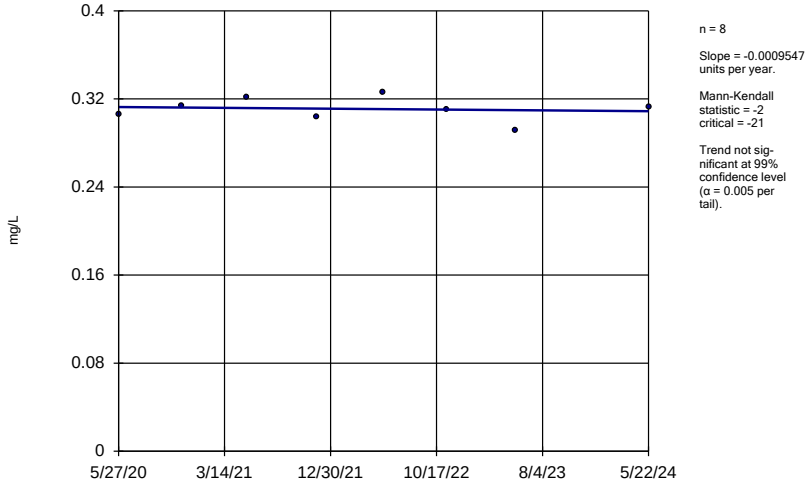
MW-28



Constituent: Barium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sen's Slope Estimator

MWPz-16A

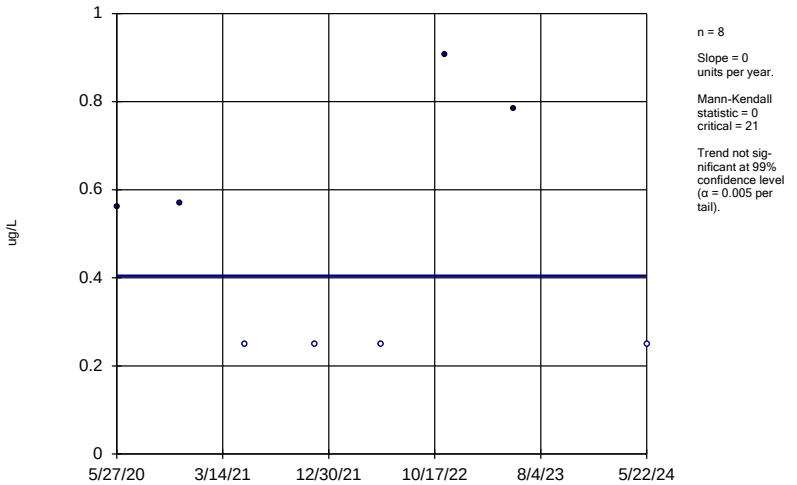


Constituent: Barium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19

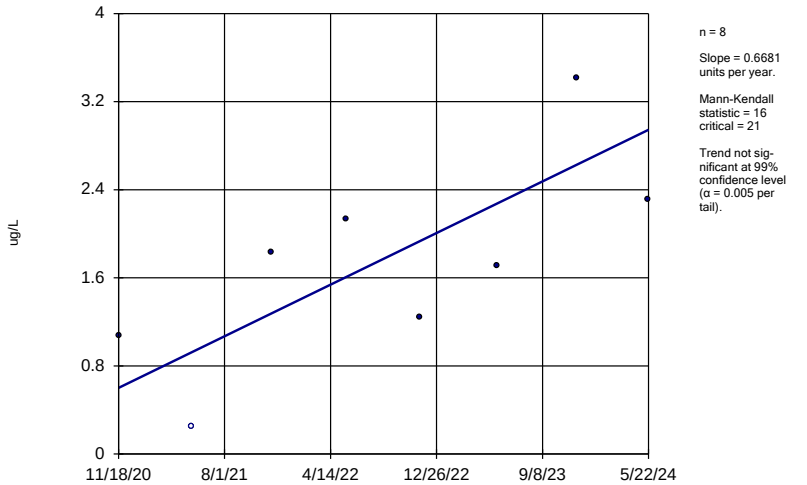


Constituent: Benzene Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



Constituent: Benzene Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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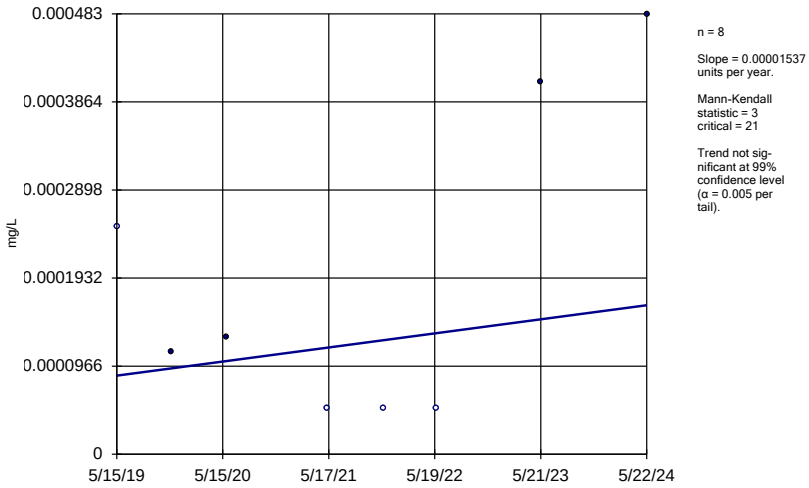
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = 0.00001537 units per year.

Mann-Kendall statistic = 3
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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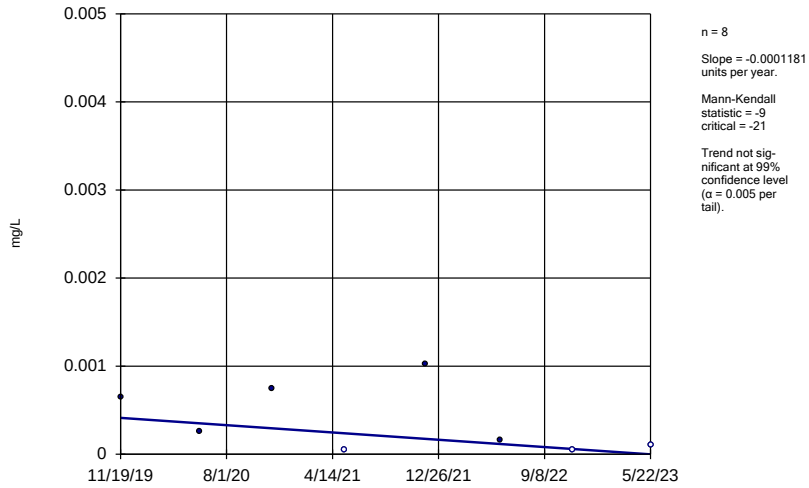
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 8

Slope = -0.0001181 units per year.

Mann-Kendall statistic = -9
critical = -21

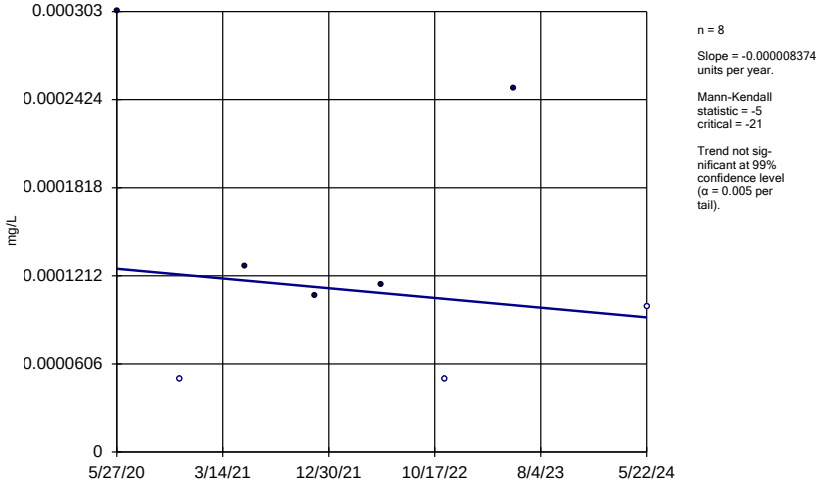
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20



n = 8

Slope = -0.000008374 units per year.

Mann-Kendall statistic = -5
critical = -21

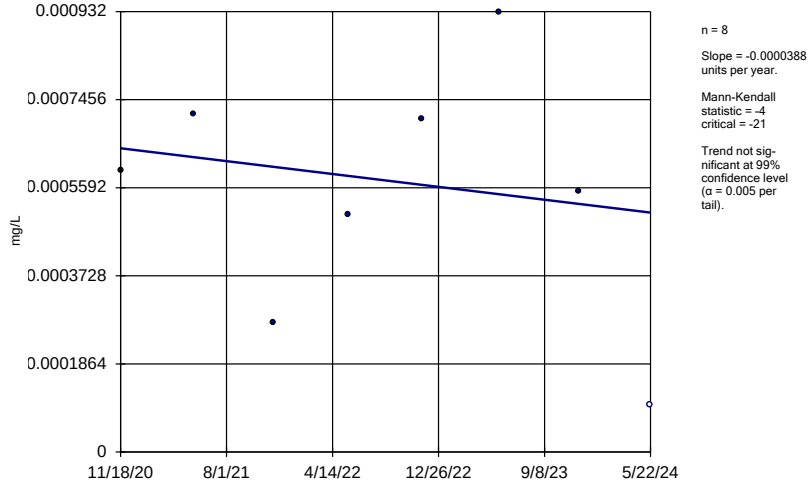
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = -0.0000388 units per year.

Mann-Kendall statistic = -4
critical = -21

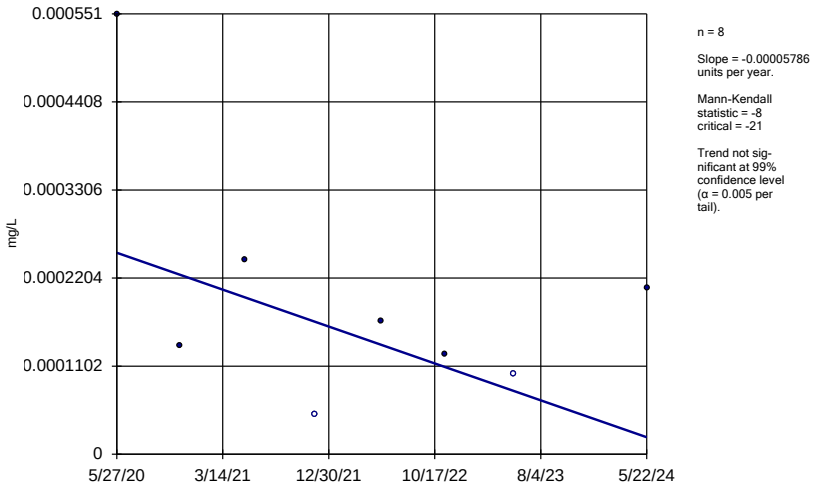
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 8

Slope = -0.00005786 units per year.

Mann-Kendall statistic = -8
critical = -21

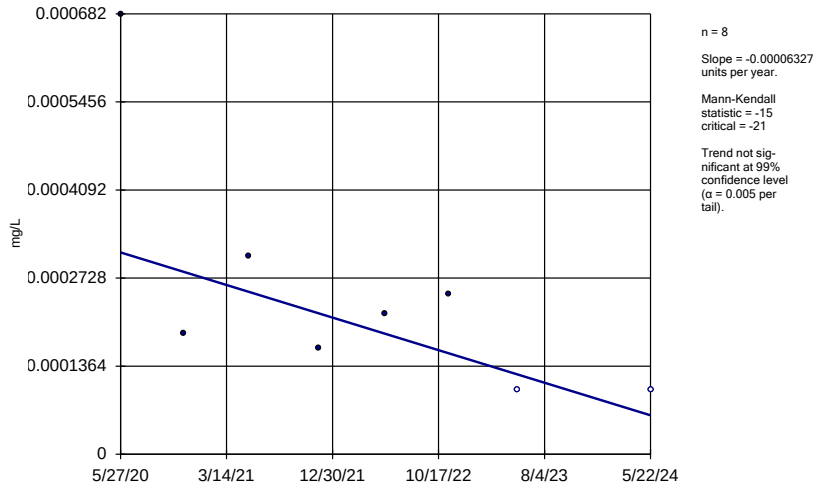
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.00006327 units per year.

Mann-Kendall statistic = -15
critical = -21

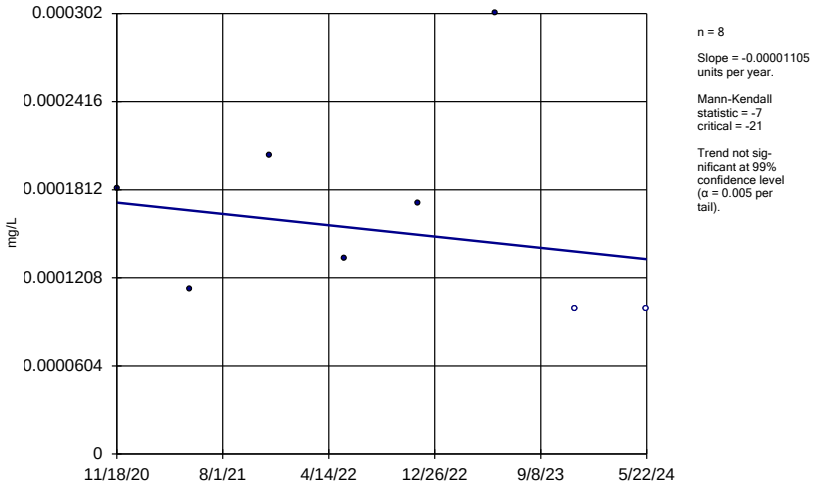
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28



n = 8

Slope = -0.00001105 units per year.

Mann-Kendall statistic = -7
critical = -21

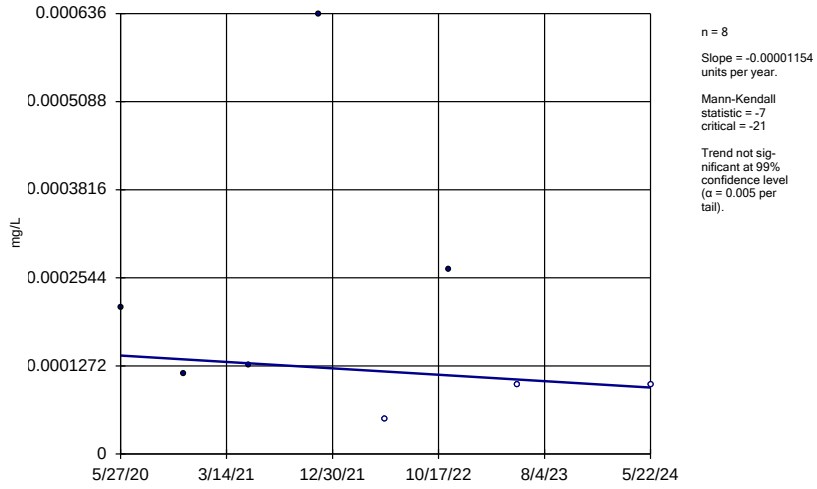
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A



n = 8

Slope = -0.00001154 units per year.

Mann-Kendall statistic = -7
critical = -21

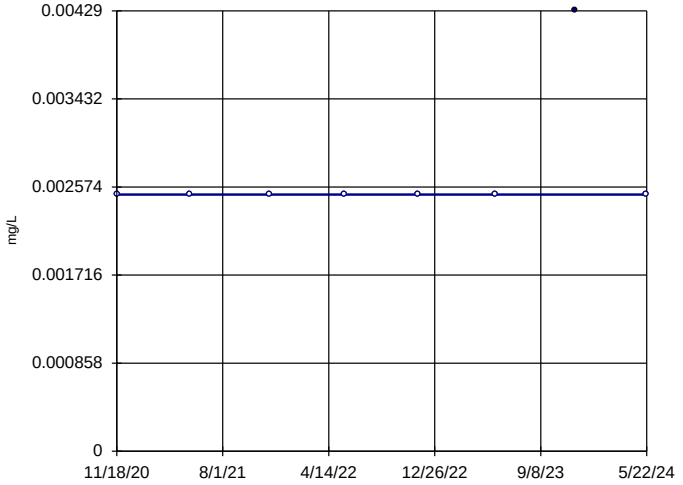
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = 5
critical = 21

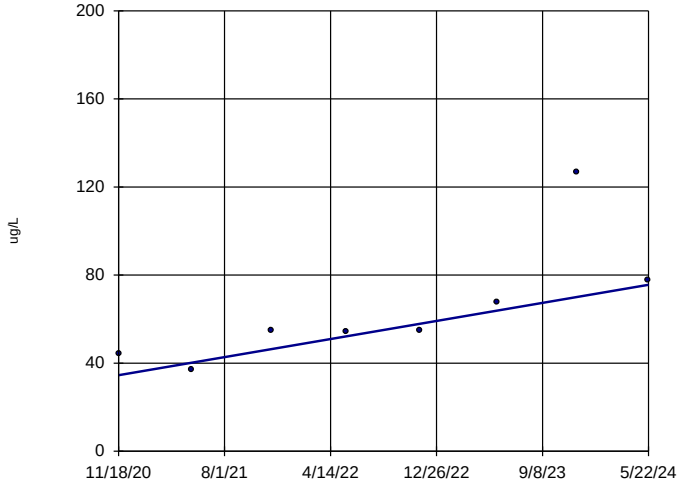
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chromium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B



n = 8

Slope = 11.7
units per year.

Mann-Kendall
statistic = 22
critical = 21

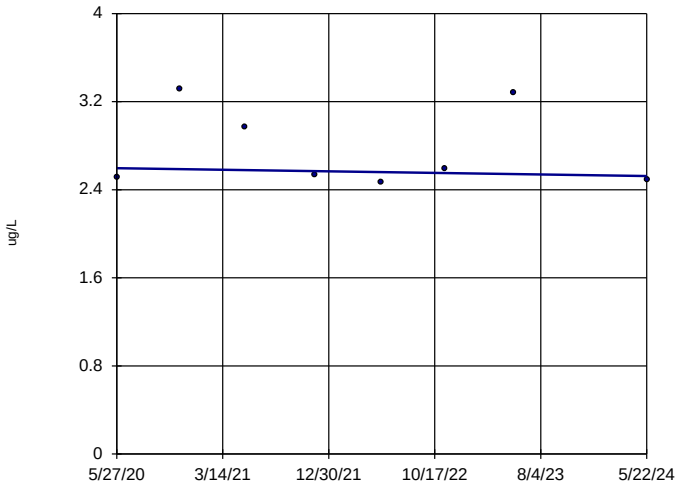
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MWPz-16A



n = 8

Slope = -0.01799
units per year.

Mann-Kendall
statistic = -4
critical = -21

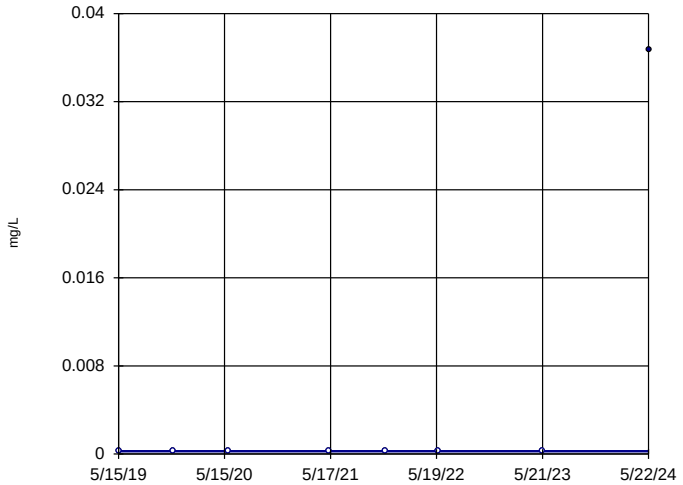
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = 0
units per year.

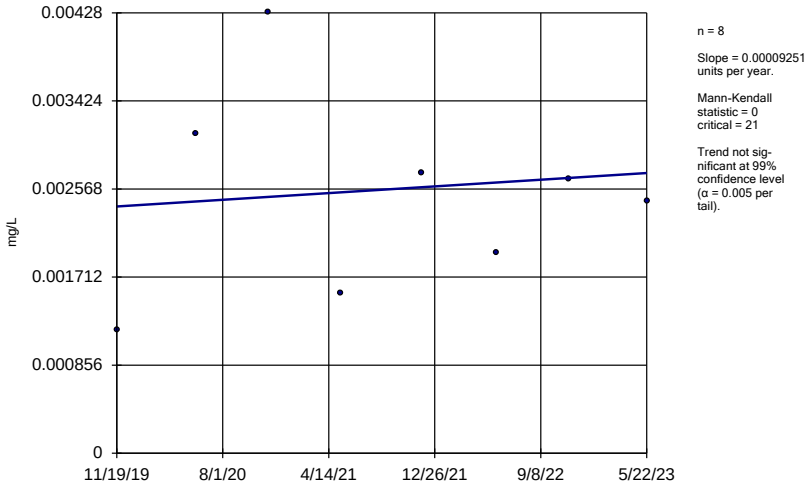
Mann-Kendall
statistic = 7
critical = 21

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sen's Slope Estimator

MW-19



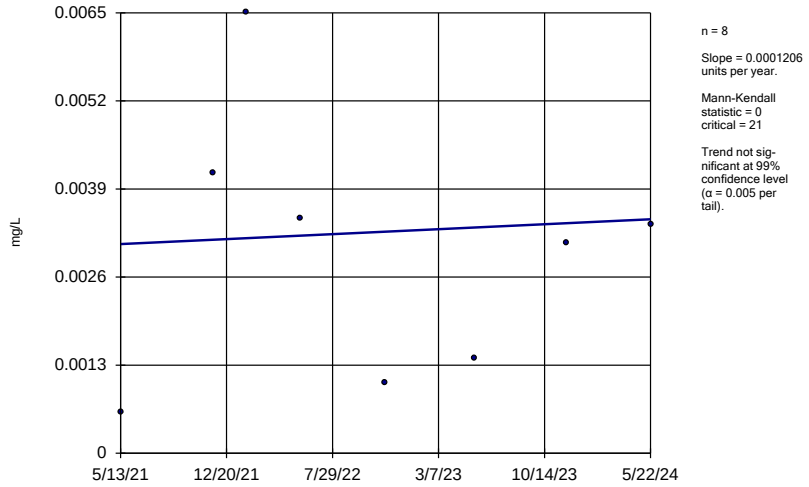
Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B



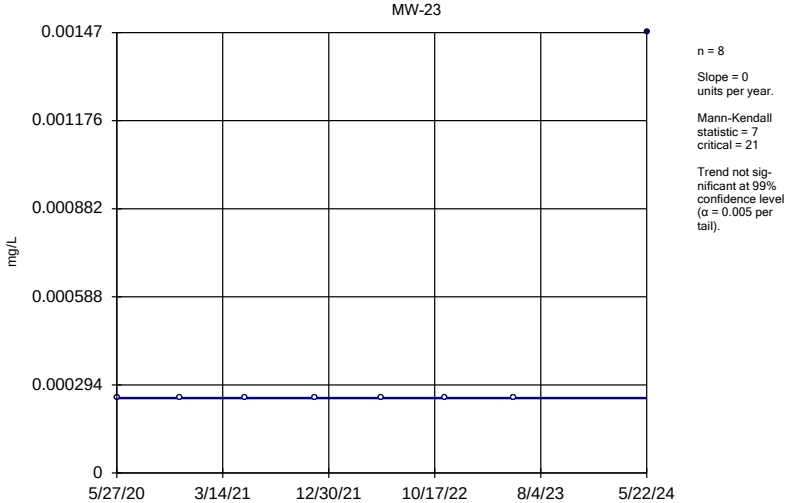
Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



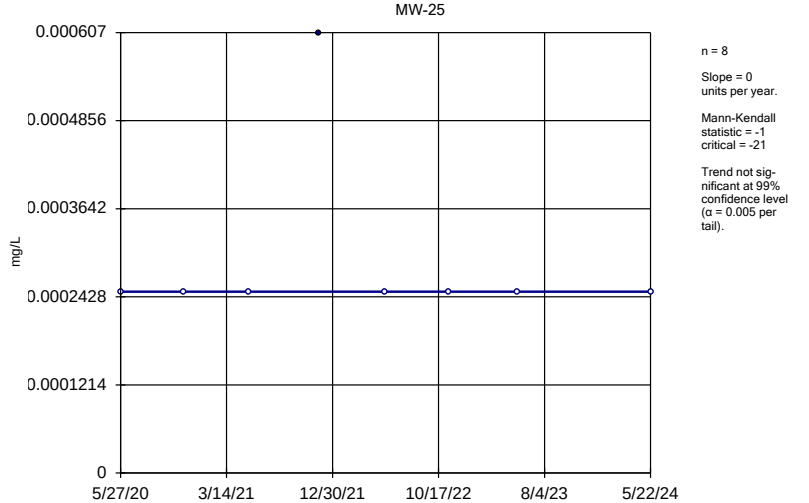
Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



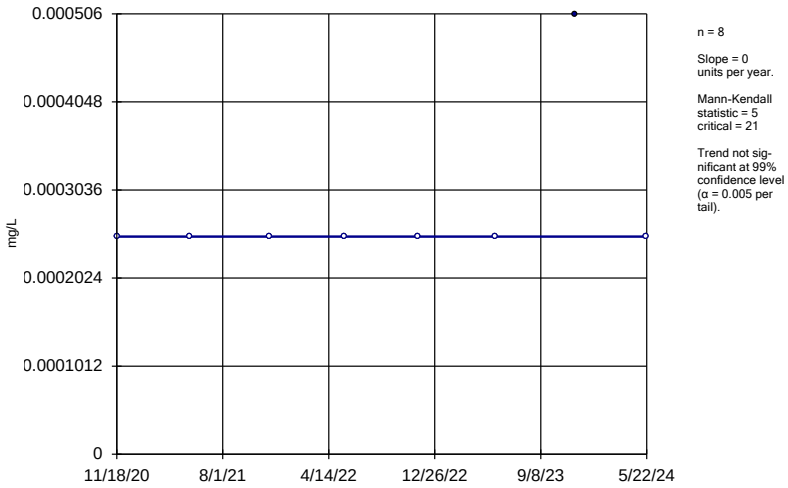
Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

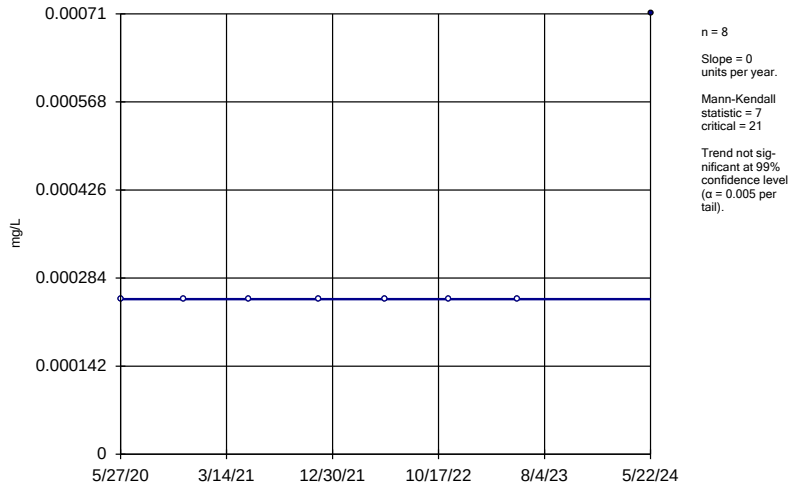


Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A

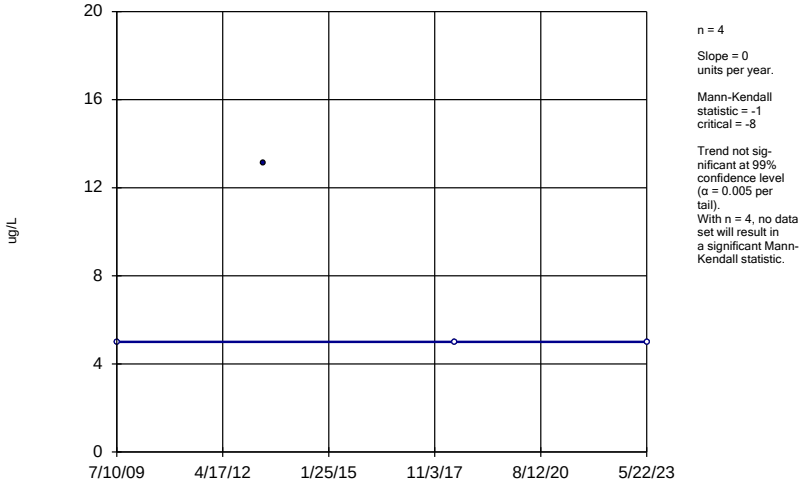


Constituent: Cobalt Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

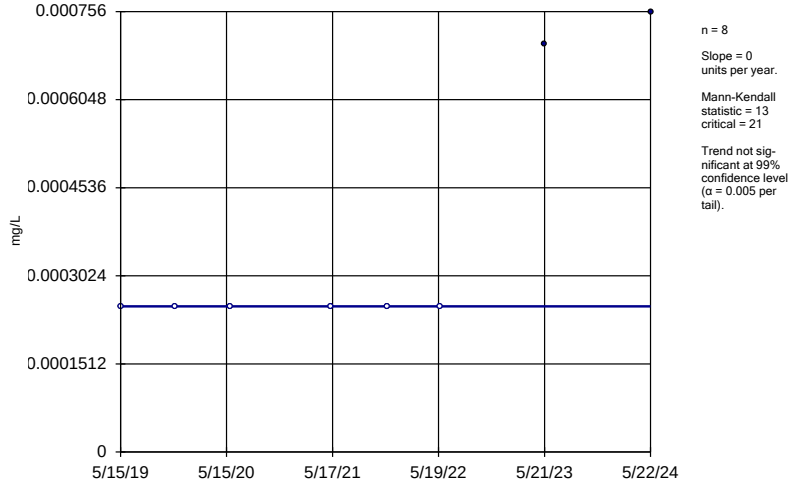


Constituent: Cyanide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

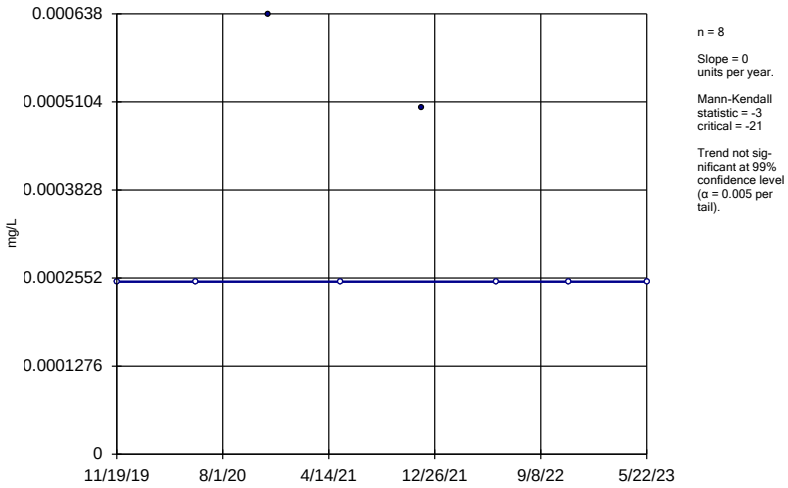


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19

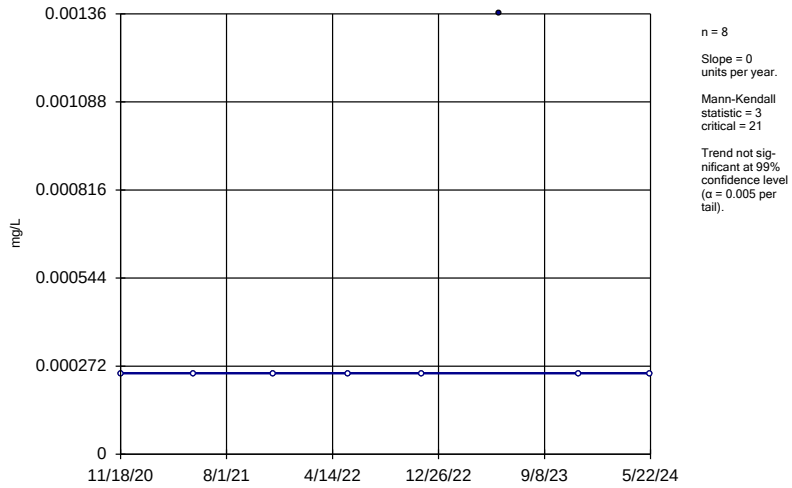


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

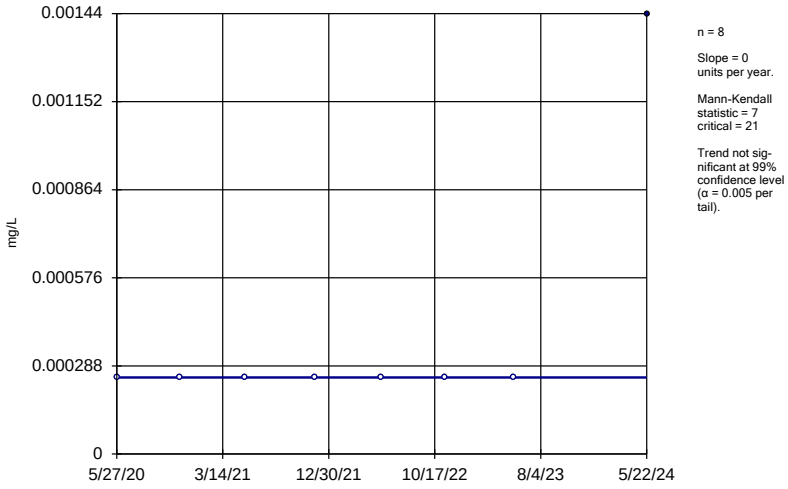


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23

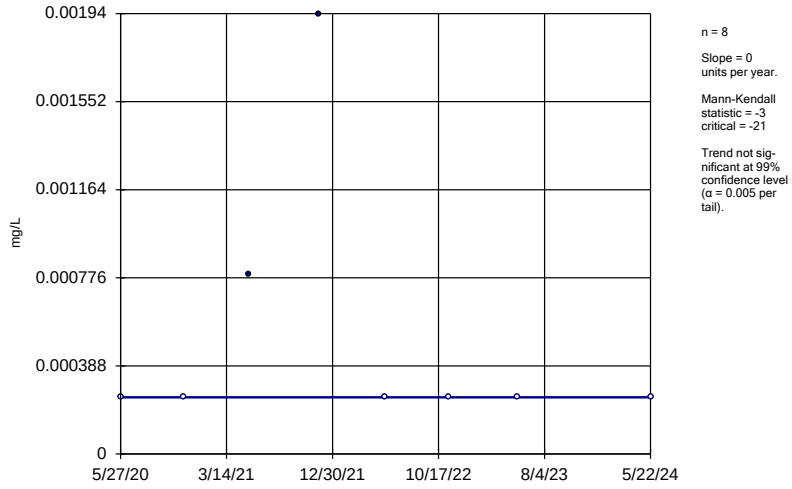


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25

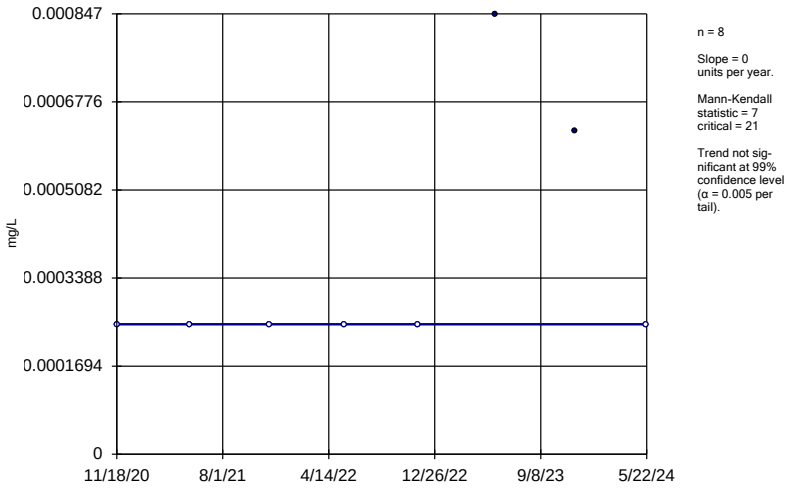


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

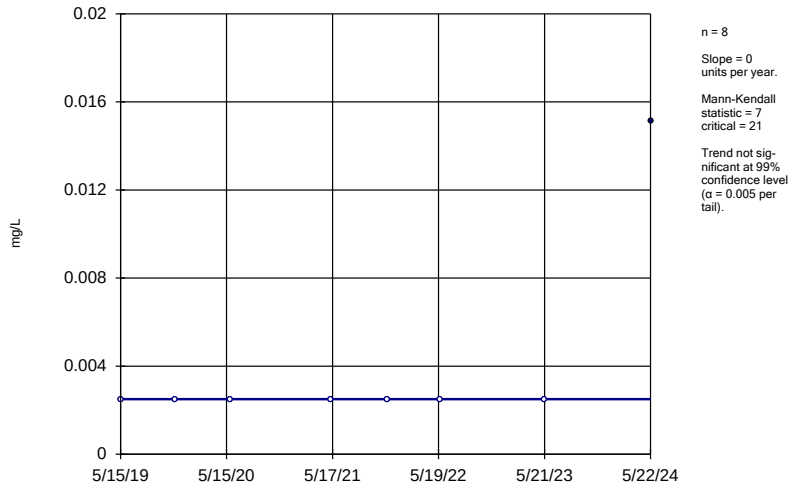


Constituent: Lead Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

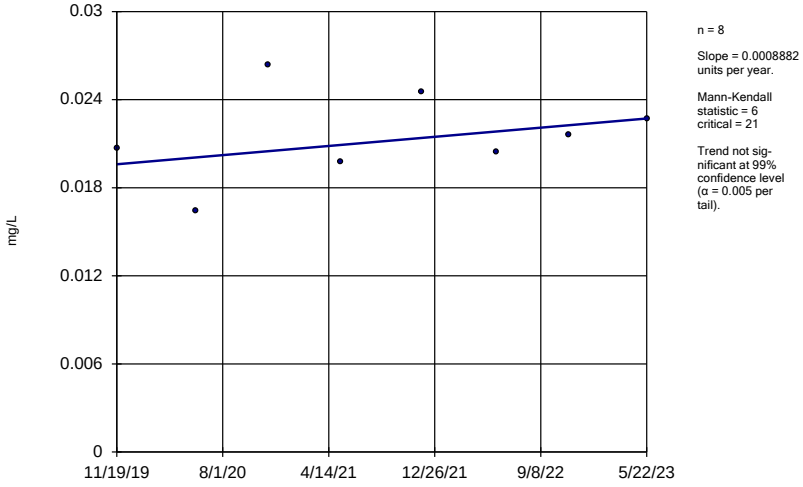


Constituent: Nickel Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-19

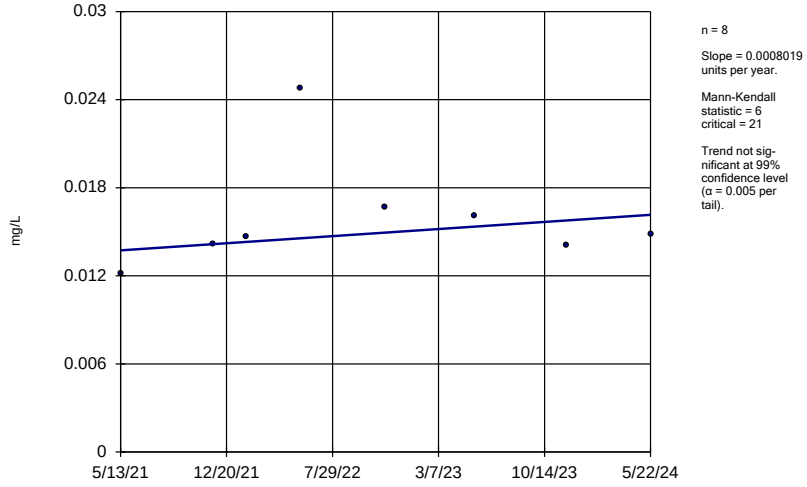


Constituent: Nickel Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B

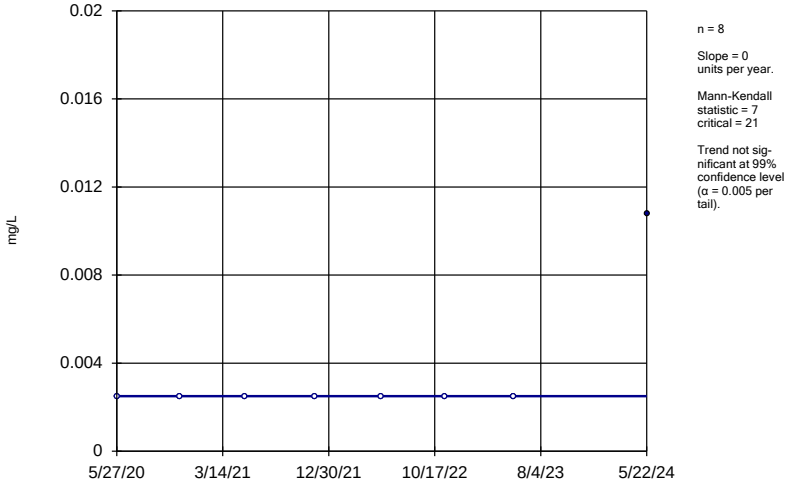


Constituent: Nickel Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = 7
critical = 21

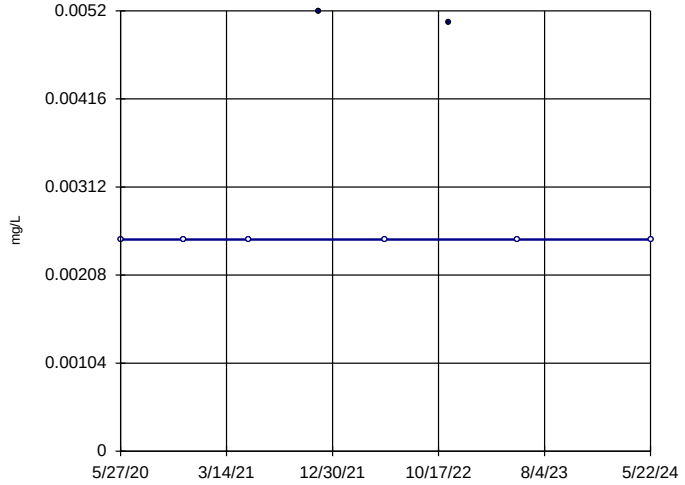
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 21

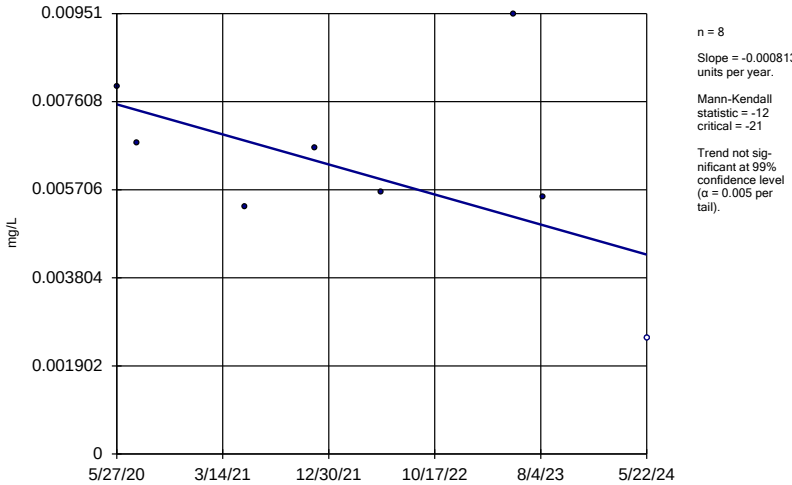
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = -0.0008133
units per year.

Mann-Kendall
statistic = -12
critical = -21

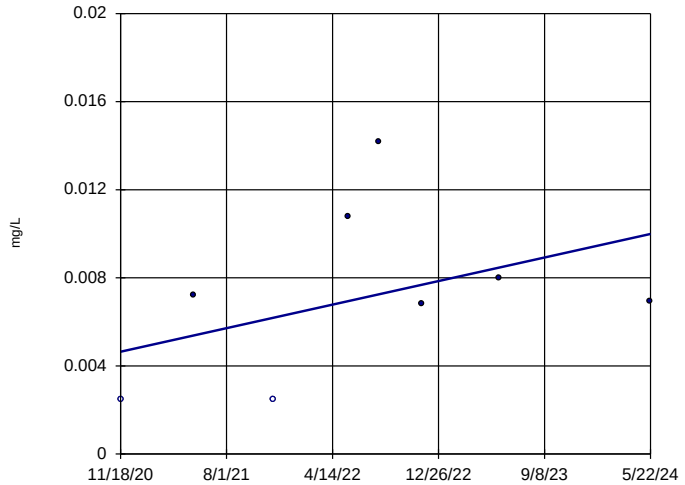
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Selenium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20



n = 8

Slope = 0.001524
units per year.

Mann-Kendall
statistic = 7
critical = 21

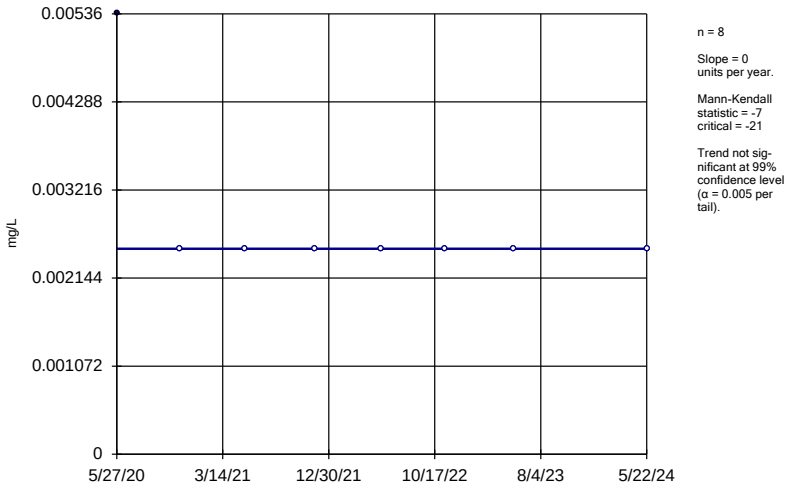
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Selenium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25

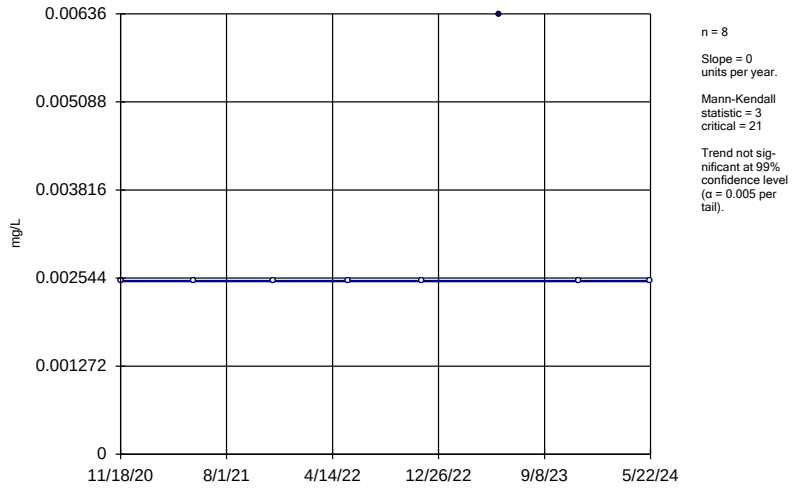


Constituent: Selenium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

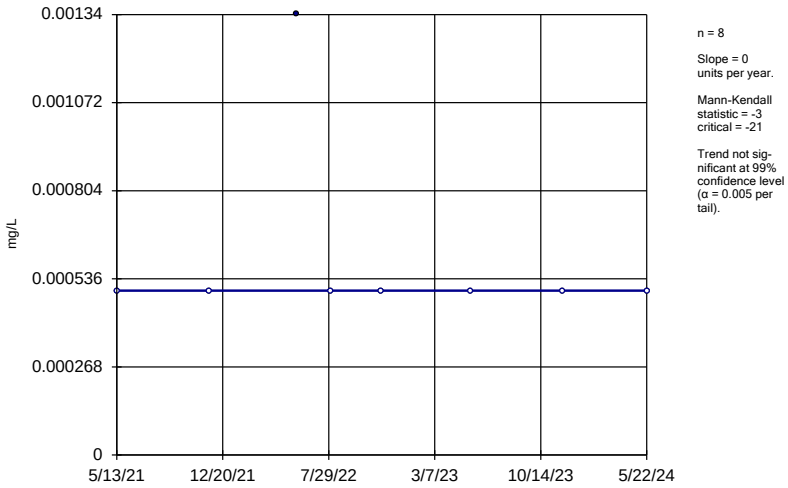


Constituent: Selenium Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

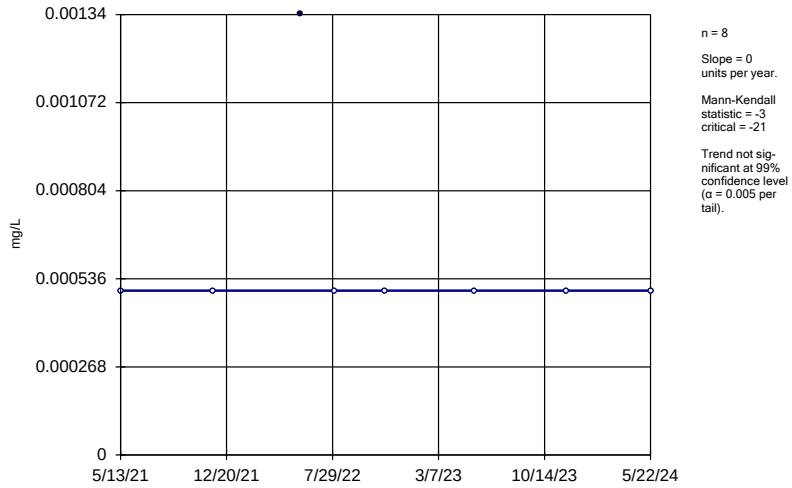


Constituent: Silver Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

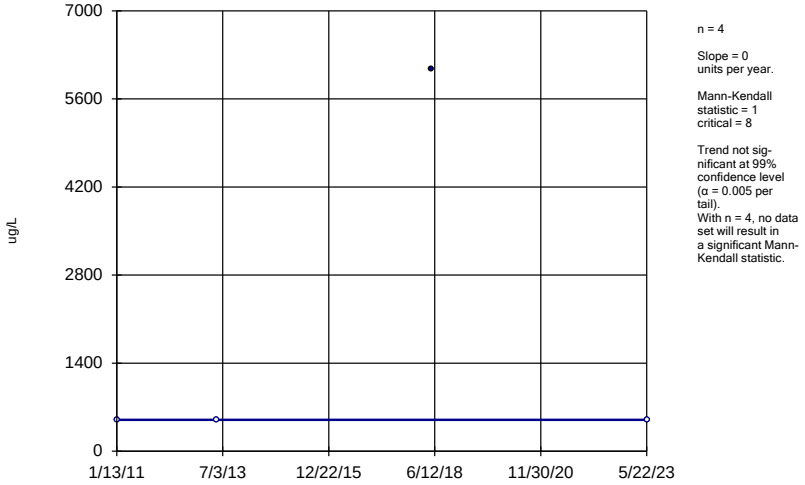


Constituent: Silver Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

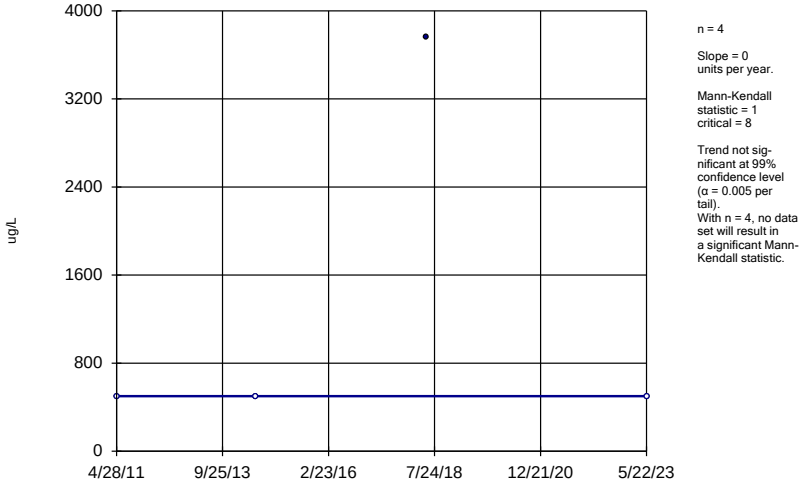
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

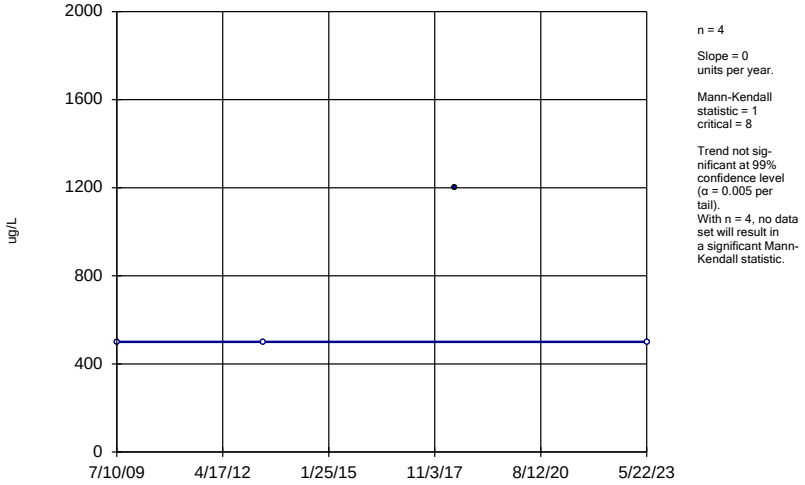
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

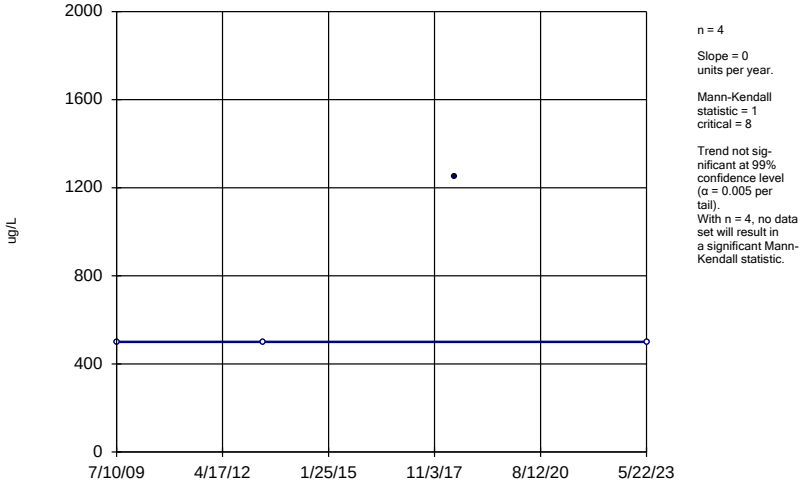
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

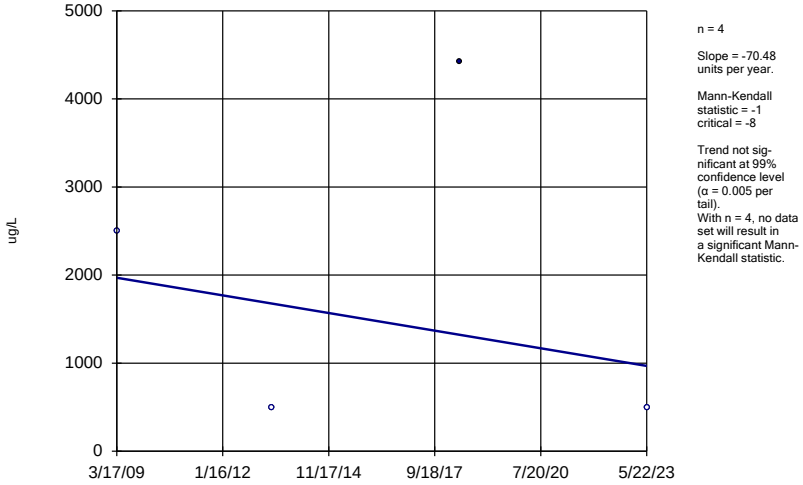
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A



n = 4

Slope = -70.48 units per year.

