

West Des Moines, IA

PROJECT: Adair County LF, FY25 Env Comp, IA 27224370.25 DATE: 1/20/2025

SUBJECT: Adair County Sanitary Landfill - 01-SDP-01-74C - 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

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TO

NAME	COMPANY	EMAIL	PHONE
Brad Davidson		brad.davison@dnr.iowa.gov	

REMARKS: Brad -

Please find for your download the Adair County Sanitary Landfill 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report. Let us know if you have any questions or comments.

Thanks,

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DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	1/20/2025	Adair County Sanitary Landfill - 01-SDP-01-74C - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report 01.20.2025.pdf	

Transmittal

DATE: 1/20/2025
TRANSMITTAL ID: 00003

COPIES:

Becky Jolly
DJ Luhrs

(Adair County Sanitary Landfill & Recycling Center
Commission)

Nathan Ohrt
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(SCS Engineers)
(SCS Engineers)

January 20, 2025
File No. 27224370.25

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

Subject: 2024 Annual Water Quality Report, 2024 Leachate Control System Performance
Evaluation Report, and 2024 Landfill Gas Annual Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Dear Brad:

On behalf of the Adair County Landfill and Recycling Center, SCS Engineers is submitting the 2024 Annual Water Quality Report as required by Iowa Department of Natural Resources Permit No. 01-SDP-01-74C. This report is intended to satisfy the requirements of 567 Iowa Administrative Code (IAC) Chapter 113.10(5)c(1) and 113.10(6)d(1), related to recordkeeping and notification and annual reporting requirements listed in IAC 113.10(10).

The Leachate Control System Performance Evaluation Report is included in Appendix F to fulfill the requirements listed in IAC 113.7(5)b(14). The Landfill Gas Report in Appendix G is presented to fulfill the landfill gas monitoring and reporting requirements listed in IAC 113.9(2)d.

If you have any questions regarding these reports, please contact Sean Marczewski at (712) 661-9682.

Sincerely,



Sean Marczewski
Project Professional
SCS Engineers



Nathan Ohrt
Senior Project Professional
SCS Engineers

SAM/NPO

Copies: Mr. DJ Luhrs, Director, Adair County Sanitary Landfill and Recycling Center



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

Adair County Sanitary Landfill Permit #01-SDP-01-74C

Adair County Sanitary Landfill and Recycling Center Commission
1645 State Highway #25
Menlo, IA 50164

SCS ENGINEERS

27224370.25 | January 20, 2025

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CERTIFICATION

Prepared by:  Date: January 20, 2025

Typed: Sean Marczewski

Reviewed by:  Date: January 20, 2025

Typed: Nathan Ohrt

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.

Executive Summary

Period of Report Coverage

The period of coverage for this report is from January 1, 2024, through December 31, 2024. Groundwater sampling events were conducted in March and July 2024 during this reporting period at the closed Adair County Sanitary Landfill (Landfill).

Report Priority

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

Site Status and Applicable Rules

The following summarizes the site status and applicable rules associated with groundwater sampling at the closed Adair County Sanitary Landfill:

- **Solid Waste Landfill Status:** Closed.
- **Types of Wastes Accepted:** Currently none. While active the Adair County Sanitary Landfill & Recycling Center Commission planning area accepted municipal solid waste and construction and demolition waste that were collected from an approximate population of 10,000 in Adair County and select cities in Guthrie County.
- **Applicable IAC Rules:** 567-113 current version.

Comments

The following summarizes points of special emphasis:

There were two new and nine ongoing well/detected constituent pairs with statistically significant increases (SSIs) above background during this reporting period as summarized in **Table 7**. The monitoring wells with SSIs are in assessment monitoring and do not require a resample. Therefore, the SSIs were not confirmed. There were no statistically significant levels (SSLs) above the GWPSs during the 2024 reporting period. Background monitoring will continue for monitoring well MW-10. Detection monitoring will continue for monitoring points GU-2 and GWD-1. Assessment monitoring will continue for monitoring wells MW-2, MW-3, MW-6, MW-7, and MW-9.

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Acronyms/Abbreviations:

ACM = Assessment of Corrective Measures
CAMP = Corrective Action Monitoring Plan
CL = Control Limit - Mean plus Two Standard Deviations
DO = Dissolved Oxygen
DQR = Double Quantification Rule
DNR = Department of Natural Resources
EPA = Environmental Protection Agency
GWPS = Groundwater Protection Standard
HMSP = Hydrologic Monitoring System Plan
LEL = Lower Explosive Limit
LCL = Lower Confidence Limit
LN = Lognormal
MCL = EPA Maximum Contaminant Level
MDL = Method Detection Limit
MSWLF = Municipal Solid Waste Landfill
N = Normal
NC = No Change
NP = Non-Parametric
ORP = Oxidation Reduction Potential
P = Parametric
PL = Prediction Limit
RL = Reporting Limit
SS = DNR Statewide Standard for a protected groundwater source
SSI = Statistically Significant Increase above background
SSL = Statistically Significant Level above groundwater protection standard
UCL = Upper Confidence Limit

1.0 SITE BACKGROUND

1.1 SITE HISTORY

The Adair County Landfill and Recycling Center facility (Site) is located on Highway 25 approximately 6 miles south of Interstate 80 and 6.5 miles north of the City of Greenfield. The Site property consists of approximately 80 acres and contains two landfill areas, the unlined landfill (approximately 21.4 acres) and the 2006 Development and Operation Plan expansion area, of which only Phase 1 (approximately 2.4 acres) was constructed with an alternative liner and a leachate collection system. Both areas are now closed, with the closure activities for the unlined landfill completed during the summer of 2009 and the Phase 1 expansion area closed in December 2012.

1.2 SITE HYDROGEOLOGY

The following summary regarding the Site hydrogeology is an excerpt from the September 2020 Revised Hydrologic Monitoring System Plan (HMSP) by SCS Engineers. The Site hydrogeology, as described below, was originally reported by Barker Lemar Engineering Consultants in the previous version of the Site's HMSP (September 2008):

"The site is located within the geomorphic setting referred to as the Southern Iowa Drift Plain. Topography is characterized by steeply rolling hills interspersed with areas of uniformly level upland divides and level alluvial lowlands. Previous research indicated that the regional stratigraphy located within the landfill area consists of sediments of either glacial or alluvial origin. The glacial sediments are comprised of till, glacial-fluvial, and loess deposits. Alluvial sediments are found on flood plains and along stream channels. Present-day soils are derived from the weathering of these parent sediments. Weathered particles of these parent materials were lifted by the wind to be deposited as a blanket of loess over the entire land surface within the landfill area.

The area near the landfill consists of relatively well drained, hilly terrain resulting primarily from fluvial erosion of loess deposits. The drainage of the area surrounding the landfill is generally to Turkey Creek located to the west and north of the landfill property. This creek discharges into Middle River located approximately three miles east of the site. The topographically upgradient portion of the site is located in the east-southeast area of the landfill. Surface water runoff is primarily through pre-existing natural gullies which extend toward the west and north.

The site geology sequence was described in the Hydrogeologic Investigation of the Adair County Sanitary Landfill, Adair County, Iowa (September 21, 1990), which was prepared by Howard R. Green Company as loess over glacial till over bedrock. In general, the soil borings in the report indicated that the site is covered with a loess mantle with thicknesses ranging from 16 to 30 feet. The loess deposits are typically thickest in the upland areas and thinner in gullies and valleys.

The thickness of the glacial till unit beneath the loess varies from 16 to 134. The composition of the till has been classified by grain-size distribution analyses as silty-clay rich

till to a sandy-clay rich till. A five-foot thick sand layer was observed within the till at the base of one of the borings. The glacial till is typically encountered approximately 6 to 20 feet below the base of the landfill (Howard R. Green Company, 1990).

Bedrock at the site reportedly consists of Pennsylvanian age shale, sandstone, and thin limestone, and is not a regional aquifer. The surface of the bedrock is irregular with the site situated on an elongated high ridge. It appears that the bedrock surface slopes from the site to both the east (toward the Middle River) and to the west (toward the Nodaway River). The Pennsylvanian bedrock is approximately 750 feet thick below the site and is a regional aquiclude (Howard R. Green Company, 1990).

The Hydrogeologic Investigation Report included in the 2006 DOPS notes that the average hydraulic conductivity of the loess unit (1.30×10^{-7} cm/sec) is greater than that of the underlying glacial till unit (9.70×10^{-8} cm/sec). Although the average loess hydraulic conductivity values were reportedly higher than the average glacial till values, the 2006 DOPS states that the shallow glacial till soils along with the overlying loess are collectively considered a hydraulic unit. The 1990 Hydrogeologic Investigation Report indicated calculated transmissivities of 3.4×10^{-2} m²/day to 6.3×10^{-2} m²/day for the loess unit and 1.9×10^{-2} m²/day to 3.3×10^{-2} m²/day for the glacial till unit, and repeatedly noted the water table existing within the loess rather than the loess and glacial till units collectively. The hydrogeology of Southern Iowa Drift Plain strata typically includes the phreatic water table surface existing at or slightly above the interface of the loess and glacial till units. Based on this generality and the reported higher values of hydraulic conductivity and transmissivity for the loess unit observed within both of the previous hydrogeologic investigations, it is likely that the water table exists primarily within the base of the loess unit at the loess/glacial till interface."

2.0 SAMPLING STATUS SUMMARY

The DNR has provided a series of tables to consistently convey information related to groundwater monitoring at municipal solid waste landfills throughout Iowa. These tables are discussed within the text in appropriate sections and are included in the Tables section of this report. **Table 1** provides an overview of the sampling status for the Site, including the monitoring points in the groundwater monitoring program, the current monitoring program for each monitoring point, comparative statistics findings, and the number of samples collected in each monitoring program since 2008. Samples noted in this table are for the full list required for detection, assessment, and/or corrective action monitoring. For the purpose of tracking samples collected, background samples are included under detection monitoring. Retests for individual parameters, if completed, are not included in the count for the total number of samples in each monitoring program since 2008. **Figure 1** depicts the Site Monitoring Network for the closed Adair County Sanitary Landfill.