Mann-Kendall statistic = -1
critical = -8

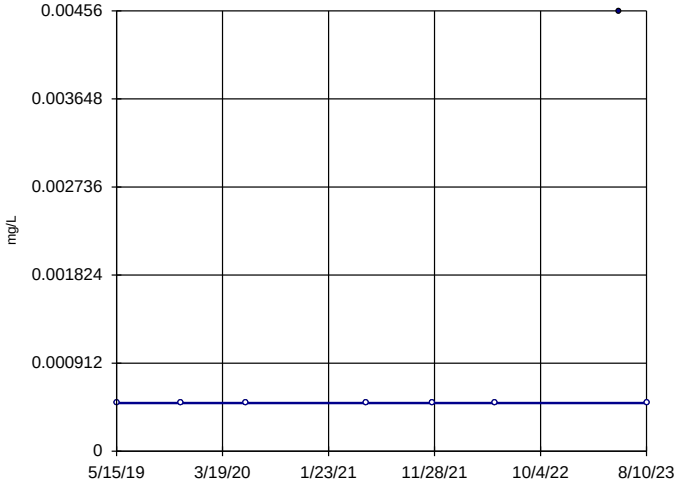
Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: Sulfide Analysis Run 10/17/2024 12:30 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 21

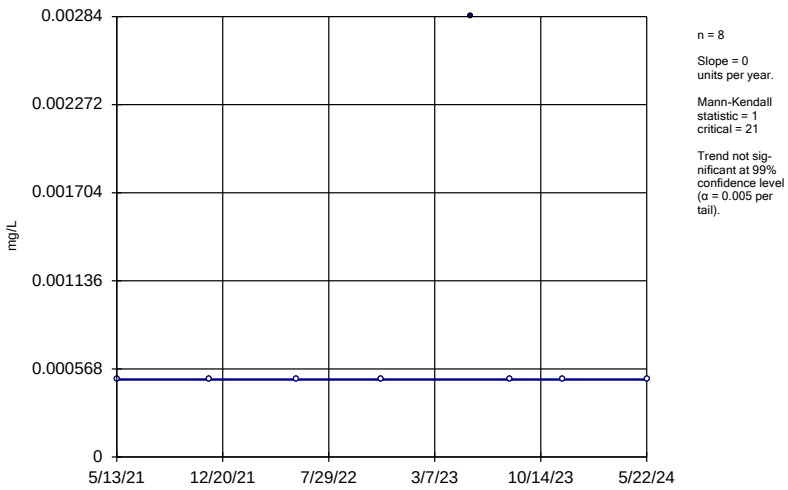
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 21

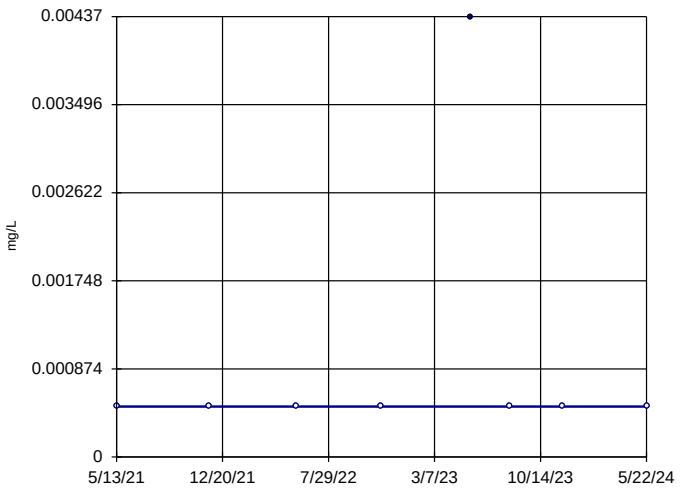
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 21

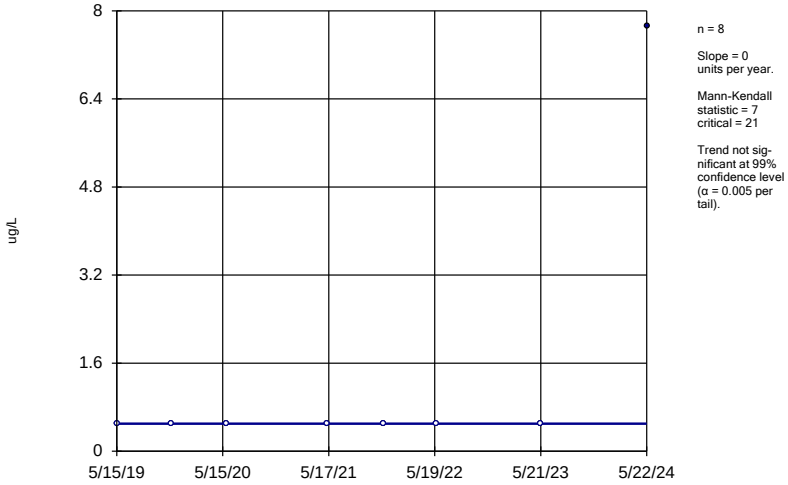
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

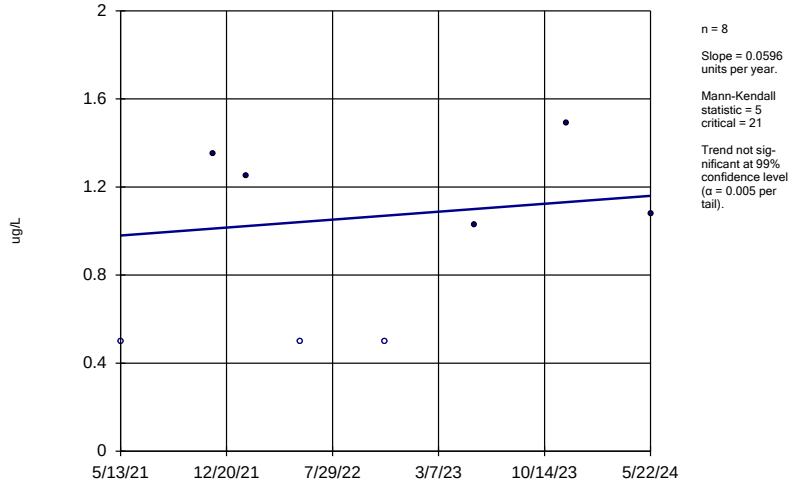


Constituent: Toluene Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

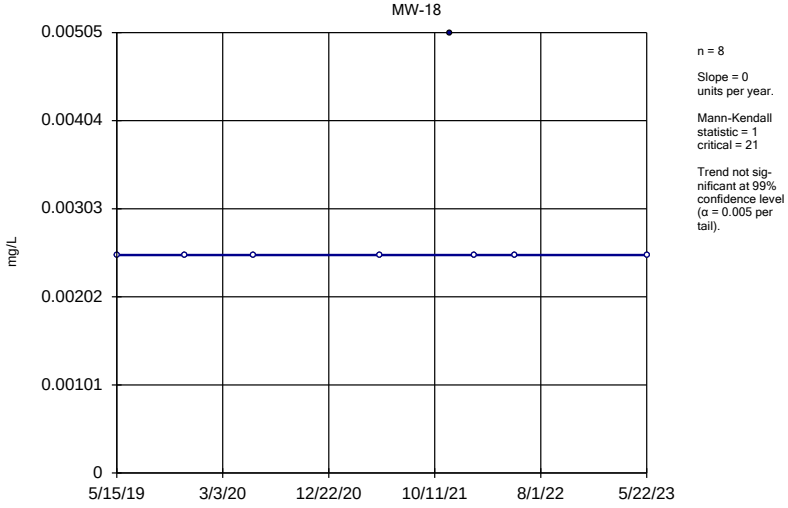


Constituent: trans-1,2-Dichloroethene Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

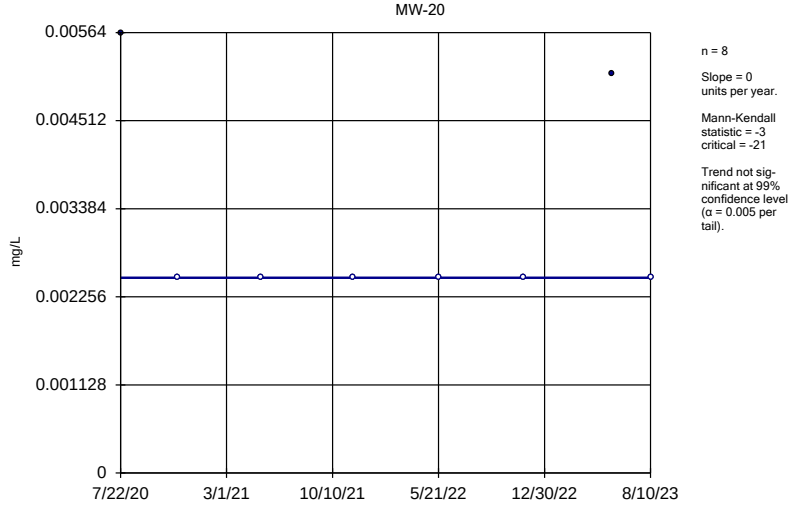


Constituent: Vanadium Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20

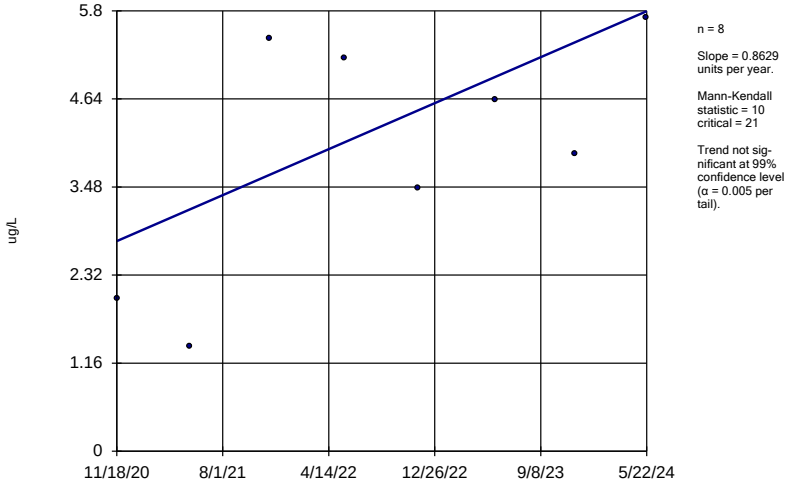


Constituent: Vanadium Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B



Constituent: Vinyl Chloride Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall

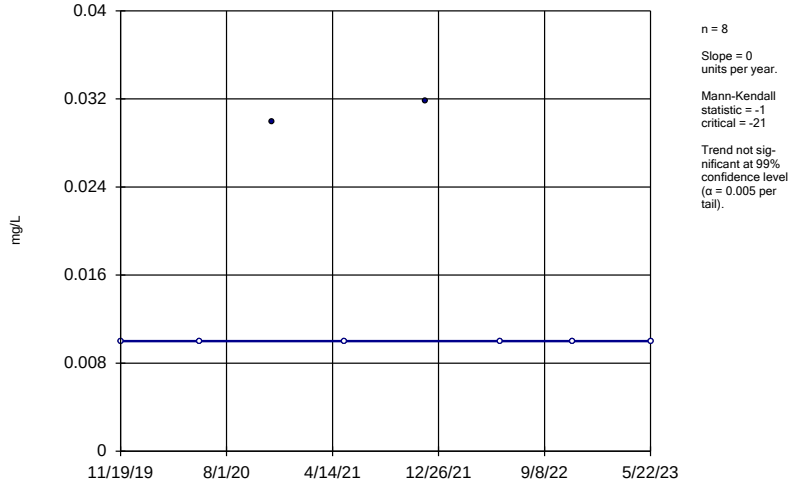
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



Constituent: Zinc Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall

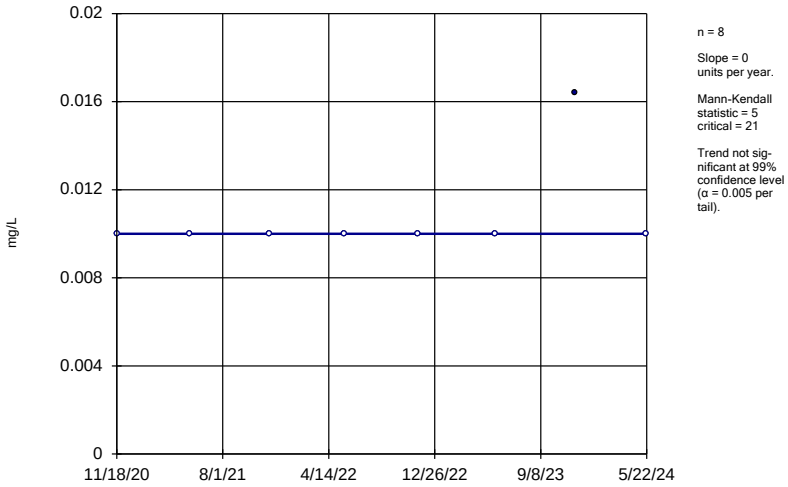
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



Constituent: Zinc Analysis Run 10/17/2024 12:31 PM View: 2024SSN Mann Kendall

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Confidence Interval Summary Table and Graphs

Confidence Interval

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM Printed 10/17/2024, 2:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1-Dichloroethane (ug/L)	MW-19	4.503	3.297	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MWPz-16A	1.892	1.405	140	No	8	0	No	0.01	Param.
4,4`-DDD (ug/L)	MW-19	0.1615	0.016	0.73	No	5	80	No	0.031	NP (NDs)
Acetone (ug/L)	MW-18	45.7	5	6300	No	8	62.5	No	0.004	NP (NDs)
Acetone (ug/L)	MW-19	24.89	5.815	6300	No	8	50	No	0.01	Param.
Acetone (ug/L)	MW-22B	14	5	6300	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-18	0.00471	0.001	0.01	No	8	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-19	0.05621	0.008254	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-20	0.00229	0.001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-22B	0.00394	0.001	0.01	No	8	87.5	No	0.004	NP (NDs)
Barium (mg/L)	MW-18	0.423	0.0596	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-19	0.9438	0.7367	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-20	0.1135	0.06176	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-22B	0.3894	0.3059	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-23	0.506	0.369	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-25	0.1063	0.06682	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-28	0.06691	0.04294	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MWPz-16A	0.3222	0.2991	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-19	0.7577	0.4478	5	No	8	50	No	0.01	Param.
Benzene (ug/L)	MW-22B	2.741	0.749	5	No	8	12.5	No	0.01	Param.
Cadmium (mg/L)	MW-18	0.0003682	0.00004153	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	MW-19	0.0007533	0.00003622	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-20	0.00023	0.00007357	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-22B	0.0008244	0.0002692	0.005	No	8	12.5	No	0.01	Param.
Cadmium (mg/L)	MW-23	0.0003534	0.00006239	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MW-25	0.0004415	0.00009779	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MW-28	0.0002358	0.0001163	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MWPz-16A	0.000636	0.00005	0.005	No	8	37.5	No	0.004	NP (normality)
Chromium (mg/L)	MW-22B	0.00429	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MWPz-16A	3.156	2.386	70	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-18	0.0367	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-19	0.003512	0.001468	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-22B	0.004997	0.0009104	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-23	0.00147	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-25	0.000607	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28	0.000506	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MWPz-16A	0.00071	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cyanide (ug/L)	MW-22B	13.1	5	200	No	4	75	No	0.0625	NP (NDs)
Lead (mg/L)	MW-18	0.000756	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-19	0.000638	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-22B	0.00136	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-23	0.00144	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-25	0.00194	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-28	0.000847	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Nickel (mg/L)	MW-18	0.0151	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MW-19	0.0248	0.01833	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-22B	0.02	0.0119	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-23	0.0108	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MWPz-16A	0.0052	0.0025	0.1	No	8	75	No	0.004	NP (NDs)
Selenium (mg/L)	MW-18	0.008408	0.00405	0.05	No	8	12.5	No	0.01	Param.

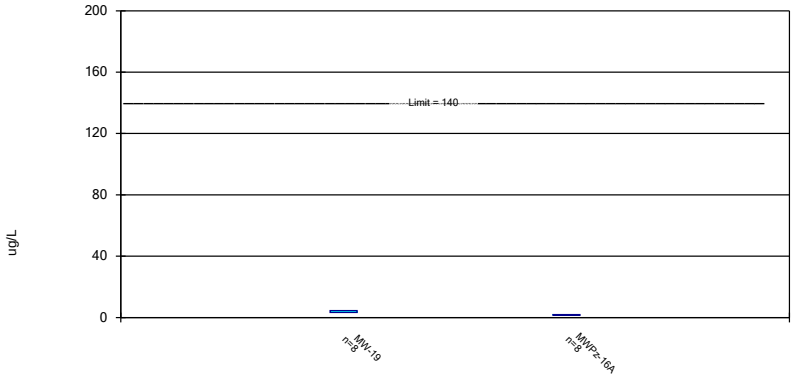
Confidence Interval

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM Printed 10/17/2024, 2:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	MW-20	0.01108	0.004924	0.05	No	8	25	No	0.01	Param.
Selenium (mg/L)	MW-25	0.00536	0.0025	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	MW-28	0.00636	0.0025	0.05	No	8	87.5	No	0.004	NP (NDs)
Silver (mg/L)	MW-22B	0.00134	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Silver (mg/L)	MW-28	0.00134	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Sulfide (ug/L)	MW-18	6080	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-19	3760	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-22B	1200	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-23	1250	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MWPz-16A	4420	500	1000	No	4	75	No	0.0625	NP (NDs)
Thallium (mg/L)	MW-18	0.00456	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-22B	0.00284	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-28	0.00437	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Toluene (ug/L)	MW-18	7.72	0.5	1000	No	8	87.5	No	0.004	NP (NDs)
trans-1,2-Dichloroethene (ug/L)	MW-22B	1.338	0.9617	100	No	8	37.5	No	0.01	Param.
Vanadium (mg/L)	MW-18	0.00505	0.0025	0.035	No	8	87.5	No	0.004	NP (NDs)
Vanadium (mg/L)	MW-20	0.00564	0.0025	0.035	No	8	75	No	0.004	NP (NDs)
Vinyl Chloride (ug/L)	**MW-22B**	**5.657**	**2.272**	**2**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Zinc (mg/L)	MW-19	0.0318	0.01	2	No	8	75	No	0.004	NP (NDs)
Zinc (mg/L)	MW-22B	0.0164	0.01	2	No	8	87.5	No	0.004	NP (NDs)

Parametric Confidence Interval

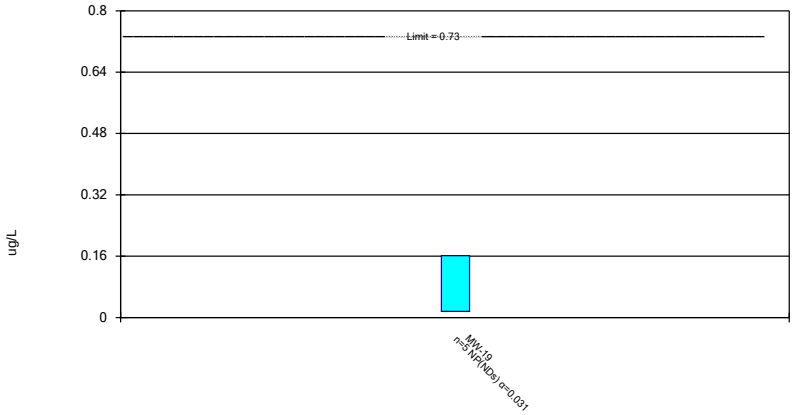
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

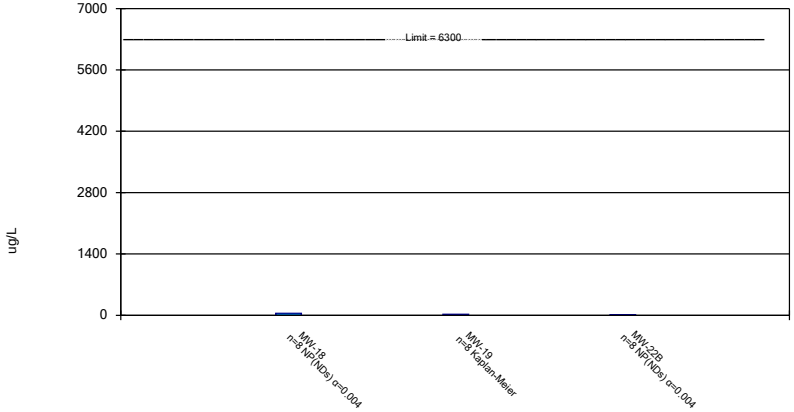
Compliance Limit is not exceeded.



Constituent: 4,4`-DDD Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

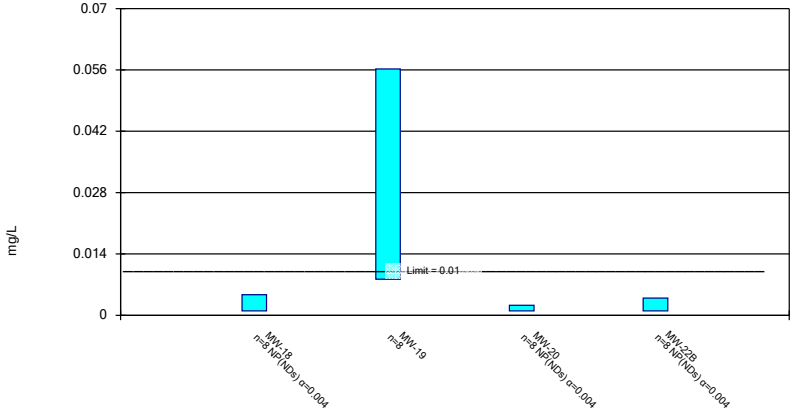
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Acetone Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

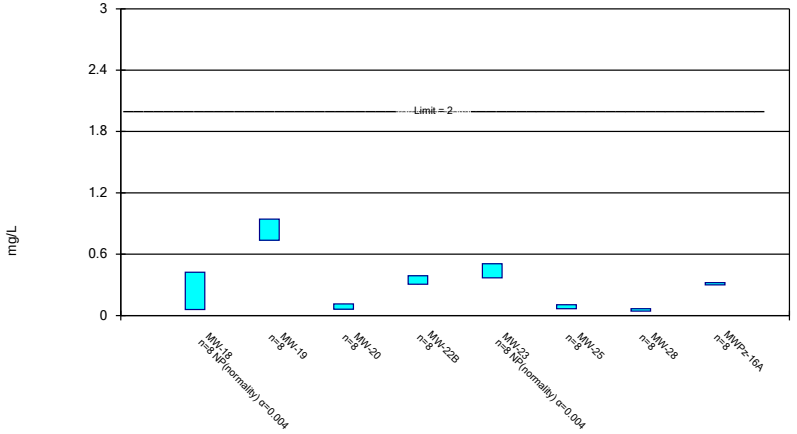
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

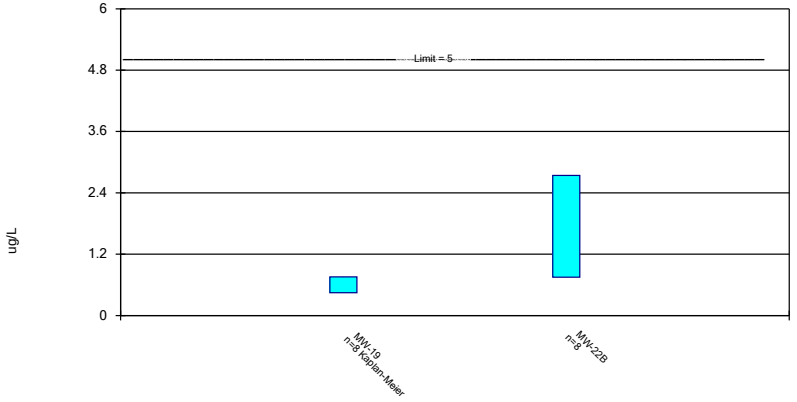
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric Confidence Interval

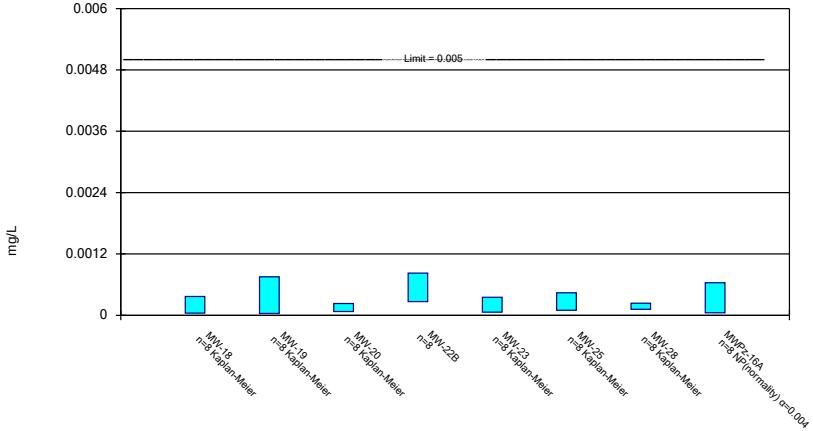
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 10/17/2024 2:20 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

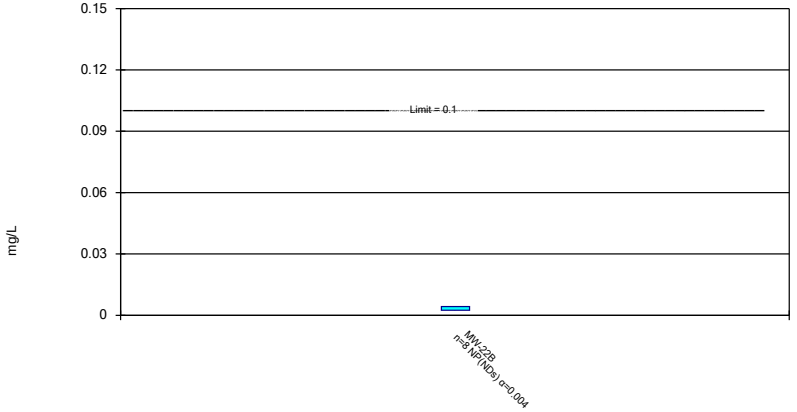
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

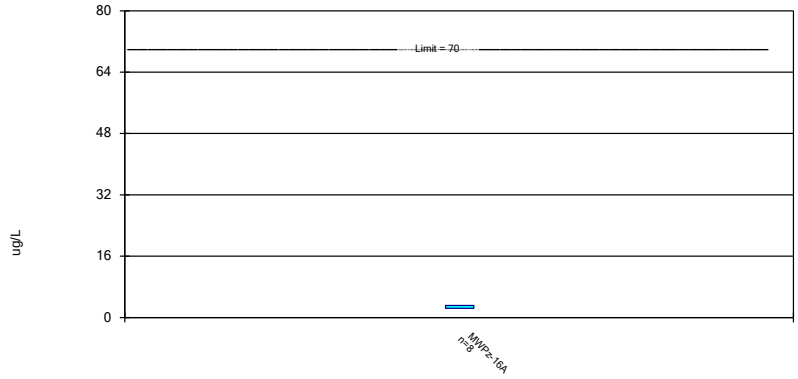
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric Confidence Interval

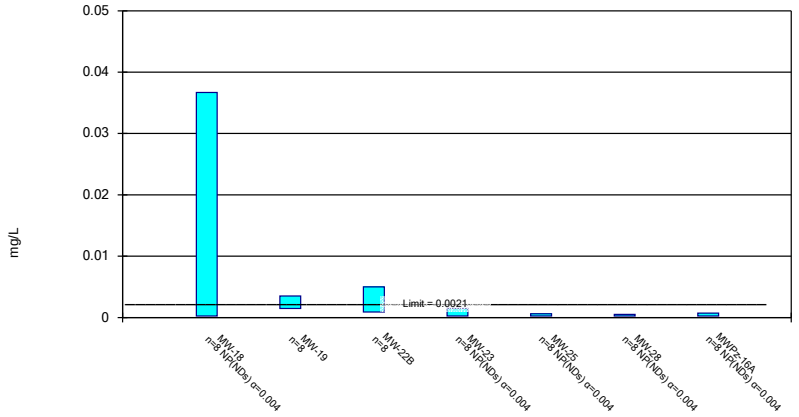
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interv
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

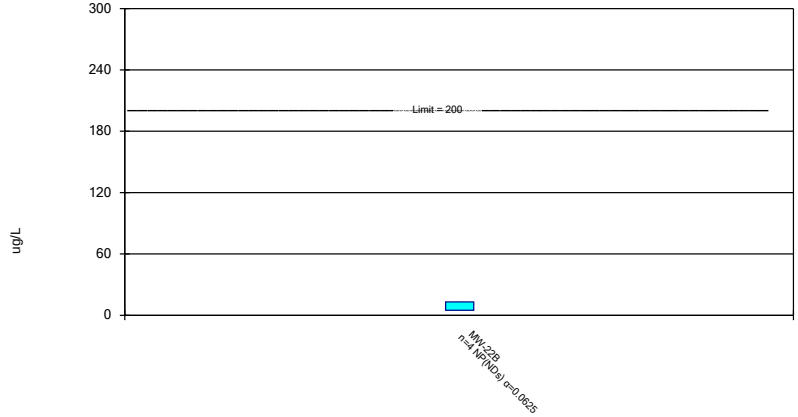
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

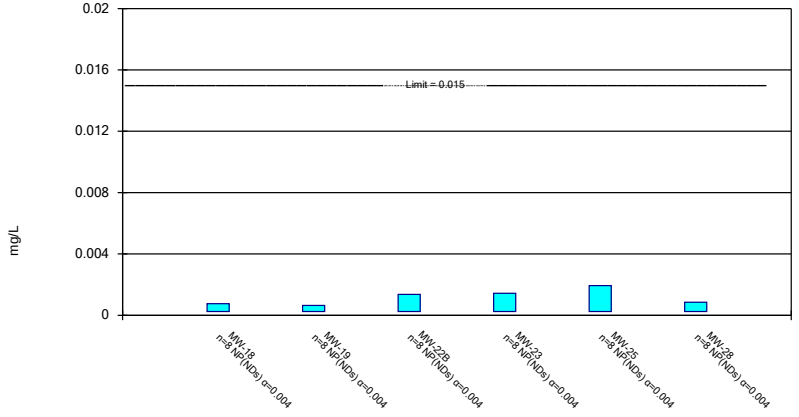
Compliance Limit is not exceeded.



Constituent: Cyanide Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

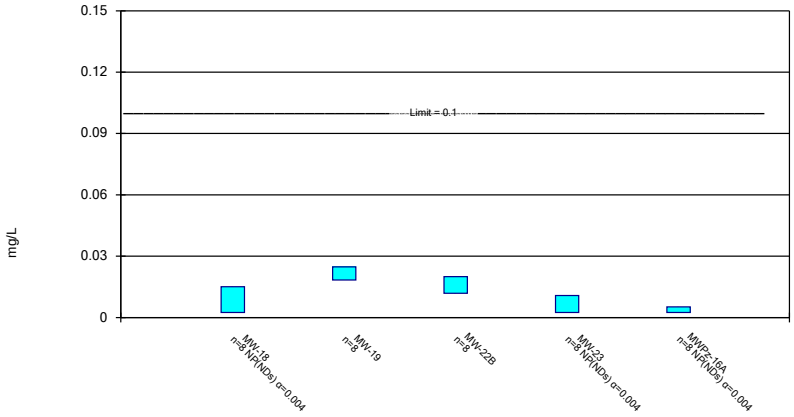
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

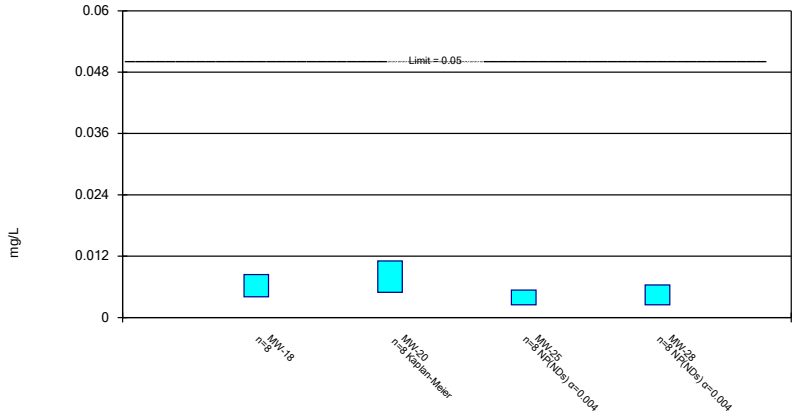
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric and Non-Parametric (NP) Confidence Interval

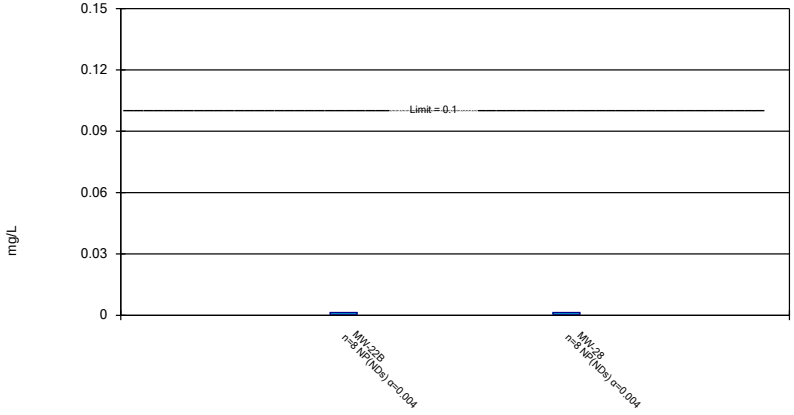
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Selenium Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

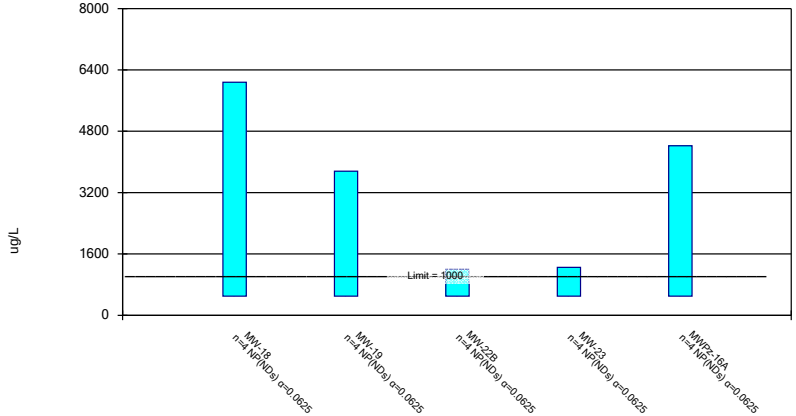
Compliance Limit is not exceeded.



Constituent: Silver Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

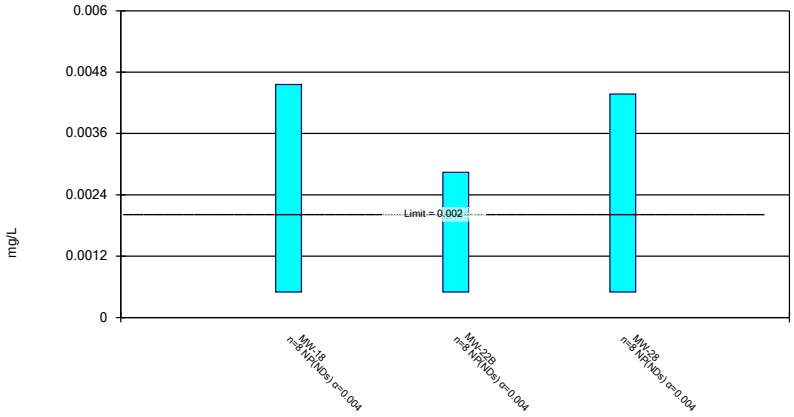
Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

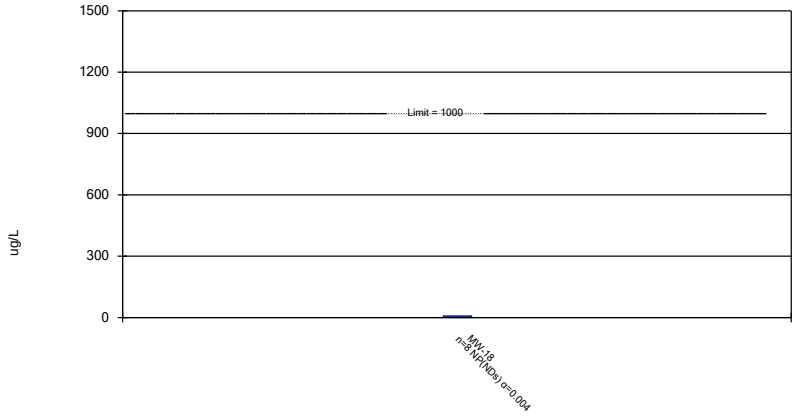
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

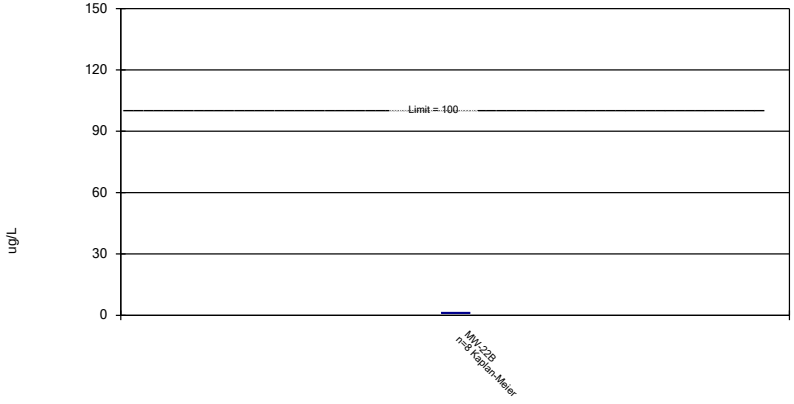
Compliance Limit is not exceeded.



Constituent: Toluene Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric Confidence Interval

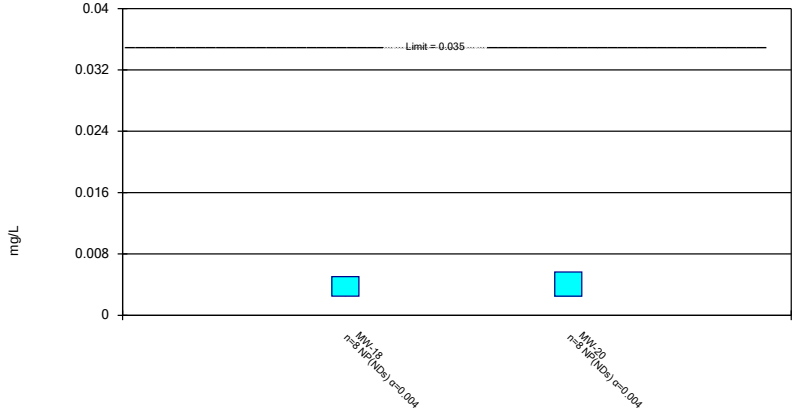
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: trans-1,2-Dichloroethene Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Int
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Non-Parametric Confidence Interval

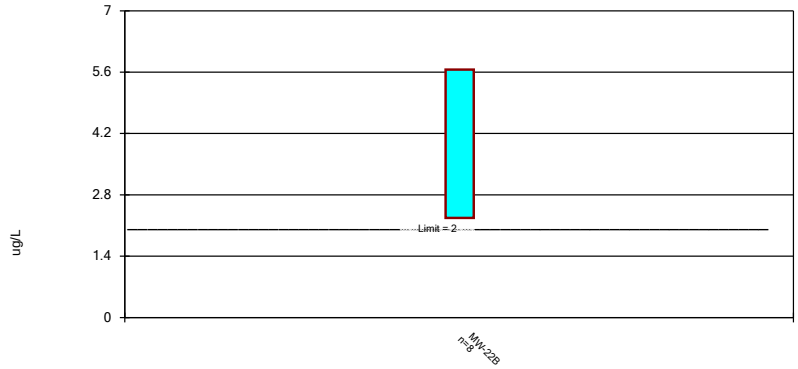
Compliance Limit is not exceeded.



Constituent: Vanadium Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Parametric Confidence Interval

Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Vinyl Chloride Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

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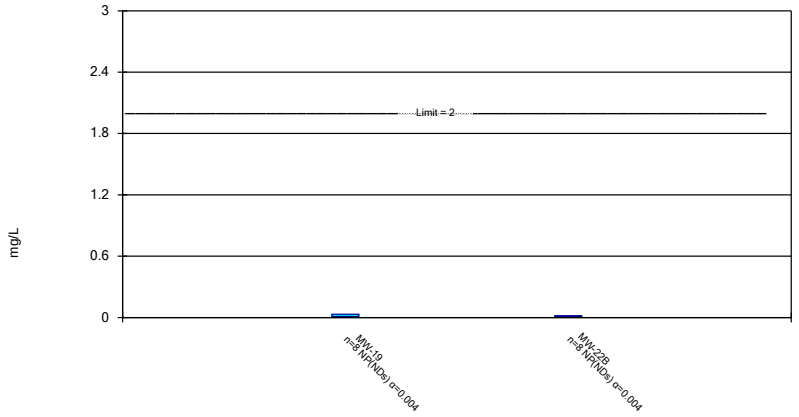
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 10/17/2024 2:21 PM View: 2024SSN - Confidence Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

Theil-Sen Confidence Bands Table and Graphs

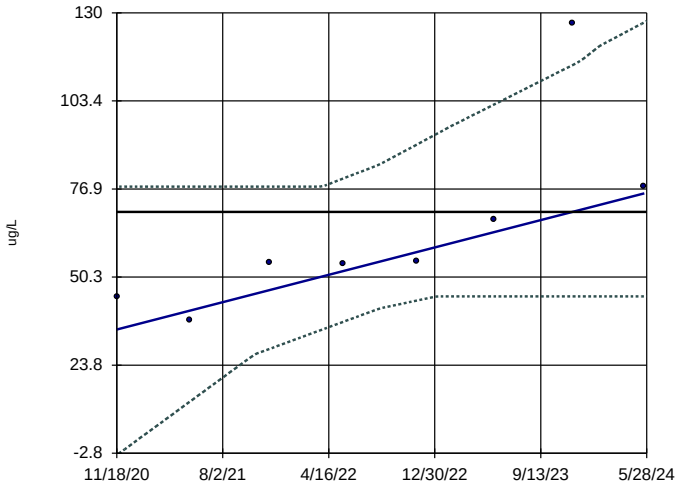
Theil Sen/Trend Test

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM Printed 10/17/2024, 2:28 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
cis-1,2-Dichloroethene (ug/L)	**MW-22B**	**11.7**	**22**	**21**	**Yes**	**8**	**0**	**0.01**	**NP**

Sen's Slope and 99% Confidence Band

MW-22B



n = 8

Slope = 11.7 units per year.

Mann-Kendall statistic = 22 critical = 21

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

GWPS ug/L (70) is entirely within the confidence band.

Constituent: cis-1,2-Dichloroethene Analysis Run 10/17/2024 2:26 PM View: 2024SSN - Theil Sen

Kossuth County SLF Client: SCS Engineers Data: Kossuth-HMSP-2024SSN-AM

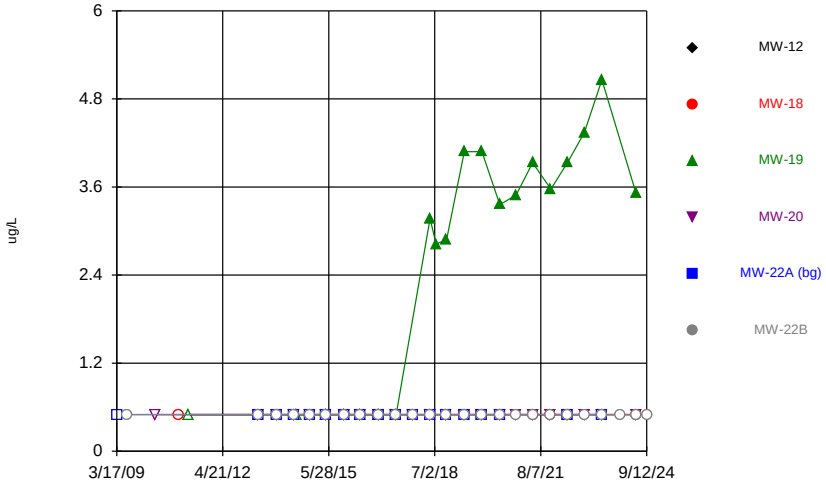
Attachment B

2nd 2024 Statistical Output

Time Series Plots

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

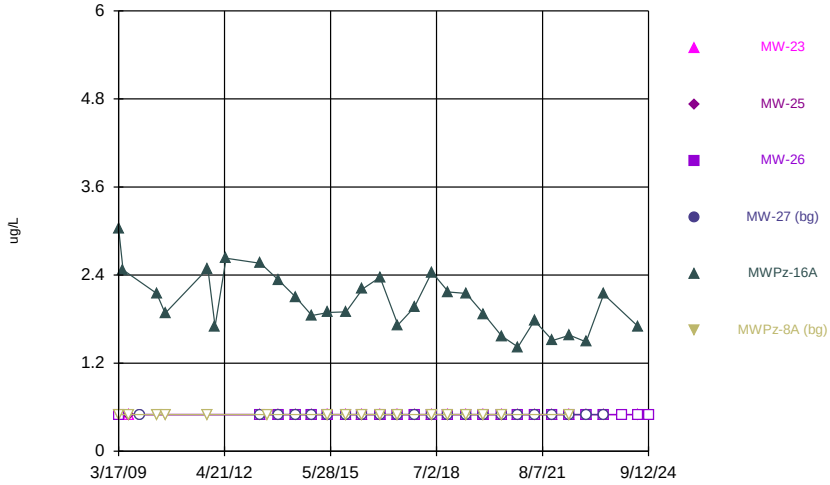
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

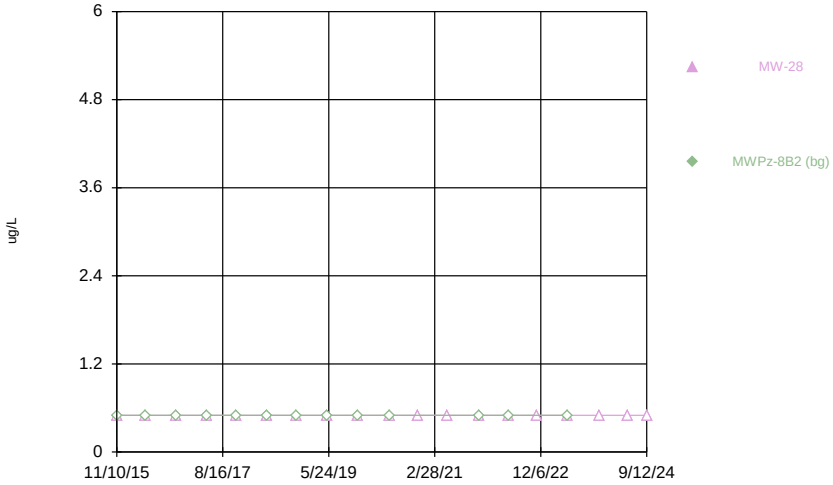
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

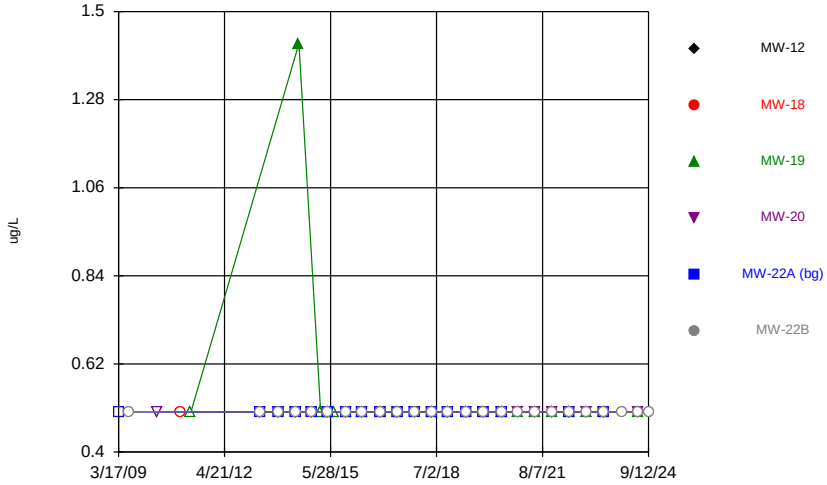
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

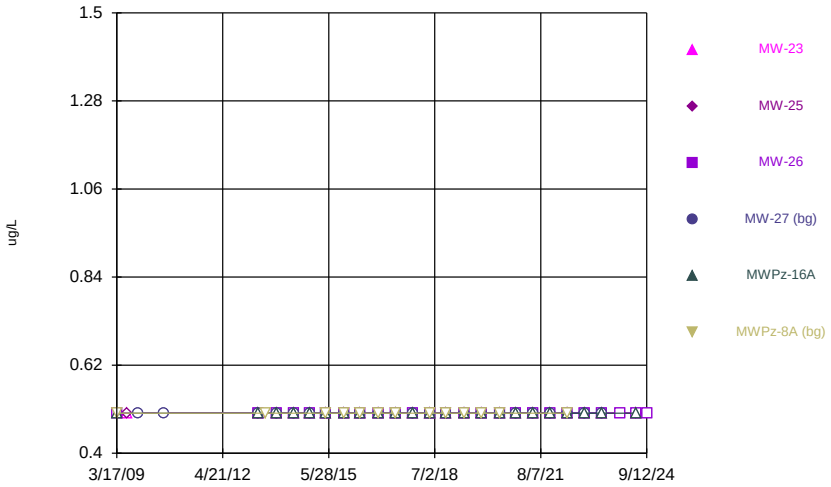
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

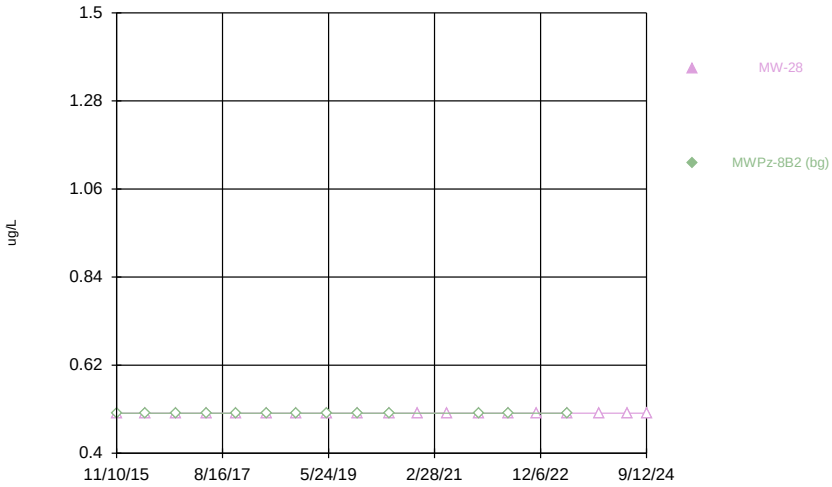
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

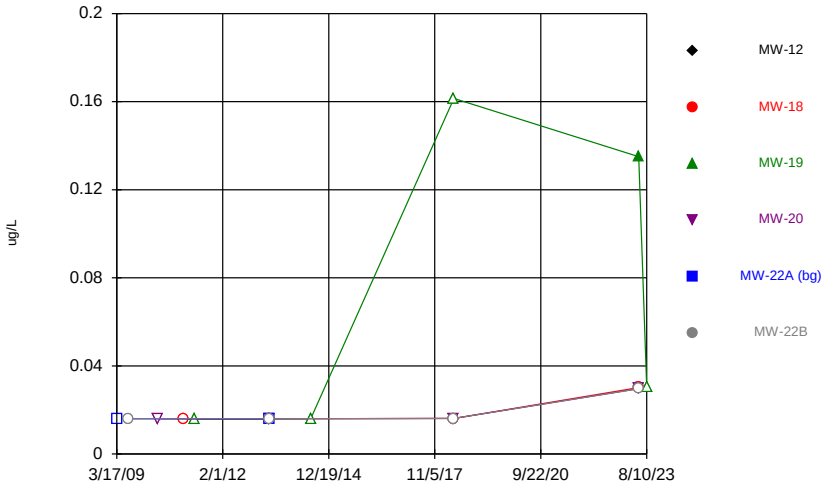
Time Series



Constituent: 1,2-Dichloroethane Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

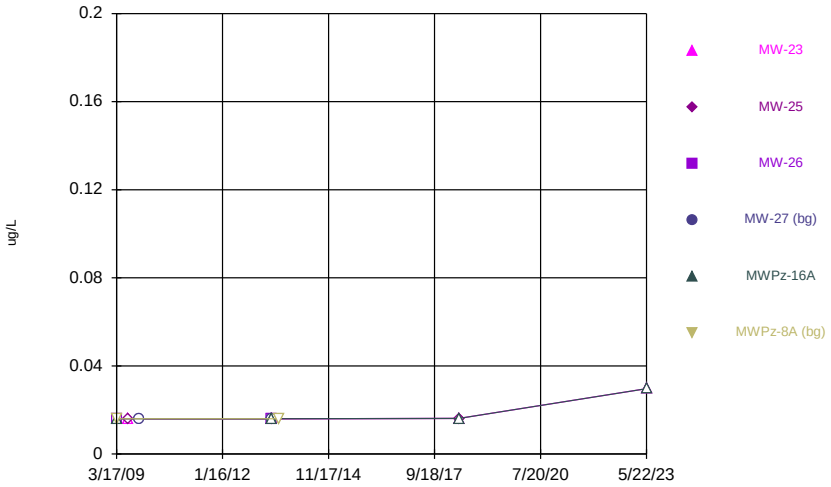
Time Series



Constituent: 4,4`-DDD Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

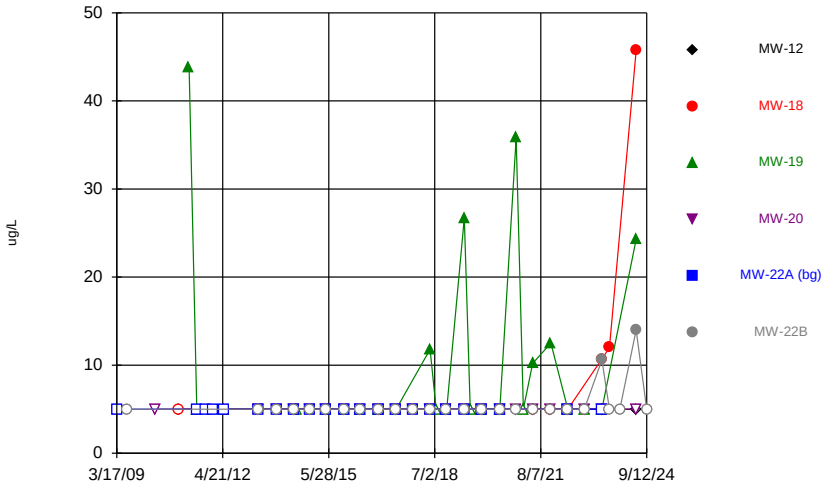
Time Series



Constituent: 4,4`-DDD Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

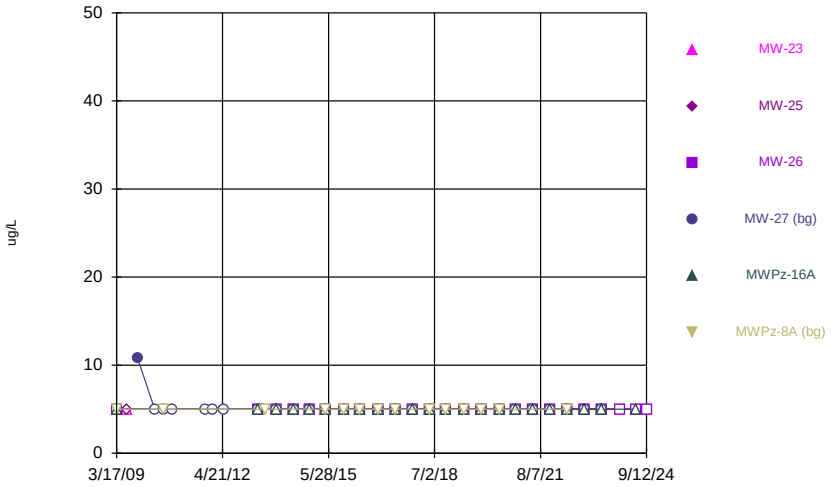
Time Series



Constituent: Acetone Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

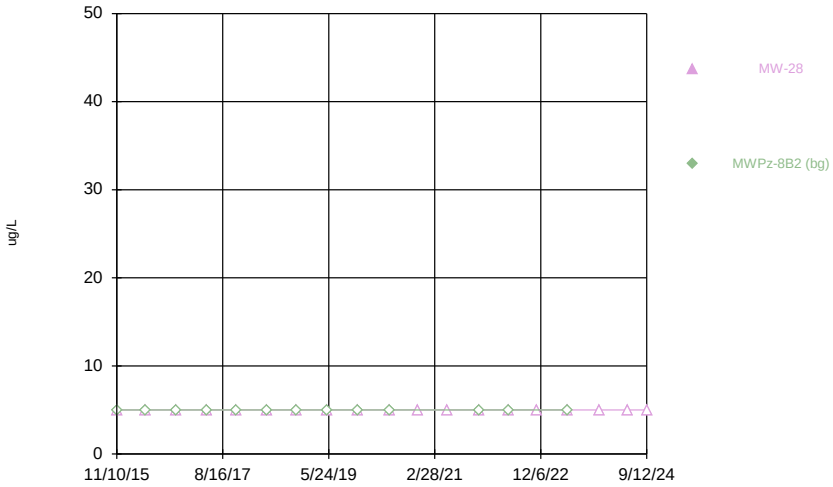
Time Series



Constituent: Acetone Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

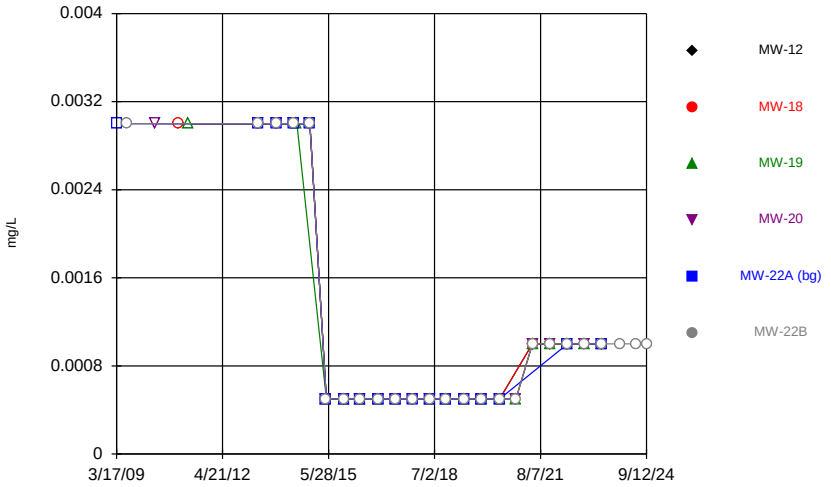
Time Series



Constituent: Acetone Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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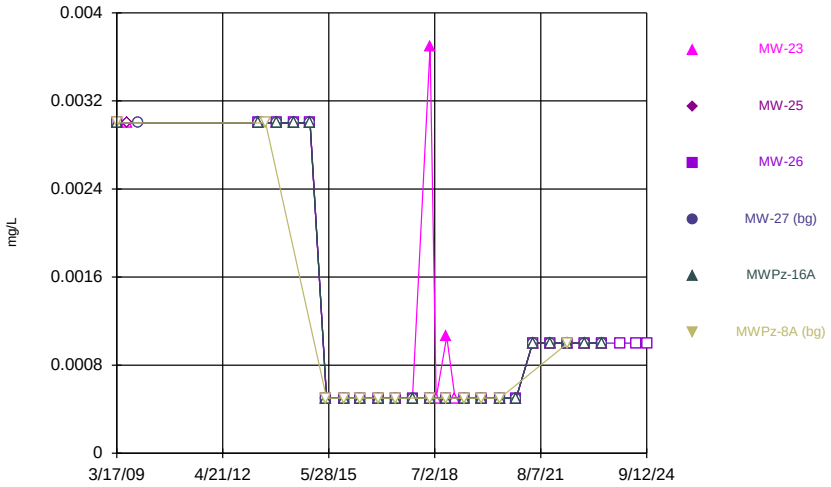
Hollow symbols indicate censored values.