Field sheets from the March and July 2024 sampling events are included in **Appendix A**. Sampling completed in 2024 and anticipated sampling for 2025 are summarized in **Table 2**. Laboratory analytical reports from the 2024 sampling events are included in **Appendix B-1**, and the 2024 data validation documentation tables are provided in **Appendix B-2**. The groundwater chemistry summary table is included in **Appendix C**.

3.0 MONITORING WELL MAINTENANCE AND PERFORMANCE SUMMARY

The closed Adair County Sanitary Landfill is governed by the monitoring well maintenance and performance reevaluation in IAC 567-113.10(2)"f":

(1) A biennial examination of high and low water levels accompanied by a discussion of the acceptability of well location (vertically and horizontally) and exposure of the screened interval to the atmosphere.

(2) A biennial evaluation of water level conditions in the monitoring wells to ensure that the effects of waste disposal or well operation have not resulted in changes in the hydrologic setting and resultant flow paths.

(3) Measurements of well depths to ensure that wells are physically intact and not filling with sediment. Measurements shall be taken annually in wells which do not contain dedicated sampling pumps and every five years in wells containing dedicated sampling pumps.

(4) A biennial evaluation of well recharge rates and chemistry to determine if well deterioration is occurring.

Table 3 provides the years in which each requirement was last met and is next scheduled for.

3.1 HIGH AND LOW WATER LEVELS EVALUATION

Groundwater elevations were measured above the top of the screened interval in each monitoring well during the 2024 sampling events. The March and July 2024 groundwater elevations and top of screen elevations are presented in **Table 4**. The measured groundwater elevations in relation to the top of the screened interval elevations indicate that the HMSP monitoring wells are placed at acceptable vertical locations to enable collection of representative groundwater samples and to detect contamination, if present. The HMSP monitoring wells are within 600 feet from other monitoring wells in the unlined former fill area, within 300 feet from other monitoring wells in the 2006 Development and Operation Plan expansion area, or at alternate spacing criteria dependent upon groundwater flow paths. Thus, the horizontal spacing of the HMSP monitoring wells is acceptable.

3.2 HYDROLOGIC SETTING AND FLOW PATHS EVALUATION

IAC 567-113.10(2)(f)(2) requires an evaluation of groundwater level conditions in the monitoring wells to ensure that the effects of waste disposal or well operation have not resulted in changes in the hydrologic setting and resultant flow paths. The Adair County Sanitary Landfill is closed and no waste disposal is occurring. Groundwater contours were produced for the Landfill using groundwater elevation data measured during the July 2024 groundwater sampling event. The July 2024 groundwater contour map is included in **Figure 2**. Comparisons of the 2024 groundwater contours to previous groundwater contours indicate that the groundwater elevations and flow directions are consistent, with the general groundwater flow direction for the Landfill being northwest.

3.3 WELL DEPTHS EVALUATION

Well depths are required to be measured annually for monitoring wells that do not contain dedicated sampling pumps. Monitoring well depths were measured at MW-2, MW-3, MW-6, MW-7, MW-9, and MW-10 during the 2024 groundwater sampling events. The difference between the as-drilled and 2024 measured well depths at MW-2, MW-3, MW-7, MW-9, and MW-10 were not greater than 0.21 feet. The difference between the as-drilled and 2024 measured well depths at MW-6 was 1.26 feet, but MW-6 has consistently measured 1 to 3 feet deeper than the as-drilled well depth. The difference between the MW-6 measured and as-drilled well depths may be the result of the as-drilled well depth having been reported as feet below ground surface (ft bgs), and the measured well depth is reported as feet below top-of-casing. It does not appear siltation is affecting the ability of the monitoring wells to produce representative groundwater samples.

3.4 WELL RECHARGE RATE AND CHEMISTRY EVALUATION

IAC 567-113.10(2)(f)(4) requires a biennial evaluation of well recharge rates and chemistry to determine if well deterioration is occurring. Monitoring wells in the Adair County Sanitary Landfill HMSP are sampled using low-flow techniques, which entails purging and sampling at a low flow rate to reduce disturbance to the well and aquifer and to limit groundwater level drawdown. To achieve this, the purge and sampling flow rate is generally set between 100 and 500 mL/min. During the sampling events conducted within this reporting period, flow rates were within the recommended rate of 100 to 500 mL/min and control of groundwater level drawdown was subsequently maintained to the extent possible by the low-flow sampling technique. Based on the recorded sampling flow rates, drawdown observations, and laboratory and statistical results, in addition to the fact that groundwater samples were collected from the HMSP monitoring wells during the 2024 sampling events (i.e., no “dry” wells), monitoring well deterioration is not evident in the HMSP monitoring well network for the Site.

3.5 WELL MAINTENANCE RECOMMENDATIONS

Based on observations during the July 2024 sampling event, maintenance does not appear to be necessary at this time. Any well maintenance items noted during 2025 sampling activities will be communicated to Site personnel upon completion of the sampling activities.

4.0 2024 QUALITY ASSURANCE/QUALITY CONTROL SUMMARY

Quality assurance/quality control (QA/QC) procedures, also referred to as data validation, are performed on analytical laboratory results for laboratory QC samples and site samples. The QA review procedure provides documentation of the accuracy and precision of the analytical data and confirms that the analyses are sufficiently sensitive to detect constituents at levels below regulatory standards when technically feasible with the laboratory method utilized. QA/QC data validation of the analytical laboratory data includes review of sample handling, analytical sensitivity, field QA/QC samples, accuracy, and precision. An explanation of the laboratory QA/QC and data validation procedures along with the QA/QC review findings are described in more detail below. The 2024 QA/QC data validation documentation tables are included in **Appendix B-2**.

4.1 SAMPLE COLLECTION AND SAMPLE HANDLING

Sample receipt forms were reviewed and checked to verify that samples were received in proper condition and within the acceptable temperature range. Chain of custody (COC) records for each sampling event were reviewed and confirmed that information was complete, custody was not breached, and samples were analyzed within the acceptable holding times.

4.2 ANALYTICAL SENSITIVITY AND BLANKS

Laboratory QA/QC procedures and data validation assist in producing data of acceptable quality and reliability. Eurofins is a certified laboratory in Iowa and performed QA/QC procedures, including analyzing laboratory method blanks in association with samples collected for the project to check for contributions to the analytical results possibly attributable to laboratory-based contamination. Trip blanks were submitted with groundwater samples for VOC analysis and verified that cross-contamination did not occur during sample handling and transport.

4.3 ACCURACY

Laboratory analytical accuracy can be assessed by evaluating the constituent recoveries from the following laboratory QA/QC samples: initial or continuing calibration verification (ICV or CCV), laboratory control sample (LCS), and LCS duplicate (LCSD). LCS/LCSD samples assess the accuracy of analytical procedures by checking the ability to recover constituents added to clean aqueous matrices. In some cases, the laboratory spiked project samples as matrix spike (MS) and MS duplicate (MSD) samples to assess the ability to recover constituents from a matrix similar to that of project samples. Accuracy was also assessed for organic analyses by evaluating the recovery of organic constituent surrogates.

The data validation confirmed that the laboratory performed accurate QA/QC and appropriately qualified data with laboratory QA/QC accuracy exceedances. The limited CCV and LCS constituent recoveries that were outside of the recommended acceptable range did not appear to affect sample results, as the constituents with recovery exceedances were either not detected in Site samples or had measured concentrations within the historical range.

4.4 PRECISION

According to the Practical Guide for Ground-Water Sampling, Barcelona et al, November 1985, prepared in cooperation with the Robert S. Kerr Environmental Research Laboratory and the United States Environmental Protection Agency's Environmental Monitoring System Laboratory:

“Duplicate sample values which differ by less than $\pm 50\%$ relative difference indicate good error control.”

Field duplicate samples were collected during the March and July 2024 sampling events to evaluate the precision of analytical measurements, as well as the reproducibility of sampling technique. The relative percent differences (RPDs; quantitative difference between the site sample and the field duplicate sample) for each constituent were calculated to evaluate the precision of the data. The RPDs can be evaluated only if the laboratory analysis results for both the site sample and the field duplicate sample are detected above the reporting limit, although instances where one sample is

reported as non-detect at the reporting limit and the other sample is detected at a concentration greater than the reporting limit are noted. A result qualified with a “J” qualifier, which indicates an estimated concentration measured between the method detection limit and the reporting limit, and total suspended solids were not considered in the duplicate comparison.

Field duplicate samples were collected at monitoring well MW-7 and MW-6 during the March and July 2024 sampling events, respectively. The RPD comparisons were within an acceptable range and show a general agreement between the site samples and field duplicate samples, indicating sampling or analysis errors are unlikely and the data are acceptable for their intended use.

4.5 DATA QUALITY SUMMARY

Based on the above QA/QC procedures and the Adair County Sanitary Landfill field sampling standard operating procedures, the samples collected during this reporting period are considered to be representative of Site conditions at the locations and times they were obtained, and no samples were rejected as unusable due to QC failures. Data validation checklists are provided in **Appendix B-2**. In general, the quality of the analytical data for this reporting period does not appear to have been compromised by sampling or analytical irregularities, and results affected by QC anomalies are qualified with the appropriate data flags, which are listed in the laboratory reports in **Appendix B-1**.

5.0 STANDARDS HISTORY

Statistical evaluations are completed for the Site on a semi-annual frequency. Table 5 provides the background and GWPS summary for the Site. Table 6 is a summary of well/detected constituent pairs with no immediately preceding statistically significant increases (SSIs). Table 7 provides a summary of ongoing and newly identified SSIs. Table 8 provides a summary of ongoing and newly identified SSLs, which again for the Site are none. Data used for the statistical evaluations are included in Appendix C (also known as Table 9 of the DNR water quality report format). The Summary of Statistical Method and Output, which details the statistical evaluations from both the first and second semi-annual sampling events, is included in Appendix D. Table 10 illustrates the historical SSIs and SSLs since 2020. Table 11 is the Corrective Action Trend Analysis for the Site; however, no corrective action is required for the Site. Standards history graphs are included in Appendix G.