Time Series



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Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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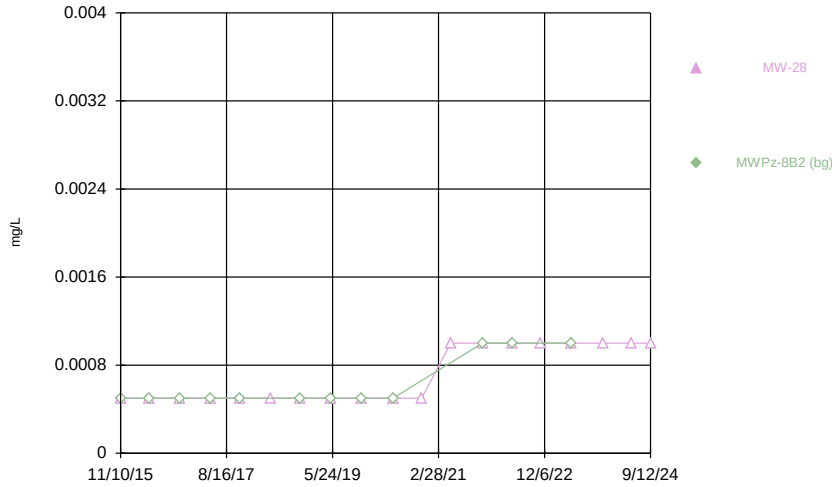
Hollow symbols indicate censored values.

Time Series



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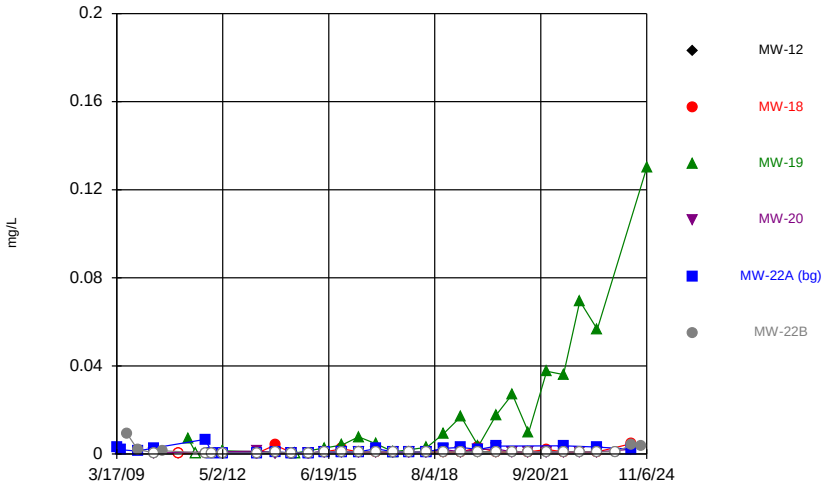
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

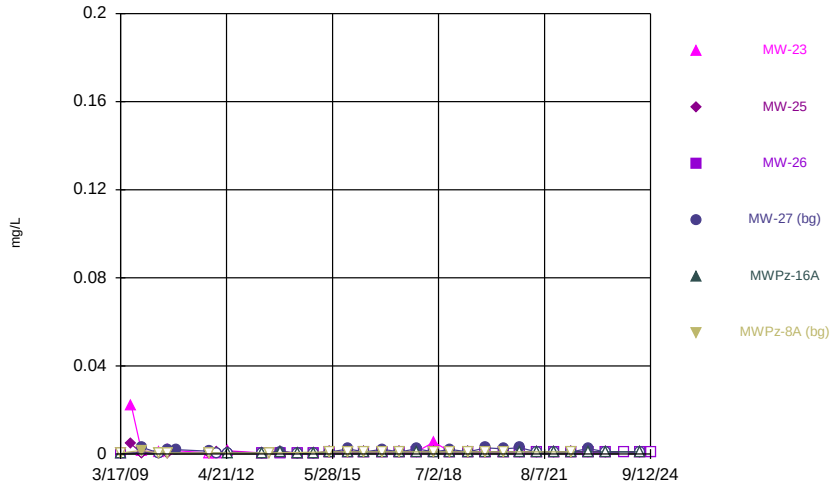
Time Series



Constituent: Arsenic Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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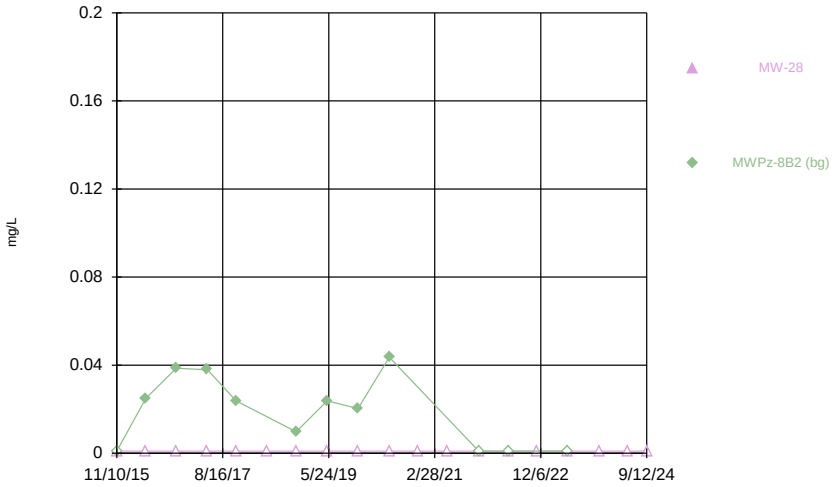
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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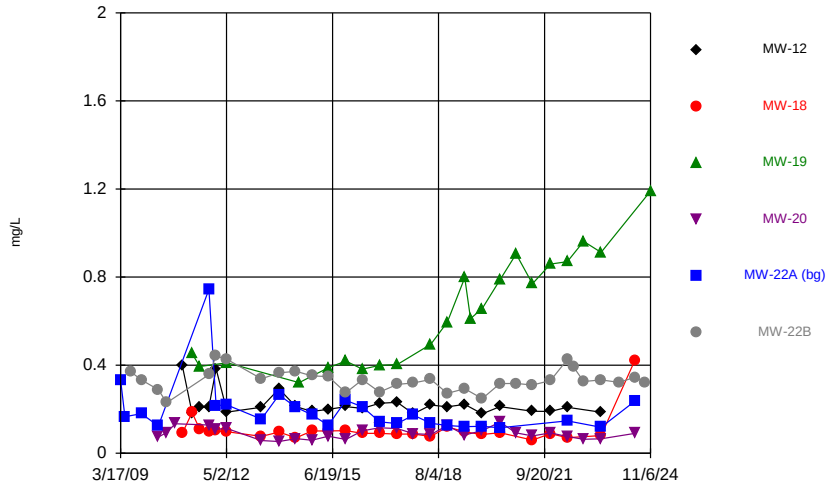
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Time Series



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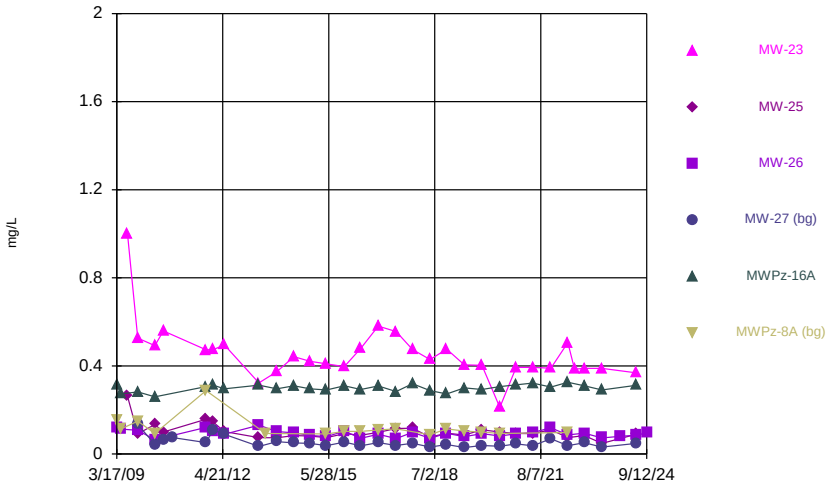
Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Time Series



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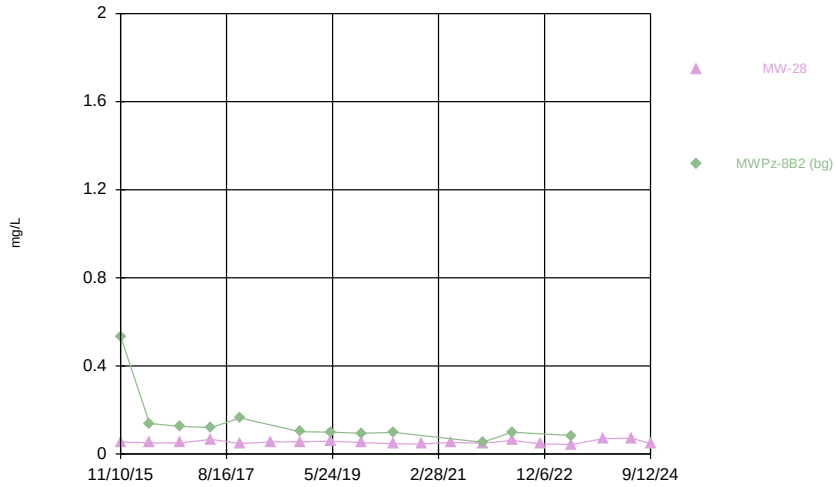
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Time Series



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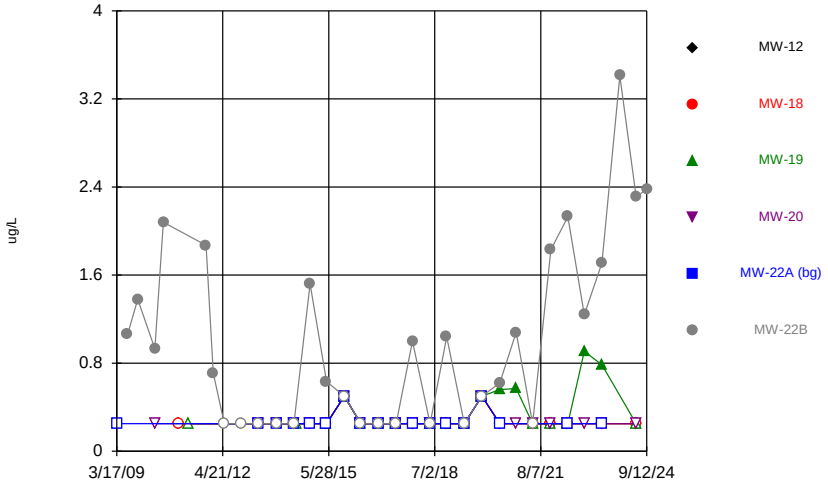
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Benzene Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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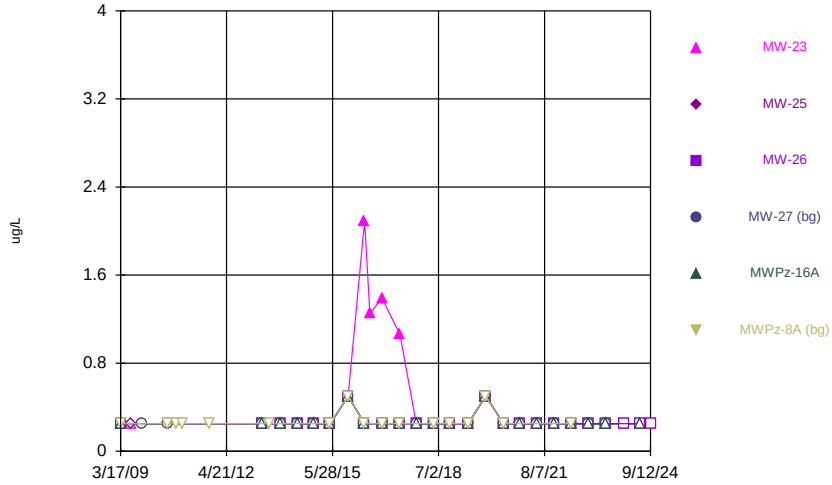
Hollow symbols indicate censored values.

Time Series



Constituent: Benzene Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
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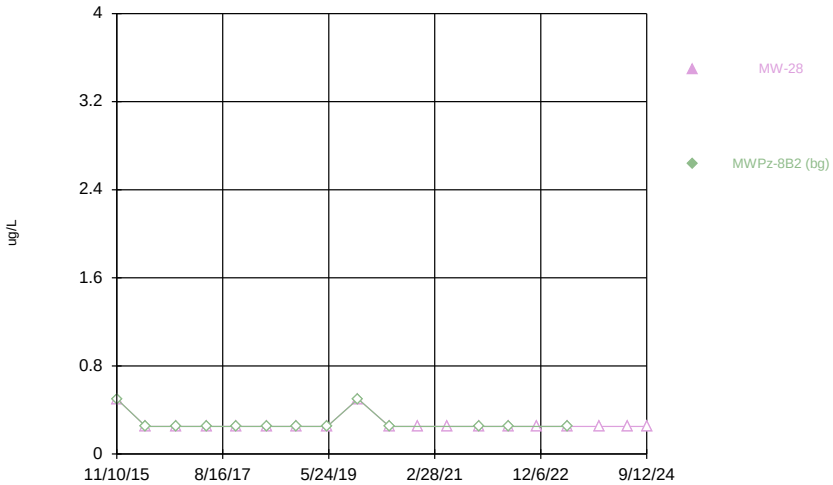
Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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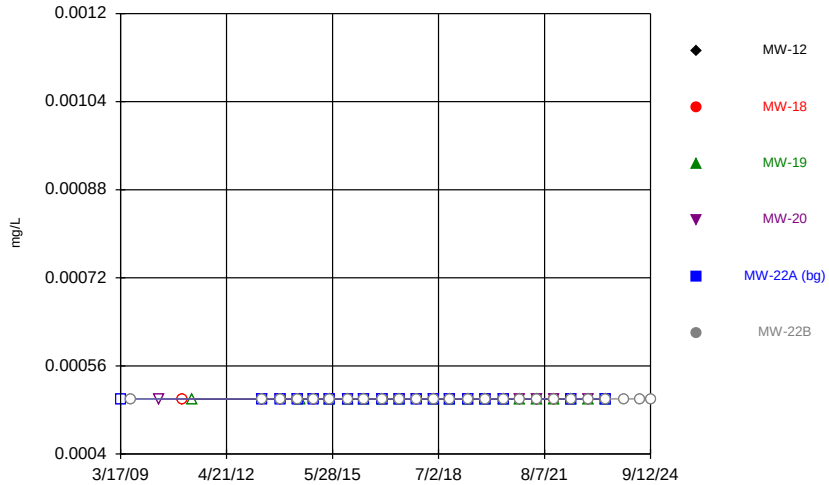
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 1/28/2025 5:51 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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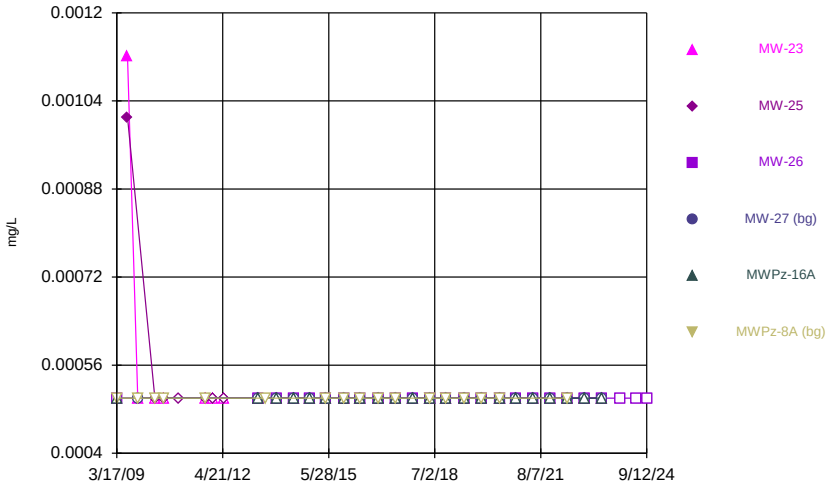
Hollow symbols indicate censored values.

Time Series



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Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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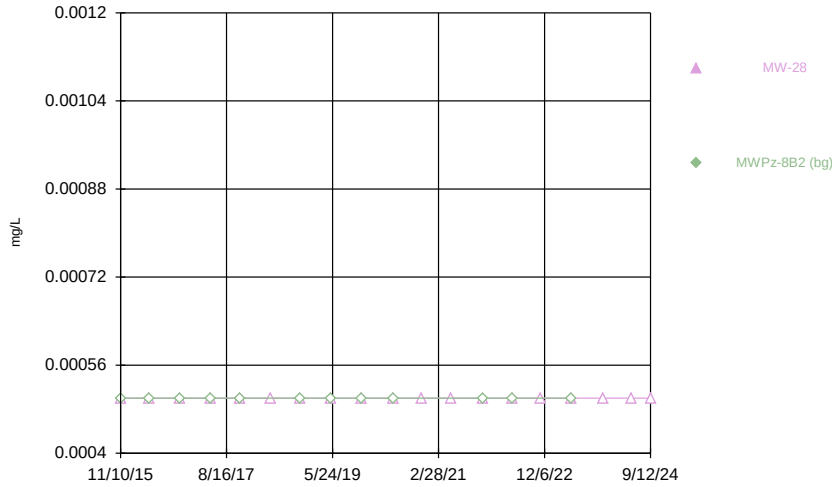

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Hollow symbols indicate censored values.

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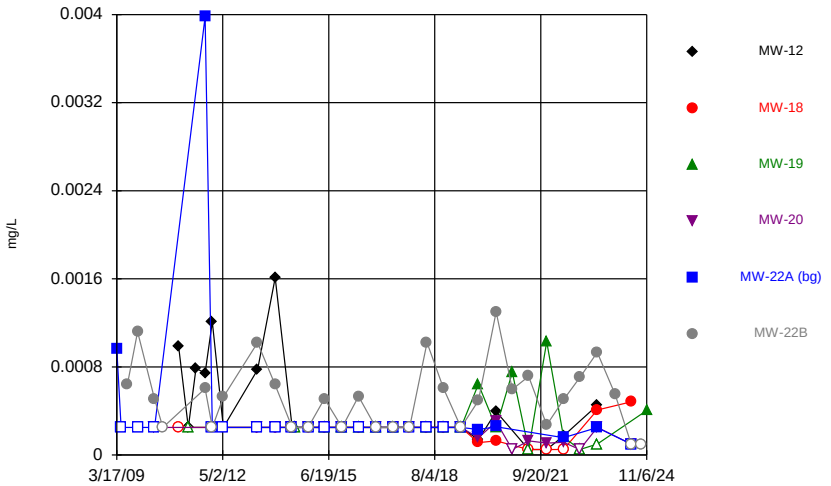

Constituent: Cadmium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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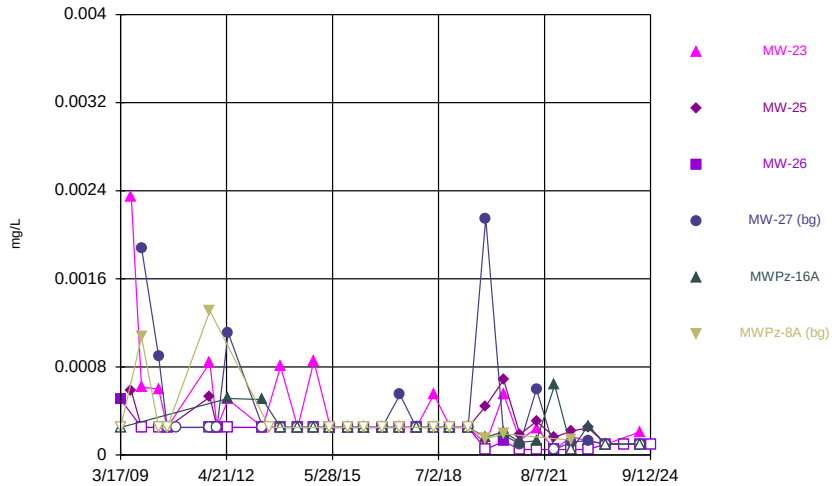
Hollow symbols indicate censored values.

Time Series



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Hollow symbols indicate censored values.

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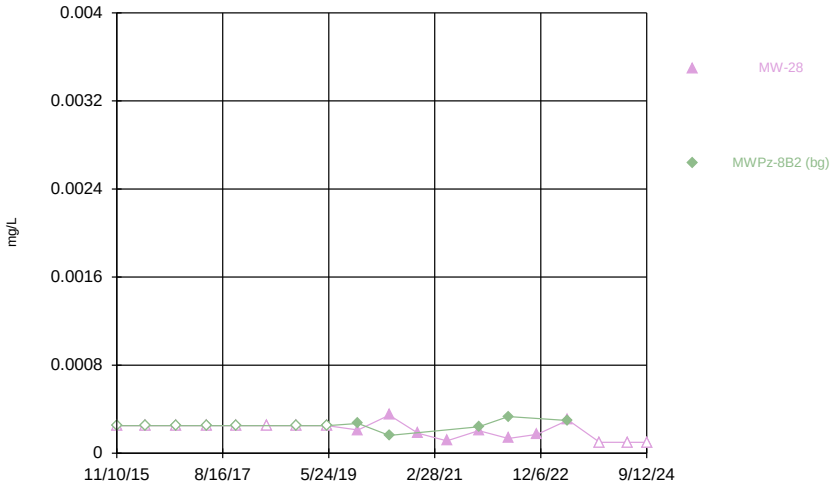

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Hollow symbols indicate censored values.

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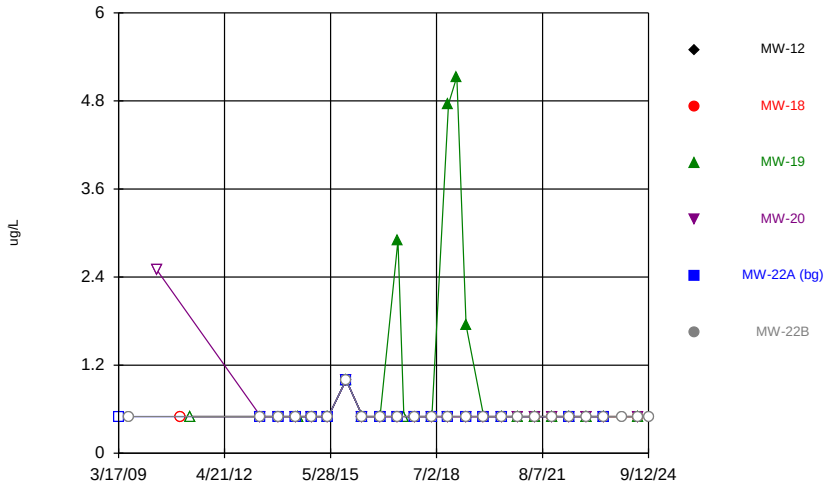
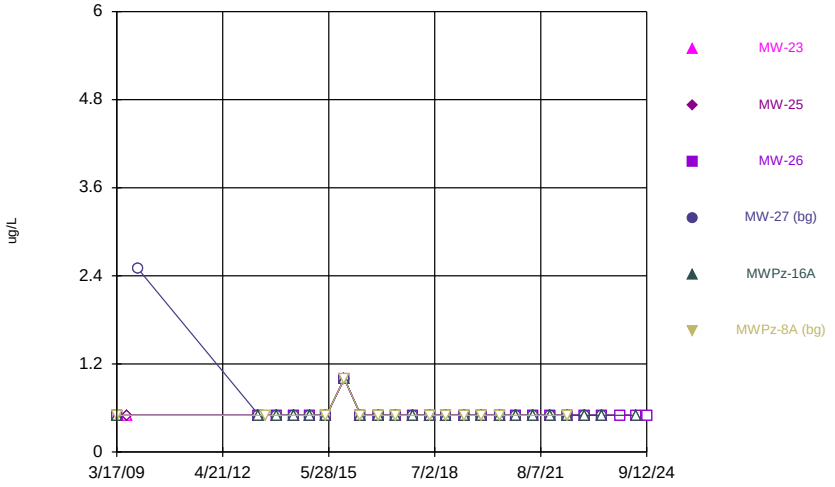


Constituent: Carbon Disulfide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Carbon Disulfide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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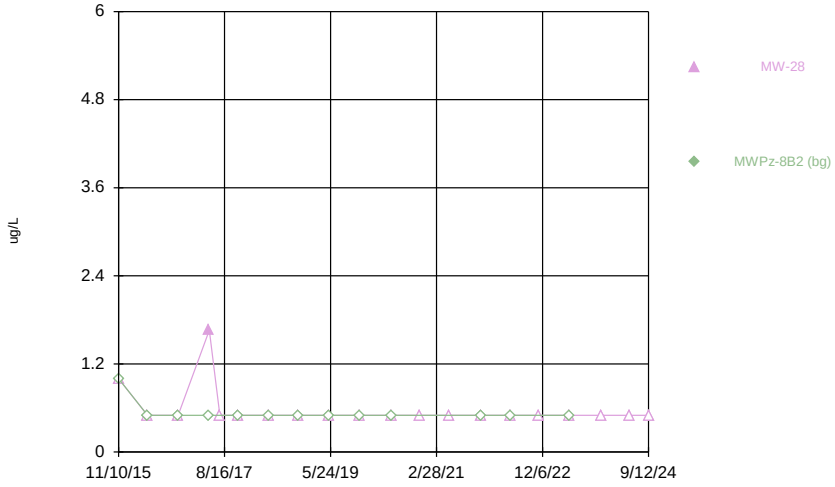
Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Carbon Disulfide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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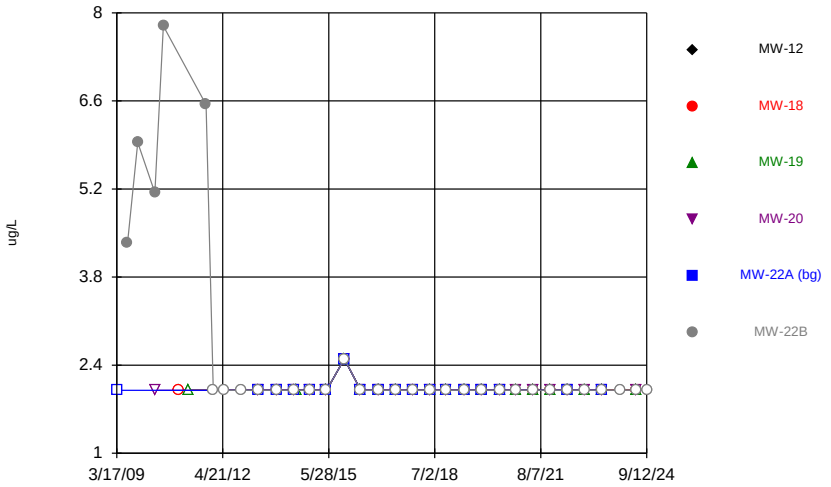
Hollow symbols indicate censored values.

Time Series



Constituent: Chloroethane Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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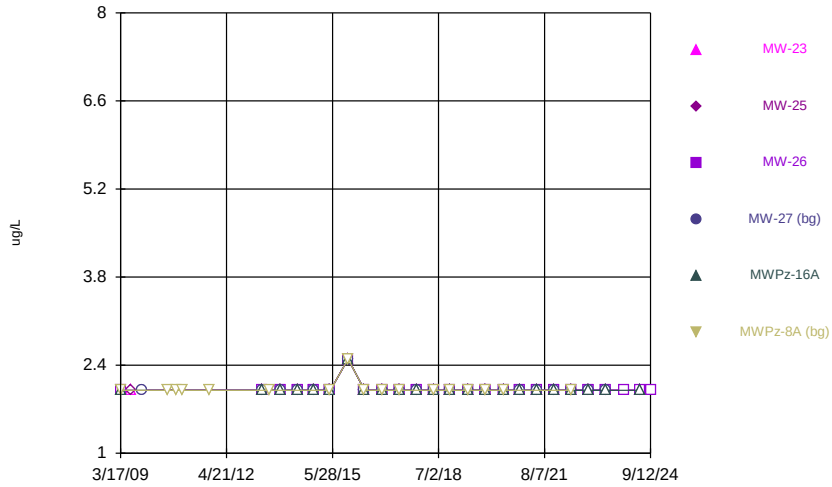
Hollow symbols indicate censored values.

Time Series



Constituent: Chloroethane Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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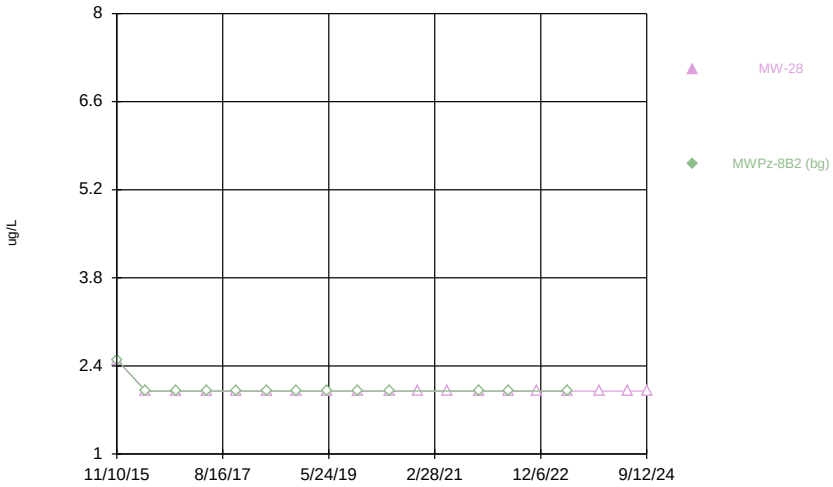
Hollow symbols indicate censored values.

Time Series



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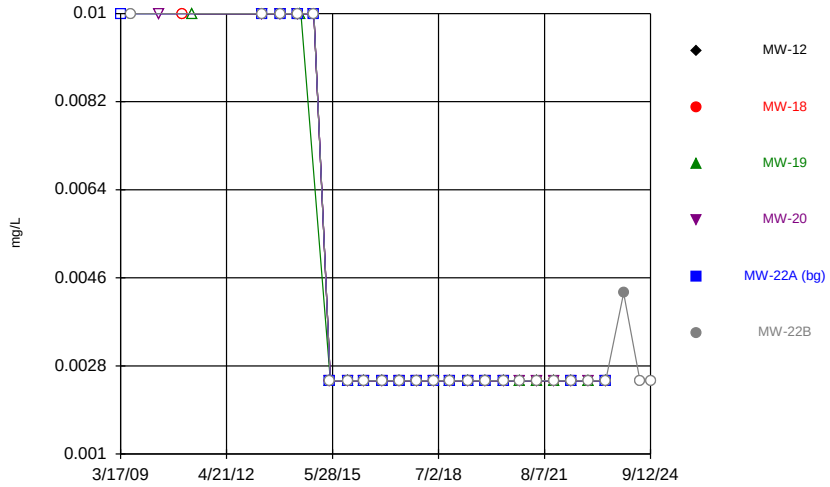

Constituent: Chromium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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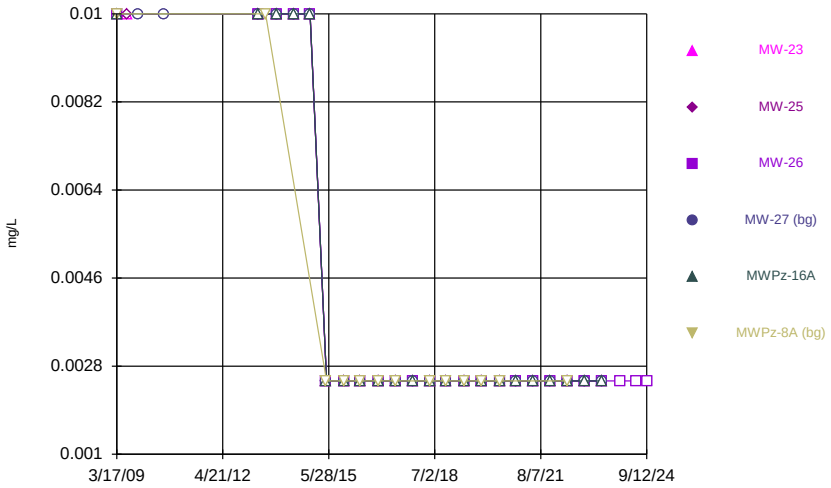
Time Series



Constituent: Chromium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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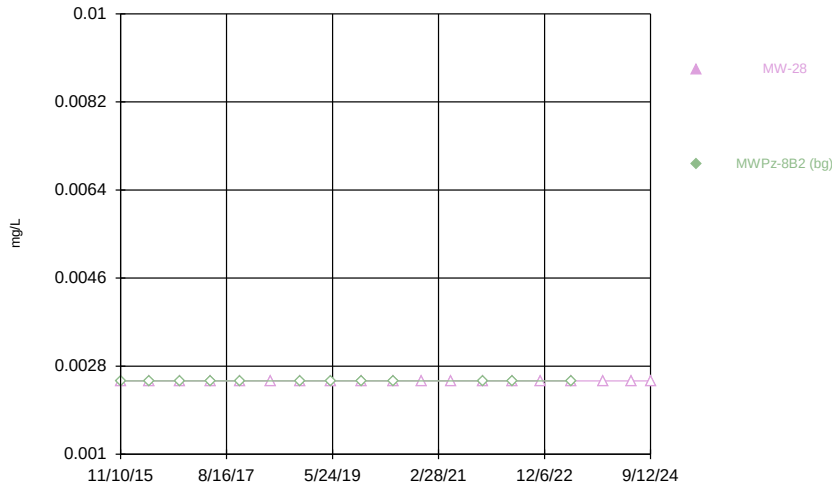
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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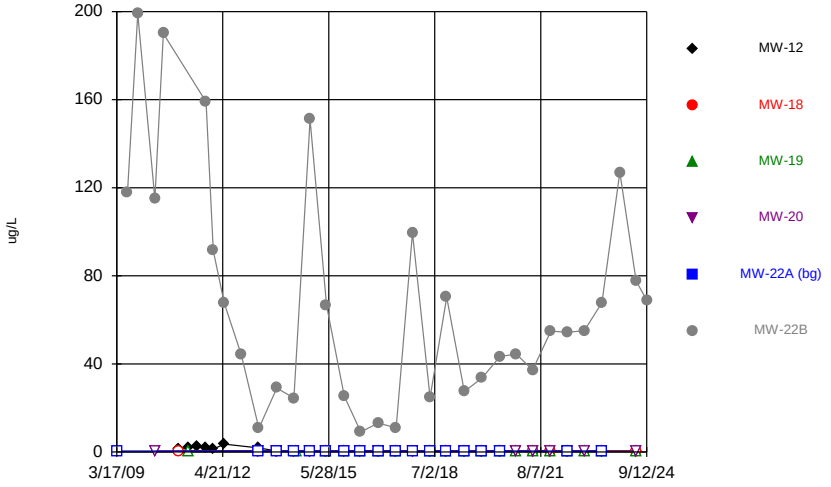

Constituent: cis-1,2-Dichloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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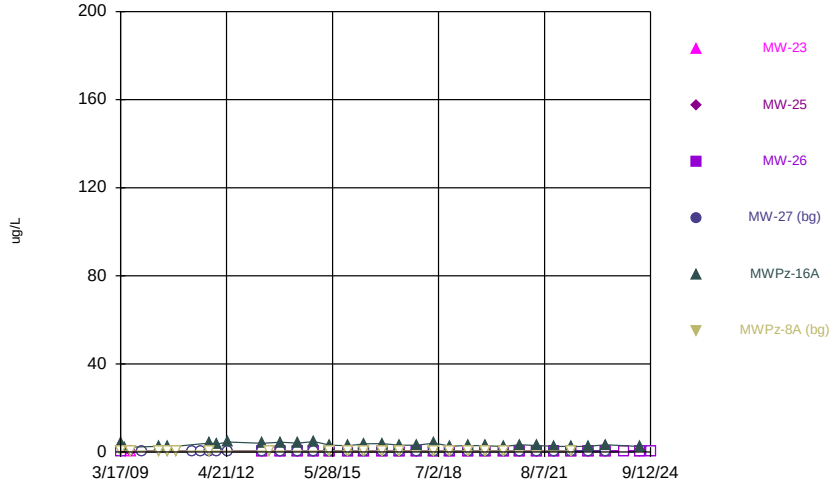
Hollow symbols indicate censored values.

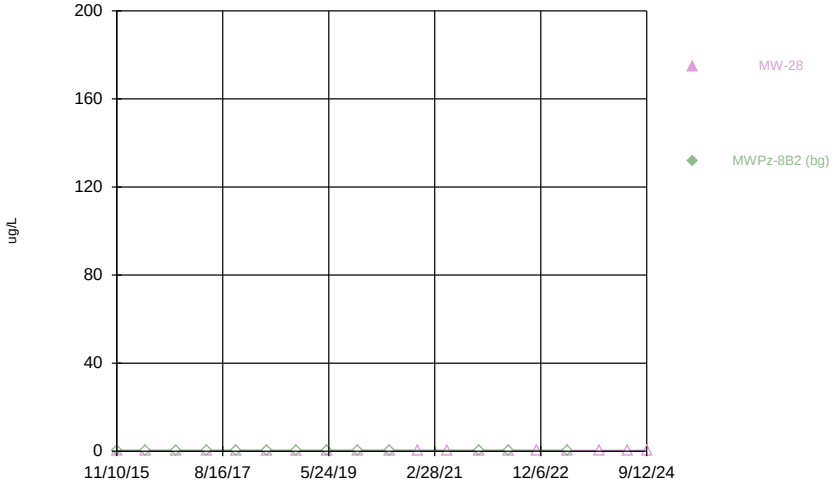
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

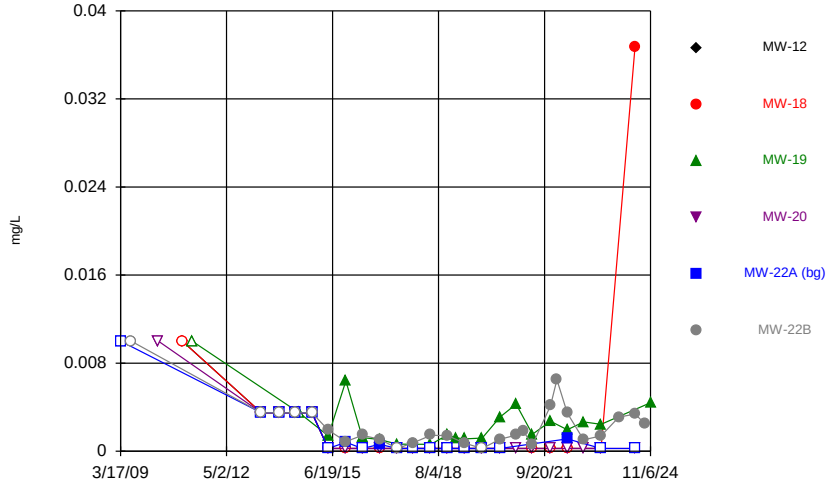
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

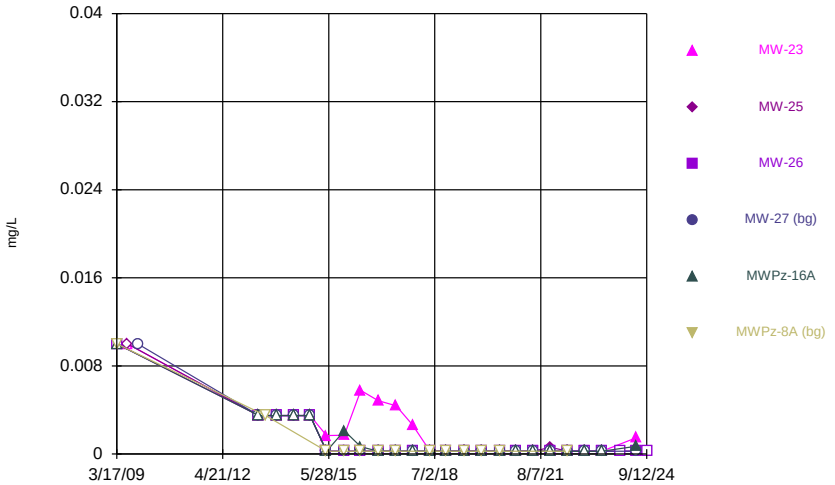
Time Series



Constituent: Cobalt Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

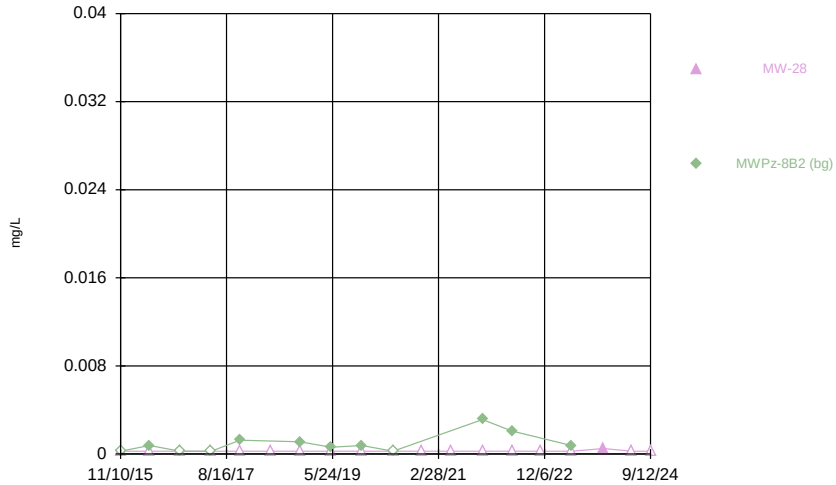
Time Series



Constituent: Cobalt Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

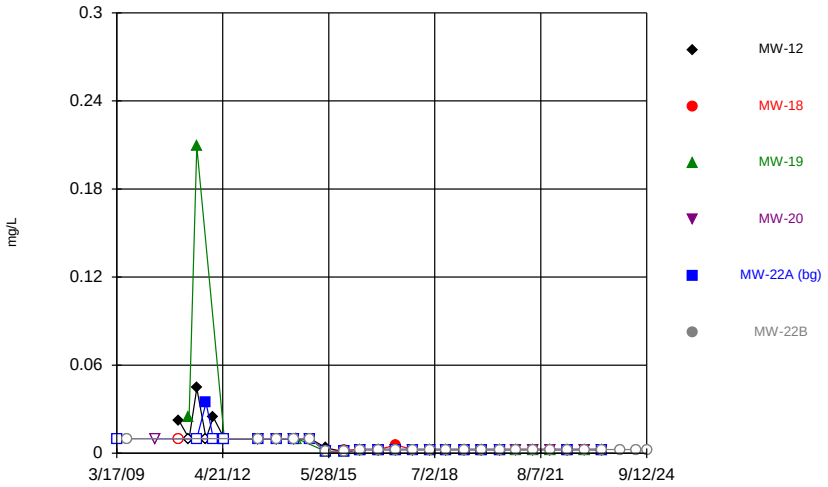
Time Series



Constituent: Cobalt Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

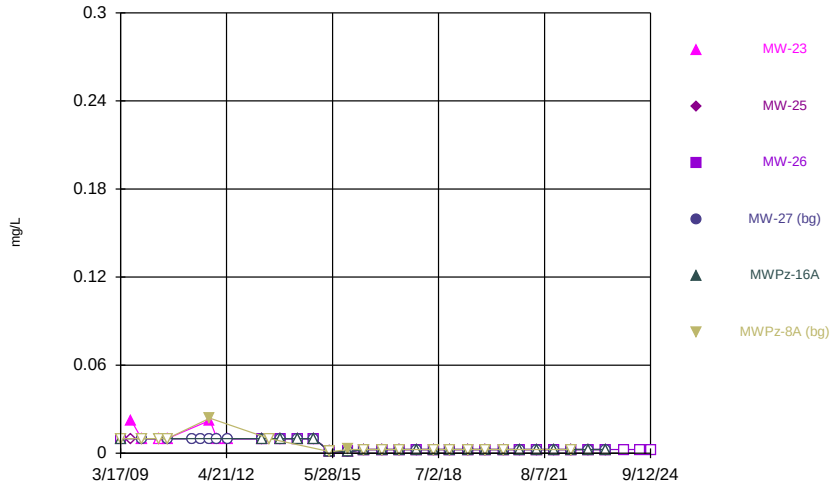
Time Series



Constituent: Copper Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

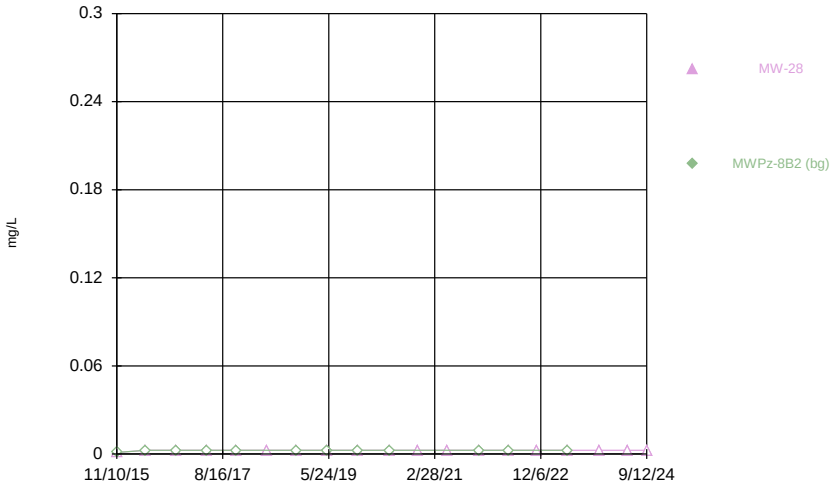
Time Series



Constituent: Copper Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

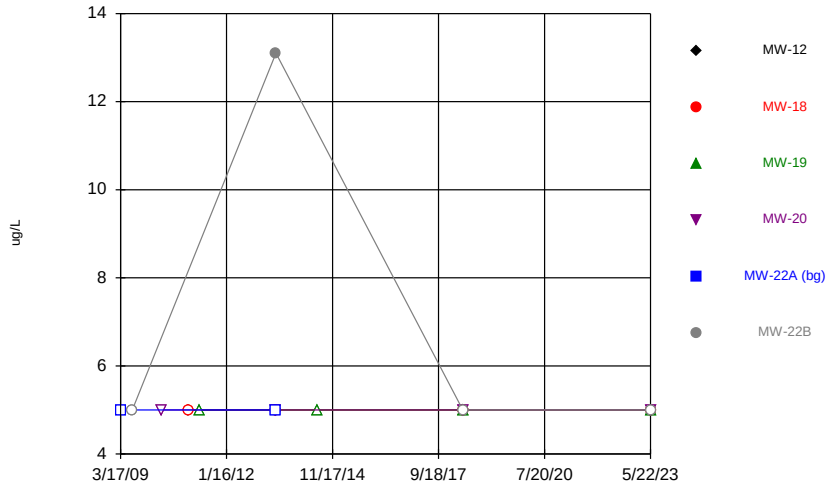
Time Series



Constituent: Copper Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cyanide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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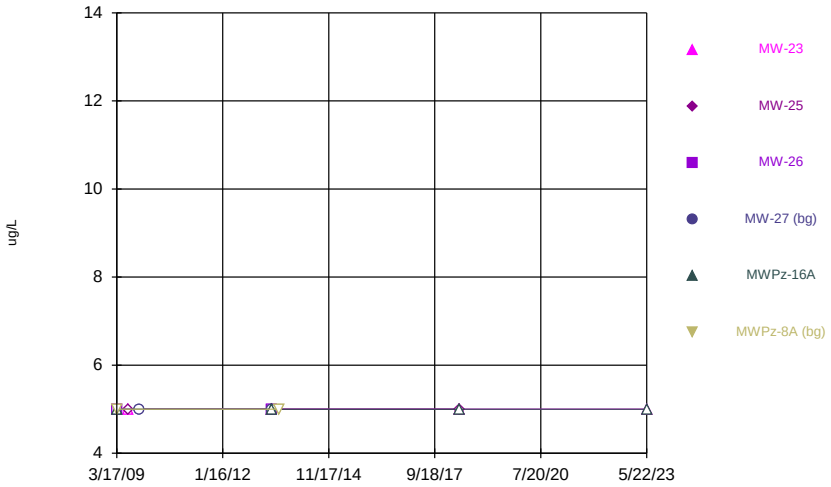
Hollow symbols indicate censored values.

Time Series



Constituent: Cyanide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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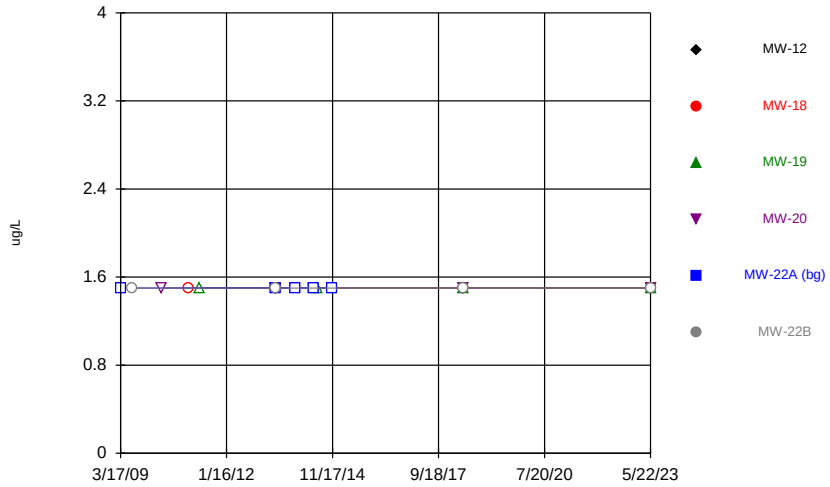
Hollow symbols indicate censored values.