The Site was assigned a site-specific GWPS in 2012 for cobalt (0.052 mg/L) due to historically high levels of cobalt detected site-wide (Doc #70013). It should be noted that the site-specific GWPS was calculated using data collected prior to low-flow sampling methods and was eliminated prior to the 1st 2023 statistical evaluation due to background cobalt concentrations being below the state-wide standard.

6.0 RECOMMENDATIONS

There were eleven well/detected constituent pairs with SSIs above background. The monitoring wells with SSIs are in assessment monitoring and do not require a resample. Therefore, the SSIs were not confirmed. No SSLs were indicated during the 2024 statistical analyses. Detection monitoring will continue for GU-2, GWD-1, and background monitoring well MW-10. Assessment monitoring will continue for monitoring wells MW-2, MW-3, MW-6, MW-7, and MW-9. Sampling for the full list of

Appendix II constituents is scheduled for 2026 for monitoring wells MW-2 and MW-9 and 2027 for monitoring wells MW-3, MW-6, and MW-7.

7.0 ADDITIONAL REPORTING

In addition to this Annual Water Quality Report, the 2024 Leachate Control System Performance Evaluation Report is included in **Appendix E** and the 2024 Landfill Gas Report is included in **Appendix F**.

Tables

Table 1
Monitoring Program Summary
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Monitoring Point	Formation	Current Monitoring Program	Change For Next Sampling Event	Constituent(s) With SSI	Constituent(s) With SSL	Total Number of Samples in Each Monitoring Program Since 2008		
						Detection	Assessment	Corrective Action
HMSP Monitoring Points								
MW-2	Glacial Till	Assessment	No Change	Arsenic, Barium, Cobalt, Nickel, Benzene	None	6	32	0
MW-3	Glacial Till	Assessment	No Change	None	None	10	28	0
MW-6	Glacial Till	Assessment	No Change	Selenium	None	8	28	0
MW-7	Glacial Till	Assessment	No Change	Cadmium, Copper, Nickel	None	10	28	0
MW-9	Glacial Till	Assessment	No Change	Cobalt, Nickel	None	6	32	0
MW-10	Glacial Till	Background	No Change	Not applicable	None	37	0	0
GU-2	Glacial Till	Detection	No Change	None	None	12	0	0
GWD-1	Glacial Till	Detection	No Change	None	None	2	0	0
Other Monitoring Points								
MW-15	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		
MW-17	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		
MW-19	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		
MW-20	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		
MW-21	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		
MW-22	Glacial Till	Groundwater level	No Change	Not applicable	Not applicable	Not applicable		

Notes:

SSL - Statistically Significant Level above groundwater protection standard.

SSI - Statistically Significant Increase above background level.

Table 2
Monitoring Program Implementation Schedule
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Monitoring Point	Recent Sampling Dates and Constituents		Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
	March 19, 2024	July 25, 2024	1 st 2025 Semi-Annual	2 nd 2025 Semi-Annual	Collected Since January 1, 2016	Next Scheduled Event
MW-2	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Spring 2016, Spring 2021	2026
MW-3	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Spring 2017, Spring 2022	2027
MW-6	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Spring 2017, Spring 2022	2027
MW-7	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Spring 2017, Spring 2022	2027
MW-9	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Spring 2016, Fall 2021	2026
MW-10	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-2	Dry (no sample)	Dry (no sample)	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GWD-1	Dry (no sample)	Dry (no sample)	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable

Notes:

TSS - Total Suspended Solids.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

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

Notes:

- (1) See Section 3.2 of this report.
- (2) See Table 4.

Table 4
Monitoring Well Maintenance and Performance Summary
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth	Initial Flow Rate	Current Recharge Rate	
					3/19/2024	7/25/2024	Discrepancy (ft)	(gpm)/date	(mL/min)/(gpm)/(date)	% Change
MW-2	1236.14	1223.11	22.7	Groundwater Level (ft)	9.75	10.97	-0.19	0.133	150	-70%
				Groundwater Elevation (Ft MSL)	1226.39	1225.17				
				Measured Well Depth (ft)	22.80	22.89				
				Submerged screen	Y	Y				
MW-3	1226.51	1208.69	27.9	Groundwater Level (ft)	15.51	14.66	-0.12	0.014	150	183%
				Groundwater Elevation (Ft MSL)	1211.00	1211.85				
				Measured Well Depth (ft)	28.01	28.02				
				Submerged screen	Y	Y				
MW-6	1227.26	1214.52	20.1	Groundwater Level (ft)	8.62	9.78	-1.26	0.049	141.67	-24%
				Groundwater Elevation (Ft MSL)	1218.64	1217.48				
				Measured Well Depth (ft)	21.36	21.33				
				Submerged screen	Y	Y				
MW-7	1245.53	1227.68	27.9	Groundwater Level (ft)	13.26	13.11	-0.09	0.436	183.33	-89%
				Groundwater Elevation (Ft MSL)	1232.27	1232.42				
				Measured Well Depth (ft)	27.75	27.99				
				Submerged screen	Y	Y				
MW-9	1259.73	1241.89	27.8	Groundwater Level (ft)	12.50	13.36	-0.20	0.176	150	-77%
				Groundwater Elevation (Ft MSL)	1247.23	1246.37				
				Measured Well Depth (ft)	28.00	27.98				
				Submerged screen	Y	Y				
MW-10	1322.44	1299.65	32.8	Groundwater Level (ft)	17.27	12.85	-0.21	0.173	150	-77%
				Groundwater Elevation (Ft MSL)	1305.17	1309.59				
				Measured Well Depth (ft)	33.00	33.01				
				Submerged screen	Y	Y				

Comments: See Section 3.0 Monitoring Well Maintenance and Performance Summary for further discussion.

Table 5
Background and GWPS Summary
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Interwell Background/GWPS (MW-10)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background level	Statistical Test	GWPS	Source
Inorganics										
Antimony (Sb)	mg/L	13	0	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00076923	< 0.002	DQR	0.006	MCL
Arsenic (As)	mg/L	13	0	0.001 (1/2 RL)	0.001 (1/2 RL)	0.001	< 0.002	DQR	0.01	MCL
Barium (Ba)	mg/L	19	19	0.156	0.195	0.17418421	0.1959	PL (P)	2	MCL
Beryllium (Be)	mg/L	13	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	5.00E-04	< 0.001	DQR	0.004	MCL
Cadmium (Ca)	mg/L	14	6	0.00005 (1/2 RL)	0.000372	0.0001685	0.000372	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	13	1	0.00047*	0.0025 (1/2 RL)	0.00234385	0.0025	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	13	3	0.000038*	0.00025 (1/2 RL)	0.00020415	0.00025	PL (NP)	0.0021	SWS
Copper (Cu)	mg/L	13	1	0.001 (1/2 RL)	0.0025 (1/2 RL)	0.00234731	0.0025	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	13	2	0.00012*	0.00522	0.00062231	0.00522	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	13	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.0025	< 0.005	DQR	0.1	SWS
Selenium (Se)	mg/L	15	7	0.00091*	0.0025 (1/2 RL)	0.00185013	0.0025	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	13	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	5.00E-04	< 0.001	DQR	0.1	SWS
Thallium (Tl)	mg/L	14	1	0.0005 (1/2 RL)	0.00129	0.00055643	0.00129	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	17	8	0.000621*	0.0025 (1/2 RL)	0.00176253	0.0025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	14	1	0.005 (1/2 RL)	0.0128*	0.00912857	0.0128	PL (NP)	2	SWS

Notes:

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

* - J Flag, concentration was below the reporting limit but above the method detection limit. The concentration is estimated.

Acronyms/Abbreviations:

RL = Reporting Limit

PL = Prediction Limit

GWPS = Groundwater Protection Standard (mg/L)

MCL = EPA Maximum Contaminant Level

DQR = Double Quantification Rule

NP = Non-Parametric

SSGWPS = Site-Specific GWPS

P = Parametric

SWS = Statewide Standard

Comments:

- 1) **Water quality results and effectiveness of the statistical data evaluation criteria:** Statistical evaluations consist of prediction limits, double quantification rule, confidence intervals/confidence bands, as appropriate, and do not use data from the background wells for development of the confidence intervals or confidence bands.
- 2) **Changes to the previous statistical method during reporting period:** There were no changes to the statistical method during the 2024 reporting period.
- 3) **Re-sampling strategy:** Retesting is performed on a 1-of-2 scheme.
- 4) **Justification for data exclusion:** Due to the effect of elevated TSS on inorganic concentrations, inorganic data measured prior to the installation of low-flow sampling apparatuses during the 2015 reporting period were no longer considered representative of groundwater quality and removed from statistical consideration beginning with the 1st 2023 semi-annual statistical evaluation.

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Monitoring Point	Constituent	Units	Most Recent Result	Background Standard
MW-7	Cadmium	mg/L	0.00109	0.000372
	Copper	mg/L	0.00568	0.0025

Notes:

- 1) Criteria for inclusion in this table is a well/constituent pair with an indicated SSI during this current reporting period and no SSI in the immediately preceding reporting period.
- 2) A single exceedance in an assessment monitoring well is recorded above as an SSI. Retesting is not performed as these monitoring wells are not in the detection monitoring program.

Comments:

- 1) **Problems with the current detection network:** None.
- 2) **Schedule to implement remedies:** Not applicable.
- 3) **Alternative constituent or sample frequency changes:** None.
- 4) **Significant changes to calculated prediction limits:** Not applicable.
- 5) **Resampling strategy:** Retesting is performed on a 1-of-2 scheme.