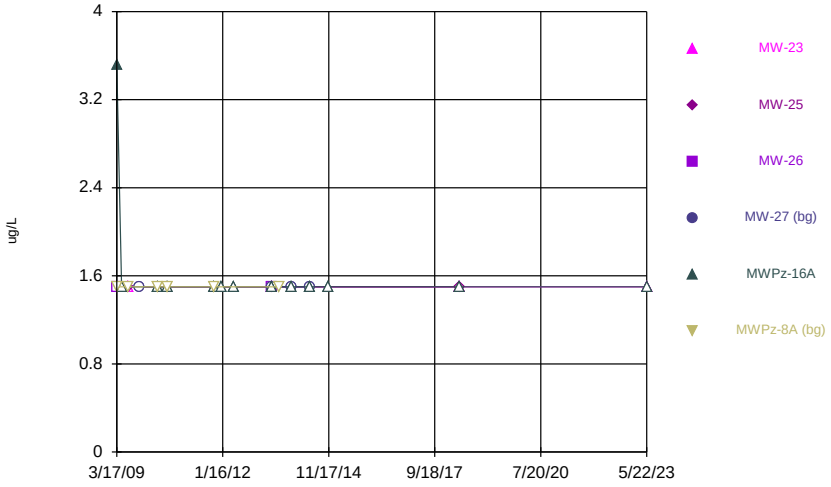
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Dichlorodifluoromethane Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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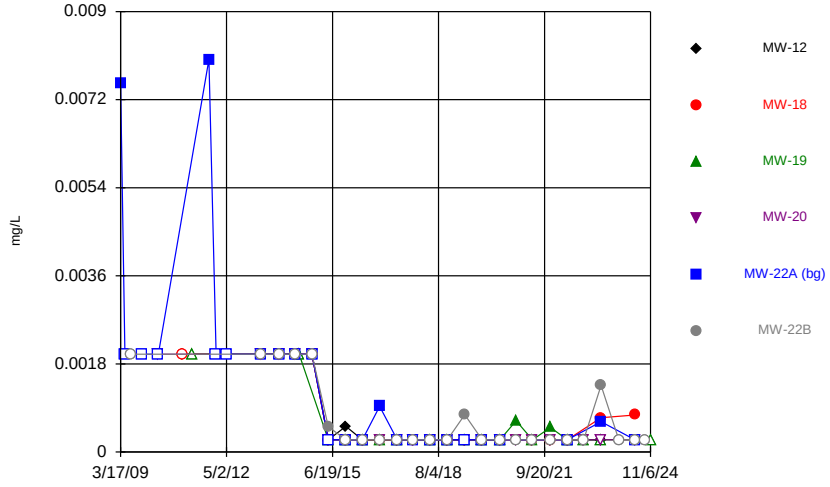
Hollow symbols indicate censored values.

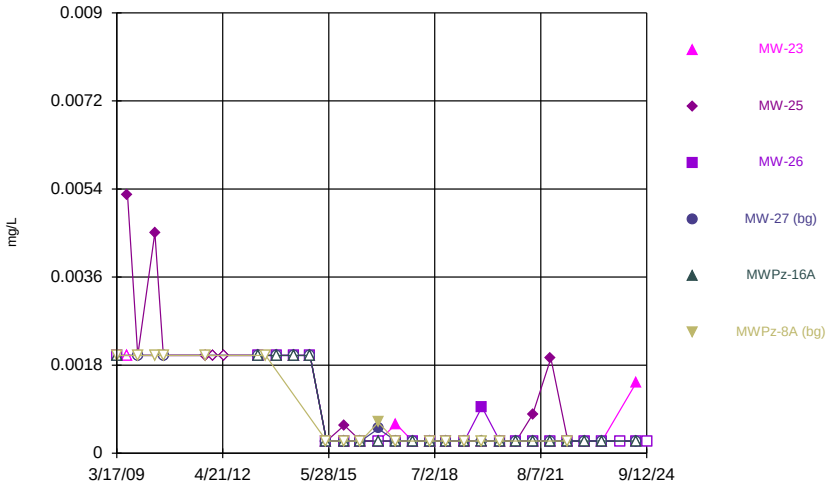
Time Series



Constituent: Lead Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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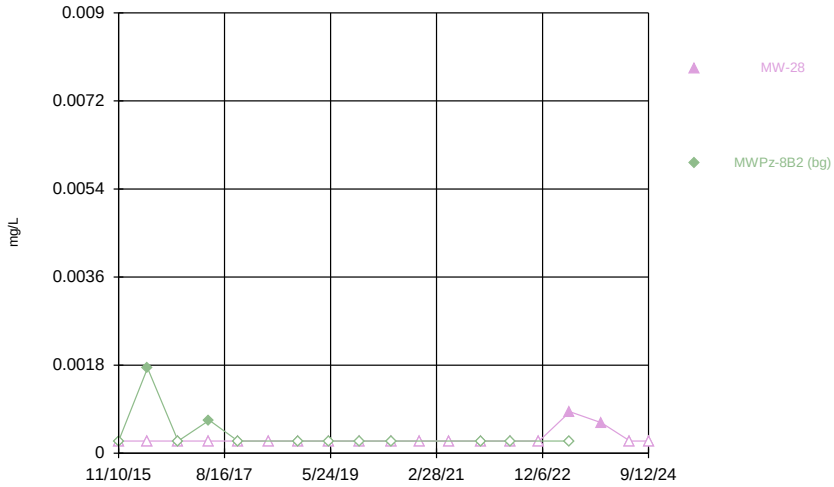
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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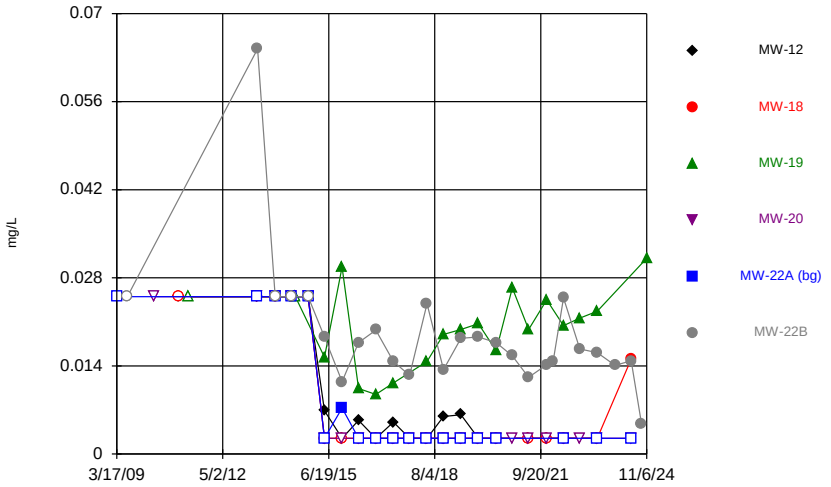
Hollow symbols indicate censored values.

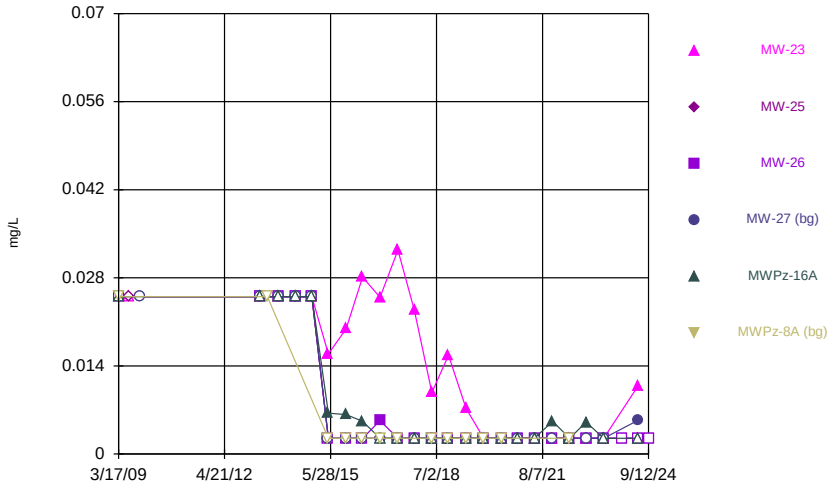
Time Series



Constituent: Nickel Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

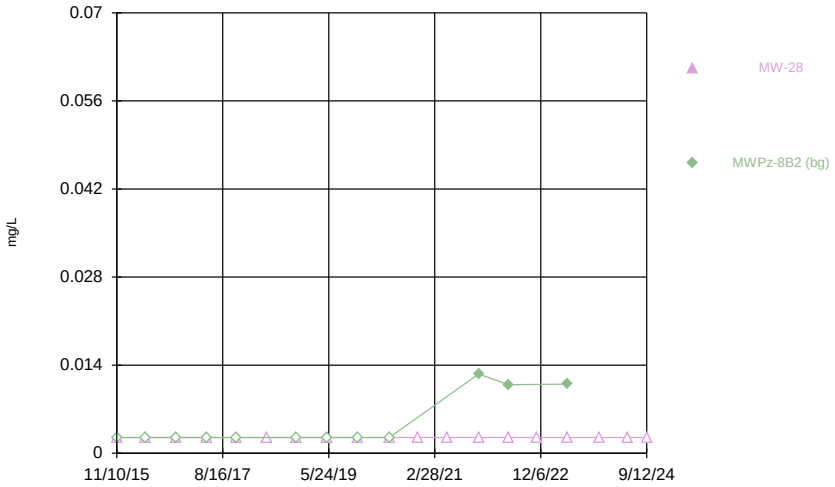
Time Series



Constituent: Nickel Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

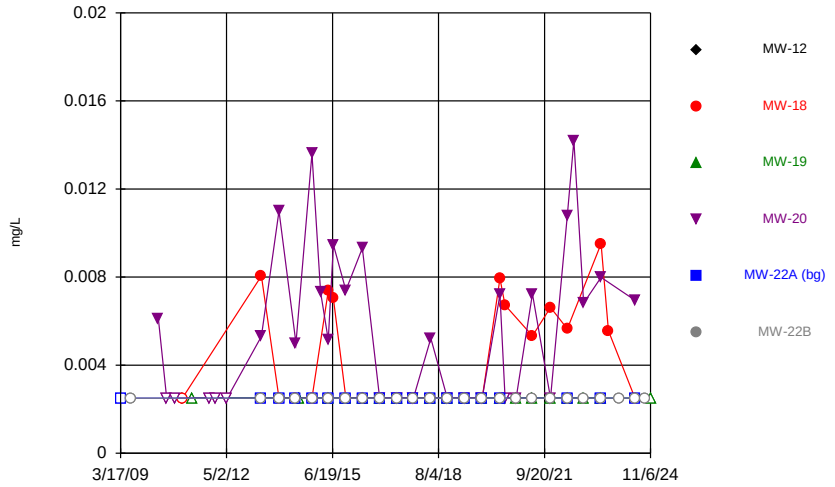
Time Series



Constituent: Nickel Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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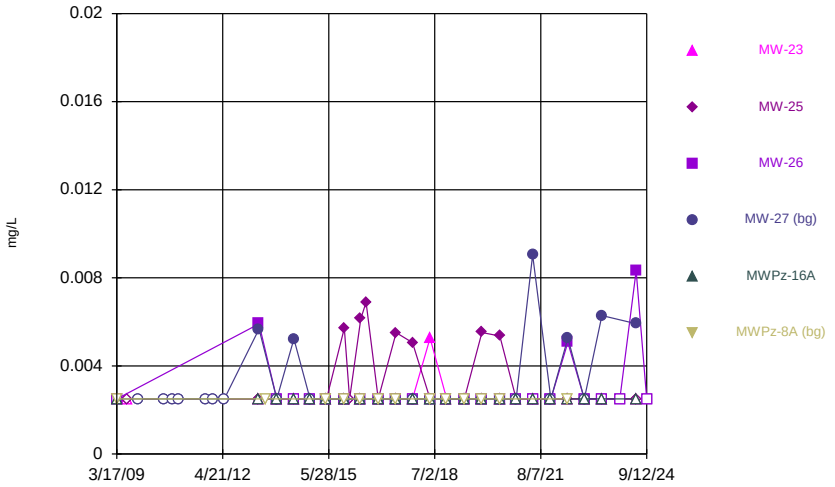
Hollow symbols indicate censored values.

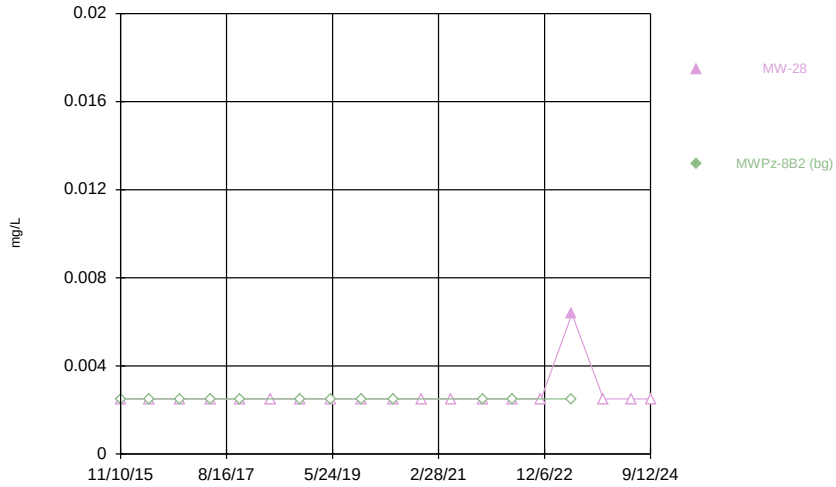
Time Series



Constituent: Selenium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

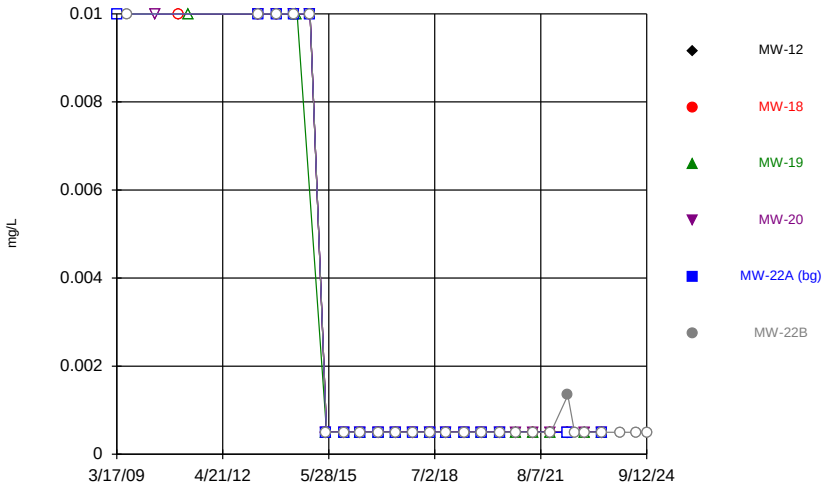
Time Series



Constituent: Selenium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

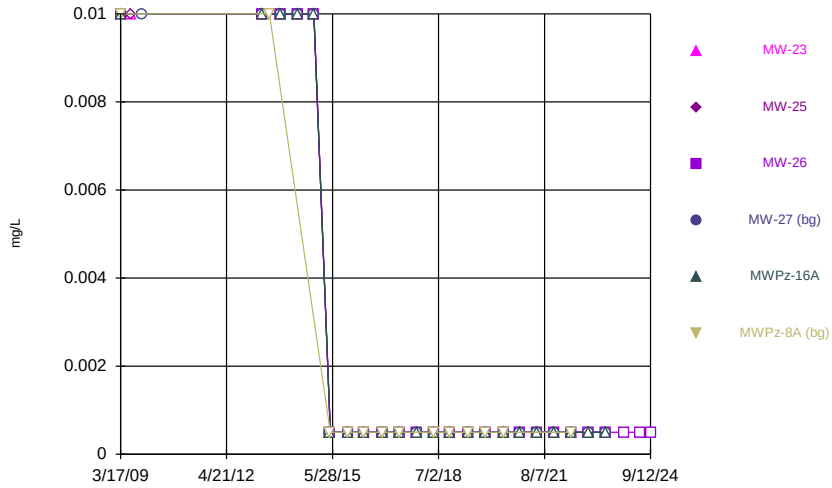
Time Series



Constituent: Silver Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

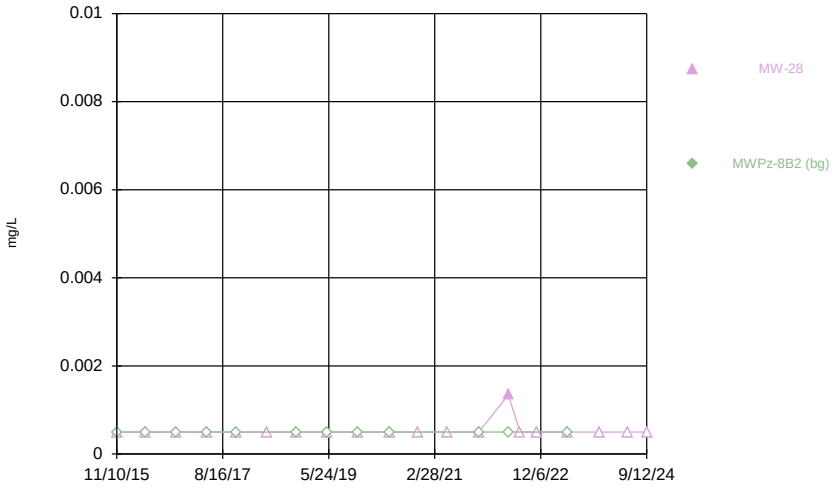
Time Series



Constituent: Silver Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

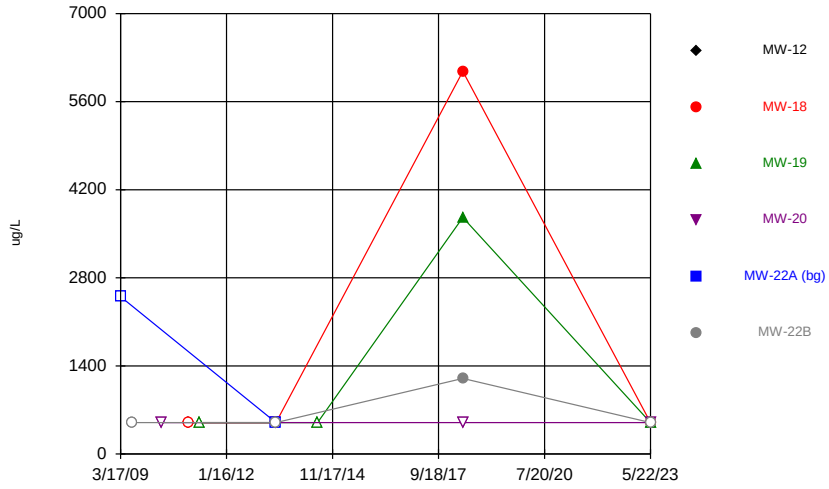
Time Series



Constituent: Silver Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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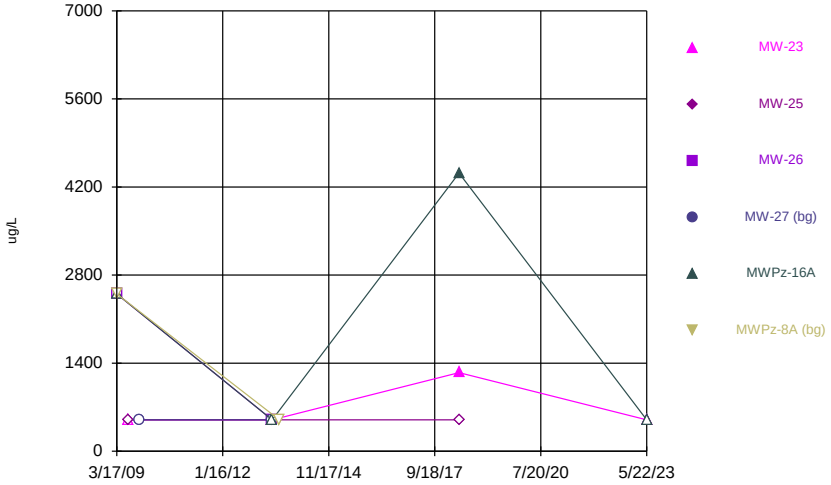
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfide Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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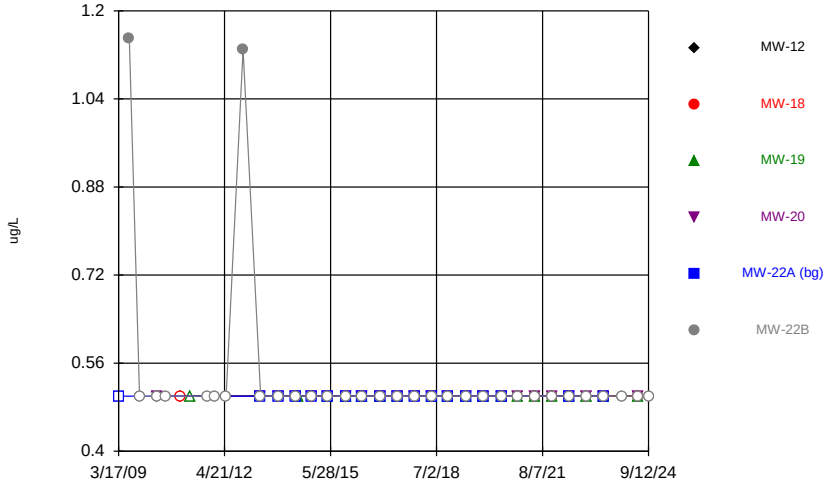
Hollow symbols indicate censored values.

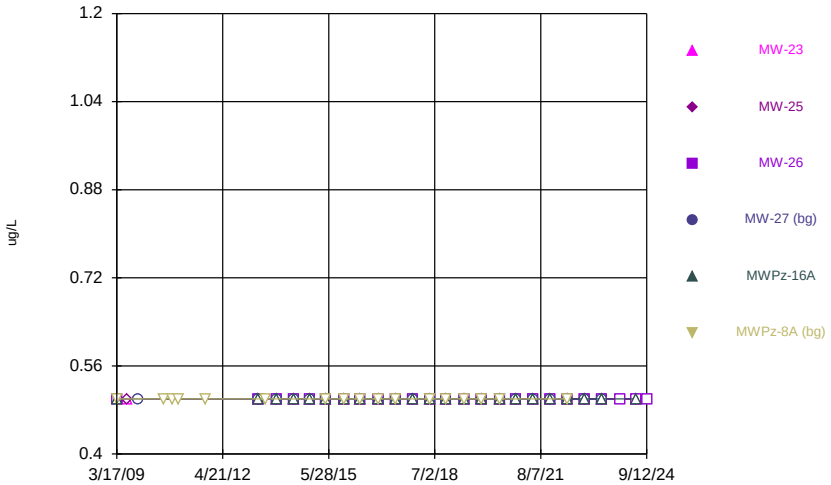
Time Series



Constituent: Tetrachloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

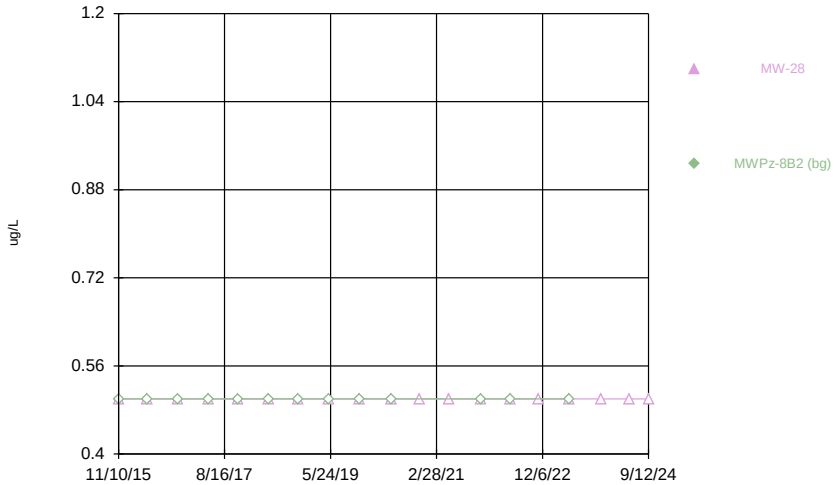
Time Series



Constituent: Tetrachloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

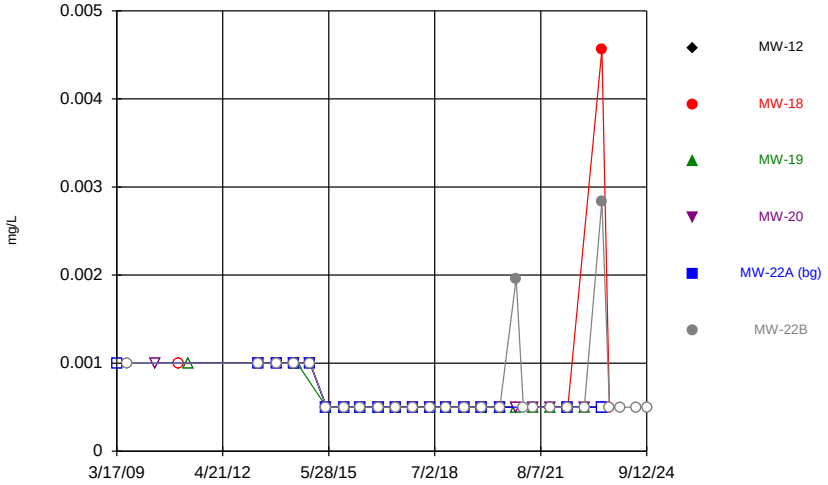
Time Series



Constituent: Tetrachloroethene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

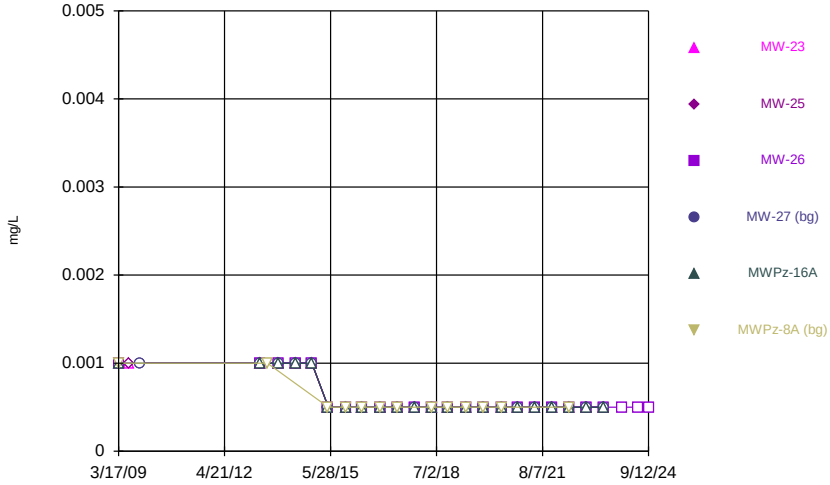
Time Series



Constituent: Thallium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

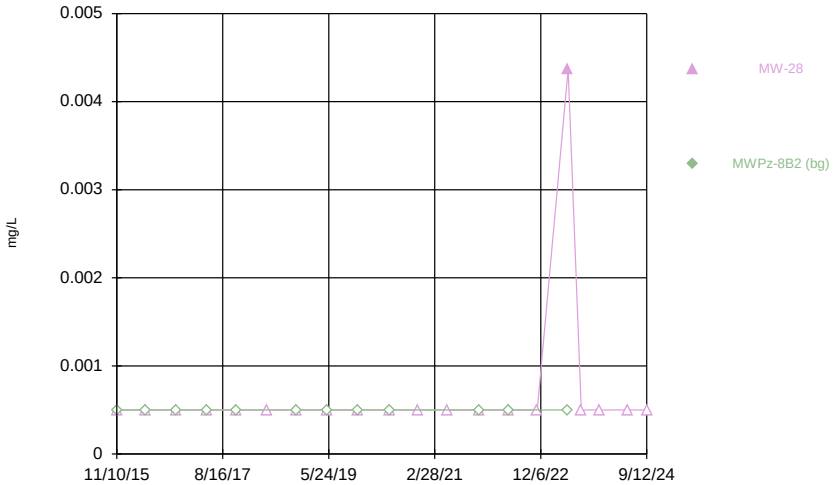
Time Series



Constituent: Thallium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

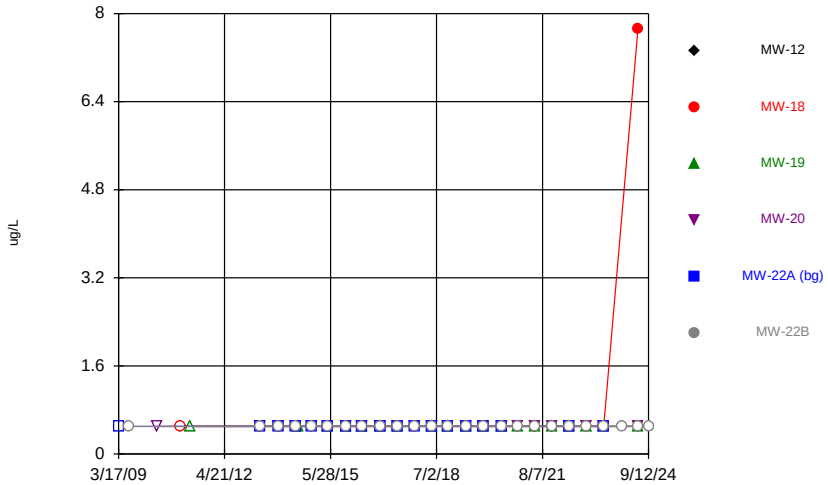
Time Series



Constituent: Thallium Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

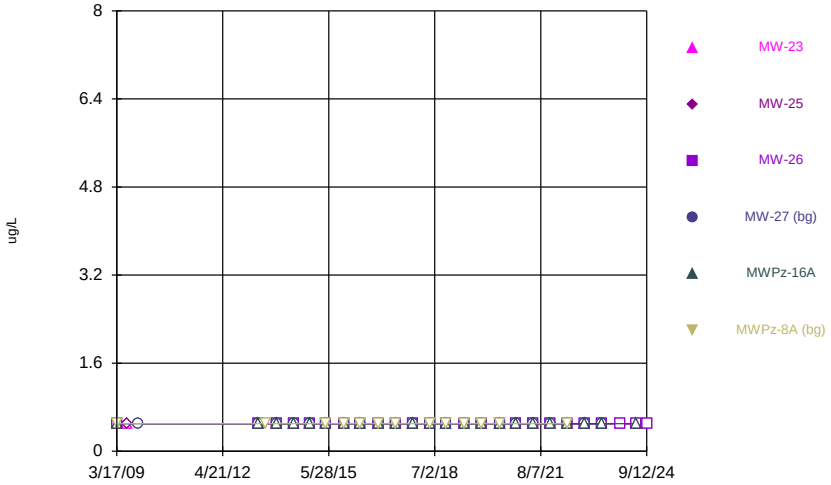
Time Series



Constituent: Toluene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

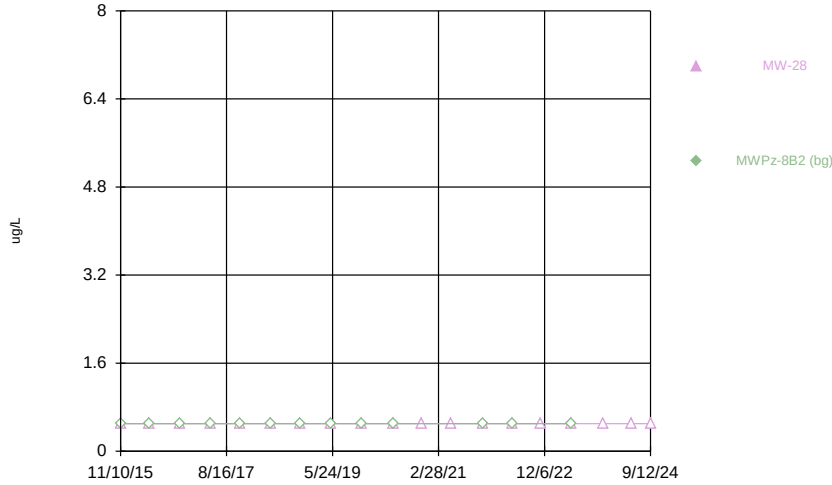
Time Series



Constituent: Toluene Analysis Run 1/28/2025 5:52 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Toluene Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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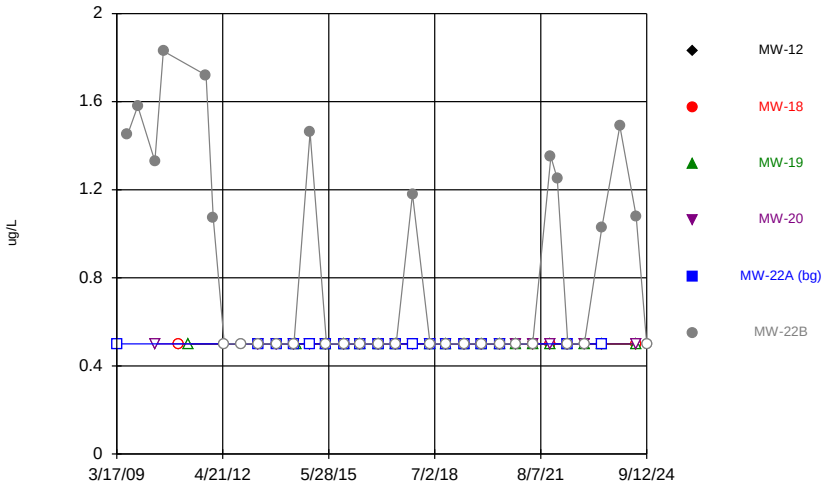
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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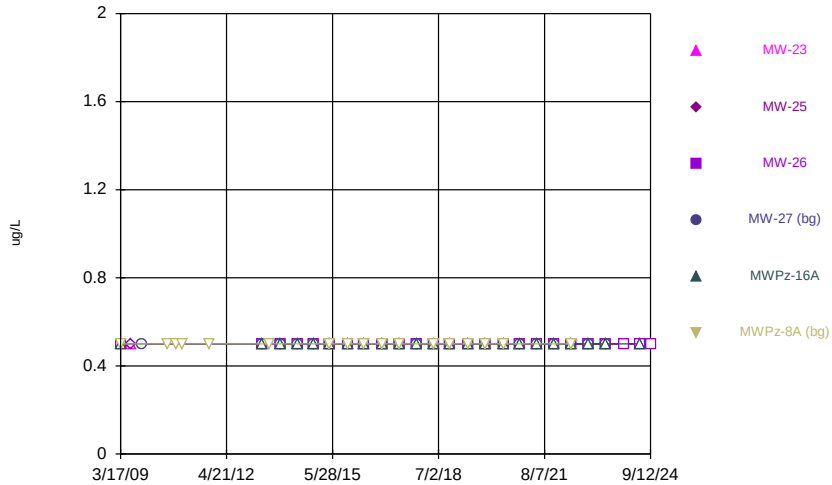
Hollow symbols indicate censored values.

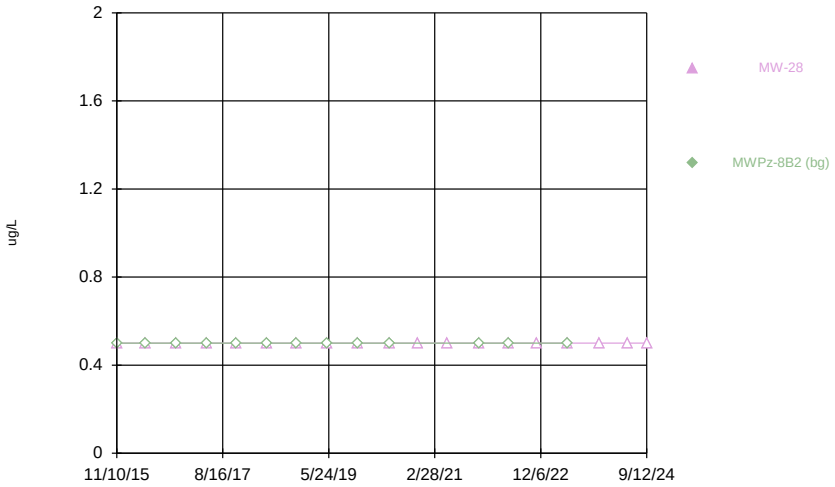
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

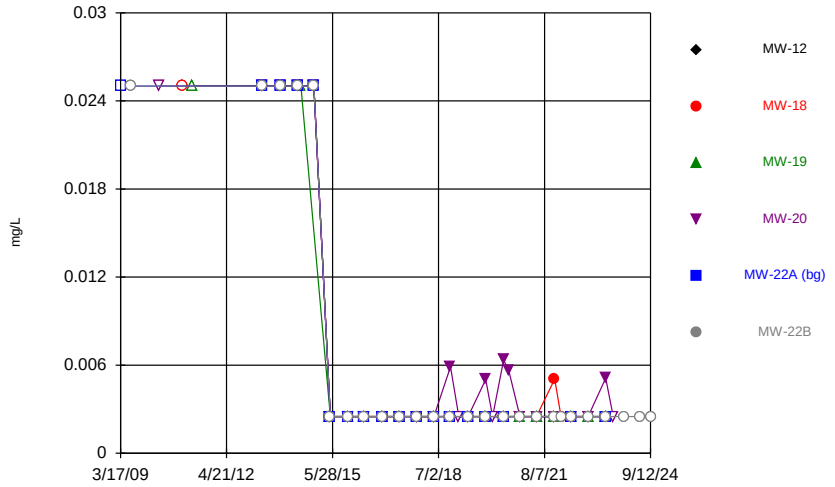
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

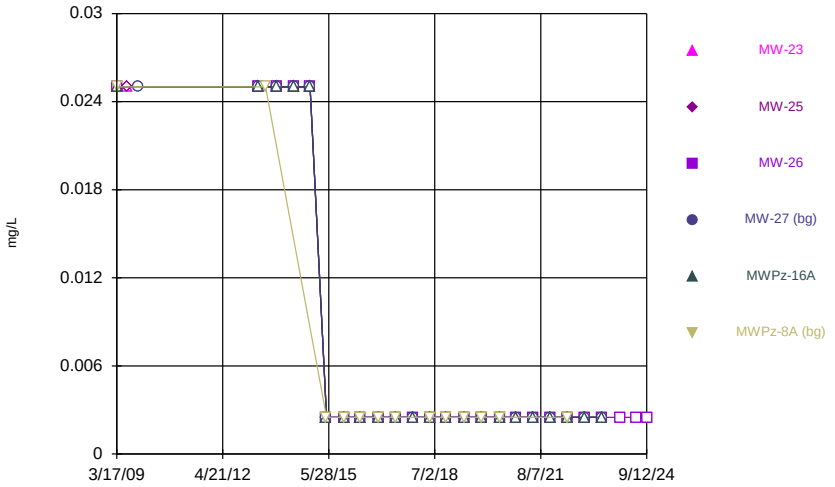
Time Series



Constituent: Vanadium Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

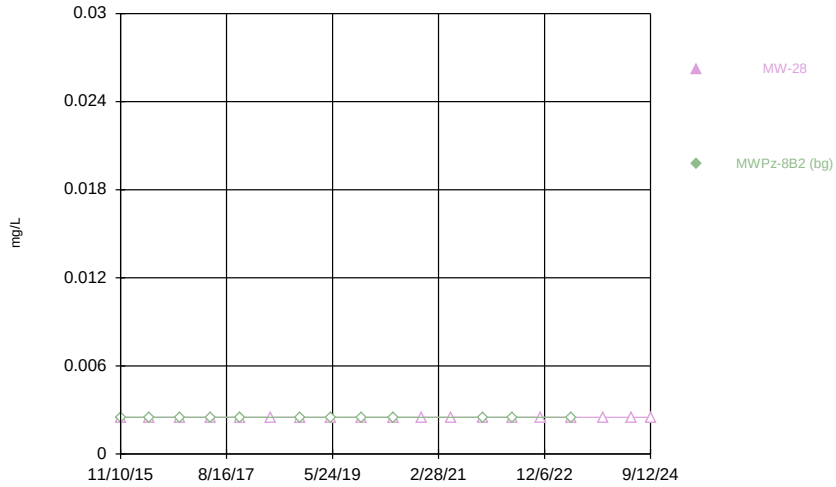
Time Series



Constituent: Vanadium Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

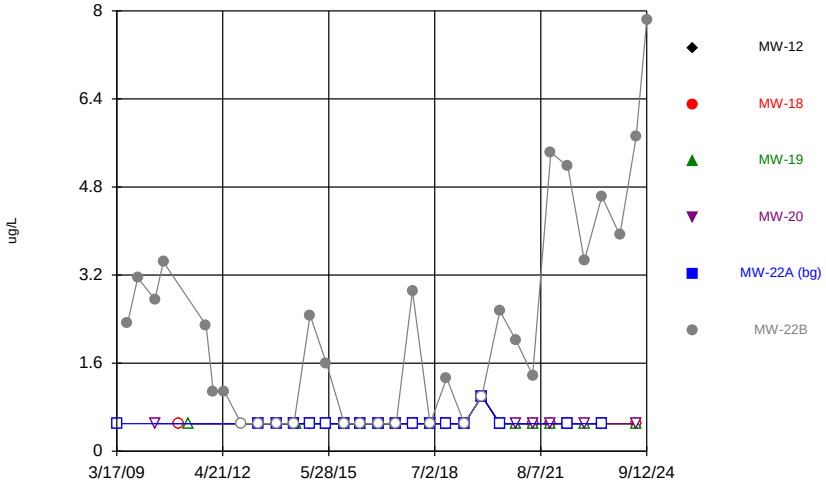
Time Series



Constituent: Vanadium Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

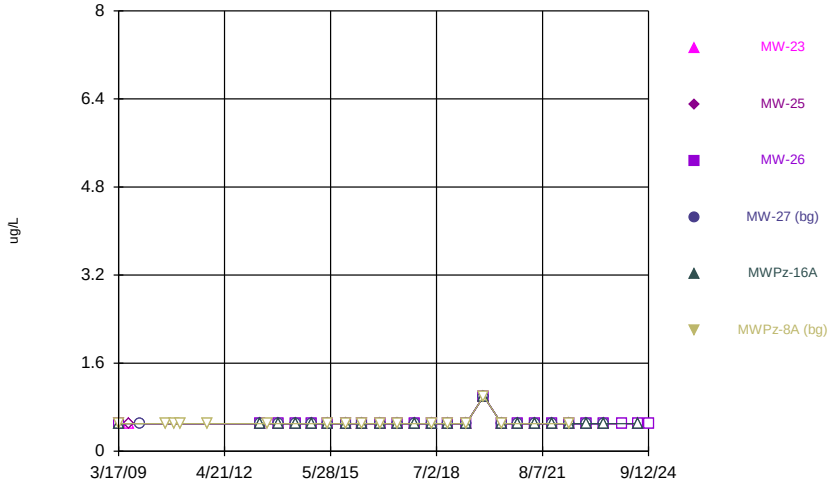
Time Series



Constituent: Vinyl Chloride Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

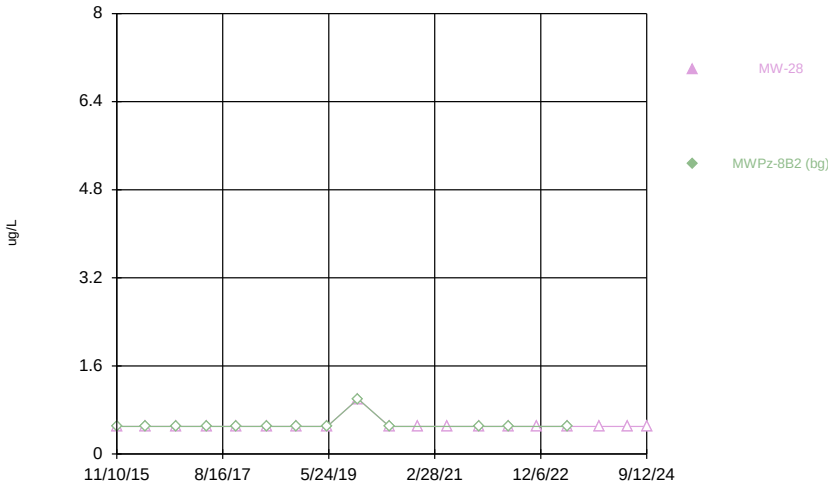
Time Series



Constituent: Vinyl Chloride Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

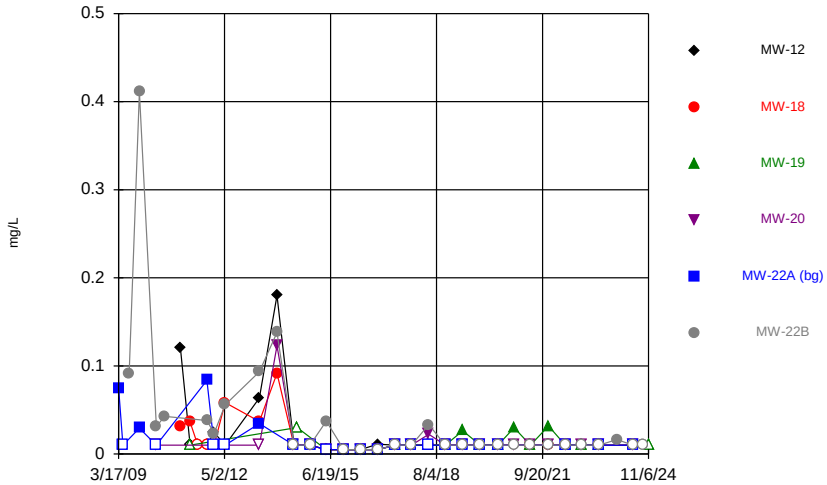
Time Series



Constituent: Vinyl Chloride Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

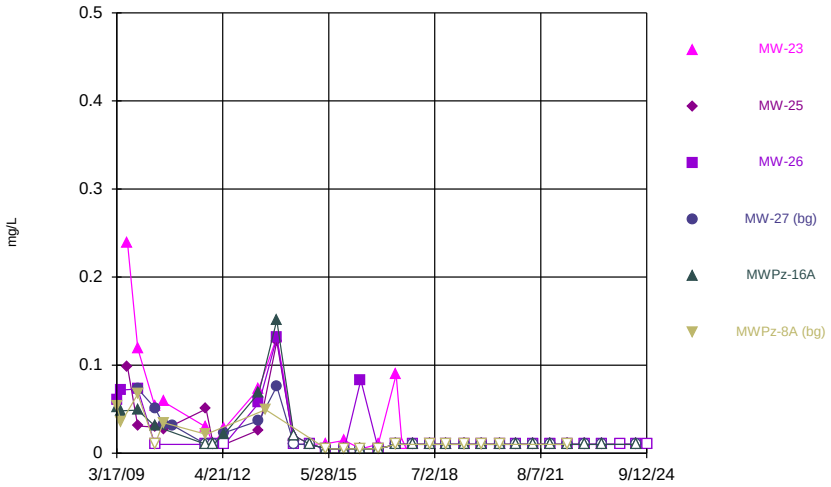
Time Series



Constituent: Zinc Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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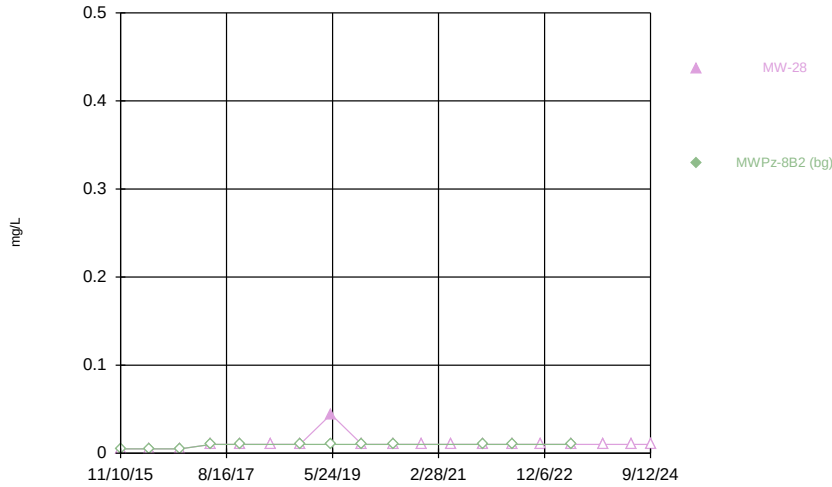
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 1/28/2025 5:53 PM View: 2024AWQR-Time_Series
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Outliers Summary Table and Graphs

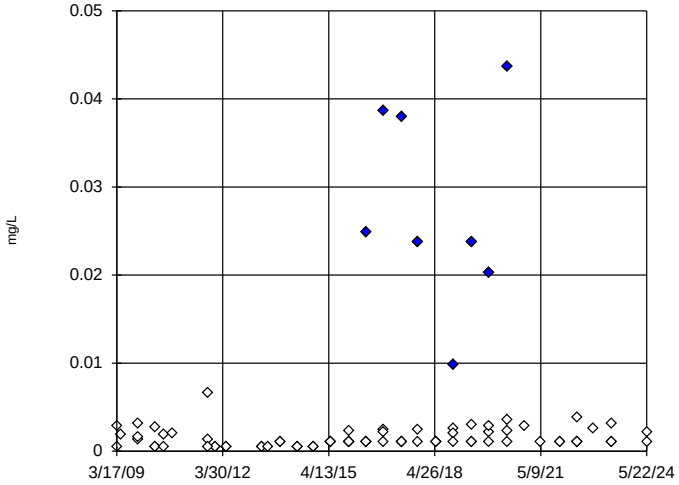
BG Outlier Analysis

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas Printed 1/29/2025, 11:18 AM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Arsenic (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.0249,0.0386,0.0379,0.0238,0.0238,0.00975,0.0203**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**83**	**0.003988**	**0.008558**	**unknown**	**ShapiroFrancia**
Barium (mg/L)	MW-27,MWPz-8B2,MW...	No	n/a	n/a w/combined bg	EPA/OH	0.05	83	0.1227	0.1047	ln(x)	ShapiroFrancia
Cadmium (mg/L)	MW-22A,MW-27,MWPz...	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	83	0.0003772	0.0005264	unknown	ShapiroFrancia
Cobalt (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.01,0.01,0.0035,0.0035,0.0035,0.0035,0.0035,0.00**	**n/a w/combined bg**	**OH**	**NaN**	**67**	**0.001278**	**0.002219**	**n/a**	**n/a**
Lead (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.00802,0.00754,0.002,0.002,0.002,0.002,0.002,0.0**	**n/a w/combined bg**	**OH**	**NaN**	**78**	**0.0009604**	**0.001356**	**n/a**	**n/a**
Nickel (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.025,0.025,0.025,0.025,0.025,0.025,0.025,0.025**	**n/a w/combined bg**	**OH**	**NaN**	**67**	**0.007047**	**0.008674**	**n/a**	**n/a**
Selenium (mg/L)	MW-22A,MW-27,MWPz...	No	n/a	n/a w/combined bg	OH	NaN	73	0.002807	0.0011	n/a	n/a
Zinc (mg/L)	**MW-22A,MW-27,MWPz...**	**Yes**	**0.0836,0.076,0.075,0.0733,0.0671,0.0535,0.0514,0.**	**n/a w/combined bg**	**OH**	**NaN**	**83**	**0.01681**	**0.01822**	**n/a**	**n/a**

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.00672, low cutoff = -0.00329, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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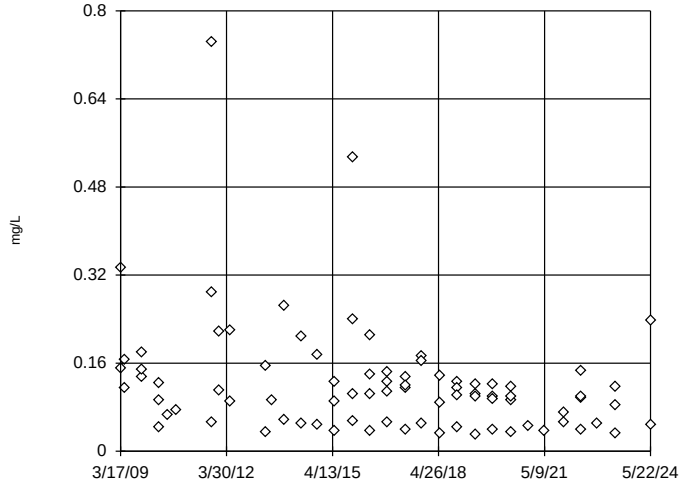
EPA Screening (suspected outliers for Rosner's Test)

MW-27,MWPz-8B2,MWPz-8A,MW-22A



n = 83

Rosner's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.1227, std. dev. 0.1047, critical Tn 3.143

Normality test used:
Shapiro Francia@alpha = 0.01
Calculated = 0.9667
Critical = 0.96 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Barium Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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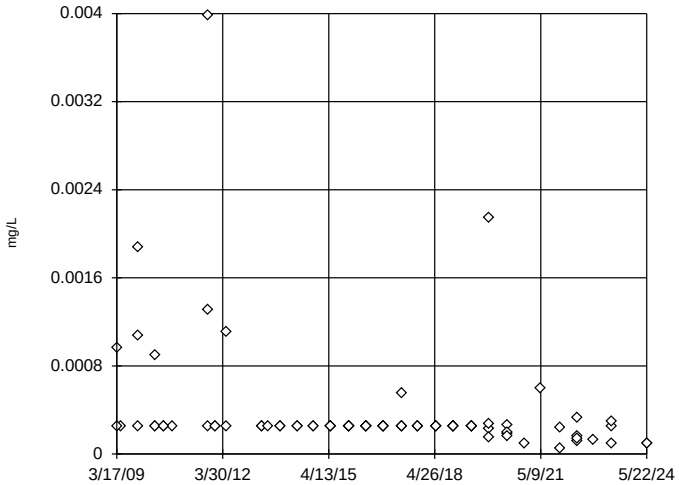
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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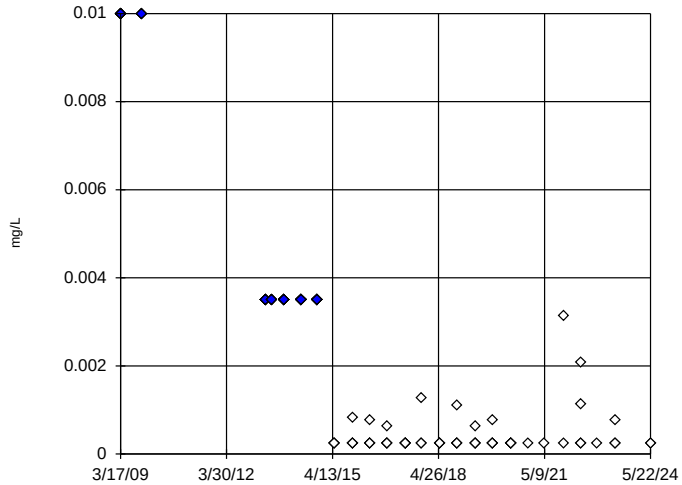
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



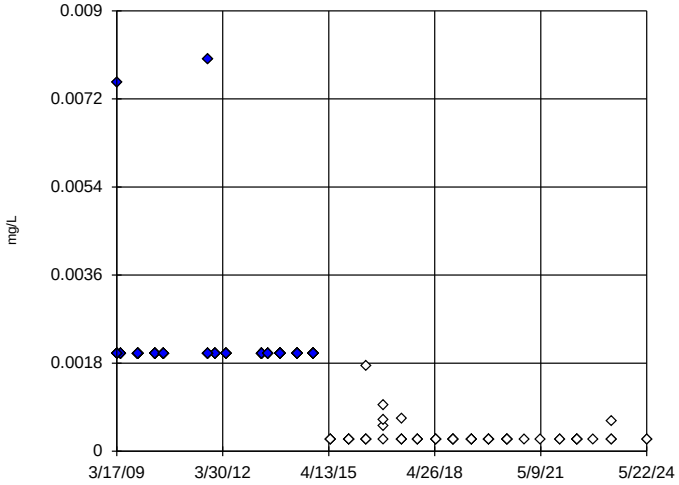
n = 67

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Cobalt Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 78

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Lead Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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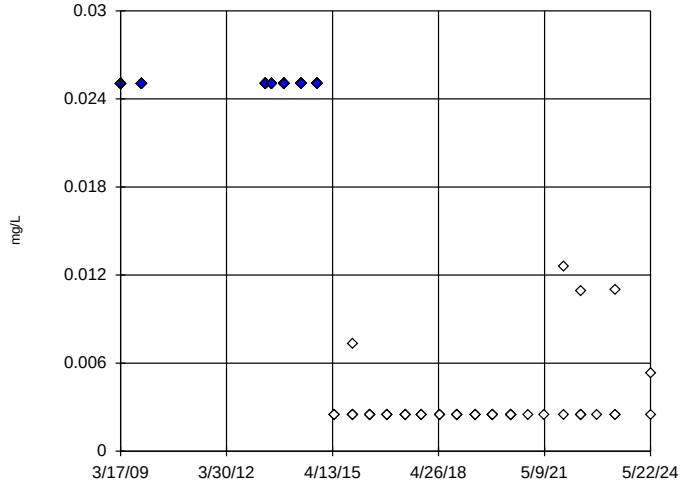
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 67

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Nickel Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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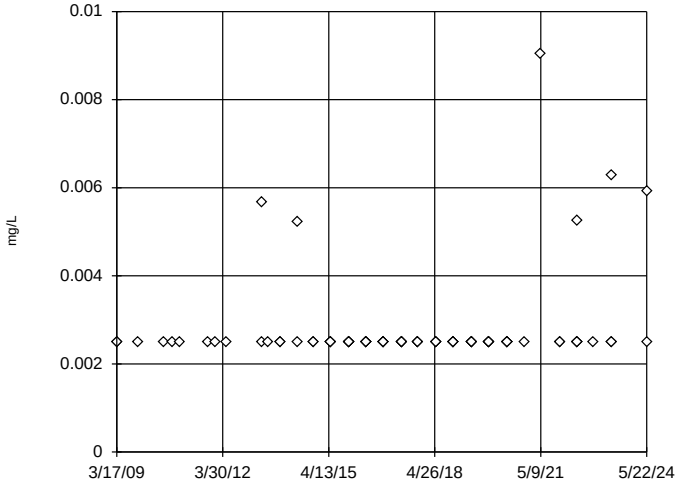
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 73

No statistical outliers.

Constituent: Selenium Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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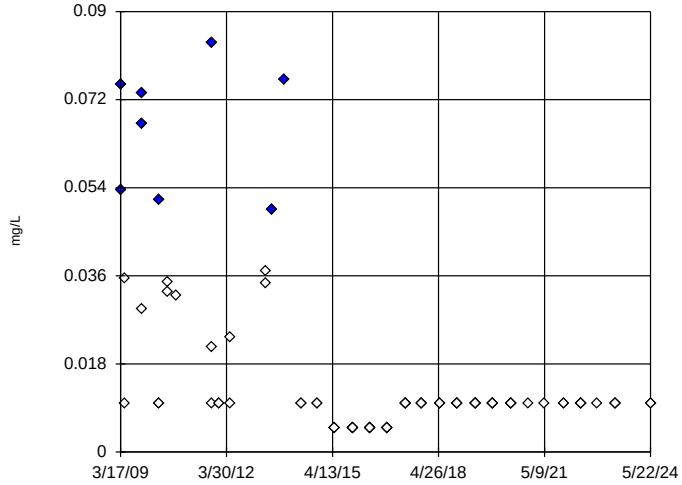
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-22A,MW-27,MWPz-8A,MWPz-8B2



n = 83

Statistical outliers are drawn as solid.
Outliers per Ohio method.

Constituent: Zinc Analysis Run 1/29/2025 11:14 AM View: 2024AWQR-BG_Outliers
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Prediction Limits Summary Table and Graphs

Prediction Limit

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas Printed 1/29/2025, 12:01 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**MW-19**	**0.0436**	**n/a**	**11/6/2024**	**0.13**	**Yes**	**83**	**56.63**	**n/a**	**0.0002789**	**NP Inter (NDs) 1 of 2**
Arsenic (mg/L)	MW-22B	0.0436	n/a	9/12/2024	0.00364	No	83	56.63	n/a	0.0002789	NP Inter (NDs) 1 of 2
Barium (mg/L)	**MW-19**	**0.3701**	**n/a**	**11/6/2024**	**1.19**	**Yes**	**83**	**0**	**ln(x)**	**0.0006583**	**Param Inter 1 of 2**
Barium (mg/L)	MW-22B	0.3701	n/a	9/12/2024	0.322	No	83	0	ln(x)	0.0006583	Param Inter 1 of 2
Barium (mg/L)	MW-26	0.3701	n/a	9/12/2024	0.0953	No	83	0	ln(x)	0.0006583	Param Inter 1 of 2
Barium (mg/L)	MW-28	0.3701	n/a	9/12/2024	0.047	No	83	0	ln(x)	0.0006583	Param Inter 1 of 2
Cadmium (mg/L)	MW-19	0.00398	n/a	11/6/2024	0.000405	No	83	68.67	n/a	0.0002789	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-19	0.01	n/a	11/6/2024	0.00441	No	67	83.58	n/a	0.0004243	NP Inter (NDs) 1 of 2
Cobalt (mg/L)	MW-22B	0.01	n/a	9/12/2024	0.00248	No	67	83.58	n/a	0.0004243	NP Inter (NDs) 1 of 2
Nickel (mg/L)	**MW-19**	**0.025**	**n/a**	**11/6/2024**	**0.0311**	**Yes**	**67**	**92.54**	**n/a**	**0.0004243**	**NP Inter (NDs) 1 of 2**
Nickel (mg/L)	MW-22B	0.025	n/a	9/12/2024	0.00473	No	67	92.54	n/a	0.0004243	NP Inter (NDs) 1 of 2

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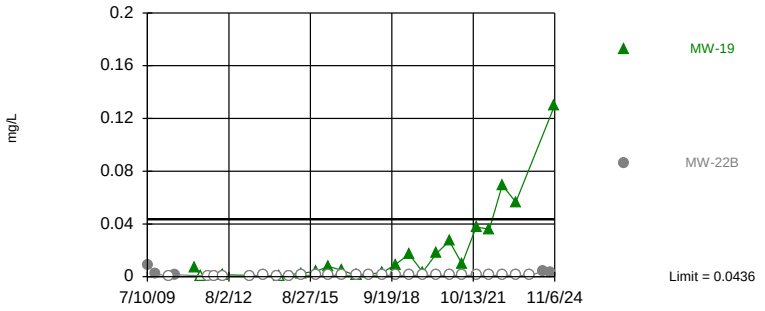
Hollow symbols indicate censored values.

Exceeds Limit: MW-19

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 83 background values. 56.63% NDs. Annual per-constituent alpha = 0.005563. Individual comparison alpha = 0.0002789 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

Constituent: Arsenic Analysis Run 1/29/2025 11:59 AM View: 2024AWQR-DM_AM_CA_Interwell_PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

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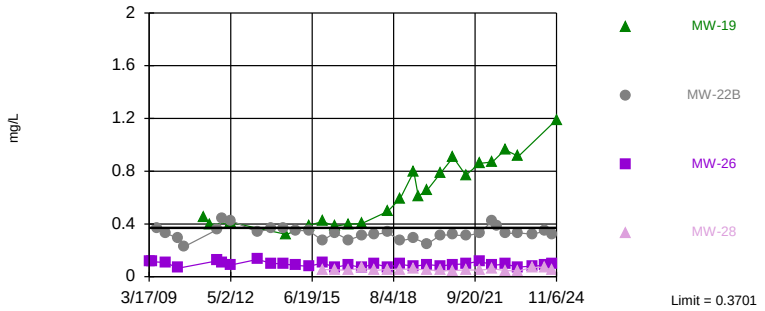
Exceeds Limit: MW-19

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=-2.332, Std. Dev.=0.6645, n=83. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9667, critical = 0.96. Kappa = 2.013 (c=8, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.006563. Individual comparison alpha = 0.0006583. Comparing 4 points to limit. Assumes 6 future values.

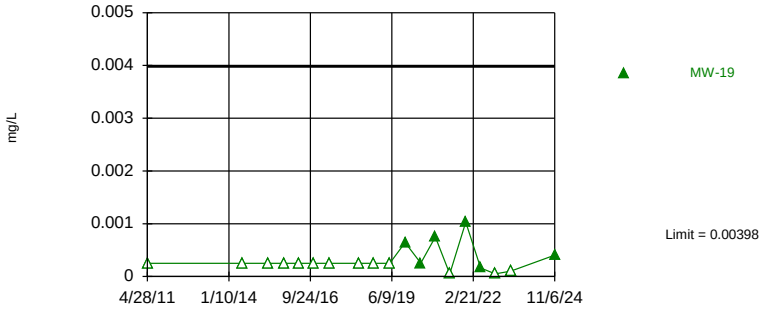
Constituent: Barium Analysis Run 1/29/2025 11:59 AM View: 2024AWQR-DM_AM_CA_Interwell_PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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 83 background values. 68.67% NDs. Annual per-constituent alpha = 0.005563. Individual comparison alpha = 0.0002789 (1 of 2). Assumes 9 future values.

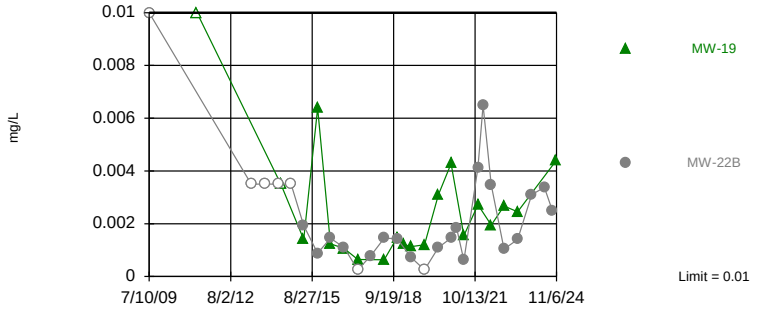
Constituent: Cadmium Analysis Run 1/29/2025 11:59 AM View: 2024AWQR-DM_AM_CA_Interwell_PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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 67 background values. 83.58% NDs. Annual per-constituent alpha = 0.008453. Individual comparison alpha = 0.0004243 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

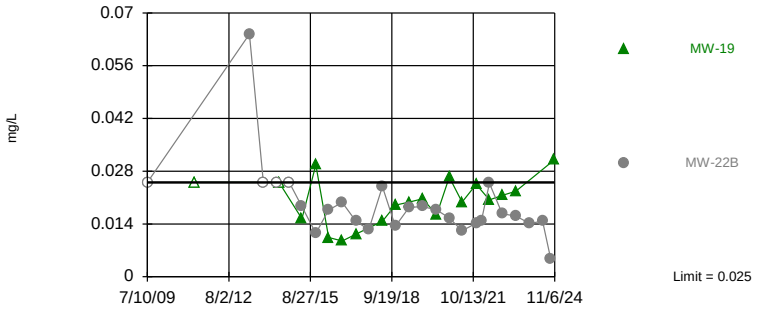
Constituent: Cobalt Analysis Run 1/29/2025 11:59 AM View: 2024AWQR-DM_AM_CA_Interwell_PL
Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Hollow symbols indicate censored values.

Exceeds Limit: MW-19

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 67 background values. 92.54% NDs. Annual per-constituent alpha = 0.008453. Individual comparison alpha = 0.0004243 (1 of 2). Comparing 2 points to limit. Assumes 8 future values.

Constituent: Nickel Analysis Run 1/29/2025 12:00 PM View: 2024AWQR-DM_AM_CA_Interwell_PL

Kossuth County SLF Client: SCS Engineers Data: Kossuth County HMSP Sanitas

Mann-Kendall Trend Test Summary Table and Graphs

Trend Test

Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM Printed 1/29/2025, 2:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,1-Dichloroethane (ug/L)	MW-19	0.2948	16	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	MWPz-16A	0.06806	8	21	No	8	0	0.01	NP
4,4`-DDD (ug/L)	MW-19	0.001355	3	12	No	5	80	0.01	NP
Acetone (ug/L)	MW-18	2.5	18	21	No	8	62.5	0.01	NP
Acetone (ug/L)	MW-19	0	-4	-21	No	8	50	0.01	NP
Acetone (ug/L)	MW-22B	0	5	21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-18	0	4	21	No	8	62.5	0.01	NP
Arsenic (mg/L)	MW-19	0.02108	20	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-20	0	-1	-21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-22B	0	11	21	No	8	75	0.01	NP
Barium (mg/L)	MW-18	-0.002086	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-19	0.07048	18	21	No	8	0	0.01	NP
Barium (mg/L)	MW-20	-0.01106	-15	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-22B	-0.006236	-11	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-23	-0.003823	-16	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-25	-0.00703	-14	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-28	0.001607	2	21	No	8	0	0.01	NP
Barium (mg/L)	MWPz-16A	-0.0009547	-2	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-19	0	0	21	No	8	50	0.01	NP
Benzene (ug/L)	MW-22B	0.6144	16	21	No	8	12.5	0.01	NP
Cadmium (mg/L)	MW-18	0.00001537	3	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-19	-0.0000474	-3	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-20	-0.000008374	-5	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-22B	-0.0001074	-9	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-23	-0.00005786	-8	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-25	-0.00006327	-15	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-28	-0.000009909	-9	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MWPz-16A	-0.00001154	-7	-21	No	8	37.5	0.01	NP
Chromium (mg/L)	MW-22B	0	3	21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-22B	10.69	20	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MWPz-16A	-0.01799	-4	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-19	-0.000009187	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-22B	-0.0005491	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-25	0	-1	-21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-28	0	3	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MWPz-16A	0	7	21	No	8	87.5	0.01	NP
Cyanide (ug/L)	MW-22B	0	-1	-8	No	4	75	0.01	NP
Lead (mg/L)	MW-18	0	13	21	No	8	75	0.01	NP
Lead (mg/L)	MW-19	0	-7	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-22B	0	1	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-25	0	-3	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-28	0	3	21	No	8	75	0.01	NP
Nickel (mg/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
Nickel (mg/L)	MW-19	0.002107	12	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-22B	-0.001274	-8	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-23	0	7	21	No	8	87.5	0.01	NP
Nickel (mg/L)	MWPz-16A	0	1	21	No	8	75	0.01	NP

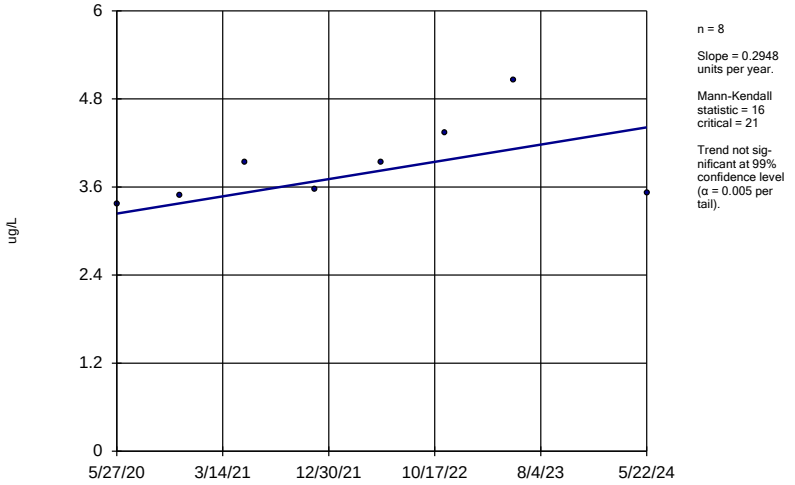
Trend Test

Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM Printed 1/29/2025, 2:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Selenium (mg/L)	MW-18	-0.0008133	-12	-21	No	8	12.5	0.01	NP
Selenium (mg/L)	MW-20	0.001524	7	21	No	8	25	0.01	NP
Selenium (mg/L)	MW-25	0	-7	-21	No	8	87.5	0.01	NP
Selenium (mg/L)	MW-28	0	1	21	No	8	87.5	0.01	NP
Silver (mg/L)	MW-22B	0	-5	-21	No	8	87.5	0.01	NP
Silver (mg/L)	MW-28	0	-5	-21	No	8	87.5	0.01	NP
Sulfide (ug/L)	MW-18	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-19	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-22B	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MW-23	0	1	8	No	4	75	0.01	NP
Sulfide (ug/L)	MWPz-16A	-70.48	-1	-8	No	4	75	0.01	NP
Thallium (mg/L)	MW-18	0	5	21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-22B	0	-1	-21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-28	0	-1	-21	No	8	87.5	0.01	NP
Toluene (ug/L)	MW-18	0	7	21	No	8	87.5	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-22B	-0.09094	-5	-21	No	8	37.5	0.01	NP
Vanadium (mg/L)	MW-18	0	1	21	No	8	87.5	0.01	NP
Vanadium (mg/L)	MW-20	0	-3	-21	No	8	75	0.01	NP
Vinyl Chloride (ug/L)	MW-22B	1.113	12	21	No	8	0	0.01	NP
Zinc (mg/L)	MW-19	0	-5	-21	No	8	75	0.01	NP
Zinc (mg/L)	MW-22B	0	3	21	No	8	87.5	0.01	NP

Sen's Slope Estimator

MW-19

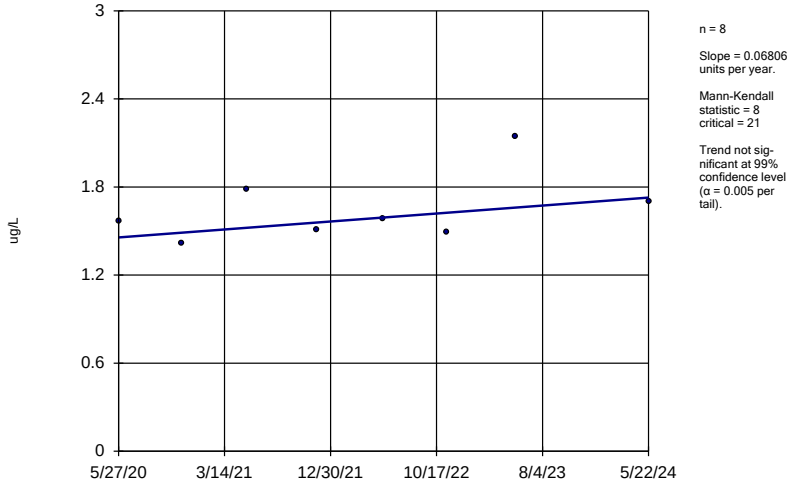


Constituent: 1,1-Dichloroethane Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MWPz-16A

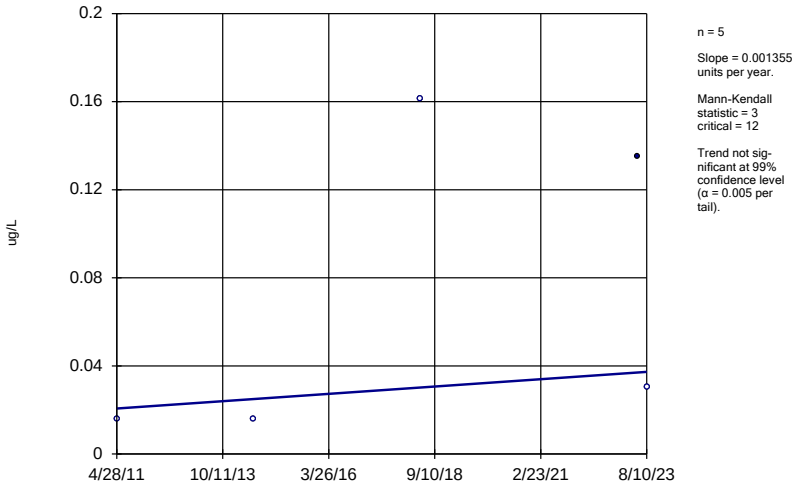


Constituent: 1,1-Dichloroethane Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19

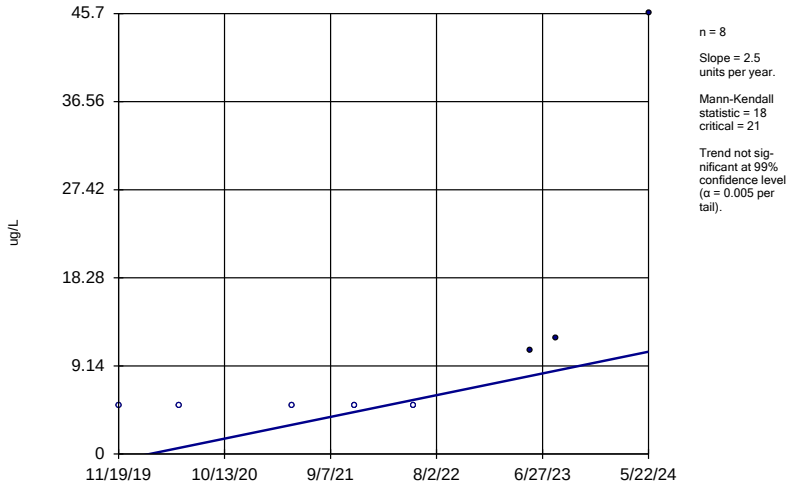


Constituent: 4,4`-DDD Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

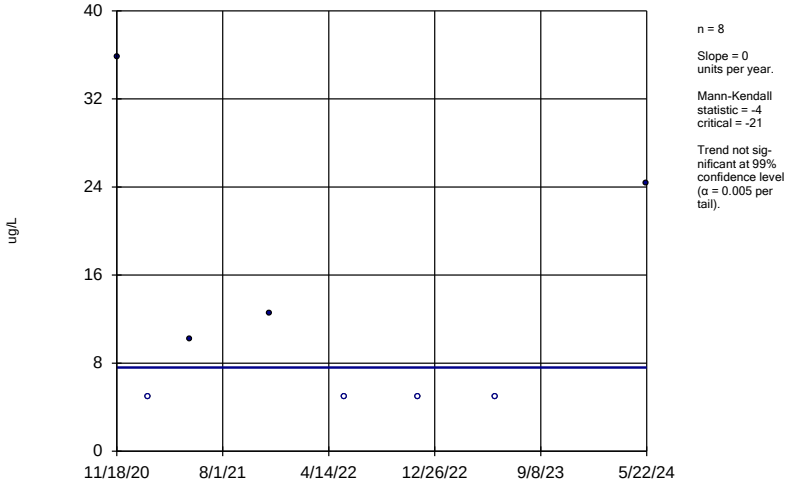


Constituent: Acetone Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



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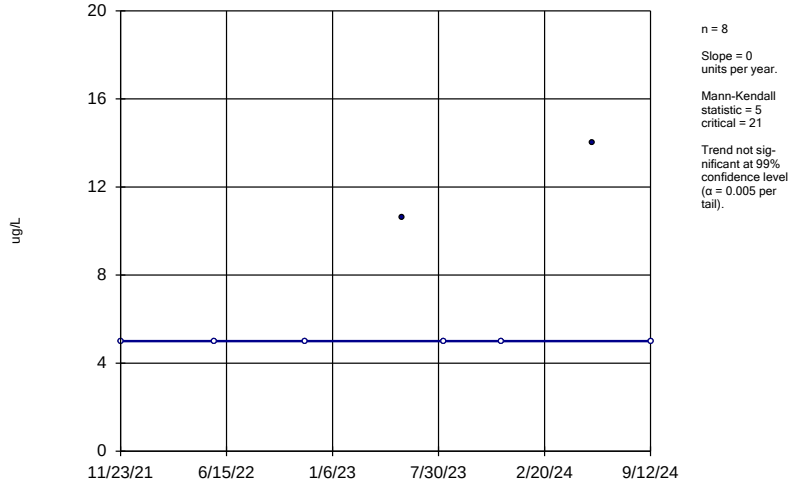
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

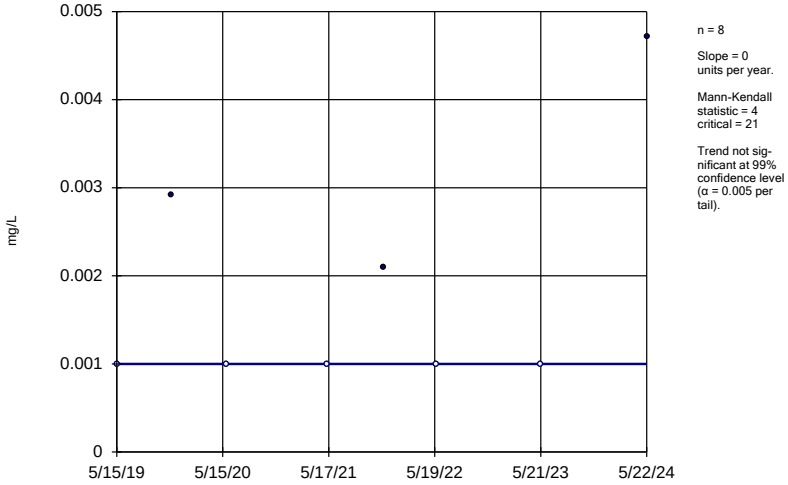


Constituent: Acetone Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

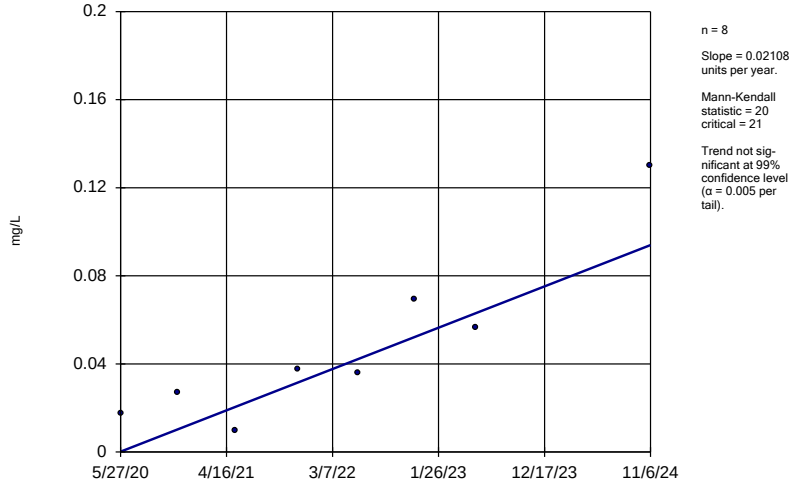


Constituent: Arsenic Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-19

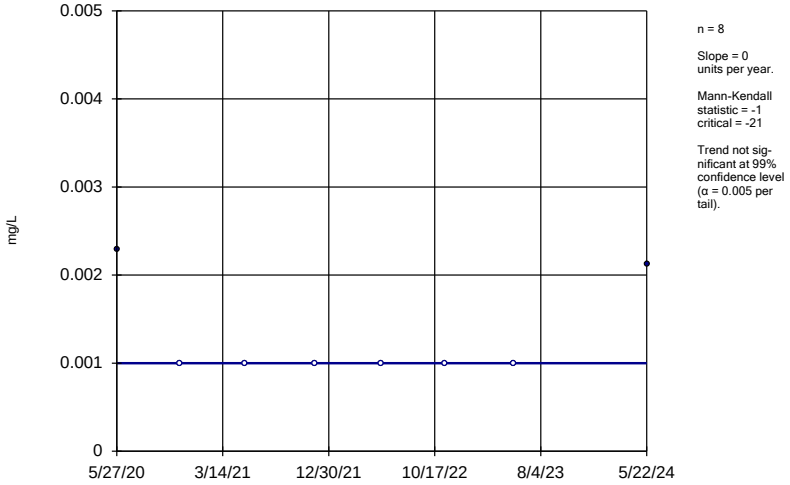


Constituent: Arsenic Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20

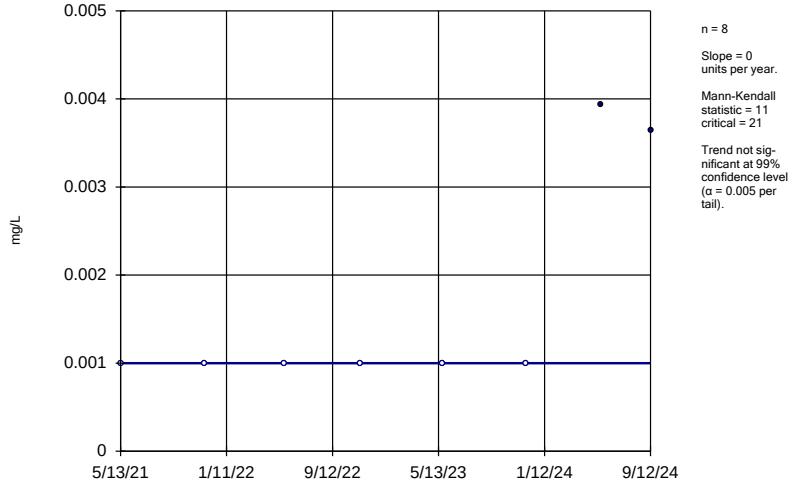


Constituent: Arsenic Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

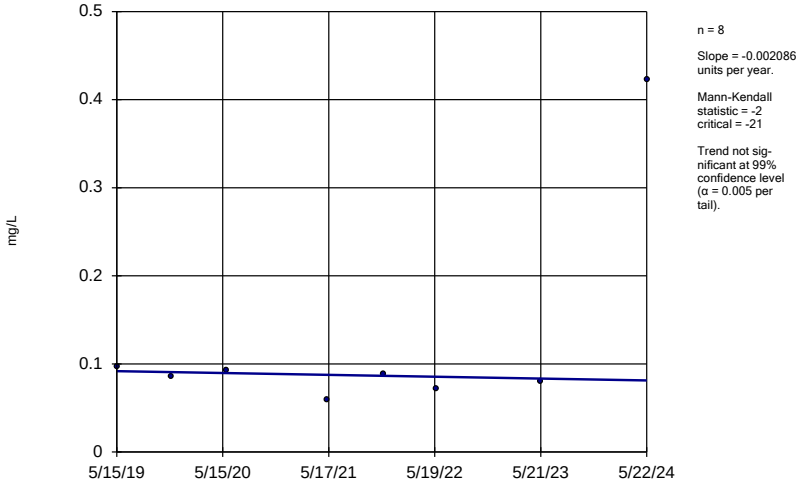


Constituent: Arsenic Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-18

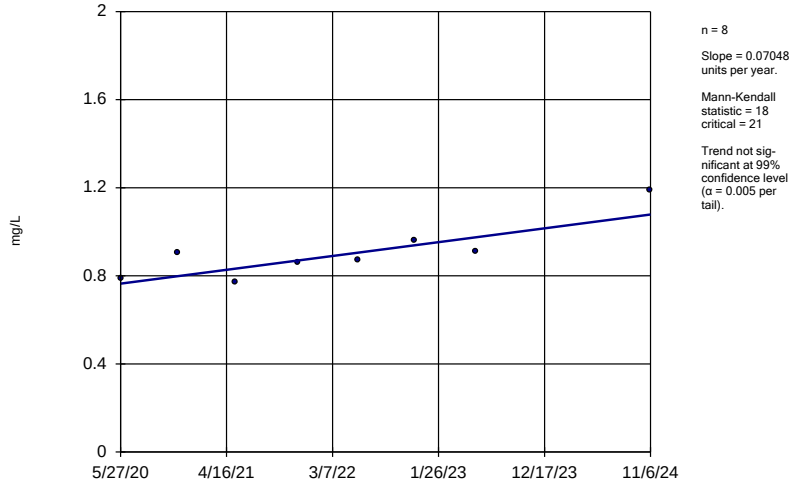


Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

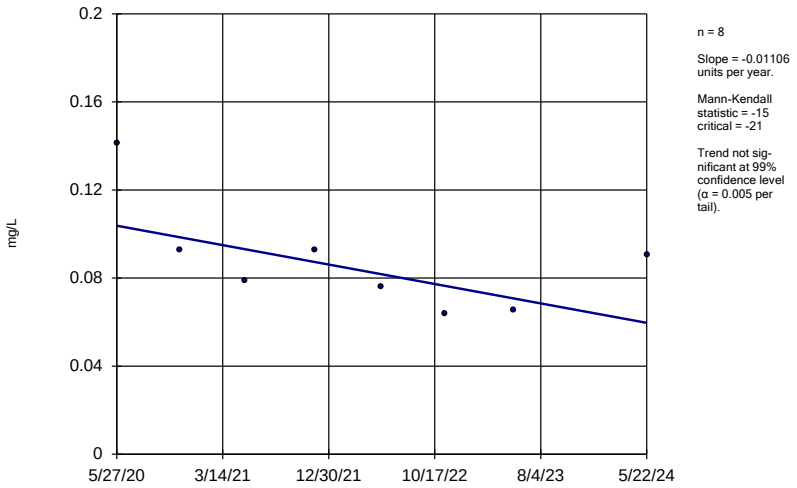
MW-19



Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

MW-20



n = 8

Slope = -0.01106 units per year.

Mann-Kendall statistic = -15
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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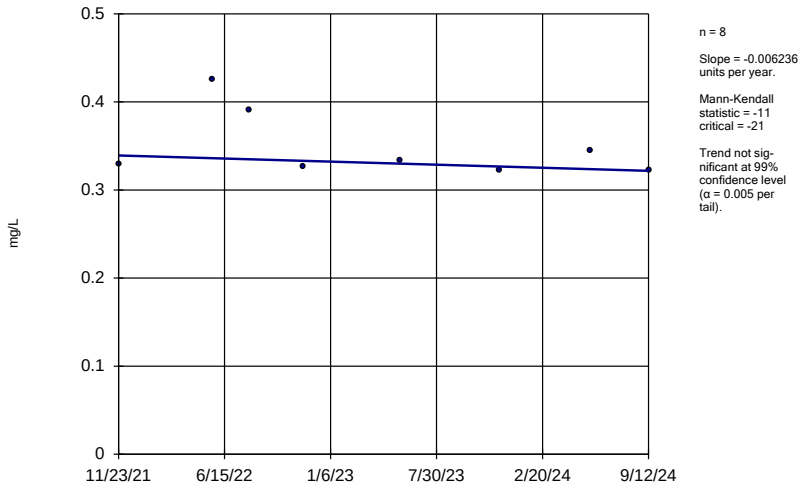
Sen's Slope Estimator

MW-22B



n = 8

Slope = -0.006236 units per year.

Mann-Kendall statistic = -11
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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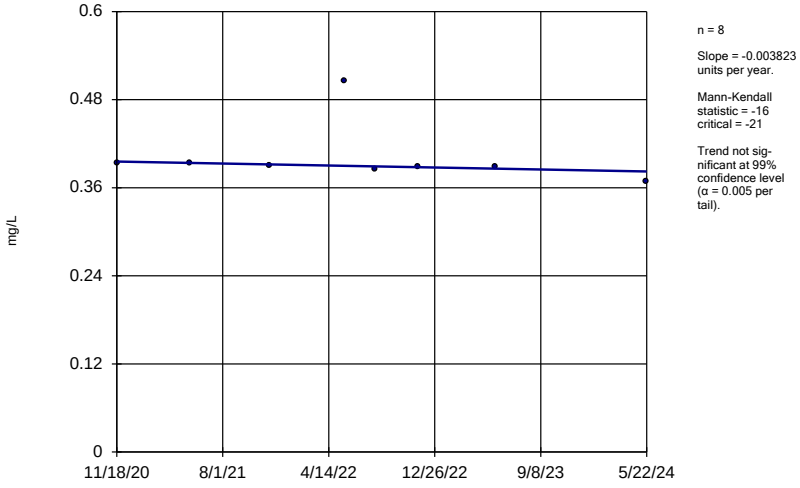
Sen's Slope Estimator

MW-23



n = 8

Slope = -0.003823 units per year.

Mann-Kendall statistic = -16
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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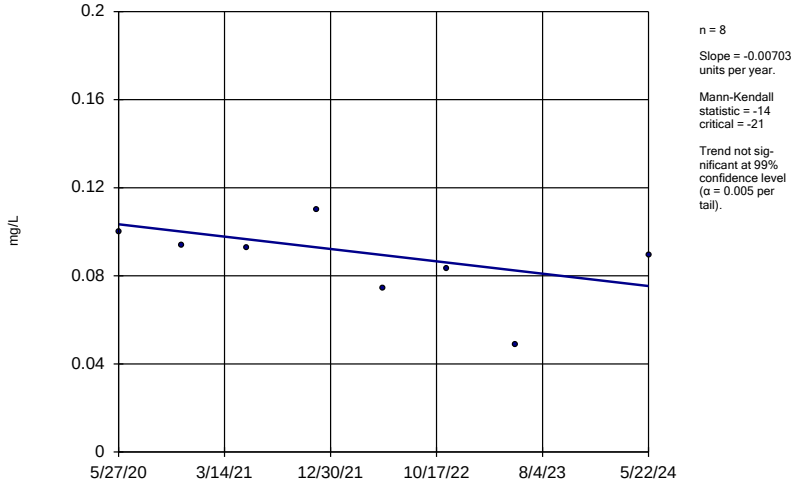
Sen's Slope Estimator

MW-25



n = 8

Slope = -0.00703 units per year.

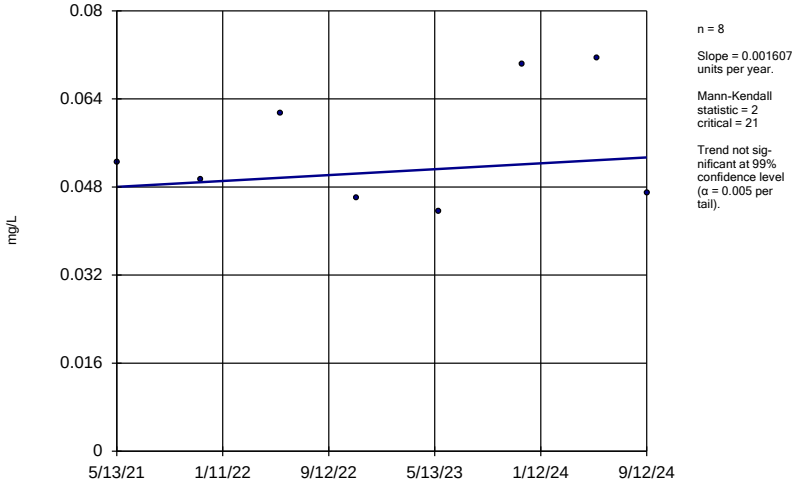
Mann-Kendall statistic = -14
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

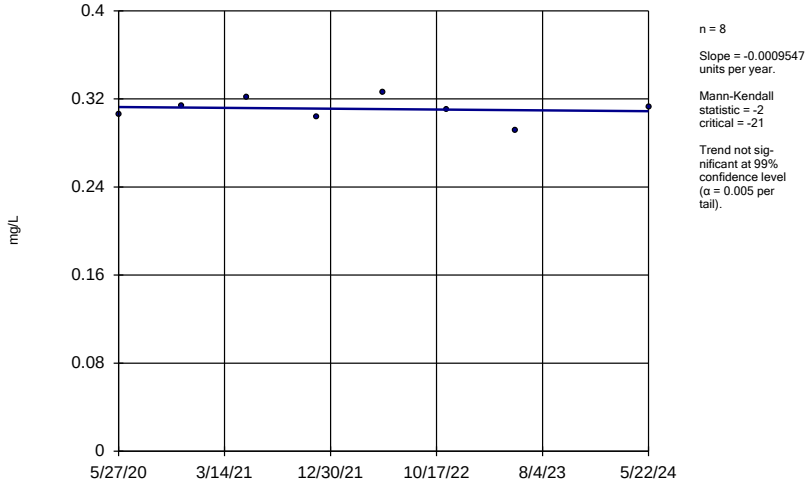
MW-28



Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

MWPz-16A

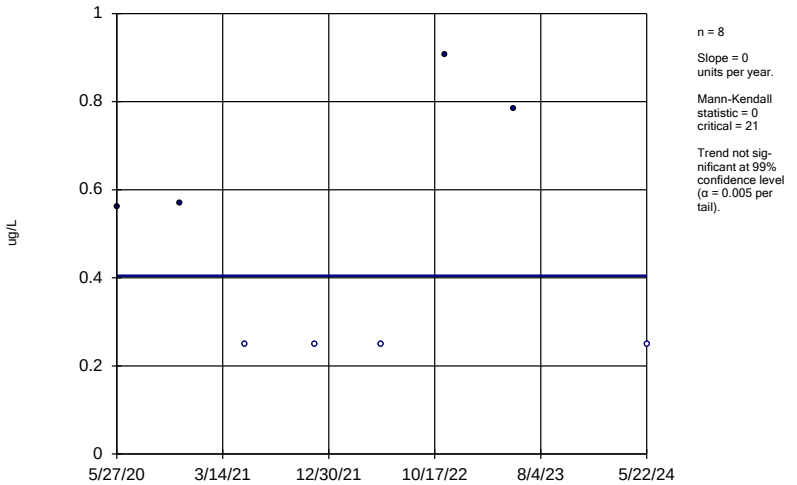


Constituent: Barium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19

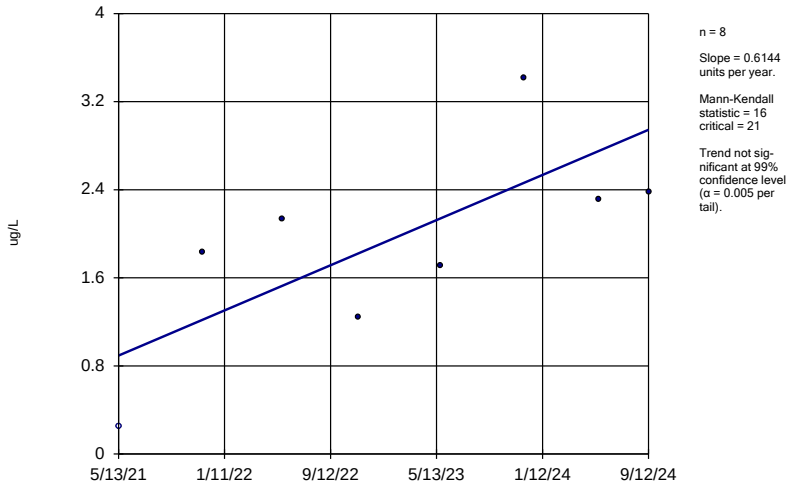


Constituent: Benzene Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



Constituent: Benzene Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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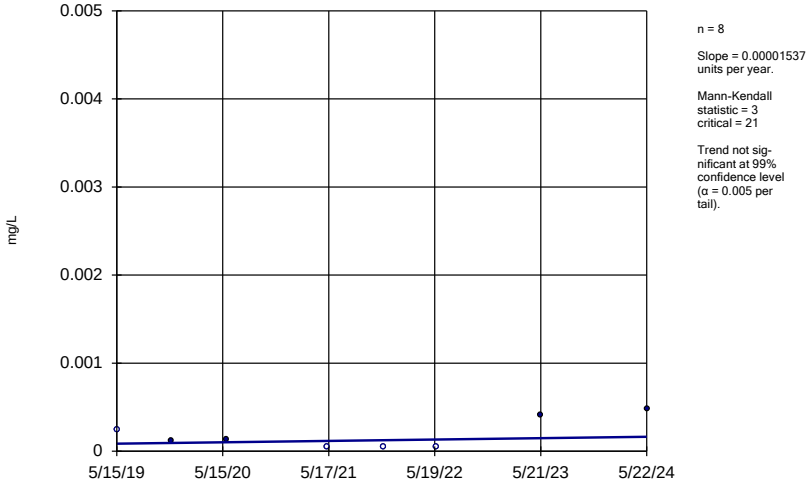
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = 0.00001537 units per year.

Mann-Kendall statistic = 3
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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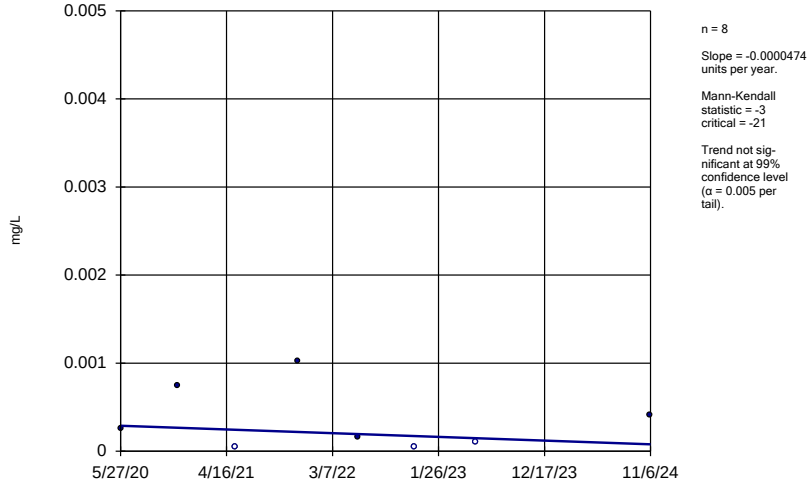
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 8

Slope = -0.0000474 units per year.

Mann-Kendall statistic = -3
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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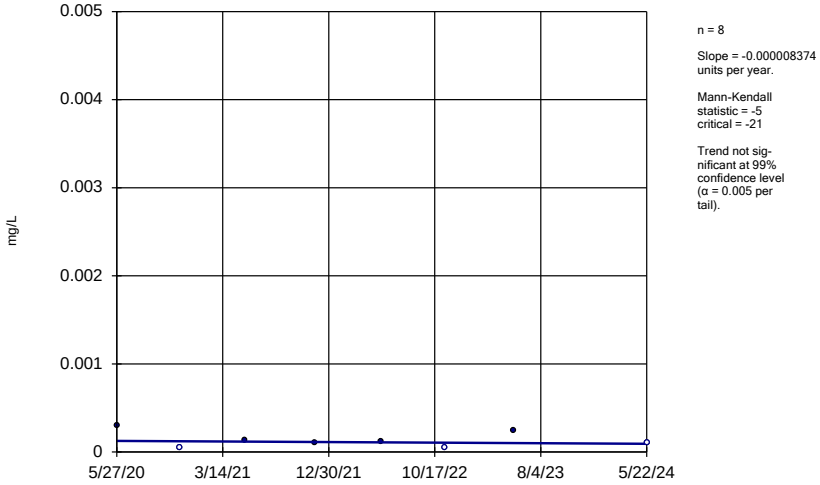
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20



n = 8

Slope = -0.000008374 units per year.

Mann-Kendall statistic = -5
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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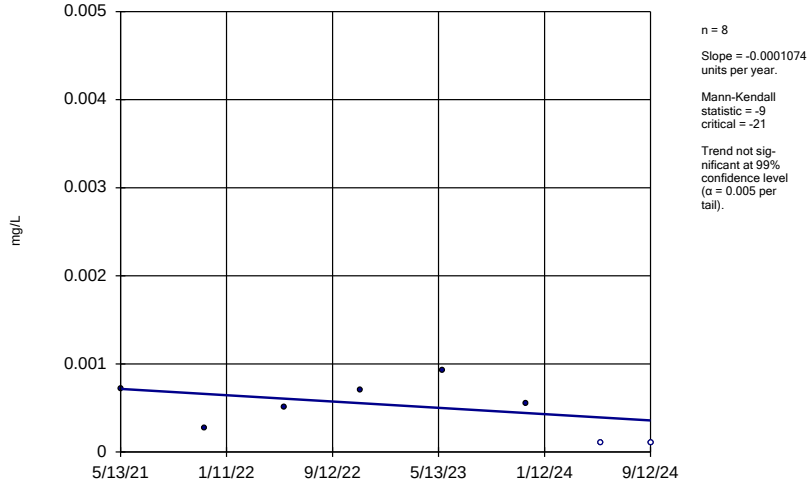
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = -0.0001074 units per year.

Mann-Kendall statistic = -9
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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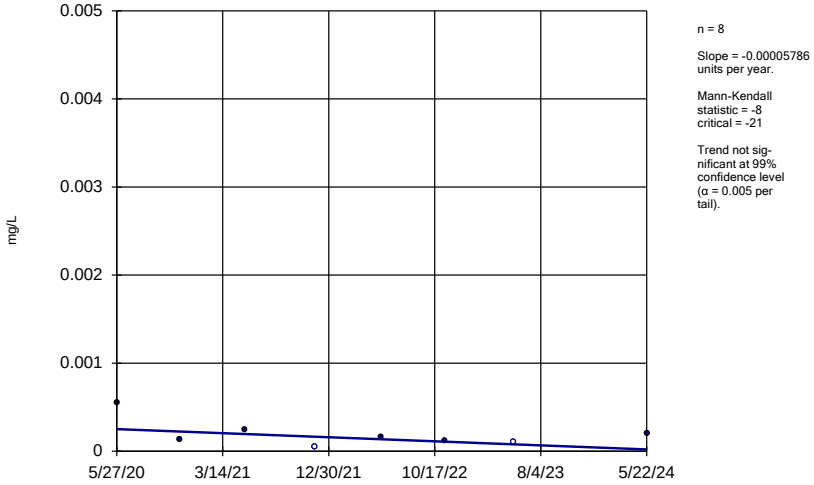
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 8

Slope = -0.00005786 units per year.

Mann-Kendall statistic = -8
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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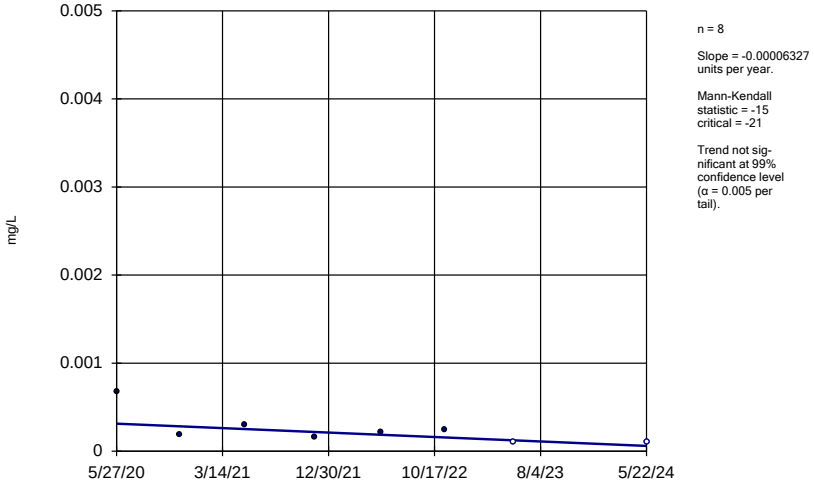
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.00006327 units per year.

Mann-Kendall statistic = -15
critical = -21

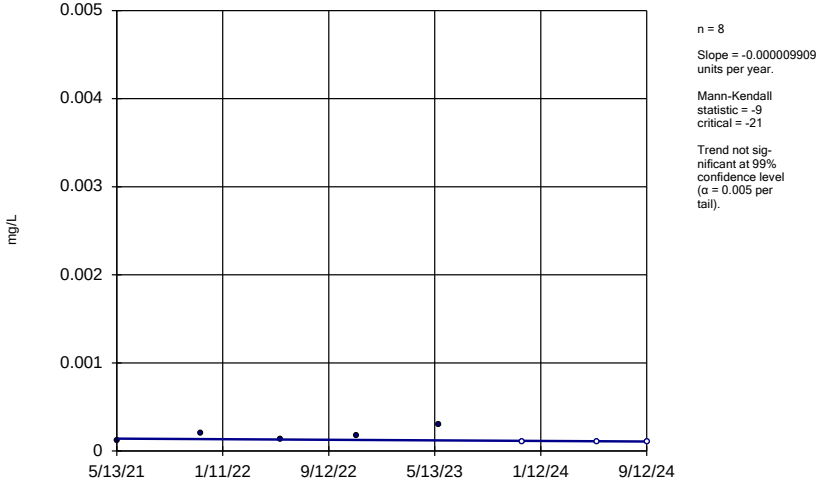
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28



n = 8

Slope = -0.000009909 units per year.

Mann-Kendall statistic = -9
critical = -21

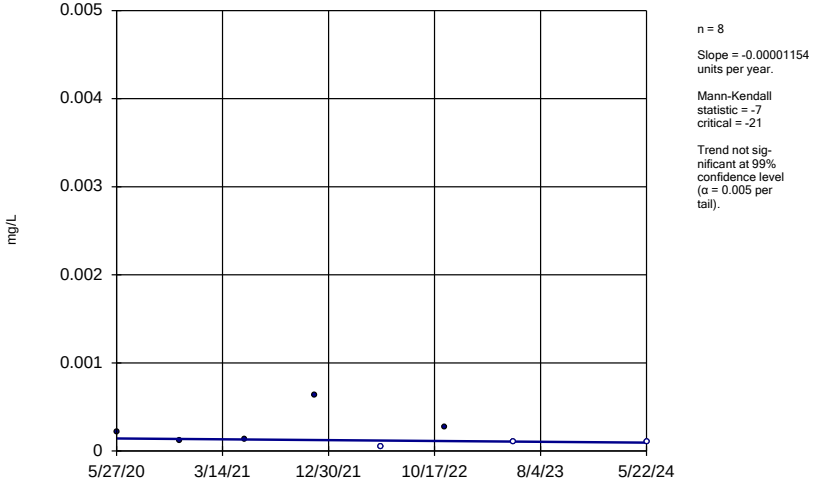
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A



n = 8

Slope = -0.00001154 units per year.