Table 7
 Summary of Ongoing and Newly Identified SSIs
 2024 Annual Water Quality Report
 Adair County Sanitary Landfill
 Permit No. 01-SDP-01-74C

Monitoring Point	Constituent	Units	Most recent result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
MW-2	Arsenic	mg/L	0.00781	< 0.002	0.001359	0.01	6/22/2023	NA	10/19/2017
	Barium	mg/L	0.207	0.1959	0.1593	2	6/22/2023	NA	10/19/2017
	Benzene	µg/L	0.879	<0.5	0.5668	5	6/20/2008	NA	11/13/2009
	Cobalt	mg/L	0.000554	0.00025	0.0009887	0.0021	6/22/2023	NA	10/19/2017
	Nickel	mg/L	< 0.005	< 0.005	0.0025	0.1	6/22/2023	NA	10/19/2017
MW-3	None								
MW-6	Selenium	mg/L	0.00921	0.0025	0.003941	0.05	6/22/2023	NA	10/19/2017
MW-7	Cadmium	mg/L	0.00109	0.000372	0.0002425	0.005	7/25/2024	NA	10/19/2017
	Copper	mg/L	0.00568	0.0025	0.00155	1.3	7/25/2024	NA	10/19/2017
	Nickel	mg/L	0.0206	< 0.005	0.01621	0.1	6/22/2023	NA	10/19/2017
MW-9	Cobalt	mg/L	0.00082	0.00025	0.0006028	0.0021	6/22/2023	NA	10/19/2017
	Nickel	mg/L	0.00648	< 0.005	0.004173	0.1	6/22/2023	NA	10/19/2017
GU-2	No samples								
GWD-1	No samples								

- Notes:
- 1) Shaded rows denote constituent/well pairs with SSIs indicated in 2024 but not 2023. Unshaded rows denote constituent/well pairs with SSIs indicated during both the 2023 and 2024 reporting periods.
 - 2) NA - Not applicable. Monitoring well is in assessment monitoring and does not require a resample.

- Comments:
- 1) **Problems with the current assessment network:** None.
 - 2) **Proposed remedies:** Not applicable.
 - 3) **Alternative constituent or sample frequency changes:** None.
 - 4) **Property owner notifications:** Not applicable.

Table 8
Summary of Ongoing and Newly Identified SSLs
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Monitoring Point	Constituent	Units	Most recent result	Upper Confidence Limit	GWPS	Initial Exceedance	Upper Confidence Limit Below GWPS		
							1 st Year	2 nd Year	3 rd Year
None									

Notes:

- 1) There are no ongoing or newly identified SSLs at the MSWLF unit.

Table 9
Summary of Groundwater Chemistry
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

The Summary of Groundwater Chemistry is located in Appendix C.

Table 10
Historical SSI and SSL
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Key

	= SSI
	= SSL

Well	Constituent	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024
MW-2	Arsenic										
	Barium										
	Benzene										
	Cobalt										
	Chlorobenzene										
	cis-1,2-Dichloroethene										
	Nickel										
	Thallium										
MW-6	Acetone										
	Cobalt										
	Selenium										
MW-7	Acetone										
	Cadmium										
	Cobalt										
	Copper										
	Nickel										
MW-9	Cobalt										
	Nickel										

Comments:

- 1) Background was updated during the 2nd 2023 semi-annual statistical evaluation. Inorganic data from the sampling events that occurred prior to the implementation of low-flow sampling, which began during the 2nd 2015 semi-annual sampling event, were removed from statistical consideration.
- 2) Retesting is not performed in assessment monitoring wells as these monitoring wells are not in the detection monitoring program.

Table 11
Corrective Action Trend Analysis
2024 Annual Water Quality Report
Adair County Sanitary Landfill
Permit No. 01-SDP-01-74C

Monitoring Point	Current SSL	Trend	Calculated S	Critical S	Total N	Projected Date to Completion
None						

Notes:

- N - Number of Samples.
- S - Mann-Kendall Statistics.

Comments:

- 1) There are no SSLs at the MSWLF unit, therefore corrective action analysis is not required.

Figures

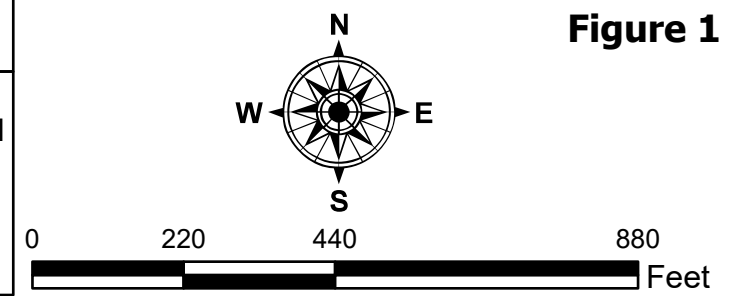
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 User: bmatson
 Path: C:\Users\hmatson\OneDrive - SCS Engineers\Desktop\Adair\Adair_2025_AVIC\Adair_2025_AVIC.aprx