Mann-Kendall statistic = -7
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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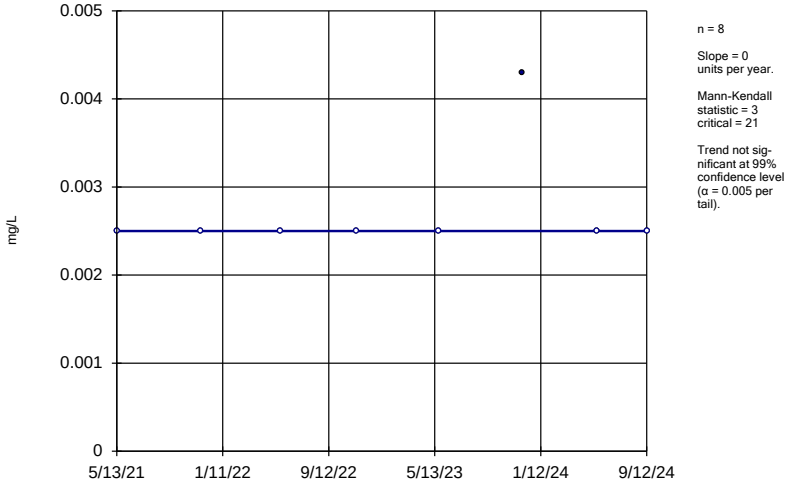
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

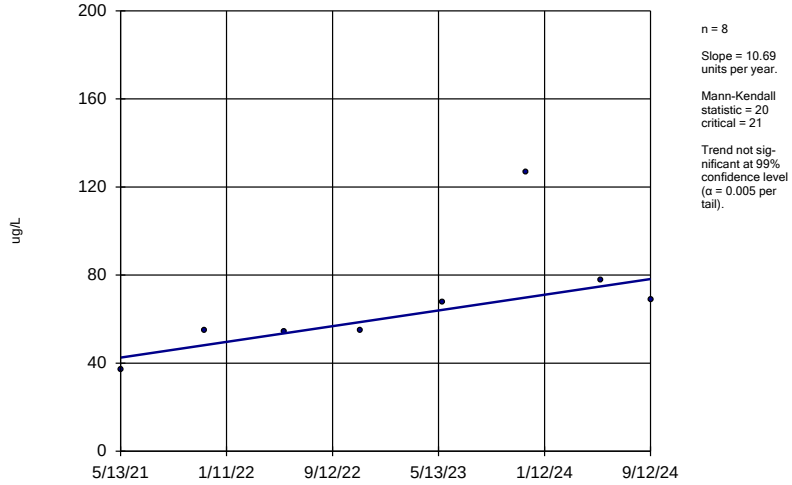


Constituent: Chromium Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B

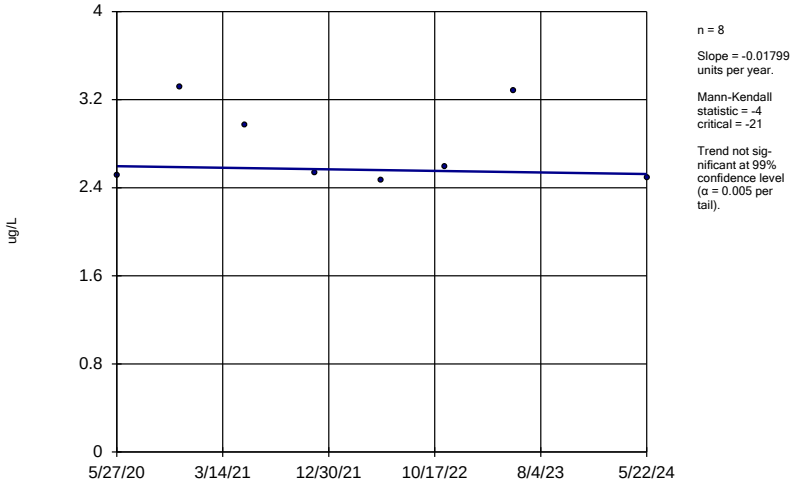


Constituent: cis-1,2-Dichloroethene Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MWPz-16A



Constituent: cis-1,2-Dichloroethene Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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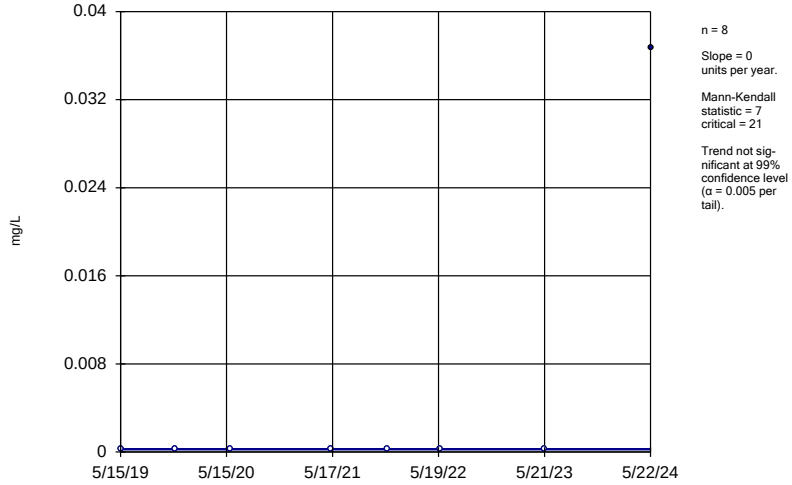
Hollow symbols indicate censored values.

Sen's Slope Estimator

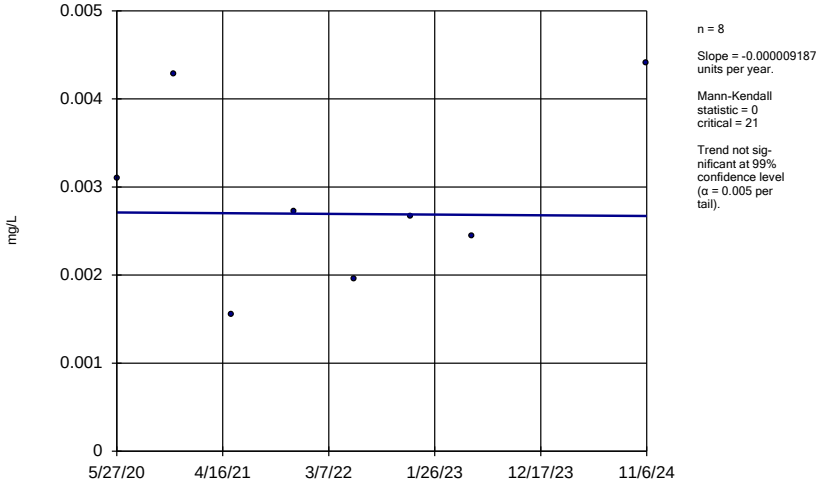
MW-18



Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

MW-19



n = 8

Slope = -0.000009187 units per year.

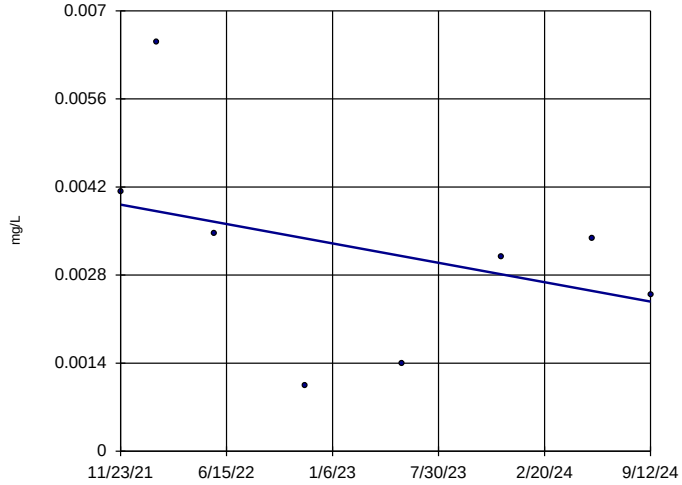
Mann-Kendall statistic = 0
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

MW-22B



n = 8

Slope = -0.0005491 units per year.

Mann-Kendall statistic = -10
critical = -21

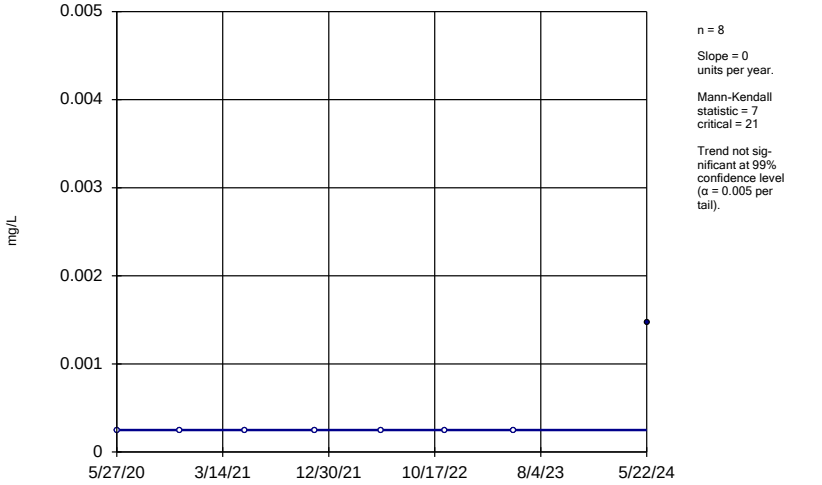
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 21

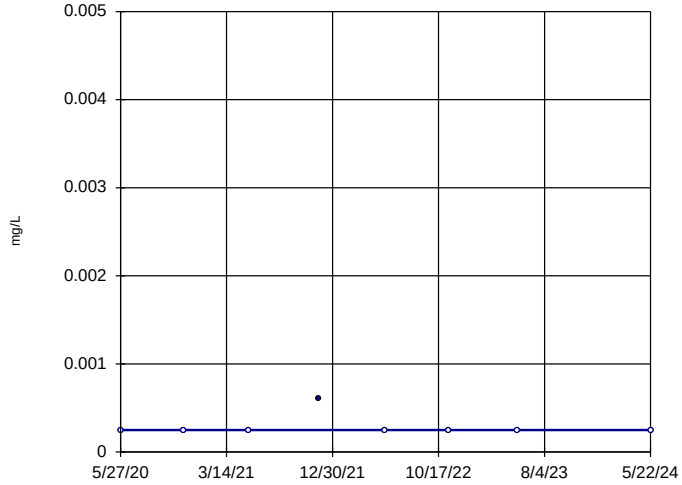
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

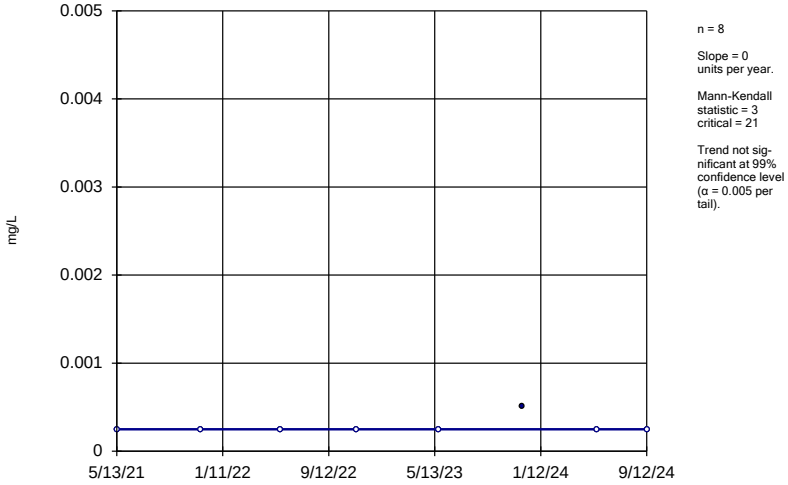
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

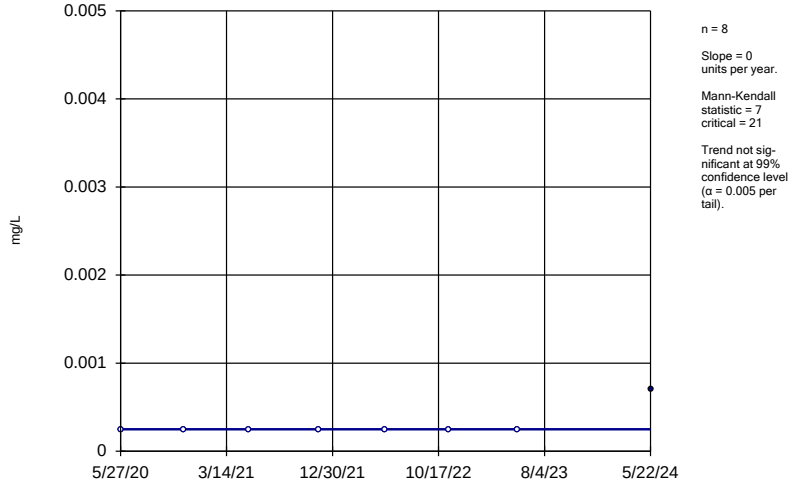


Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A

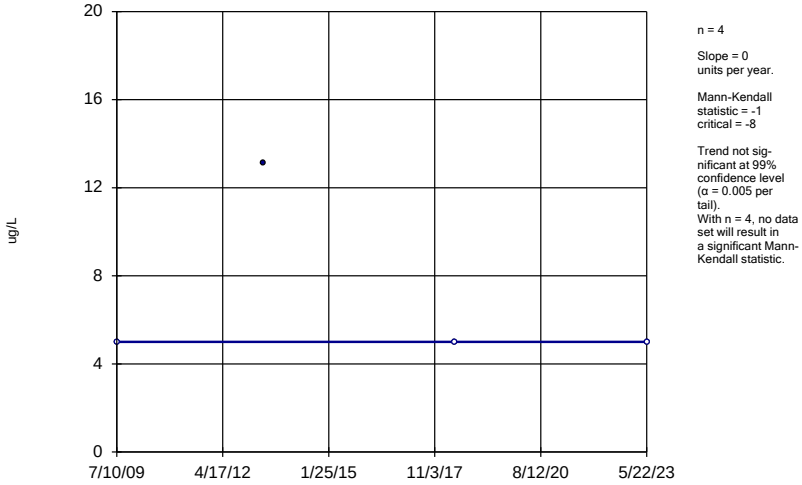


Constituent: Cobalt Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

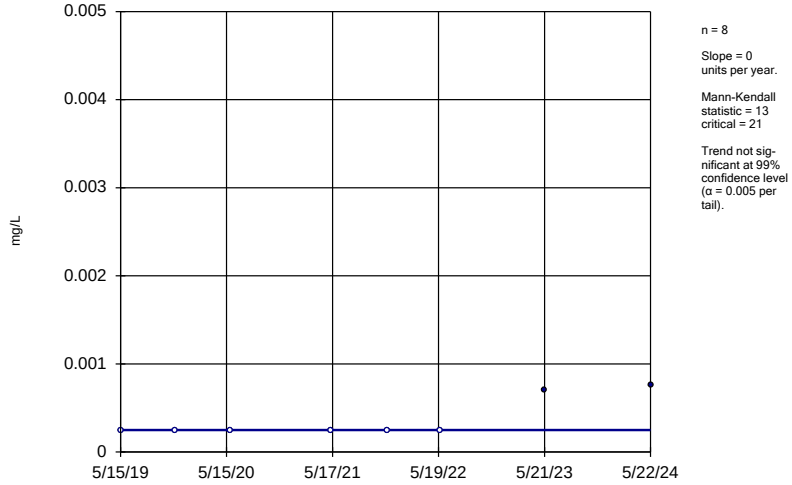


Constituent: Cyanide Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

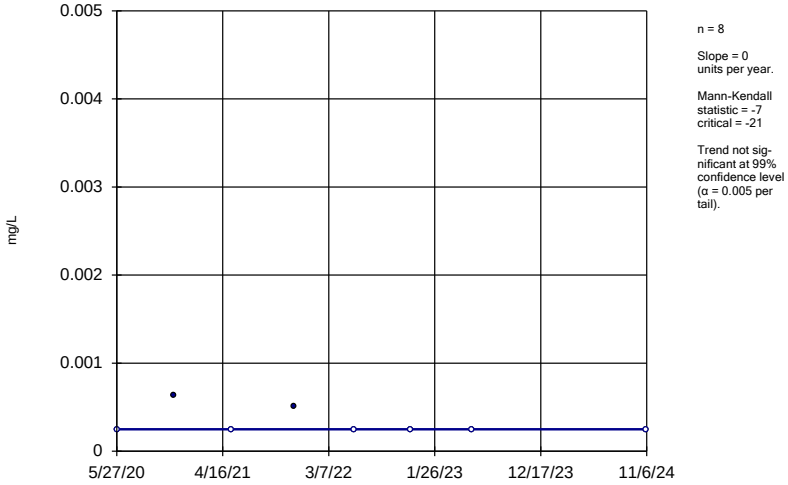


Constituent: Lead Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -7
critical = -21

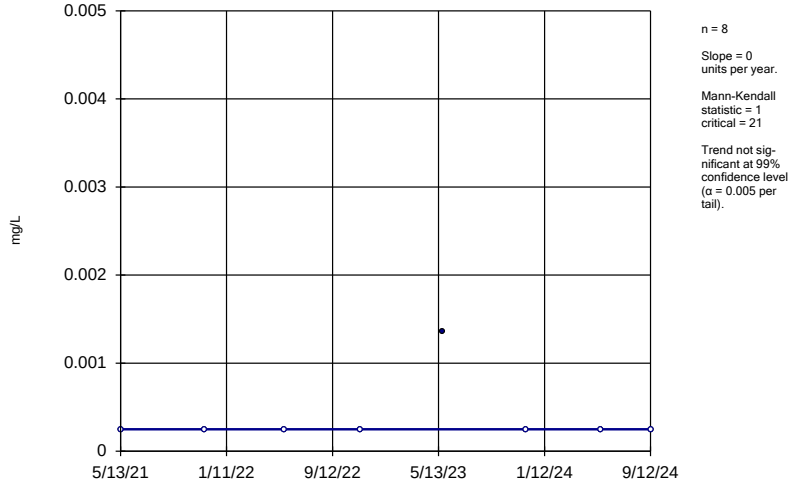
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 21

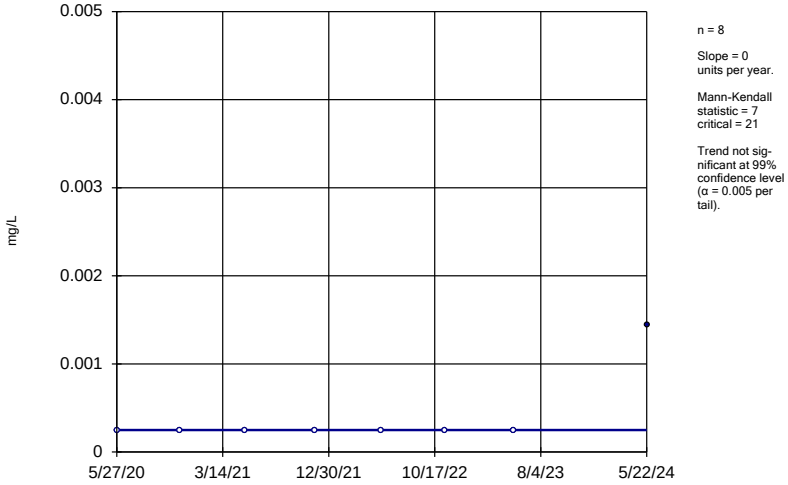
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 21

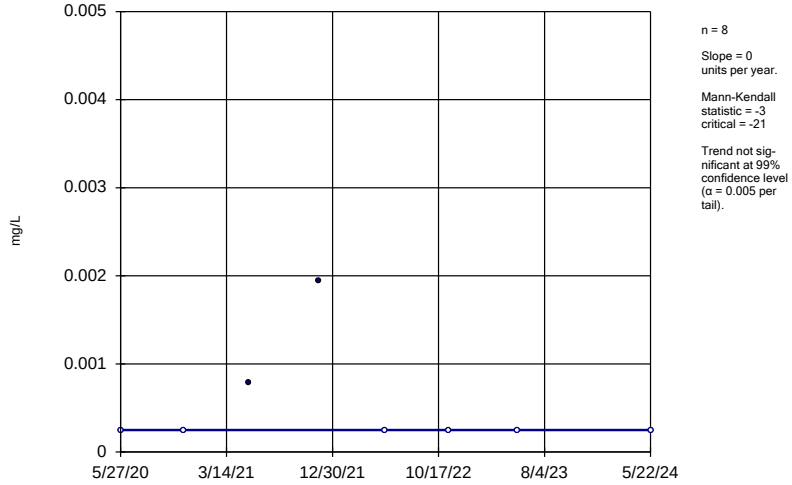
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -3
critical = -21

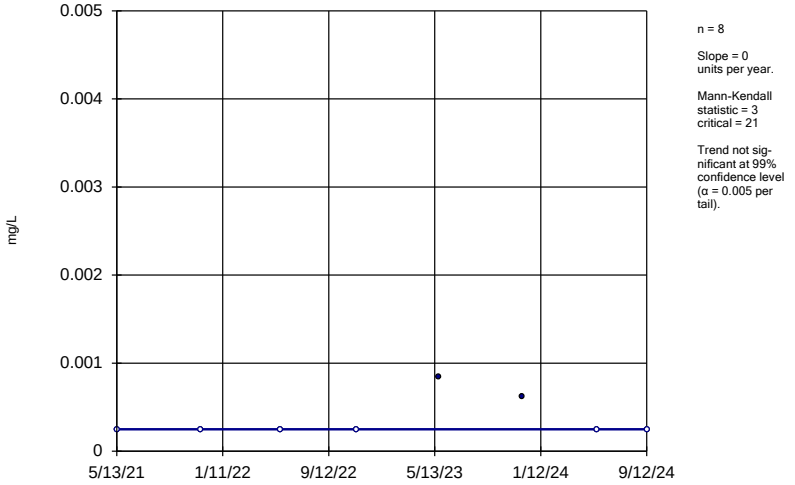
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 1/29/2025 2:03 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

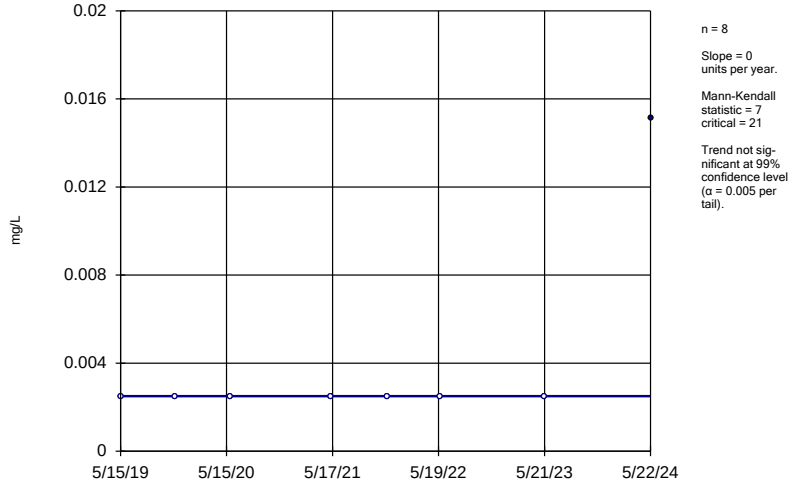


Constituent: Lead Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

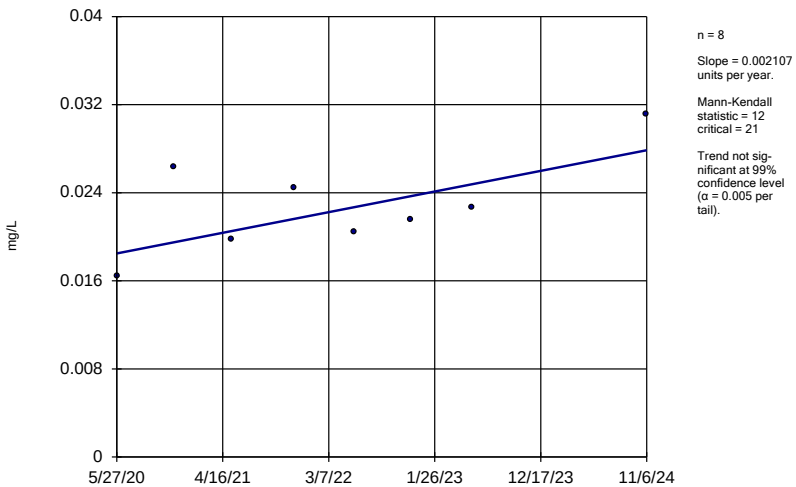


Constituent: Nickel Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-19

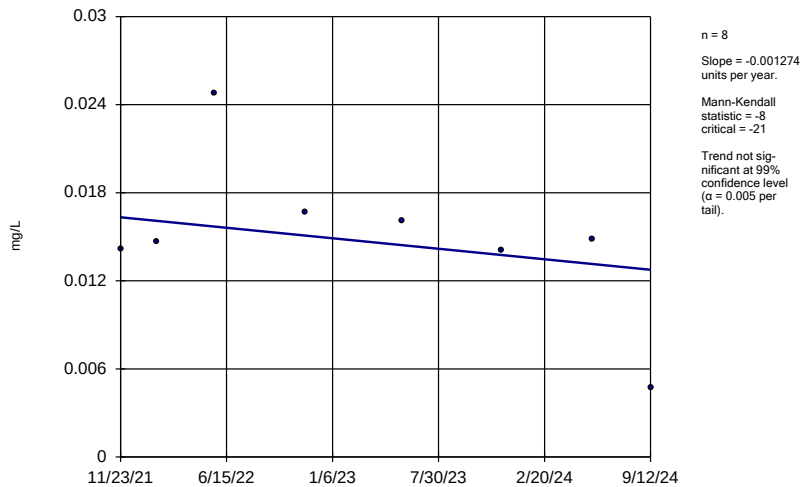


Constituent: Nickel Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-22B

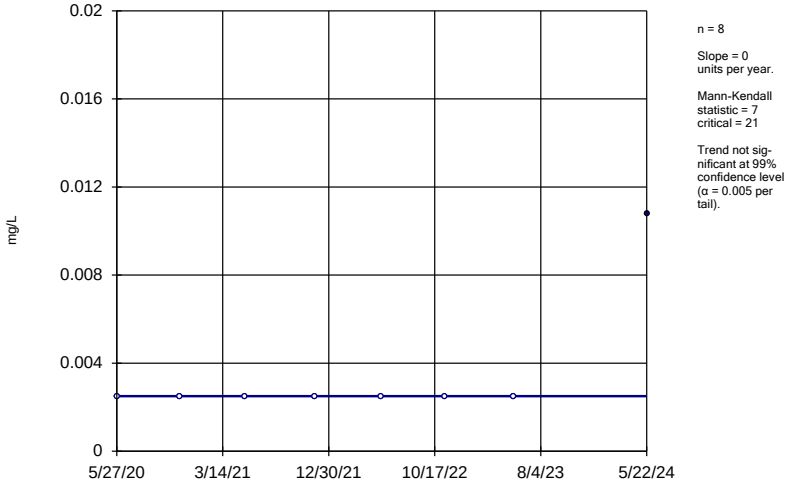


Constituent: Nickel Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23

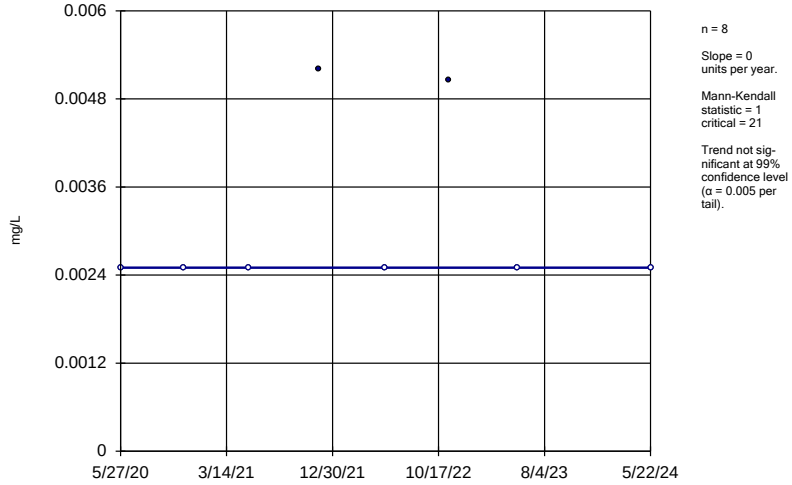


Constituent: Nickel Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A

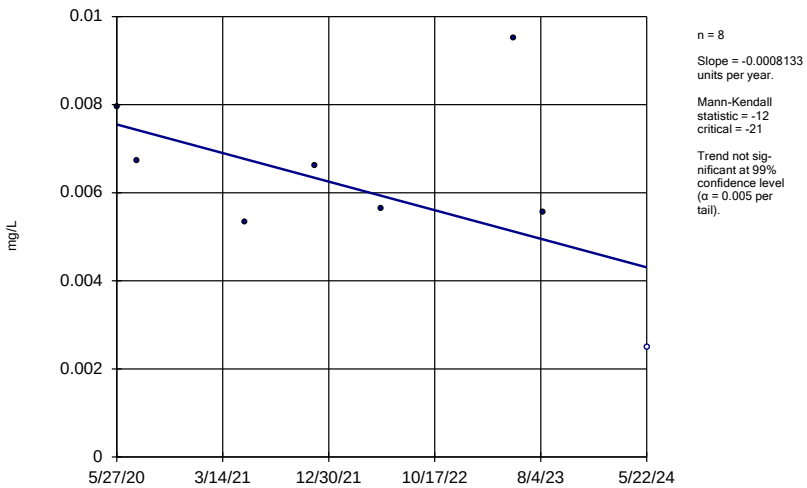


Constituent: Nickel Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

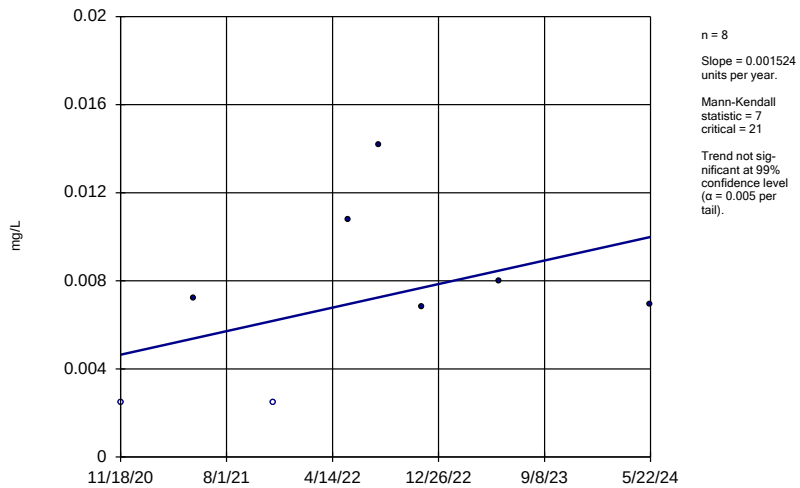


Constituent: Selenium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-20

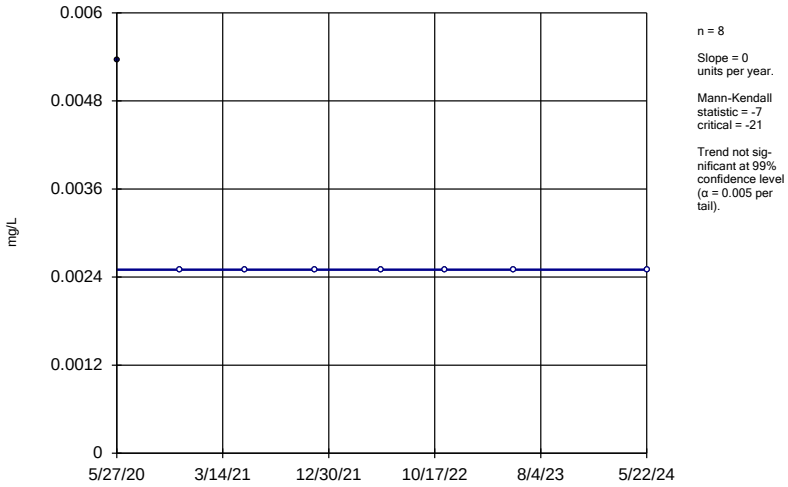


Constituent: Selenium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25

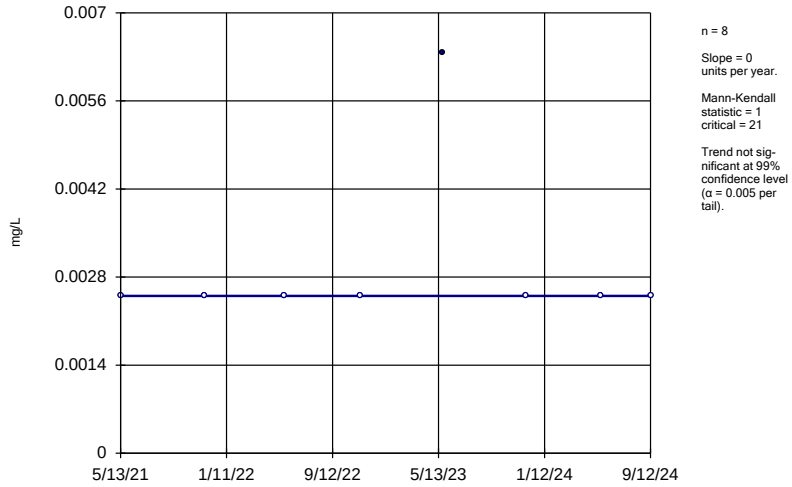


Constituent: Selenium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

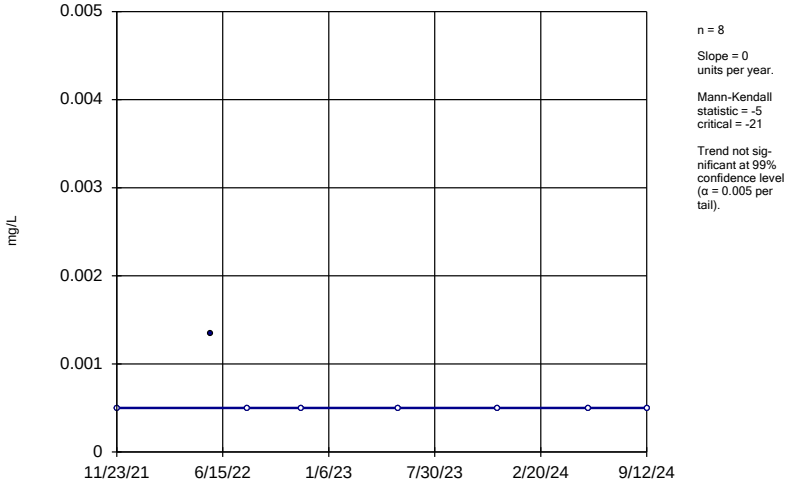


Constituent: Selenium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

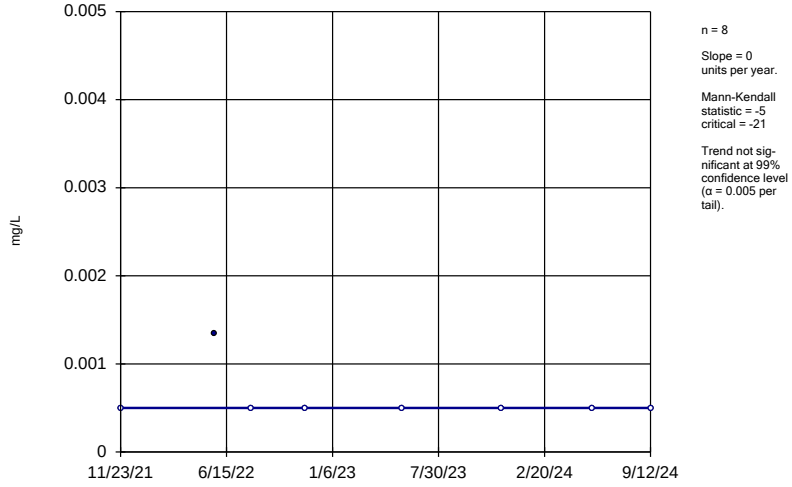


Constituent: Silver Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28

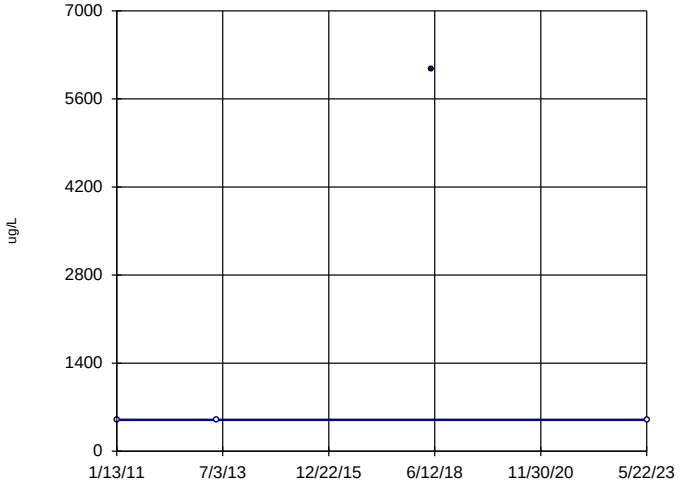


Constituent: Silver Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

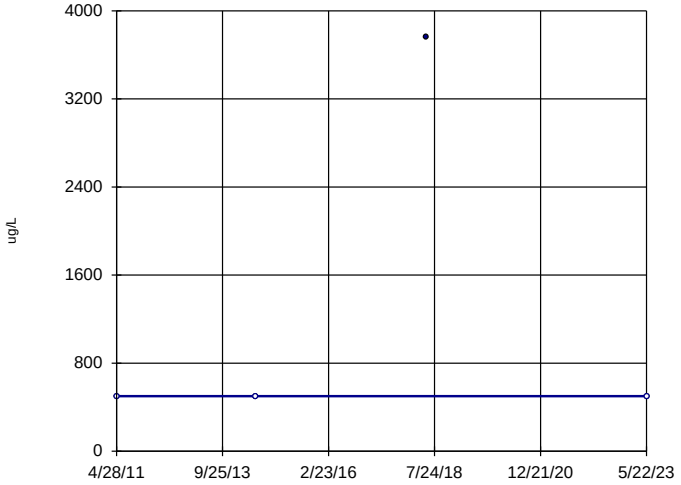
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

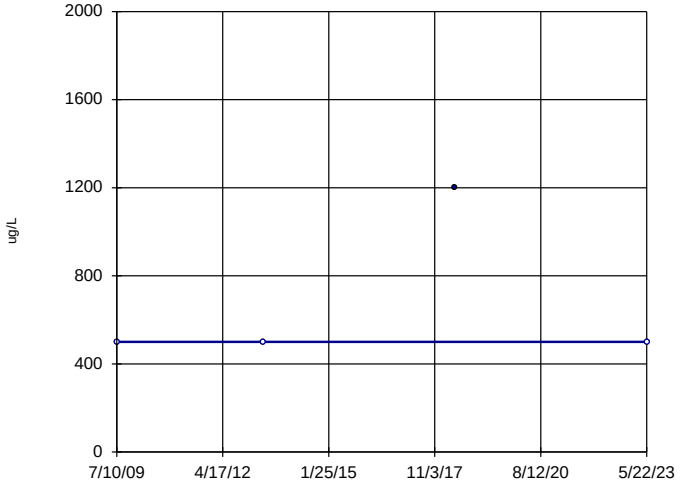
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

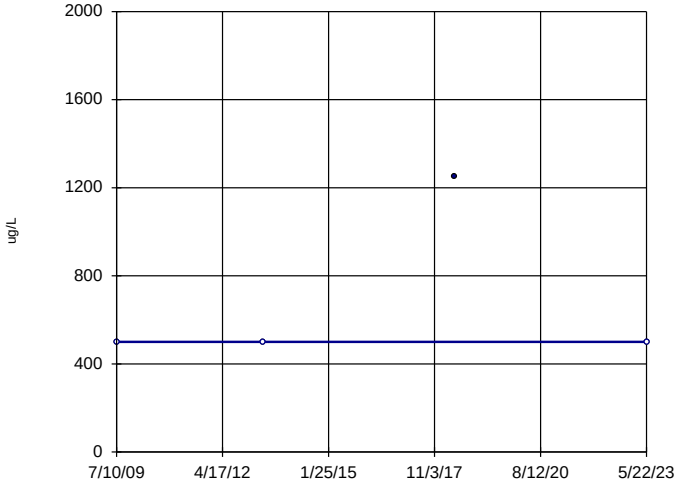
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-23



n = 4

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 8

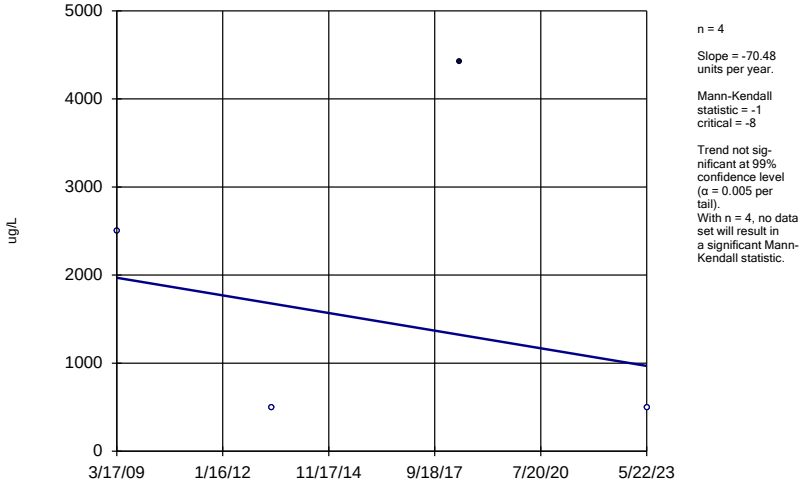
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).
With n = 4, no data
set will result in
a significant Mann-
Kendall statistic.

Constituent: Sulfide Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MWPz-16A



n = 4

Slope = -70.48 units per year.

Mann-Kendall statistic = -1
critical = -8

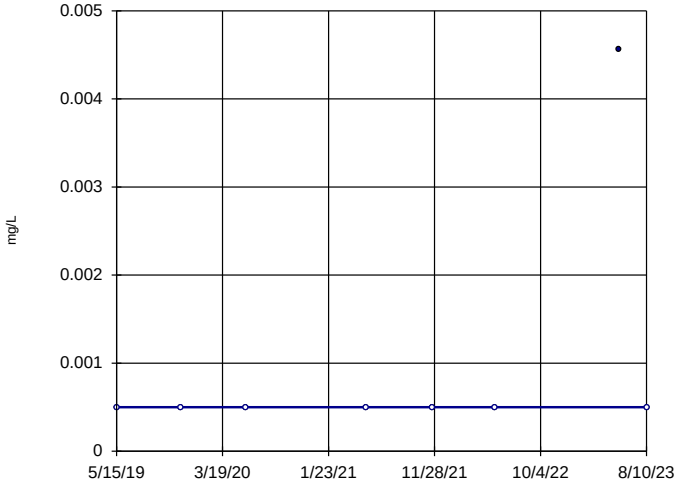
Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: Sulfide Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 21

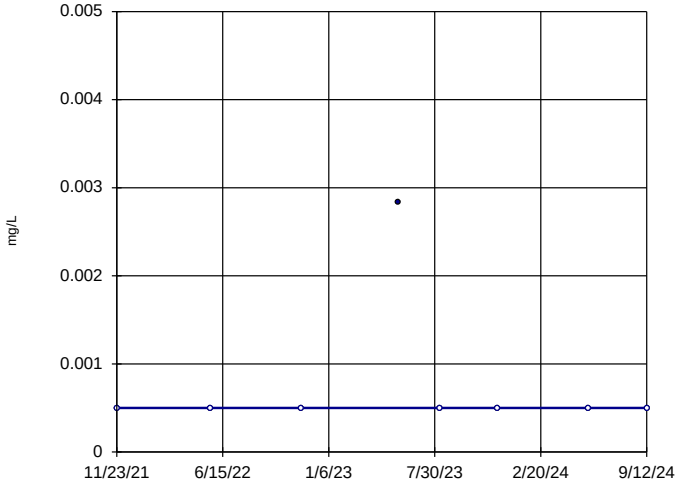
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

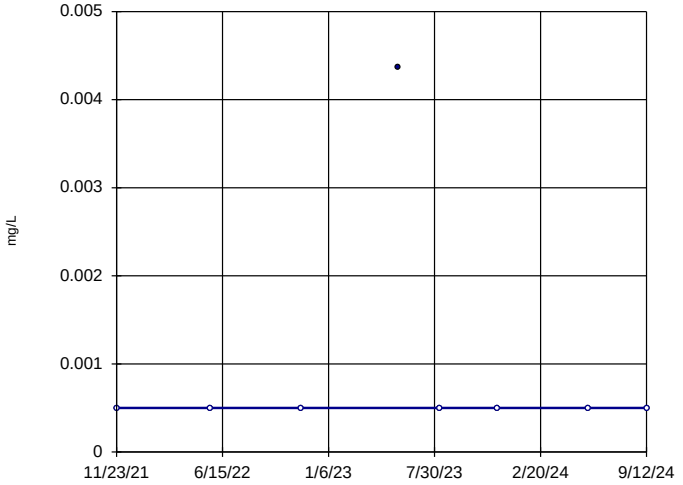
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-28



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

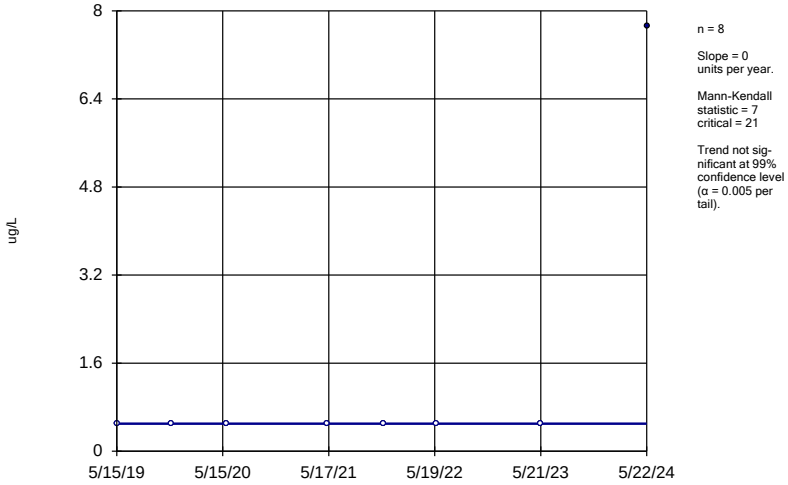
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

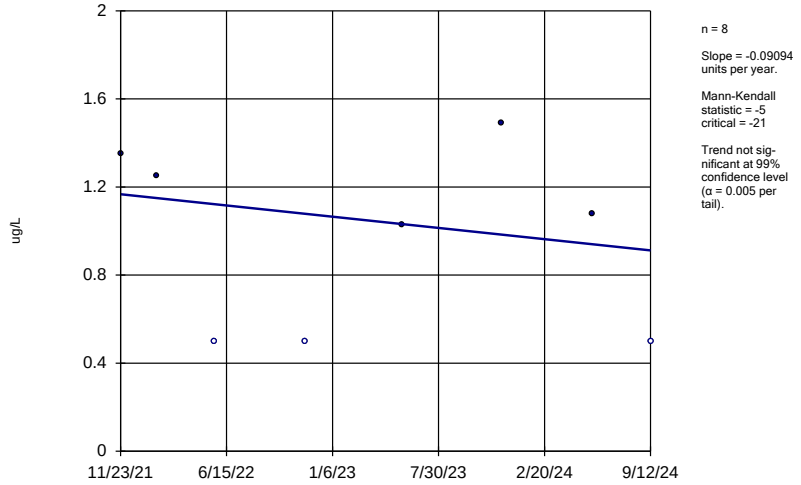


Constituent: Toluene Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B

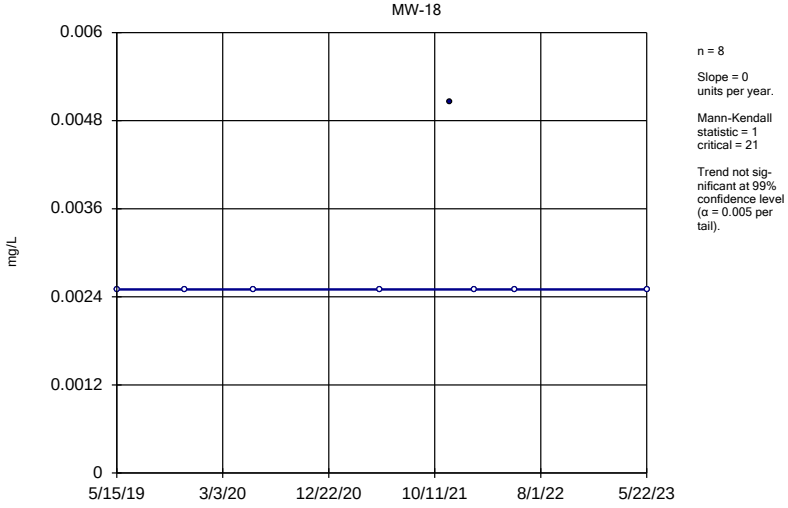


Constituent: trans-1,2-Dichloroethene Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-18

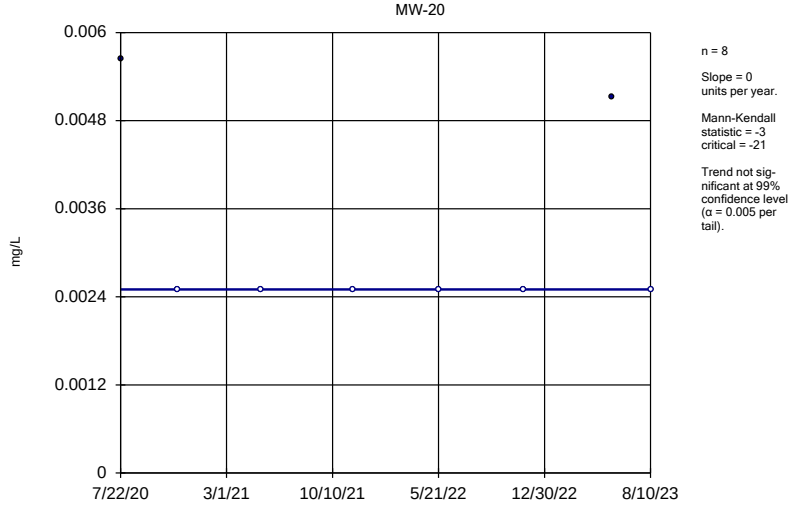


Constituent: Vanadium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

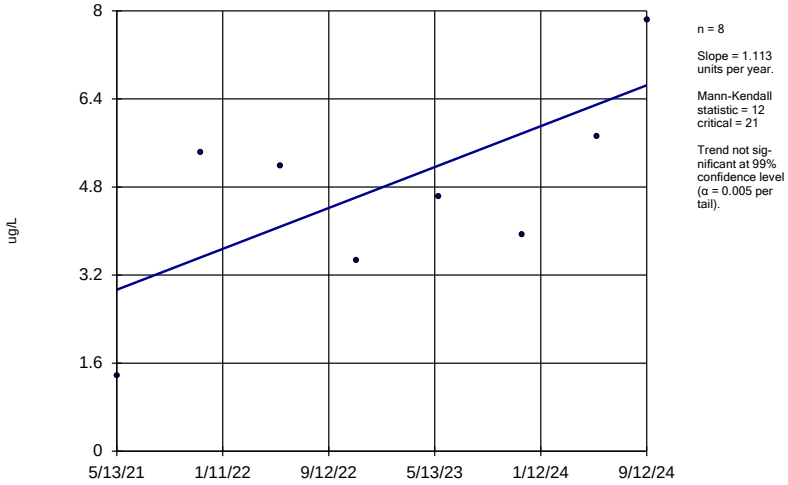
MW-20



Constituent: Vanadium Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Sen's Slope Estimator

MW-22B

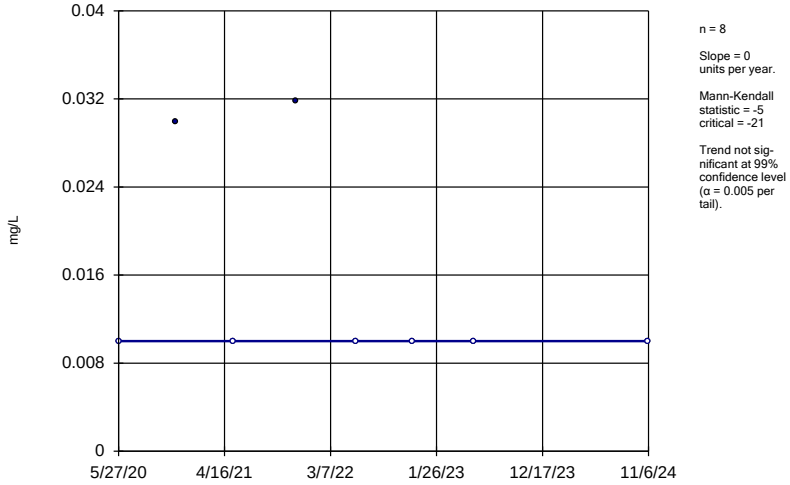


Constituent: Vinyl Chloride Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-19

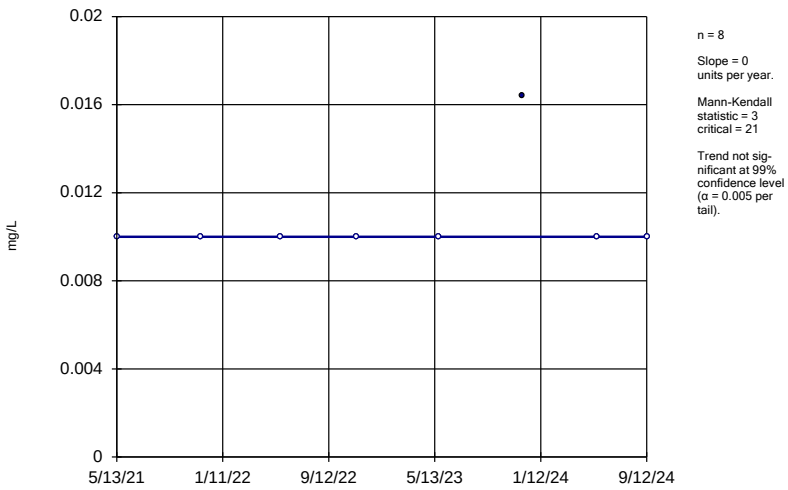


Constituent: Zinc Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-22B



Constituent: Zinc Analysis Run 1/29/2025 2:04 PM View: 2024AWQR-Mann_Kendall
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Confidence Interval Summary Table and Graphs

Confidence Interval

Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM Printed 1/29/2025, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1-Dichloroethane (ug/L)	MW-19	4.503	3.297	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	MWPz-16A	1.892	1.405	140	No	8	0	No	0.01	Param.
4,4`-DDD (ug/L)	MW-19	0.1615	0.016	0.73	No	5	80	No	0.031	NP (NDs)
Acetone (ug/L)	MW-18	45.7	5	6300	No	8	62.5	No	0.004	NP (NDs)
Acetone (ug/L)	MW-19	24.89	5.815	6300	No	8	50	No	0.01	Param.
Acetone (ug/L)	MW-22B	14	5	6300	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-18	0.00471	0.001	0.01	No	8	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-19	0.08874	0.007332	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-20	0.00229	0.001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-22B	0.00394	0.001	0.01	No	8	75	No	0.004	NP (NDs)
Barium (mg/L)	MW-18	0.423	0.0596	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-19	1.046	0.7681	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-20	0.1135	0.06176	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-22B	0.3893	0.3089	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-23	0.506	0.369	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-25	0.1063	0.06682	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-28	0.06691	0.04341	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MWPz-16A	0.3222	0.2991	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-19	0.7577	0.4478	5	No	8	50	No	0.01	Param.
Benzene (ug/L)	MW-22B	2.883	0.9319	5	No	8	12.5	No	0.01	Param.
Cadmium (mg/L)	MW-18	0.0003682	0.00004153	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	MW-19	0.0007098	0.00002017	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-20	0.00023	0.00007357	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-22B	0.0007767	0.0002427	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MW-23	0.0003534	0.00006239	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MW-25	0.0004415	0.00009779	0.005	No	8	25	No	0.01	Param.
Cadmium (mg/L)	MW-28	0.0002305	0.0001057	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MWPz-16A	0.000636	0.00005	0.005	No	8	37.5	No	0.004	NP (normality)
Chromium (mg/L)	MW-22B	0.00429	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-22B	96.32	39.44	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MWPz-16A	3.156	2.386	70	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-18	0.0367	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-19	0.003969	0.001814	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-22B	0.004992	0.001383	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-23	0.00147	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-25	0.000607	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-28	0.000506	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	MWPz-16A	0.00071	0.00025	0.0021	No	8	87.5	No	0.004	NP (NDs)
Cyanide (ug/L)	MW-22B	13.1	5	200	No	4	75	No	0.0625	NP (NDs)
Lead (mg/L)	MW-18	0.000756	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-19	0.000638	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-22B	0.00136	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-23	0.00144	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-25	0.00194	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-28	0.000847	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Nickel (mg/L)	MW-18	0.0151	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MW-19	0.02763	0.01809	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-22B	0.02078	0.00925	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-23	0.0108	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MWPz-16A	0.0052	0.0025	0.1	No	8	75	No	0.004	NP (NDs)

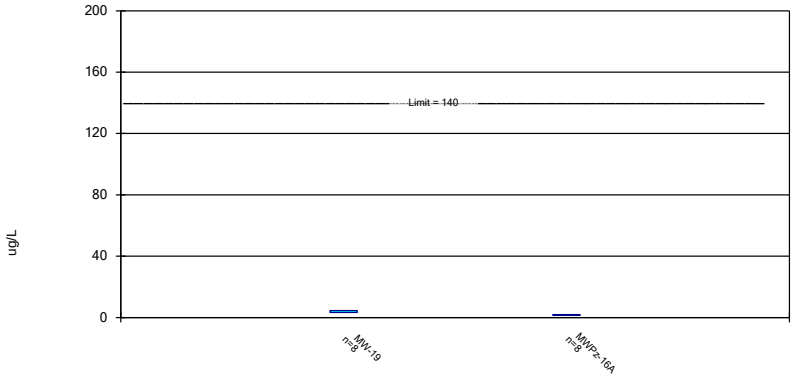
Confidence Interval

Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM Printed 1/29/2025, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	MW-18	0.008408	0.00405	0.05	No	8	12.5	No	0.01	Param.
Selenium (mg/L)	MW-20	0.01108	0.004924	0.05	No	8	25	No	0.01	Param.
Selenium (mg/L)	MW-25	0.00536	0.0025	0.05	No	8	87.5	No	0.004	NP (NDs)
Selenium (mg/L)	MW-28	0.00636	0.0025	0.05	No	8	87.5	No	0.004	NP (NDs)
Silver (mg/L)	MW-22B	0.00134	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Silver (mg/L)	MW-28	0.00134	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Sulfide (ug/L)	MW-18	6080	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-19	3760	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-22B	1200	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MW-23	1250	500	1000	No	4	75	No	0.0625	NP (NDs)
Sulfide (ug/L)	MWPz-16A	4420	500	1000	No	4	75	No	0.0625	NP (NDs)
Thallium (mg/L)	MW-18	0.00456	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-22B	0.00284	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-28	0.00437	0.0005	0.002	No	8	87.5	No	0.004	NP (NDs)
Toluene (ug/L)	MW-18	7.72	0.5	1000	No	8	87.5	No	0.004	NP (NDs)
trans-1,2-Dichloroethene (ug/L)	MW-22B	1.338	0.9617	100	No	8	37.5	No	0.01	Param.
Vanadium (mg/L)	MW-18	0.00505	0.0025	0.035	No	8	87.5	No	0.004	NP (NDs)
Vanadium (mg/L)	MW-20	0.00564	0.0025	0.035	No	8	75	No	0.004	NP (NDs)
Vinyl Chloride (ug/L)	**MW-22B**	**6.682**	**2.7**	**2**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Zinc (mg/L)	MW-19	0.0318	0.01	2	No	8	75	No	0.004	NP (NDs)
Zinc (mg/L)	MW-22B	0.0164	0.01	2	No	8	87.5	No	0.004	NP (NDs)

Parametric Confidence Interval

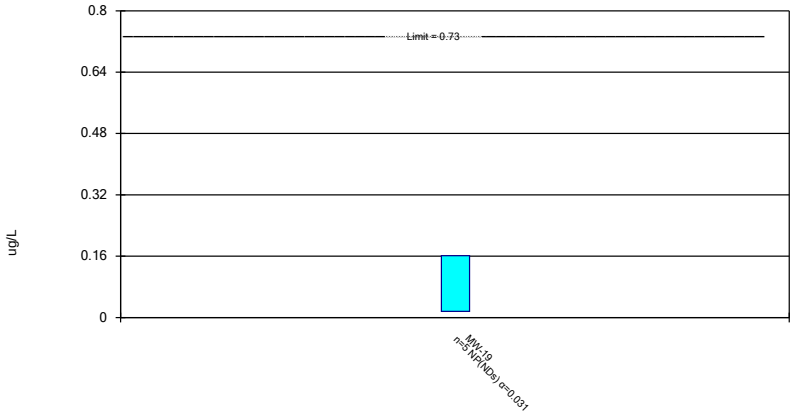
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

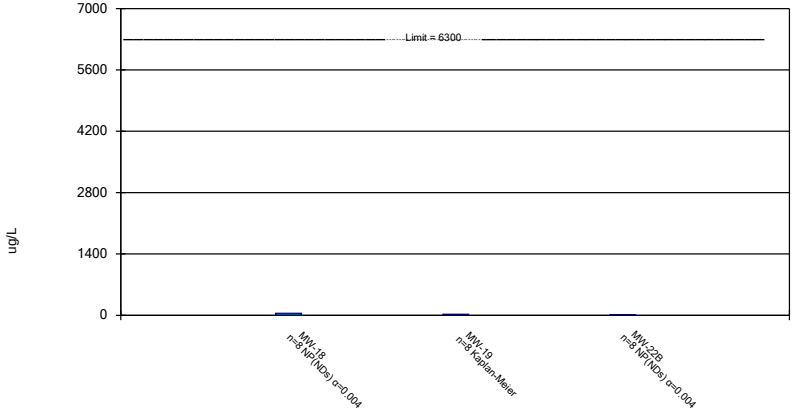
Compliance Limit is not exceeded.



Constituent: 4,4`-DDD Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

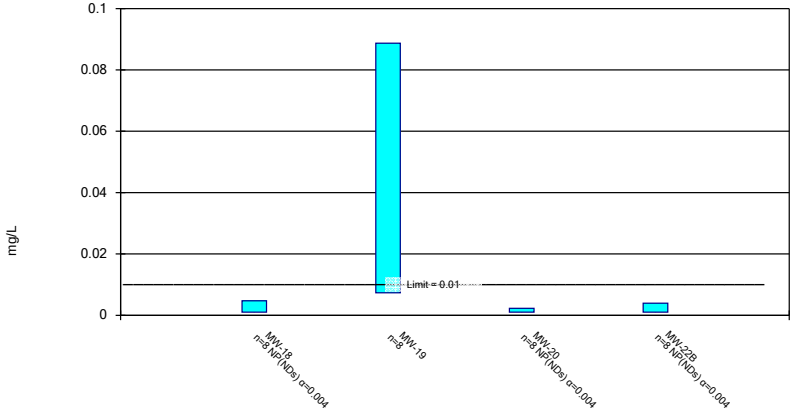
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Acetone Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

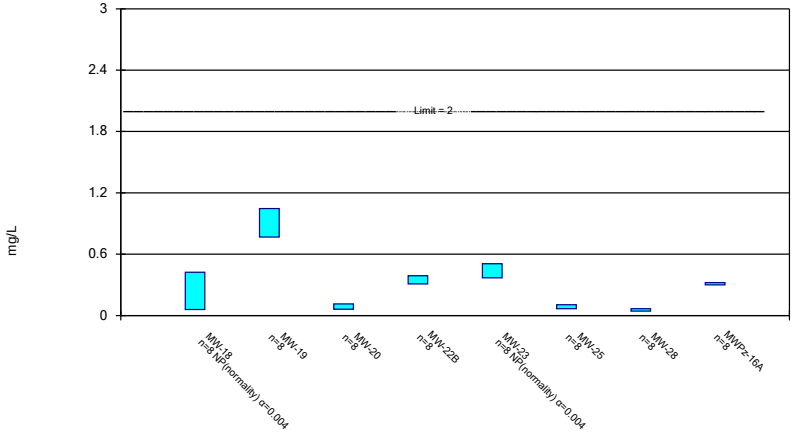
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

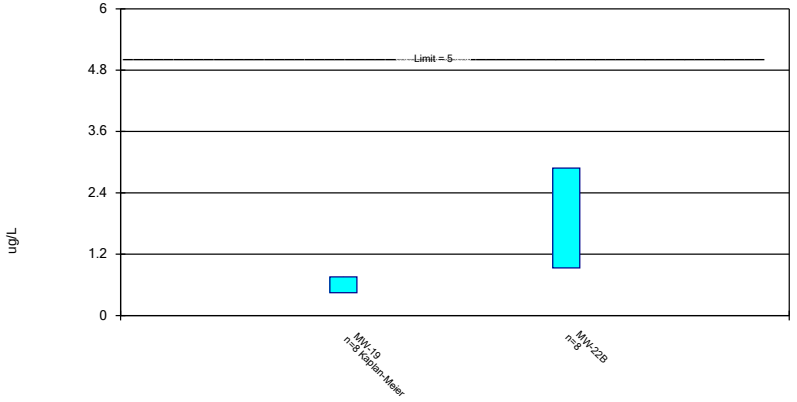
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric Confidence Interval

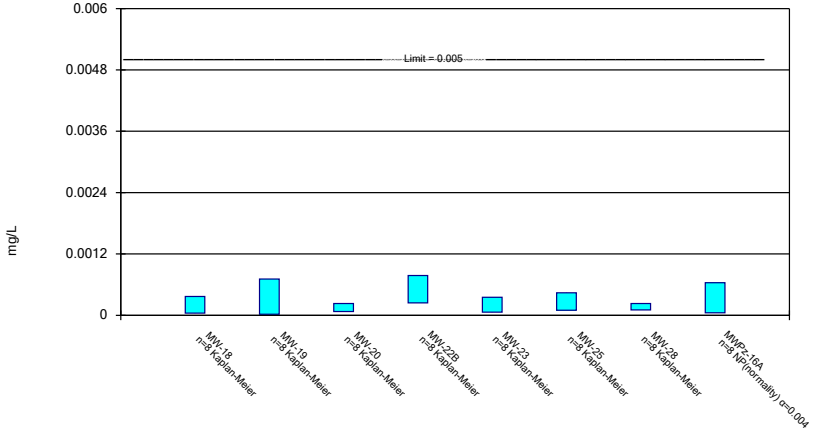
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

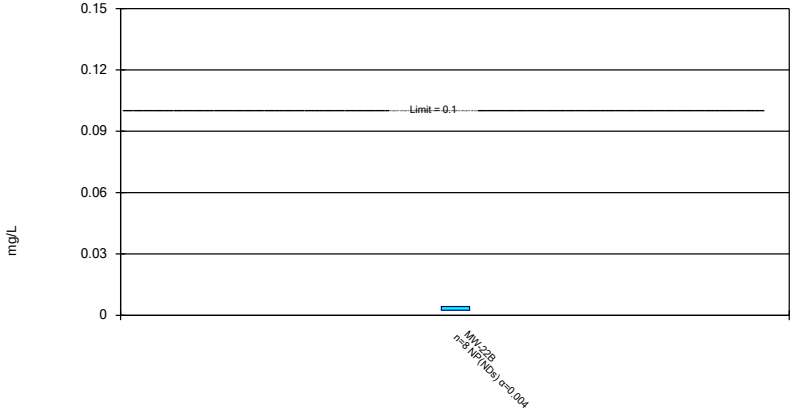
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

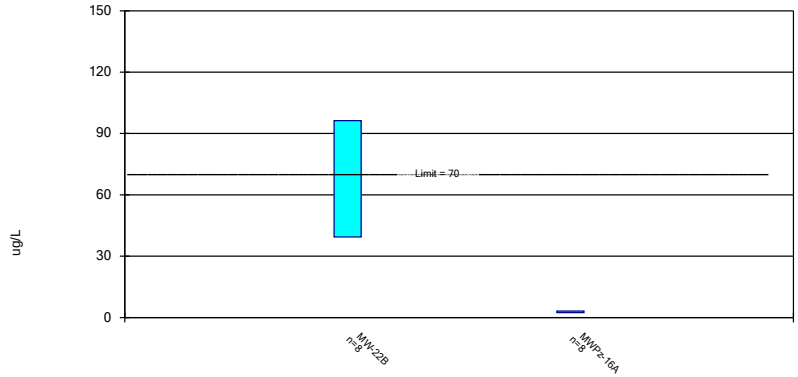
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric Confidence Interval

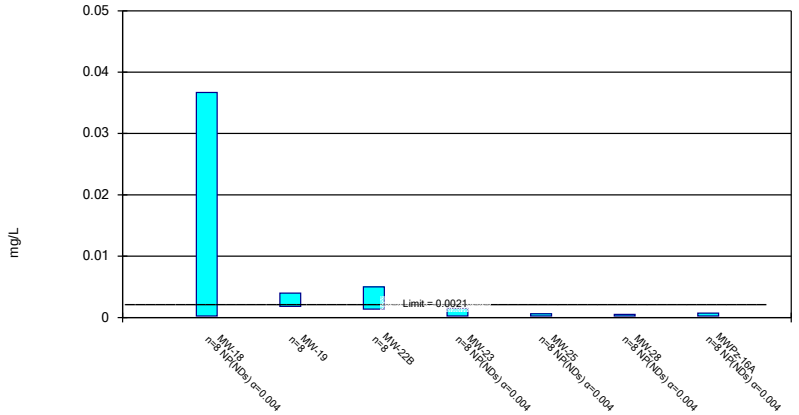
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Inter
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

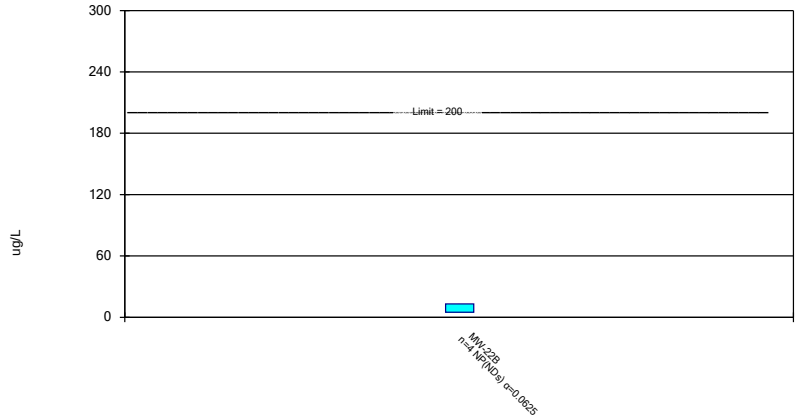
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

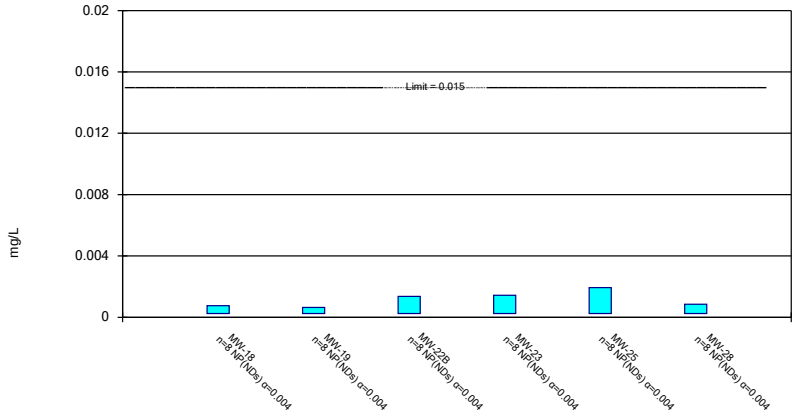
Compliance Limit is not exceeded.



Constituent: Cyanide Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

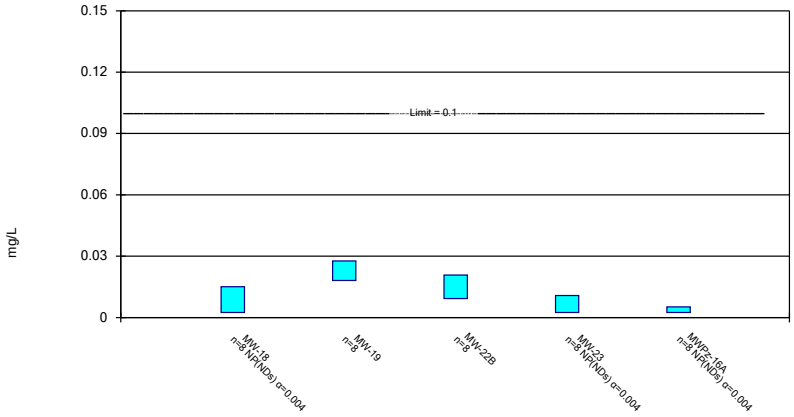
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

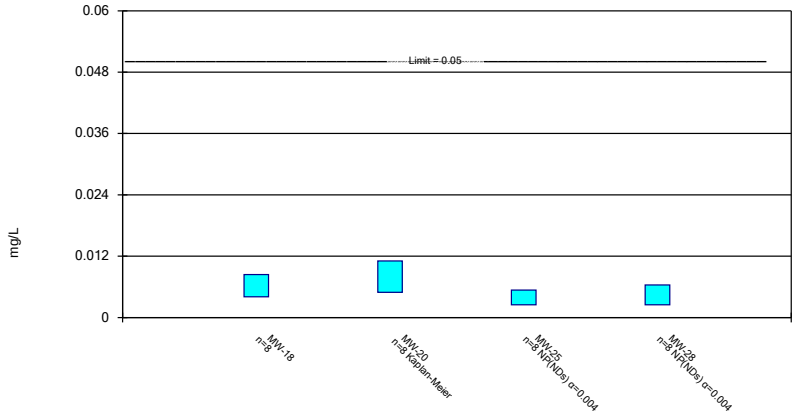
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

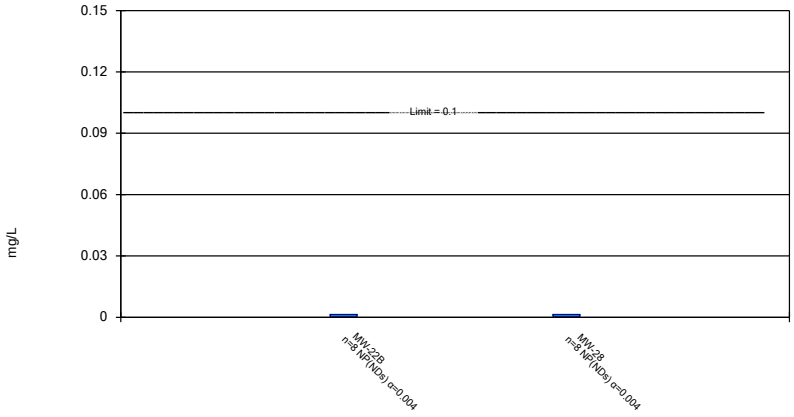
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Selenium Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Silver Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

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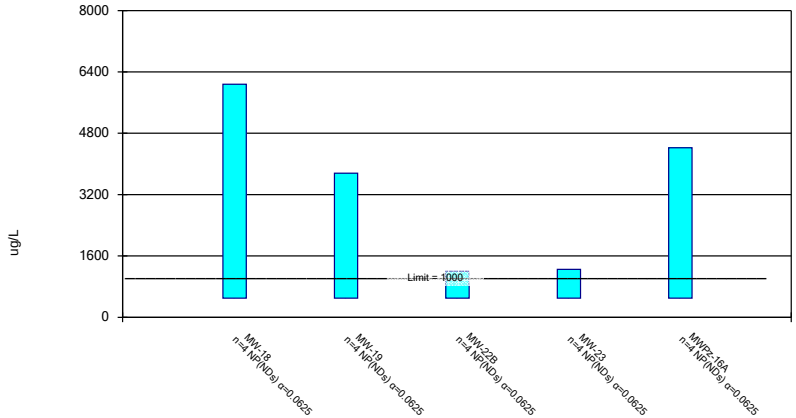

Constituent: Sulfide Analysis Run 1/29/2025 2:21 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

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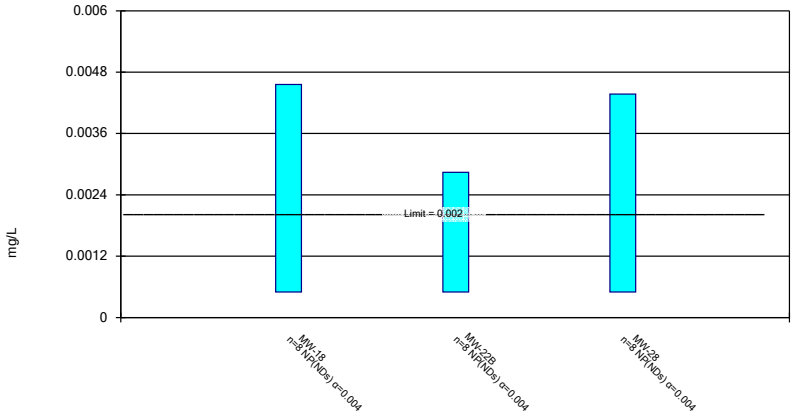
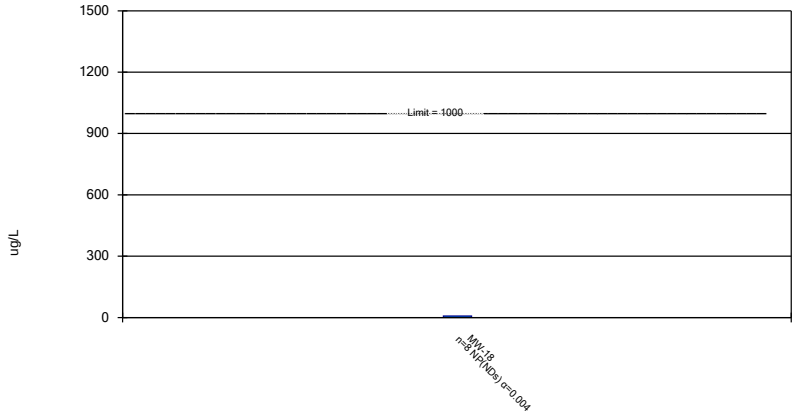


Constituent: Thallium Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Toluene Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric Confidence Interval

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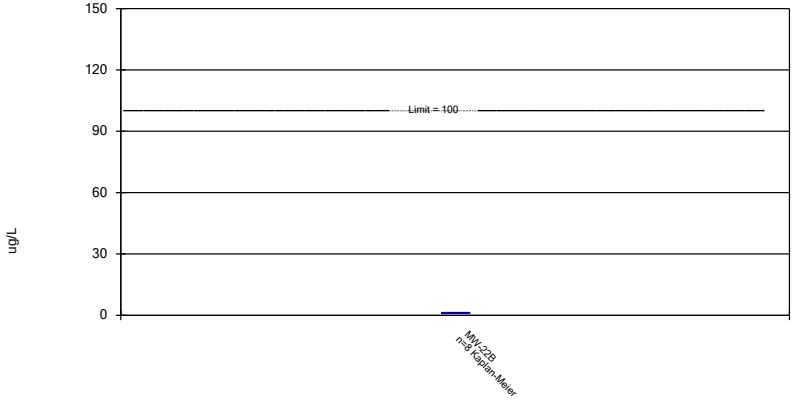
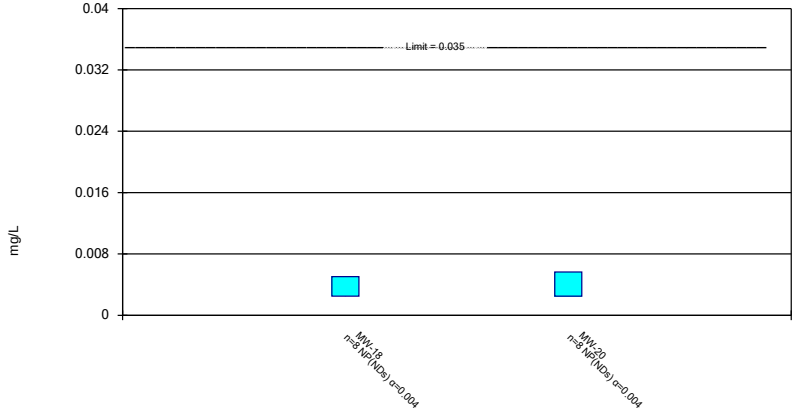


Constituent: trans-1,2-Dichloroethene Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Int
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Non-Parametric Confidence Interval

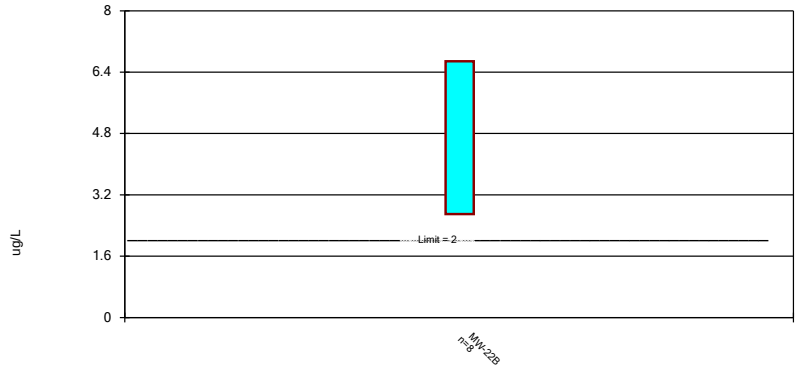
Compliance Limit is not exceeded.



Constituent: Vanadium Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Parametric Confidence Interval

Compliance limit is exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Vinyl Chloride Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

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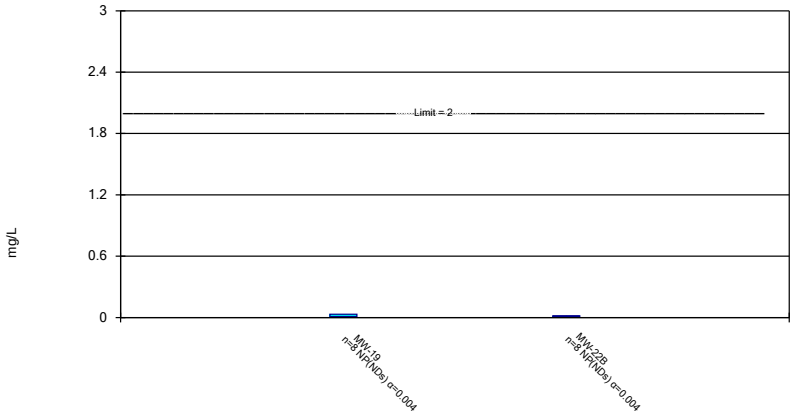
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 1/29/2025 2:22 PM View: 2024AWQR-Confidence_Interval
Kossuth County SLF Client: SCS Engineers Data: Kossuth-2024AWQR-AM

Appendix E

2024 Leachate Control System Performance Evaluation Report

Leachate Management Summary
2024 Leachate Control System Performance Evaluation Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Month	Unlined Cells - Column Thickness (ft)											Discharged to POTW (gal)	Precipitation (in)
	KL1	KL2	KL3	KL4	KL5	KL6	KL7	KL8	KL9	KL10	Leachate Lagoon		
January 2024											2.1	0	0.15
February 2024											2.3	0	0.11
March 2024	0.9	7.2	10.0	Dry	11.1	10.7	1.1	Dry	12.6	Dry	2.7	0	3.23
April 2024											2.9	0	4.67
May 2024	0.8	8.8	13.9	2.9	17.7	14.7	2.1	2.4	13.5	5.2	3.5	0	10.78
June 2024											4.1	0	8.65
July 2024											3.9	0	4.79
August 2024											3.5	0	3.38
September 2024	0.5	7.8	13.7	2.4	15.0	Dry	2.0	Dry	13.0	4.7	3.3	0	0.10
October 2024											3.1	0	0.34
November 2024	Dry	7.7	13.5	Dry	Dry	11.8	1.8	Dry	12.0	Dry	3.2	0	1.40
December 2024											3.2	0	0.51
											Reporting Period Total	0	38.11

Notes:

1) Fluid level measurements are collected quarterly by SCS.
2) Leachate lagoon levels are measured monthly by facility staff. See the graph following the piezometer graphs.
3) Precipitation data obtained from https://mesonet.agron.iastate.edu/ASOS/reports/mon_prec.php?year=2024 for Algona, IA.
4) Figure 1 shows the location of the leachate monitoring points.
5) Historical leachate levels and graphs are included in Attachment A. It should be noted that the "Dry" measurements recorded for monitoring point KL-5 in November 2024 and in monitoring point KL-6 in September 2024 are likely anomalous compared to other measurements and are not included in the graphs.

Comments:

Reporting Period: January - December 2024.
Approved Changes to Leachate Collection System: There were no new approved changes to the leachate collection system during this reporting period.
Recommended Changes to Leachate Collection System: None.
Maintenance Performed on Leachate Collection System: None.
Last Date of Cleaning and Inspection: Leachate line cleaning and inspection was performed in October 2024.
Date of Next Cleaning and Inspection: Leachate line cleaning and inspection will be performed next in 2027.
Volume of Leachate Recirculated: Leachate is not recirculated at this facility.
Volume of Leachate Treated Off-Site: Leachate was not transported for treatment off-site during this reporting period.
Leachate Quality Testing Results: Leachate quality testing was not performed during this reporting period.

Leachate Control System

Legend

- Leachate Piezometer
- Leachate Line Cleanout
- Leachate Collection Line
- Monitoring Well
- Surface Monitoring Point
- Gas Vent
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

Figure 1

N E S W

0 320 640 1,280 Feet

SCS ENGINEERS
environmental consultants and contractors

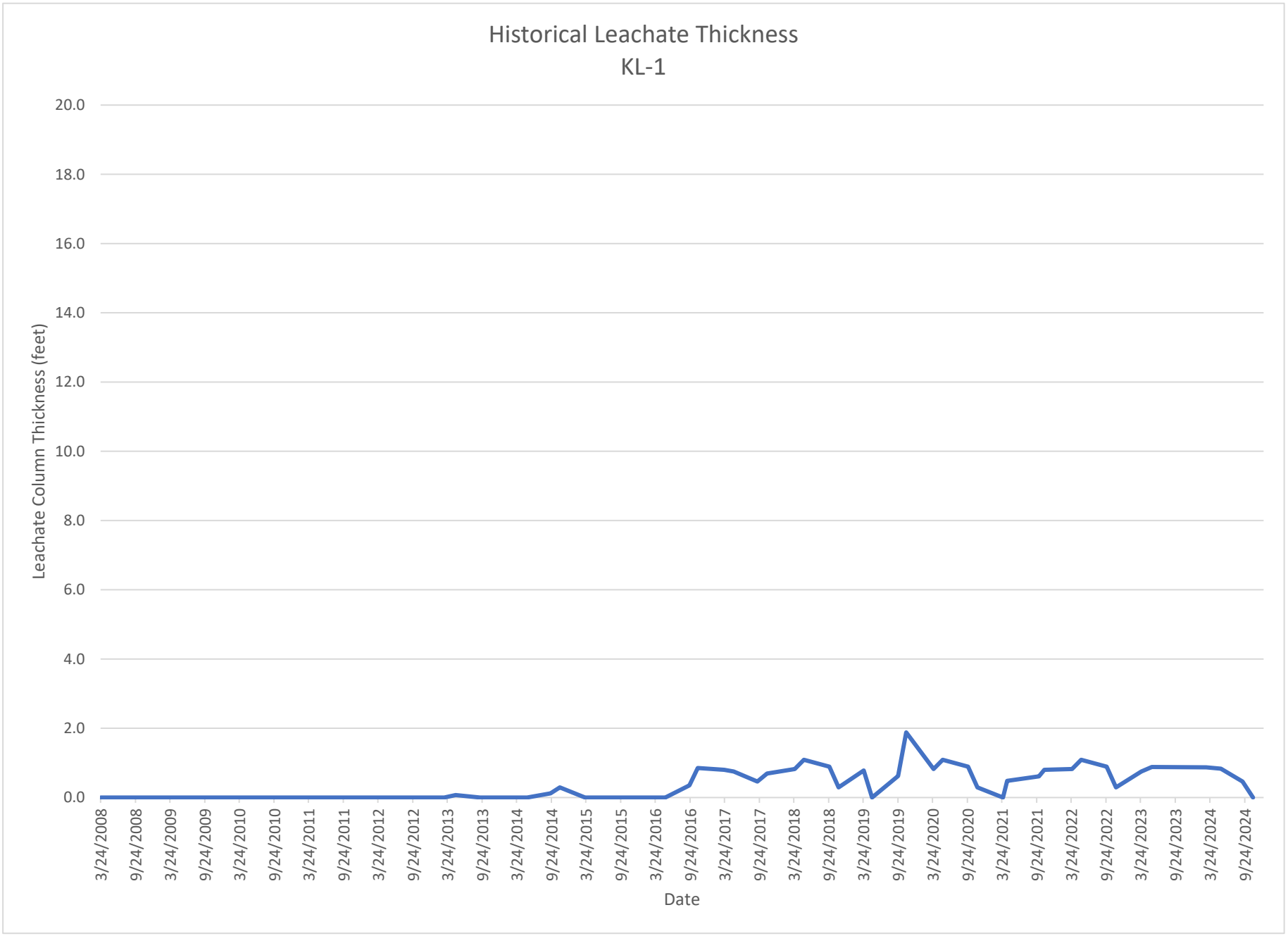
Historical Leachate Levels
Kossuth County Sanitary Landfill

Monitoring Location	KL1	KL2	KL3	KL4	KL5	KL6	KL7	KL8	KL9	KL10	Leachate Lagoon
3/24/2008	0.0	3.4	11.0	0.0	13.1	13.1	0.8	0.5	0.8	1.4	2.5
6/9/2008	0.0	3.4	11.0	0.0	13.1	13.1	0.8	0.5	0.8	1.4	2.5
9/10/2008	0.0	3.8	13.6	1.4	14.5	13.1	0.0	0.7	2.2	0.9	1.5
12/26/2008	0.0	10.8	11.7	0.0	13.5	12.8	0.0	0.8	2.8	1.8	1.8
3/30/2009	0.0	3.9	11.8	2.5	15.1	14.1	0.8	0.7	2.4	1.6	3.1
6/17/2009	0.0	3.9	12.2	2.4	15.9	14.0	0.0	0.7	2.1	1.3	2.5
9/29/2009	0.0	4.0	12.6	1.4	13.8	13.0	1.1	0.2	2.7	1.0	2.0
12/22/2009	0.0	4.2	14.7	2.2	16.0	14.1	1.2	0.4	2.9	1.2	2.0
3/26/2010	0.0	4.3	14.0	3.6	17.6	14.4	1.2	1.1	2.7	2.5	3.8
6/30/2010	0.0	5.0	15.0	2.9	16.7	14.4	1.6	0.7	2.5	1.2	3.8
9/30/2010	0.0	5.1	13.4	1.2	14.5	13.6	1.3	0.0	2.8	2.2	3.5
12/22/2010	0.0	5.0	12.0	0.0	11.5	13.7	0.0	0.0	3.2	2.0	3.5
3/30/2011	0.0	5.0	12.8	0.0	13.1	14.5	1.1	0.0	2.7	2.4	3.5
6/29/2011	0.0	5.1	16.8	3.1	15.9	14.4	1.1	0.0	3.3	3.9	3.5
9/28/2011	0.0	5.2	13.9	1.7	14.3	13.9	1.2	0.0	4.1	2.9	3.0
12/21/2011	0.0	5.3	12.0	0.7	12.9	13.6	1.1	0.0	4.1	2.8	3.0
3/23/2012	0.0	5.2	10.9	0.9	12.2	13.7	1.0	0.0	3.5	2.7	3.3
5/4/2012	0.0	5.1	11.0	2.2	12.8	14.1	1.0	0.0	3.4	2.6	3.0
9/19/2012	0.0	5.1	11.2	0.4	12.3	11.8	0.8	0.0	4.1	2.6	2.0
11/2/2012	0.0	5.1	10.9	0.0	11.7	11.5	0.0	0.0	1.9	2.6	1.0
3/8/2013	0.0	4.6	9.9	0.0	10.3	10.7	0.4	0.0	2.7	2.6	1.2
5/7/2013	0.1	5.3	15.0	2.9	17.5	14.4	0.3	1.9	2.1	3.2	2.0
9/13/2013	0.0	5.4	13.9	2.1	14.9	12.9	1.3	0.0	2.5	2.7	1.8
11/14/2013	0.0	5.4	13.9	2.1	14.9	12.9	1.3	0.0	2.5	2.7	1.8
3/21/2014	0.0	5.3	10.3	0.0	11.7	11.8	1.0	0.0	2.3	1.9	2.5
5/19/2014	0.0	5.5	11.0	2.8	14.2	14.4	1.2	0.0	1.8	2.8	2.3
9/19/2014	0.1	5.7	14.8	2.7	16.4	14.2	1.7	0.0	2.5	1.6	2.9
11/7/2014	0.3	5.7	13.7	2.2	15.3	14.0	2.0	0.0	3.0	2.6	2.8
3/20/2015	0.0	5.8	12.1	0.5	13.7	14.1	1.2	0.0	2.9	2.7	2.8
5/1/2015	0.0	5.9	17.4	2.8	17.7	14.6	1.1	0.0	2.3	4.1	2.7
9/17/2015	0.0	6.2	14.3	2.4	16.1	14.5	1.2	0.0	5.1	4.6	3.3
11/9/2015	0.0	6.0	12.9	1.3	14.4	12.9	1.4	0.0	4.6	3.8	4.0
3/29/2016	0.0	6.4	18.0	2.9	18.5	14.5	1.2	2.4	7.8	7.9	4.1
5/16/2016	0.0	6.7	17.7	3.0	15.1	14.2	1.1	2.1	8.2	7.9	4.2
9/20/2016	0.4	6.9	12.8	2.6	16.1	14.7	1.1	0.0	7.7	7.1	4.0
11/3/2016	0.9	6.9	15.2	2.5	16.2	14.6	1.3	0.0	7.9	6.4	4.2
3/22/2017	0.8	6.6	18.1	2.8	16.7	14.5	1.0	0.0	9.9	8.3	4.6
5/11/2017	0.8	6.9	18.3	1.8	17.0	14.6	1.0	0.0	11.1	8.6	4.7
9/13/2017	0.5	6.9	13.6	1.9	14.9	14.5	1.1	0.0	11.4	7.7	3.9
11/3/2017	0.7	6.8	13.0	1.9	14.7	14.2	1.2	0.0	11.1	6.6	4.1
3/29/2018	0.8	7.0	10.4	0.0	12.7	12.3	1.6	0.0	12.1	4.8	3.2
5/16/2018	1.1	7.5	10.8	2.4	15.0	14.4	1.8	0.0	12.2	5.7	3.1
9/27/2018	0.9	7.5	12.1	0.7	13.1	12.0	1.2	0.0	12.7	5.2	2.3
11/15/2018	0.3	7.4	11.7	0.1	13.0	11.6	1.4	0.0	12.9	5.2	2.1
3/27/2019	0.8	6.7	12.0	0.2	14.0	12.3	1.1	0.0	12.0	7.5	5.3
5/10/2019	0.0	6.9	13.9	2.9	16.5	14.4	1.8	0.0	12.4	8.7	5.5
9/24/2019	0.6	7.2	13.5	1.2	15.1	14.5	1.5	0.0	13.3	9.1	5.0
11/6/2019	1.9	7.2	14.3	1.7	15.6	14.4	1.6	0.0	13.3	8.3	5.0

Historical Leachate Levels
Kossuth County Sanitary Landfill

Monitoring Location	KL1	KL2	KL3	KL4	KL5	KL6	KL7	KL8	KL9	KL10	Leachate Lagoon
3/29/2020	0.8	7.0	10.4	0.0	12.7	12.3	1.6	0.0	12.1	4.8	3.2
5/16/2020	1.1	7.5	10.8	2.4	15.0	14.4	1.8	0.0	12.2	5.7	3.1
9/27/2020	0.9	7.5	12.1	0.7	13.1	12.0	1.2	0.0	12.7	5.2	2.3
11/15/2020	0.3	7.4	11.7	0.1	13.0	11.6	1.4	0.0	12.9	5.2	2.1
3/30/2021	NA	7.0	10.4	2.5	12.2	13.4	1.2	0.0	12.8	5.8	3.5
4/21/2021	0.5	7.5	10.8	1.5	12.8	13.8	1.6	0.0	12.6	5.2	3.2
10/5/2021	0.6	7.5	12.1	2.3	15.4	14.1	1.5	0.0	12.4	5.2	3.0
11/3/2021	0.8	7.4	11.7	1.9	14.5	13.1	1.7	0.0	12.6	5.2	3.0
3/29/2022	0.8	7.0	10.4	0.0	12.7	12.3	1.6	0.0	12.1	4.8	3.2
5/16/2022	1.1	7.5	10.8	2.4	15.0	14.4	1.8	0.0	12.2	5.7	3.1
9/27/2022	0.9	7.5	12.1	0.7	13.1	12.0	1.2	0.0	12.7	5.2	2.3
11/15/2022	0.3	7.4	11.7	0.1	13.0	11.6	1.4	0.0	12.9	5.2	2.1
3/29/2023	0.8	7.2	10.3	0.0	13.6	13.9	1.8	1.8	12.3	4.4	3.0
5/23/2023	0.9	7.4	11.3	2.9	16.0	14.6	1.7	2.1	12.4	5.0	3.0
3/5/2024	0.9	7.2	10.0	0.0	11.1	10.7	1.1	0.0	12.6	0.0	2.7
5/21/2024	0.8	8.8	13.9	2.9	17.7	14.7	2.1	2.4	13.5	5.2	3.5
9/12/2024	0.5	7.8	13.7	2.4	15.0	0.0	2.0	0.0	13.0	4.7	3.3
11/6/2024	0.0	7.7	13.5	0.0	0.0	11.8	1.8	0.0	12.0	0.0	3.2

NA - Not available.


Historical Leachate Thickness
KL-1
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
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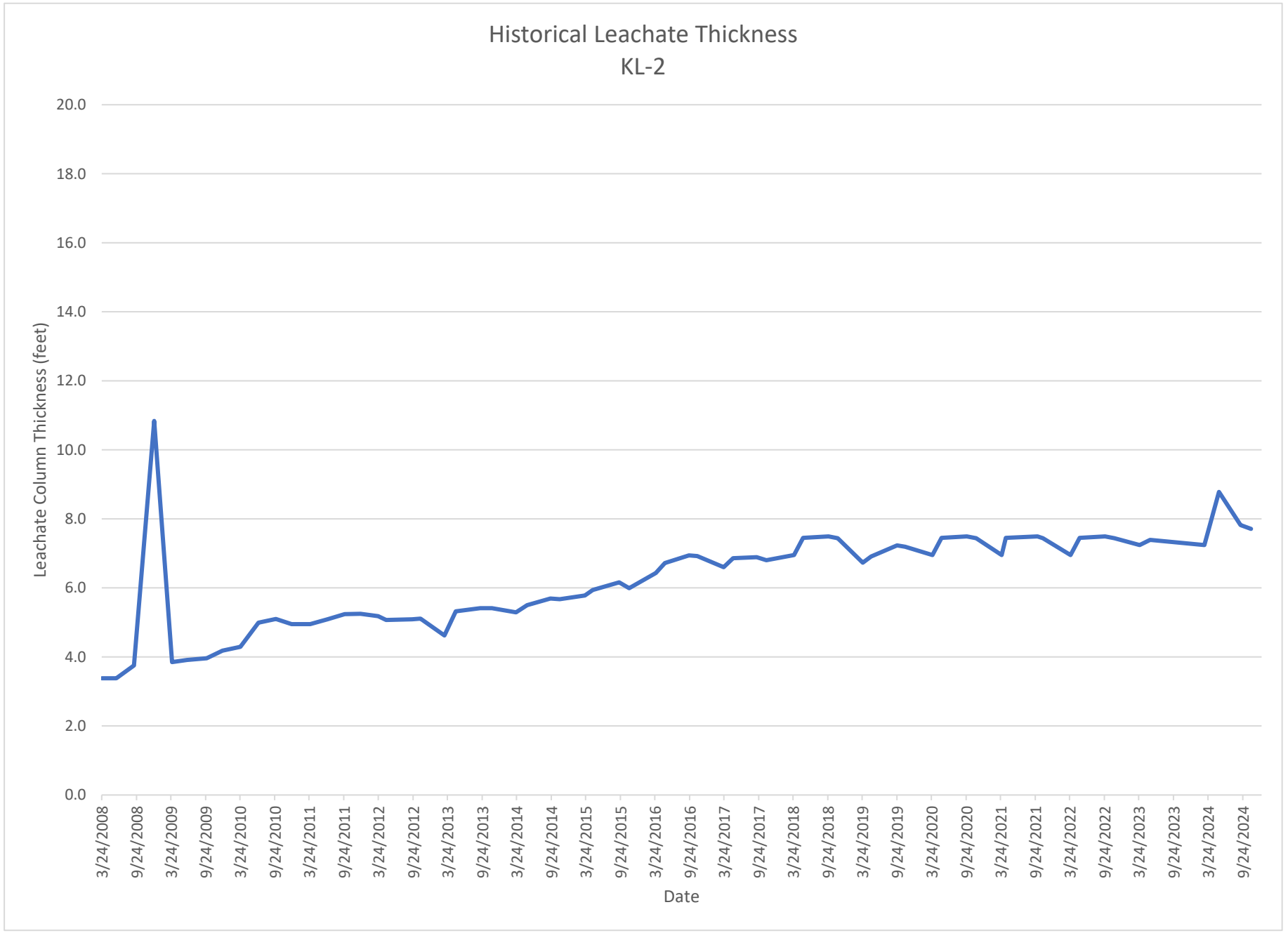
Historical Leachate Thickness
KL-2
Leachate Column Thickness (feet)
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18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
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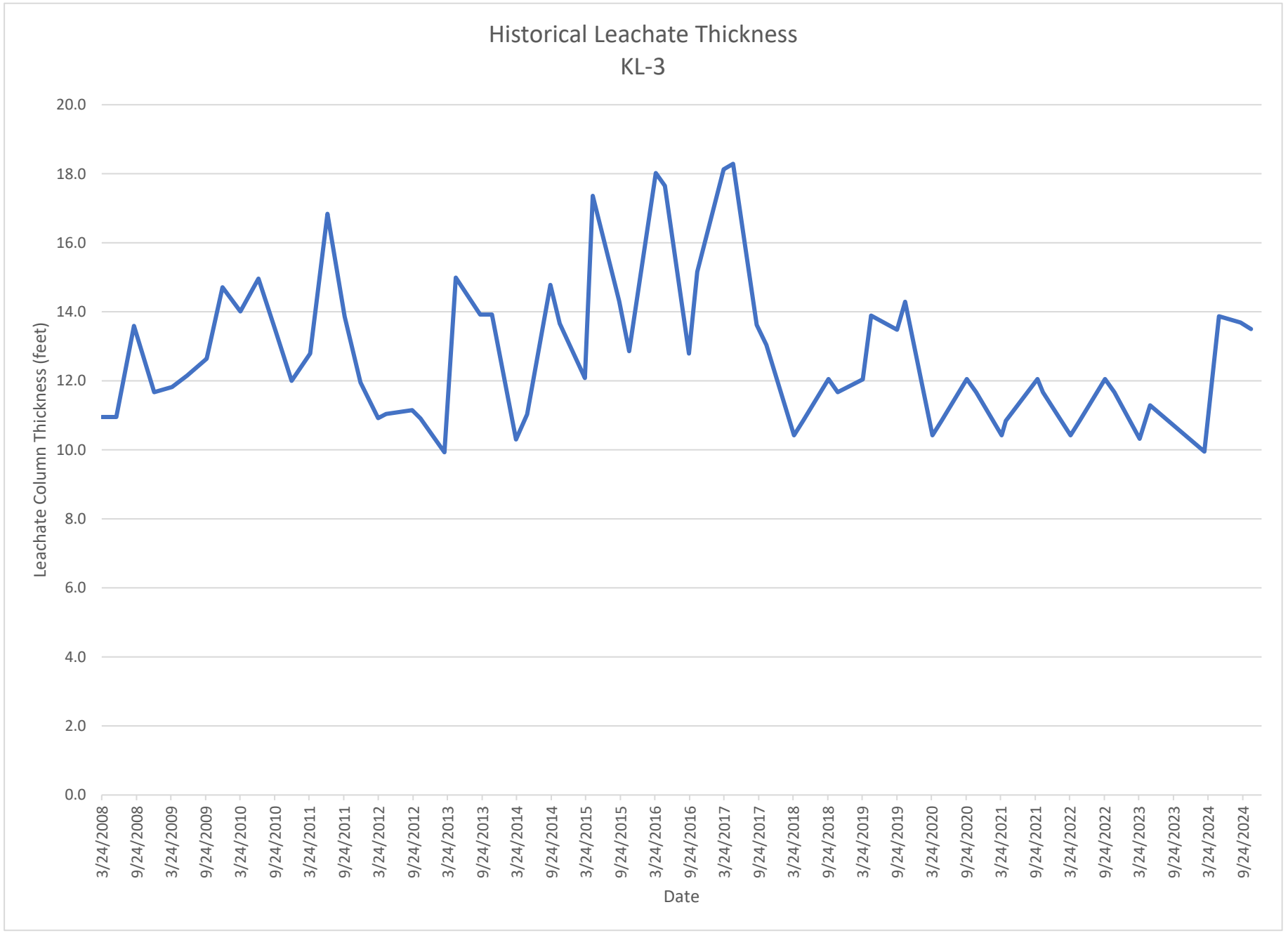
Historical Leachate Thickness
KL-3
Leachate Column Thickness (feet)
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18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
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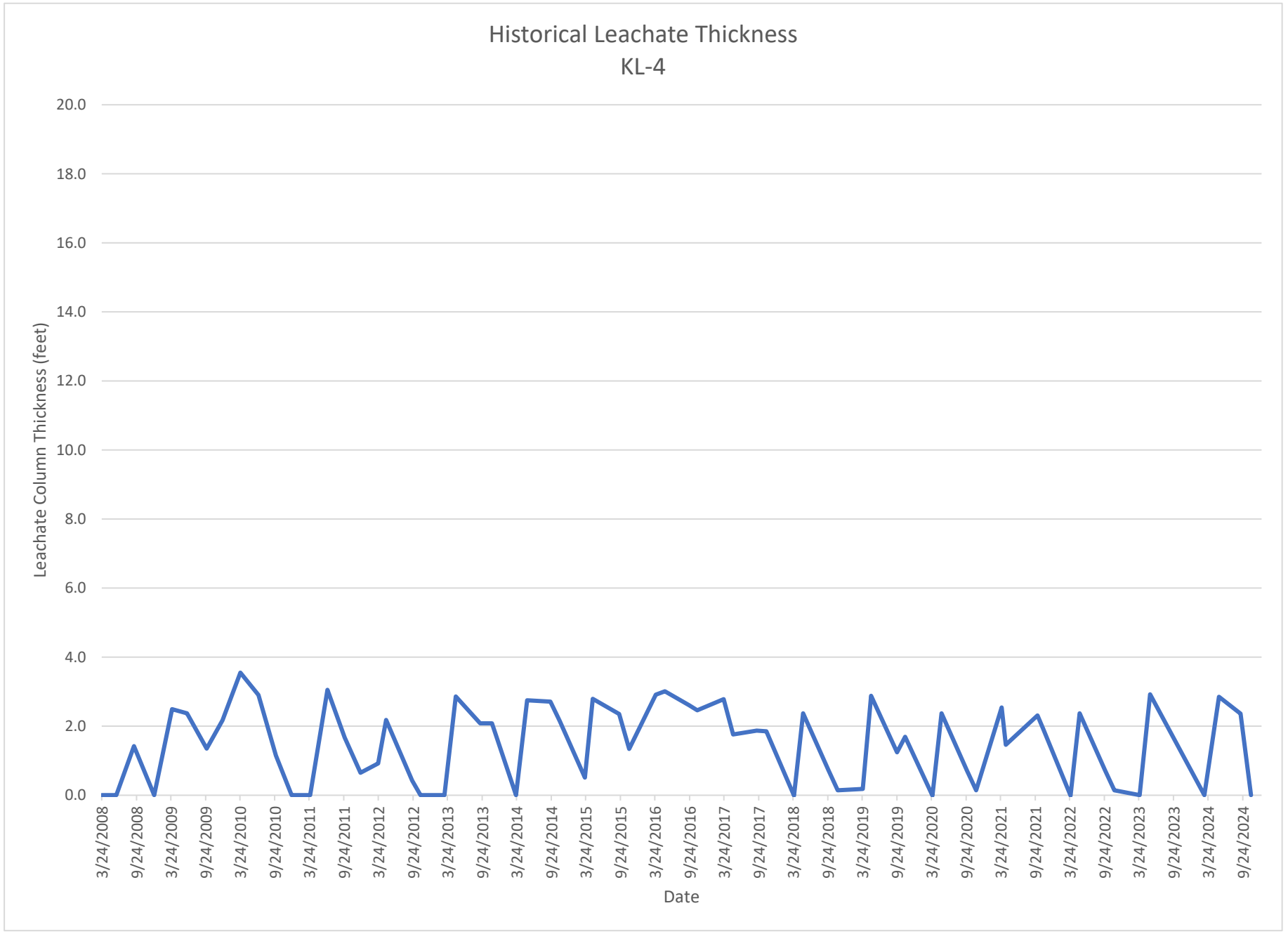
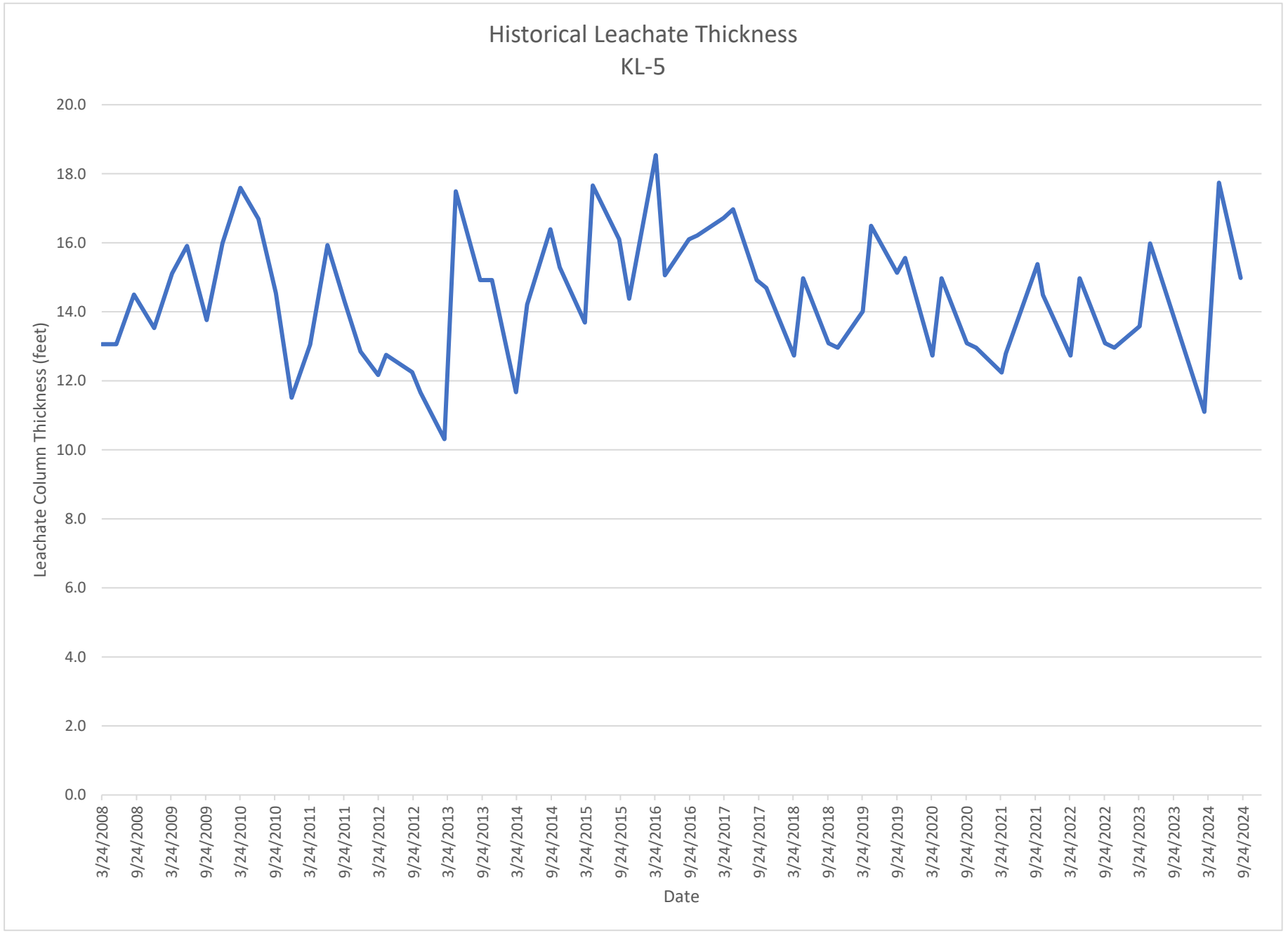
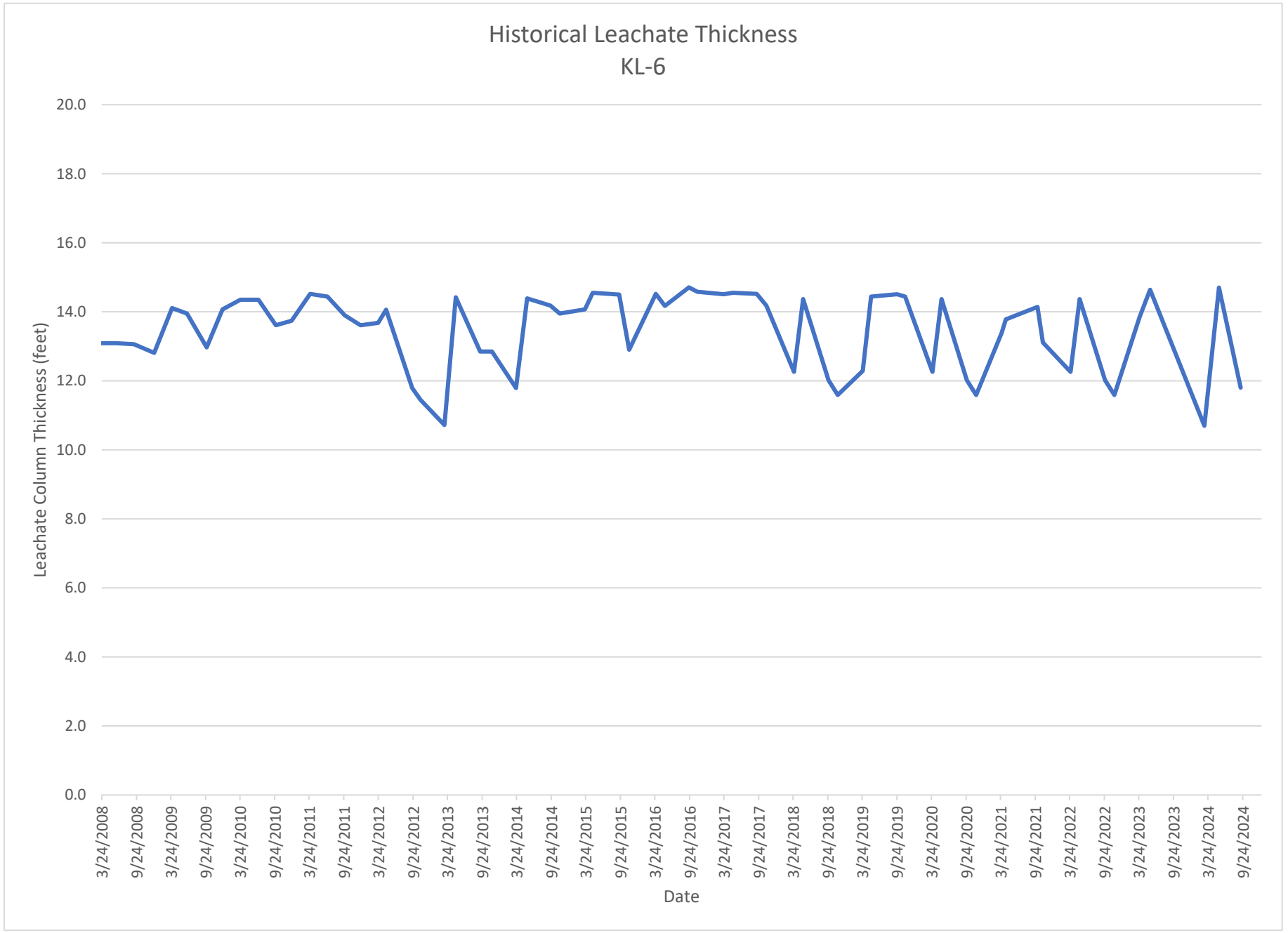
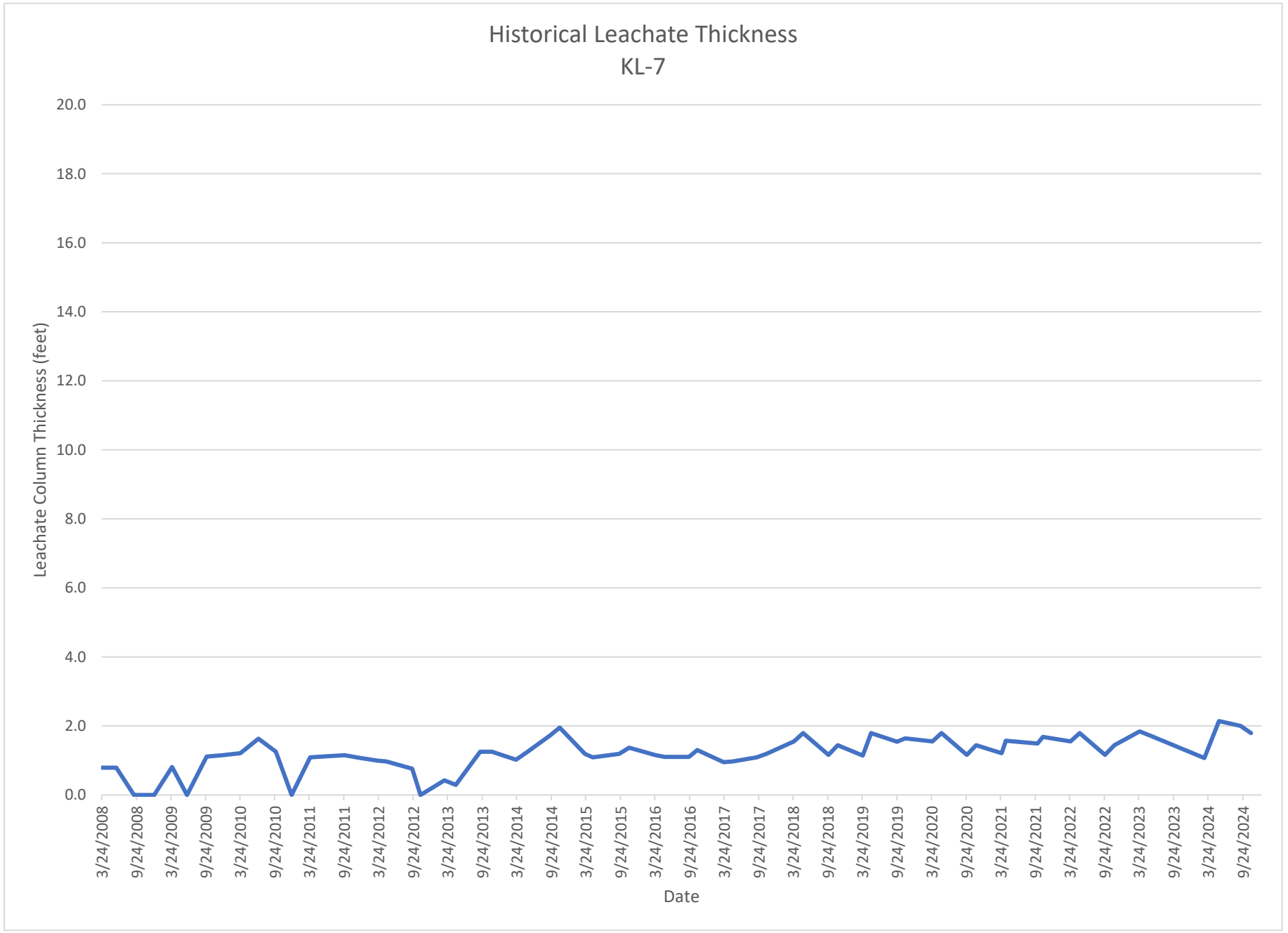
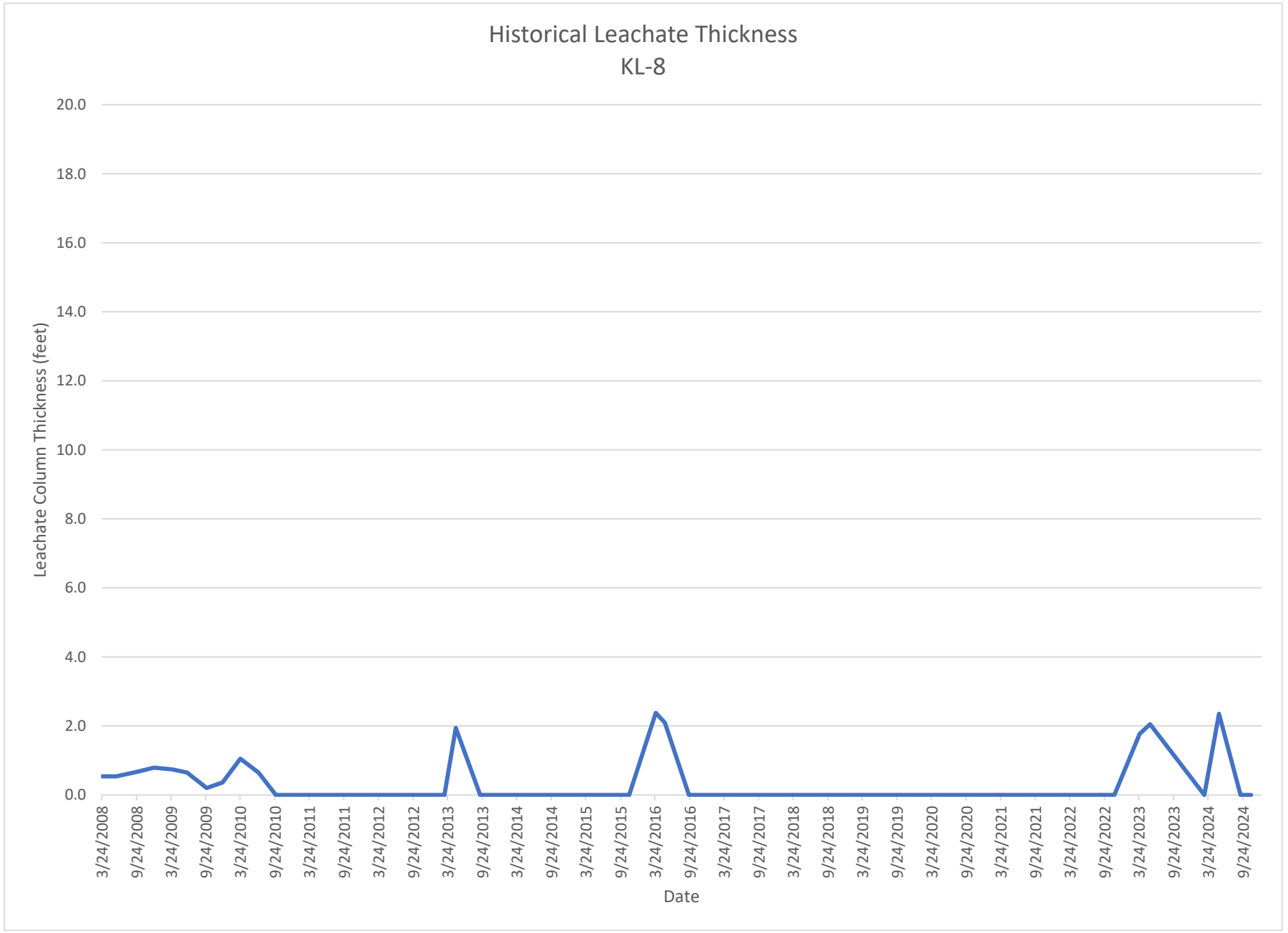
9/24/2024
Date

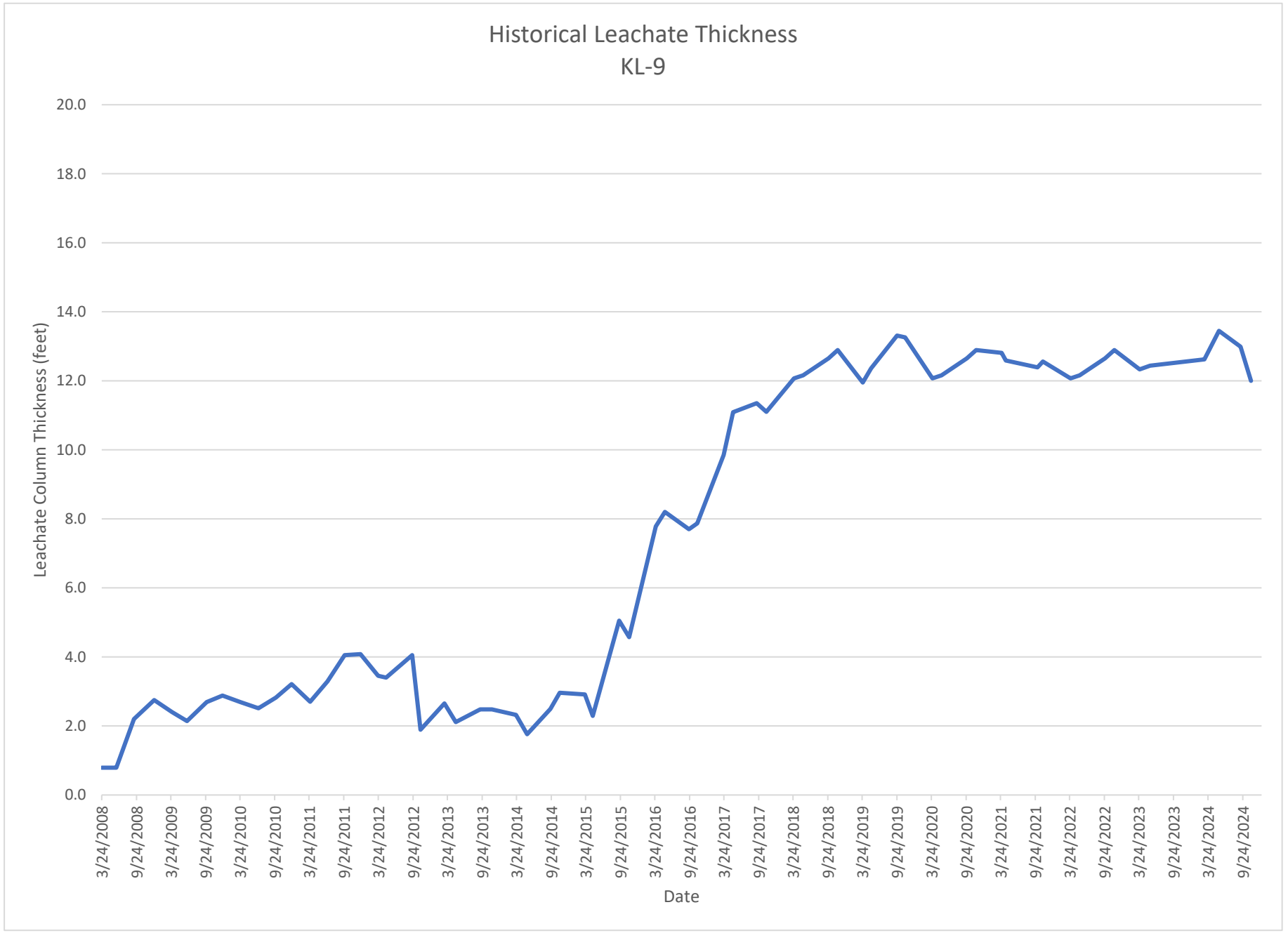

Historical Leachate Thickness
KL-4
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date

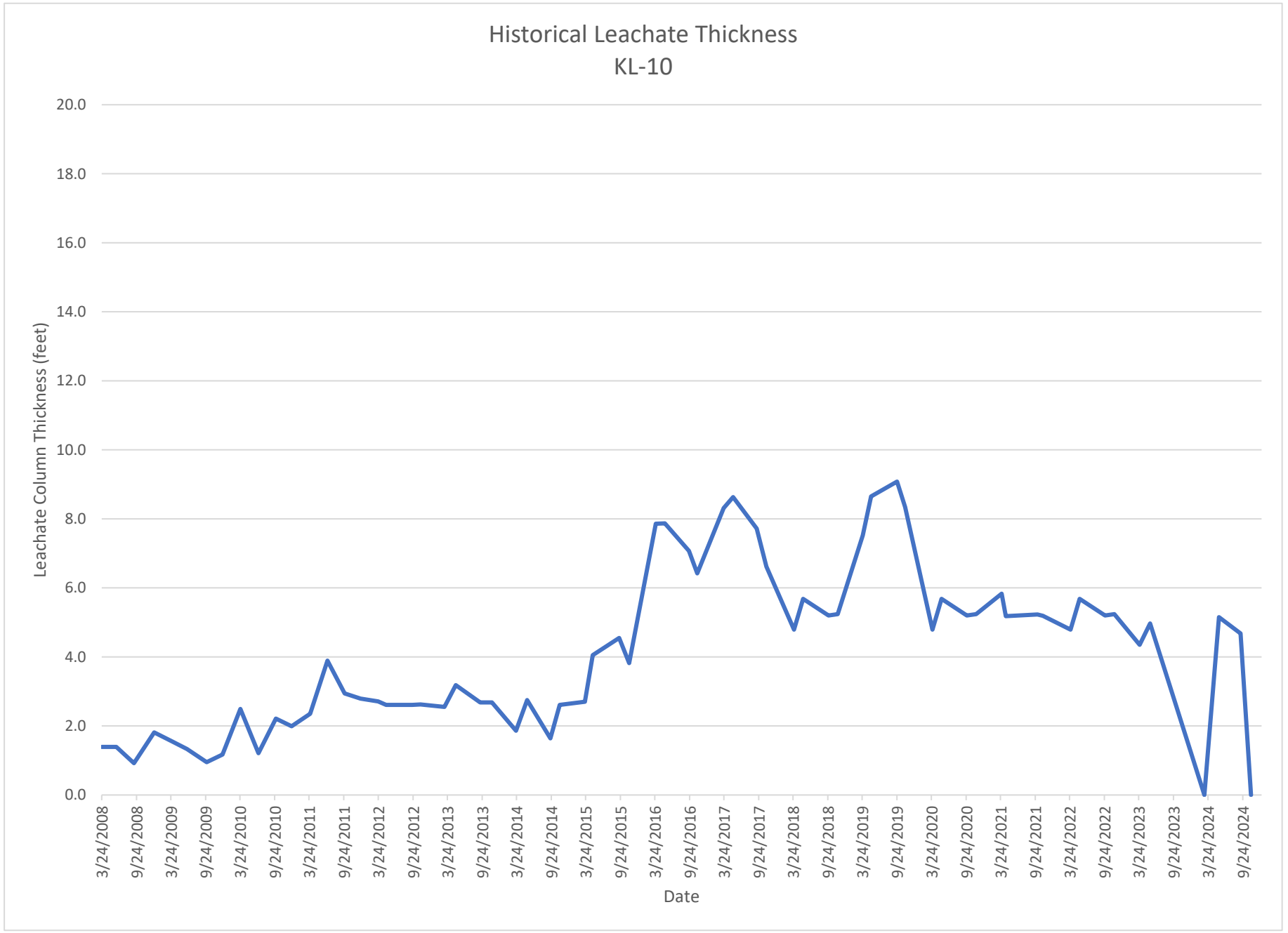

Historical Leachate Thickness
KL-5
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Thickness
KL-6
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Thickness
KL-7
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Thickness
KL-8
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Thickness
KL-9
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Thickness
KL-10
Leachate Column Thickness (feet)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
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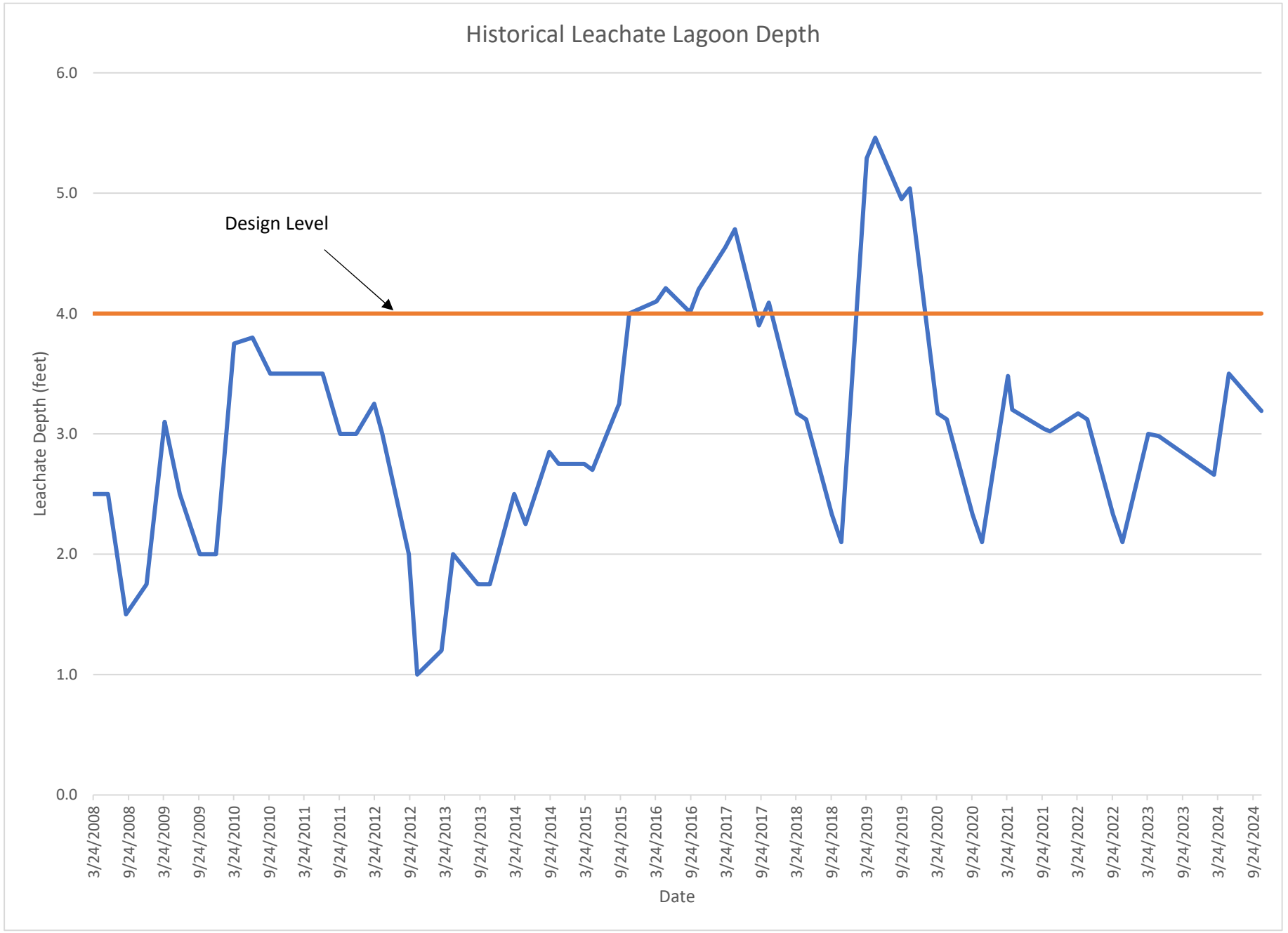
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date


Historical Leachate Lagoon Depth
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Leachate Depth (feet)
Design Level
3/24/2008
9/24/2008
3/24/2009
9/24/2009
3/24/2010
9/24/2010
3/24/2011
9/24/2011
3/24/2012
9/24/2012
3/24/2013
9/24/2013
3/24/2014
9/24/2014
3/24/2015
9/24/2015
3/24/2016
9/24/2016
3/24/2017
9/24/2017
3/24/2018
9/24/2018
3/24/2019
9/24/2019
3/24/2020
9/24/2020
3/24/2021
9/24/2021
3/24/2022
9/24/2022
3/24/2023
9/24/2023
3/24/2024
9/24/2024
Date

Appendix F
2024 Landfill Gas Annual Report

Table 12
Gas Monitoring Summary
2024 Gas Monitoring Report
Kossuth County Sanitary Landfill
Permit No. 55-SDP-01-75C

Monitoring Points			Methane Results (% LEL)									
Name	**Type**	**Description**	**3/5/2024**	S(Y/N)	Inside Well	Outside Well	Site Boundary	**5/22/2024**	S(Y/N)	Inside Well	Outside Well	Site Boundary
#1. Office	Indoor	Inside Office	0					0				
#2. Recycling Building	Indoor	Inside Recycling Building	0					1				
#3. South Garage	Indoor	Inside South Garage	0					0				
#4. Transfer Station	Indoor	Inside Transfer Statopm	0					0				
#5. SW-1	Subsurface	Subsurface pin at property boundary near SW-1										0
#6. NE Corner	Ambient	Subsurface pin at property boundary near northeast corner										0
#7. SW-2	Subsurface	Subsurface pin at property boundary near SW-2										2
#8. NW Corner	Ambient	Subsurface pin at property boundary near northwest corner										0
#9. North Gas Vent	Gas Extraction Tile	At north outlet	91*					0				
#10. South Gas Vent	Gas Extraction Tile	At south outlet	0					0				
#11. MWPz-16A	Monitoring Well	Inside monitoring well or subsurface pin						0	Y	0	0	
#12. MW-12	Monitoring Well	Inside monitoring well or subsurface pin						0	Y	0	0	
#13. MW-19	Monitoring Well	Inside monitoring well or subsurface pin						0	Y	0		
#14. MW-25	Monitoring Well	Inside monitoring well or subsurface pin						0	N	0	0	
#15. MWPz-8A	Monitoring Well	Inside monitoring well or subsurface pin						0	N	0		
#16. MW-23	Monitoring Well	Inside monitoring well or subsurface pin						0	N	0		
#17. MW-22B	Monitoring Well	Inside monitoring well or subsurface pin	5	N	0	0		0	N	0		
#18. MW-28	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0	0		0	N	0		

Monitoring Points			Methane Results (% LEL)									
Name	**Type**	**Description**	**9/12/2024**	S(Y/N)	Inside Well	Outside Well	Site Boundary	**11/6/2024**	S(Y/N)	Inside Well	Outside Well	Site Boundary
#1. Office	Indoor	Inside Office	0					0				
#2. Recycling Building	Indoor	Inside Recycling Building	0					0				
#3. South Garage	Indoor	Inside South Garage	0					0				
#4. Transfer Station	Indoor	Inside Transfer Statopm	0					0				
#5. SW-1	Subsurface	Subsurface pin at property boundary near SW-1					0					
#6. NE Corner	Ambient	Subsurface pin at property boundary near northeast corner					0					
#7. SW-2	Subsurface	Subsurface pin at property boundary near SW-2					1					
#8. NW Corner	Ambient	Subsurface pin at property boundary near northwest corner					0					
#9. North Gas Vent	Gas Extraction Tile	At north outlet	15					0				
#10. South Gas Vent	Gas Extraction Tile	At south outlet	0					0				
#11. MWPz-16A	Monitoring Well	Inside monitoring well or subsurface pin	0	Y	0	0						
#12. MW-12	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0							
#13. MW-19	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0							
#14. MW-25	Monitoring Well	Inside monitoring well or subsurface pin	0	Y	0	0						
#15. MWPz-8A	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0							
#16. MW-23	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0							
#17. MW-22B	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0			0	N	0		
#18. MW-28	Monitoring Well	Inside monitoring well or subsurface pin	0	N	0			0	N	0		

Notes:

S(Y/N) - Was screen submerged, yes or no or blank is non-applicable

* - Following the monitoring of the gas vent, the field technician monitored at the property boundary to the west and at the road to the south. No methane was detected at these two points, so action levels at the property boundary were not exceeded.

No.	Name	Type
#1	Office	Indoor
#2	Recycling Building	Indoor
#3	South Garage (Maintenance Building)	Indoor
#4	Transfer Station	Indoor
#5	SW-1	Subsurface
#6	N.E. Corner	Outdoor
#7	SW-2	Subsurface
#8	N.W. Corner	Outdoor
#9	North Gas Vent	Subsurface
#10	South Gas Vent	Subsurface
#11	MW-PZ16A	Subsurface
#12	MW-12	Subsurface
#13	MW-19	Subsurface
#14	MW-25	Subsurface
#15	MWPz-8A	Subsurface
#16	MW-23	Subsurface
#17	MW-22B	Subsurface
#18	MW-28	Subsurface

SCS ENGINEERS
environmental consultants and contractors

Methane Monitoring Network

Legend

- Methane Monitoring Point
- Gas Vent
- Gas Collection Tile
- Leachate Piezometer
- Monitoring Well
- Surface Monitoring Point
- Waterway
- Approximate Property Boundary
- Approximate Waste Boundary

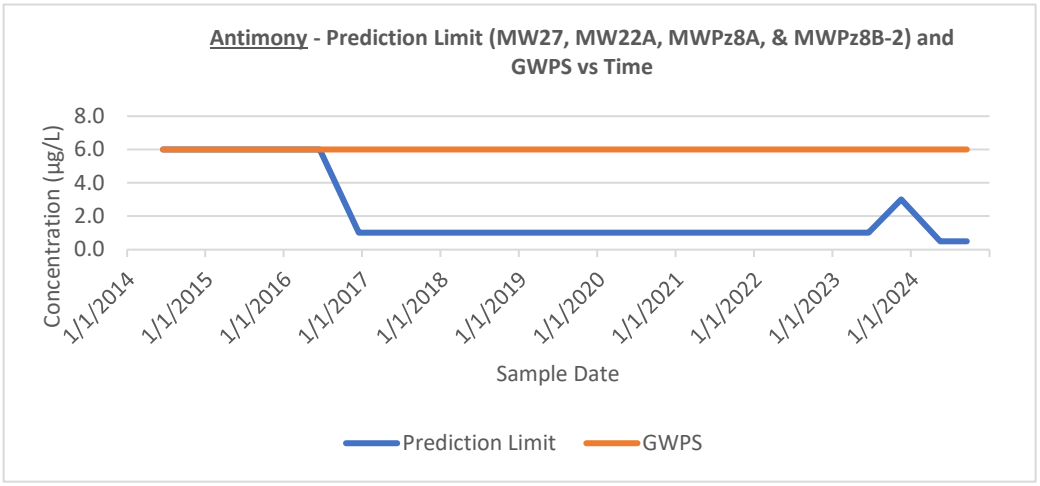
Kossuth County Sanitary Landfill
Burt, IA
Project No: 27223408.25
Drawing Date: February 2025

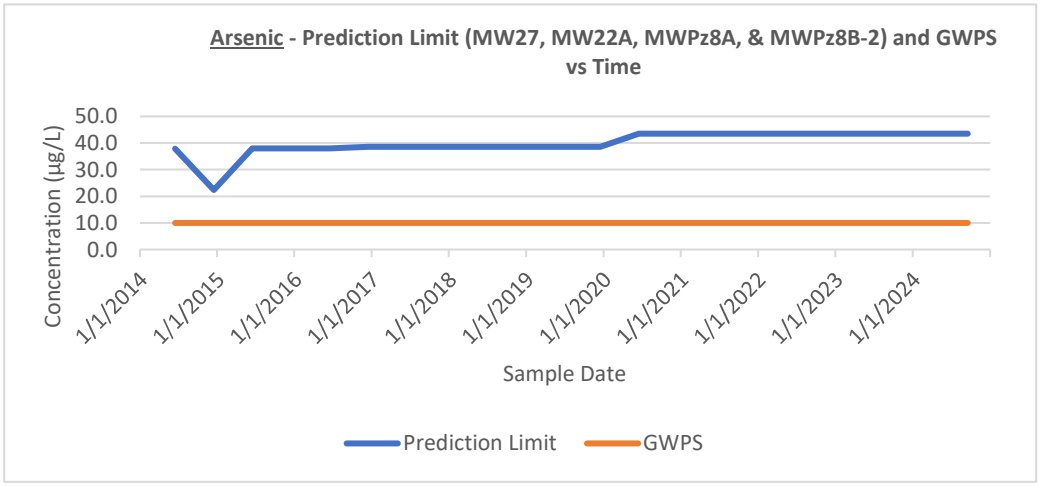
Figure 1

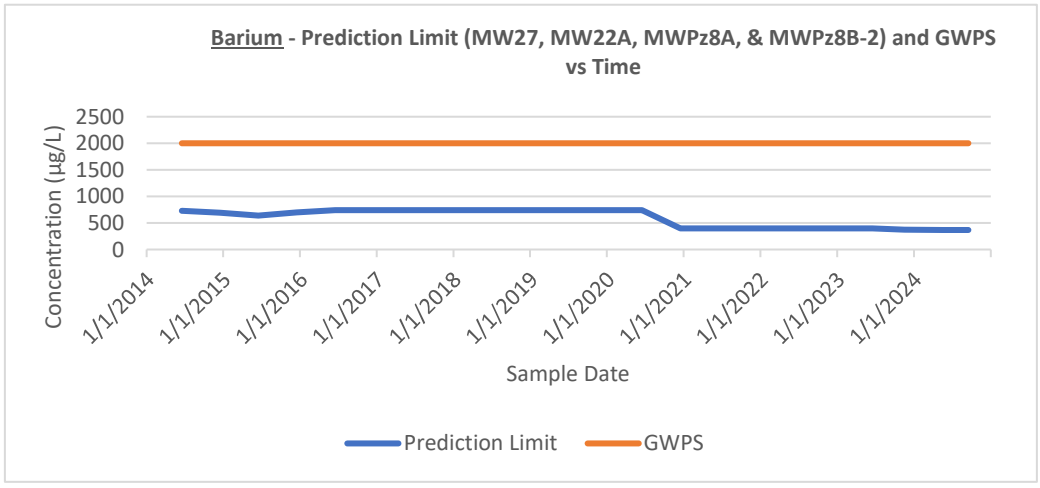
N E S W

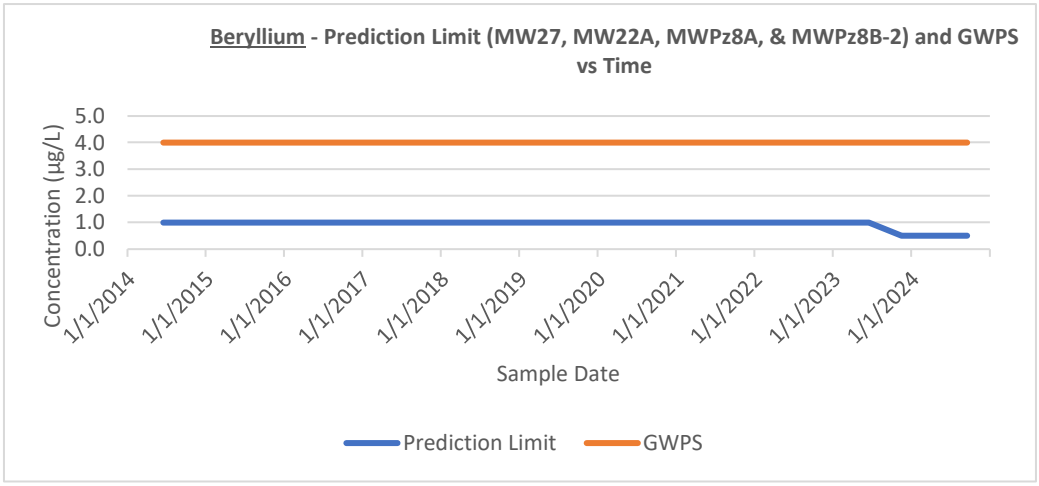
0 500 1,000 2,000 Feet

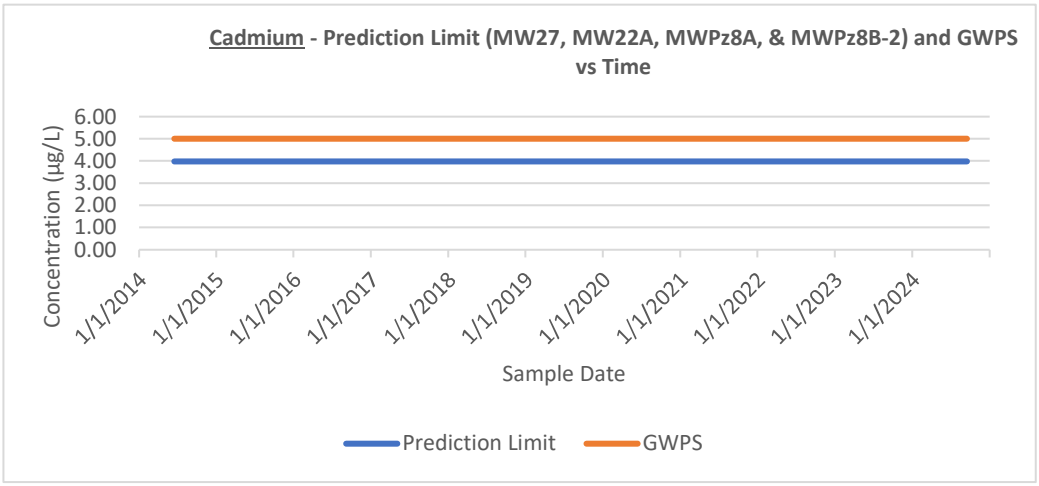
Appendix G
Standards History Graphs

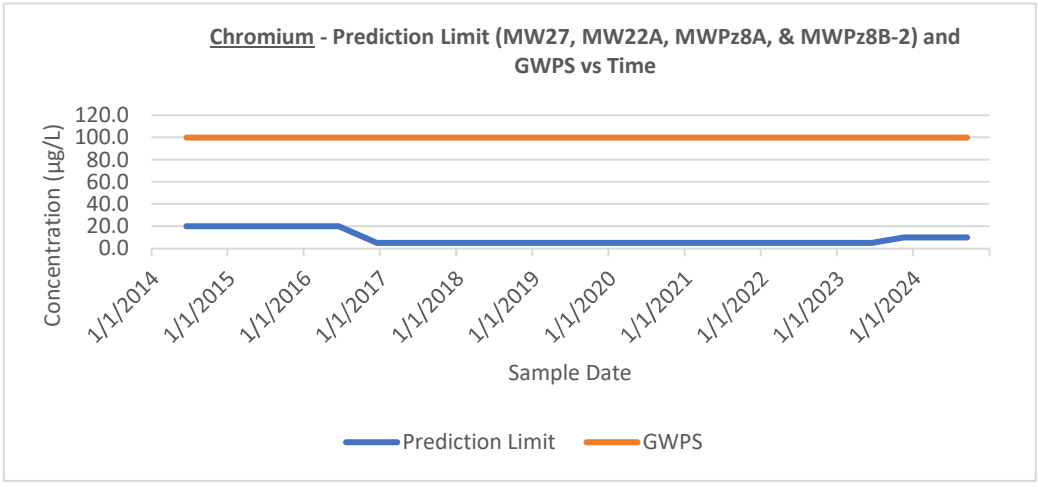

Antimony - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
8.0
6.0
4.0
2.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

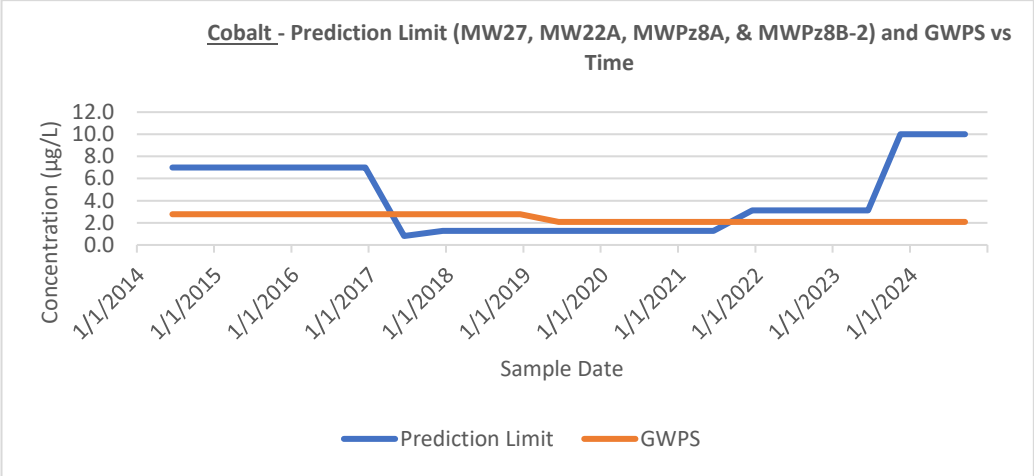

Arsenic - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
50.0
40.0
30.0
20.0
10.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

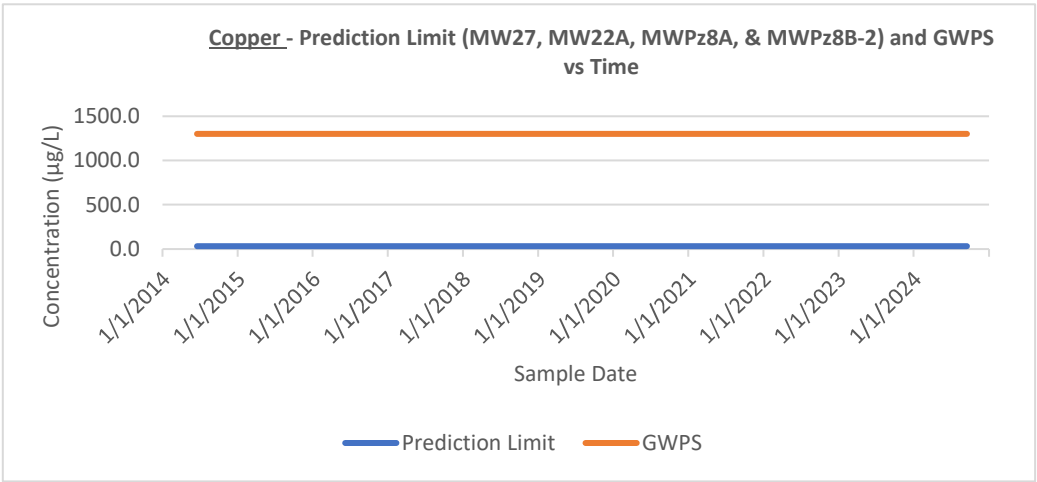

Barium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
2500
2000
1500
1000
500
0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

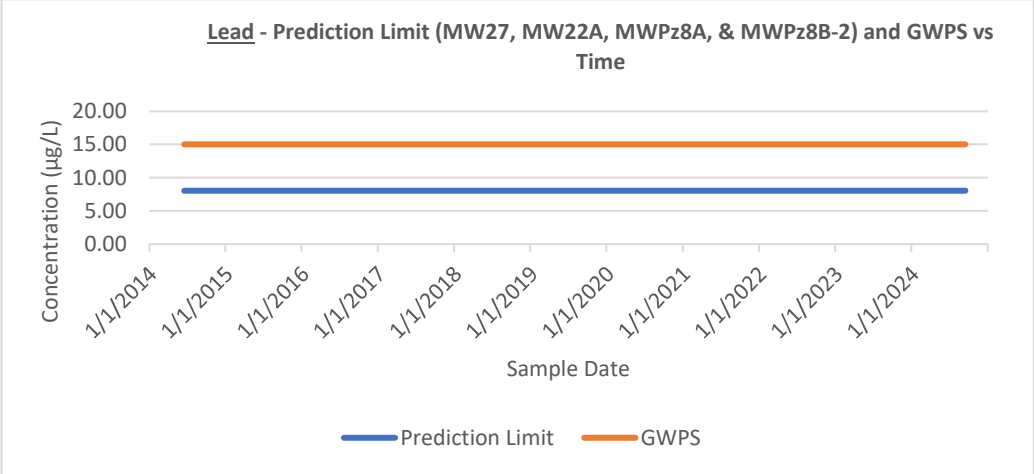

Beryllium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
5.0
4.0
3.0
2.0
1.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

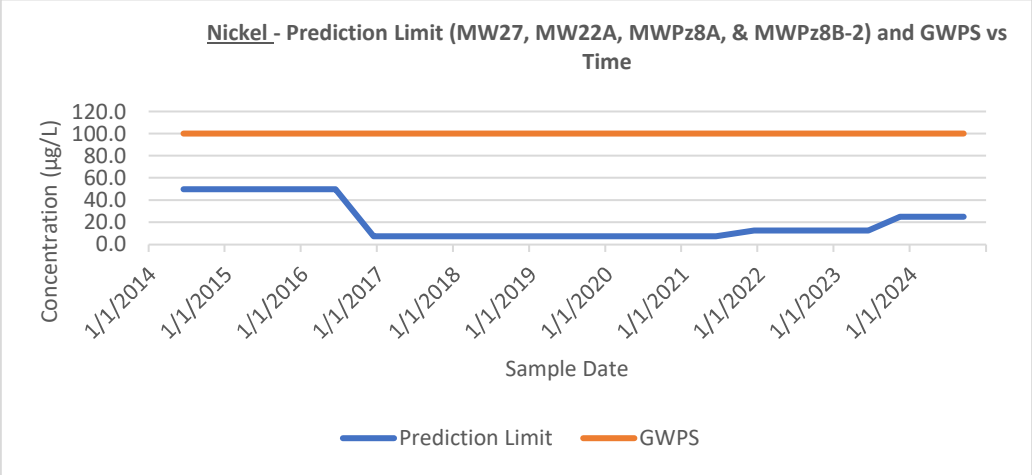

Cadmium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

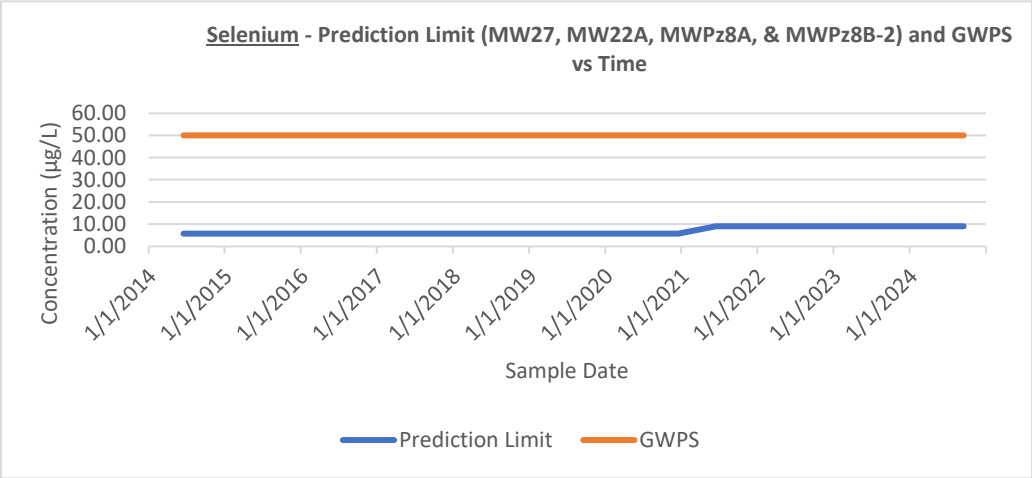

Chromium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

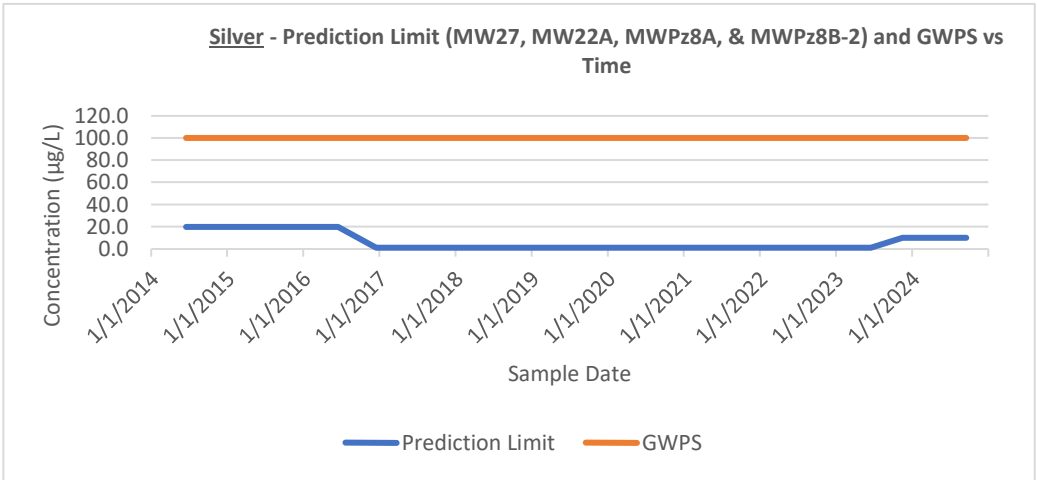

Cobalt - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

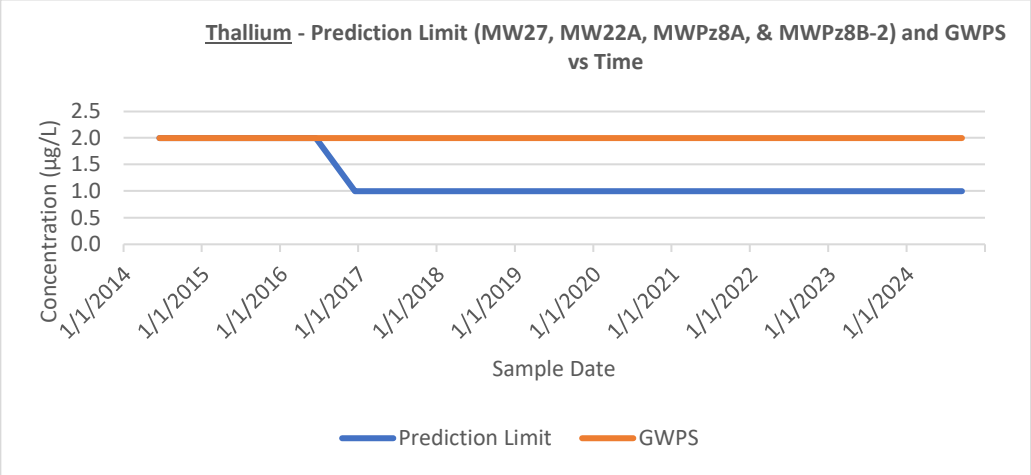

Copper - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
1500.0
1000.0
500.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

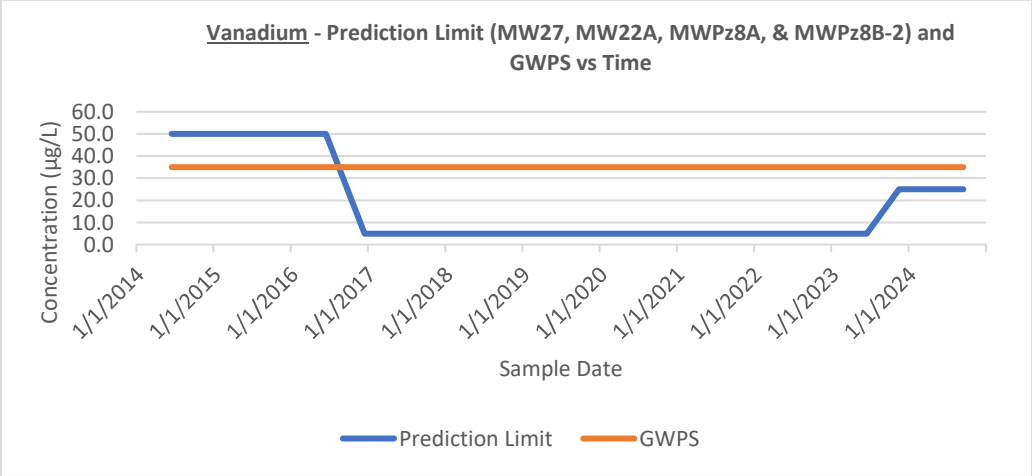

Lead - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
20.00
15.00
10.00
5.00
0.00
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS

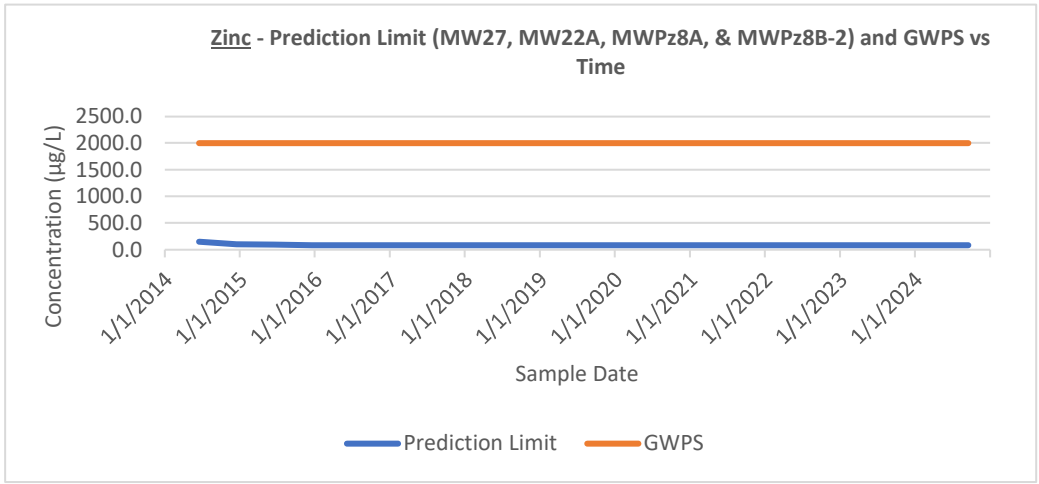

Nickel - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS


Selenium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
60.00
50.00
40.00
30.00
20.00
10.00
0.00
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS


Silver - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS


Thallium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
2.5
2.0
1.5
1.0
0.5
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS


Vanadium - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS


Zinc - Prediction Limit (MW27, MW22A, MWPz8A, & MWPz8B-2) and GWPS vs Time
Concentration (µg/L)
2500.0
2000.0
1500.0
1000.0
500.0
0.0
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Sample Date
Prediction Limit
GWPS