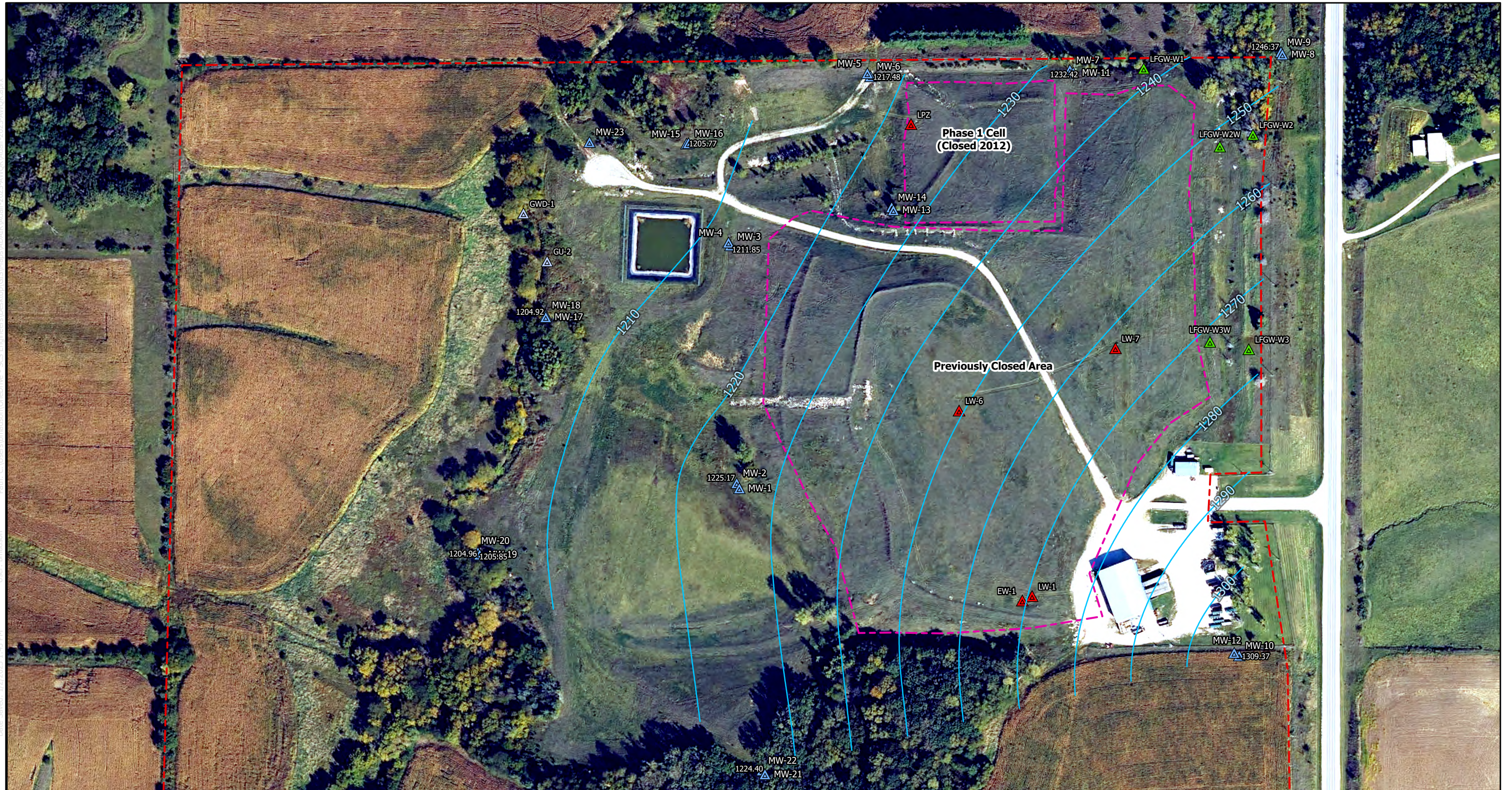


Monitoring Point	Current Monitoring Program
MW-2	Assessment
MW-3	Assessment
MW-6	Assessment
MW-7	Assessment
MW-9	Assessment
MW-10	Background
GU-2	Detection
GWD-1	Detection

Approved Monitoring Network

Legend <ul style="list-style-type: none"> ▲ HMSP Monitoring Well ▲ HMSP Goundwater Underdrain Monitoring Point ▲ Monitoring Well ▲ Landfill Gas Monitoring Well ▲ Leachate Monitoring Point Approximate Waste Boundary Approximate Property Boundary 	Adair County Sanitary Landfill Adair, IA Project No: 27224370.25 Drawing Date: January 2025
--	--





Data Source: 11/27/2025 1:43 PM
 User: tomason
 Path: C:\Users\Tomason\OneDrive - SCS Engineers\Desktop\Adair\Adair_2025_AVIC01A.dwg 10/22/2025 AVIC01A.dwg



Groundwater Contours

Legend	
	Approximate Groundwater Contours Based on Field Measurements Taken July 25, 2024
	Monitoring Well
	Landfill Gas Monitoring Well
	Leachate Monitoring Point
	Approximate Waste Boundary
	Approximate Property Boundary

Adair County Sanitary Landfill
 Adair, IA
 Project No: 27224370.25
 Drawing Date: January 2025

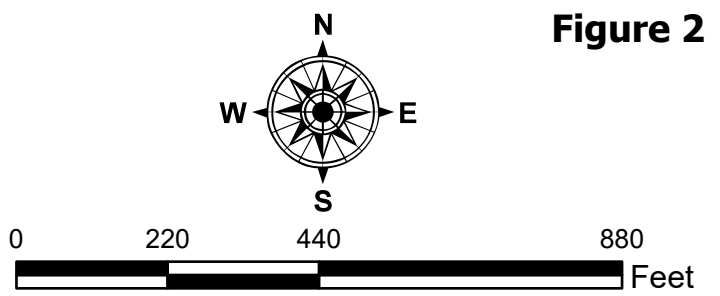
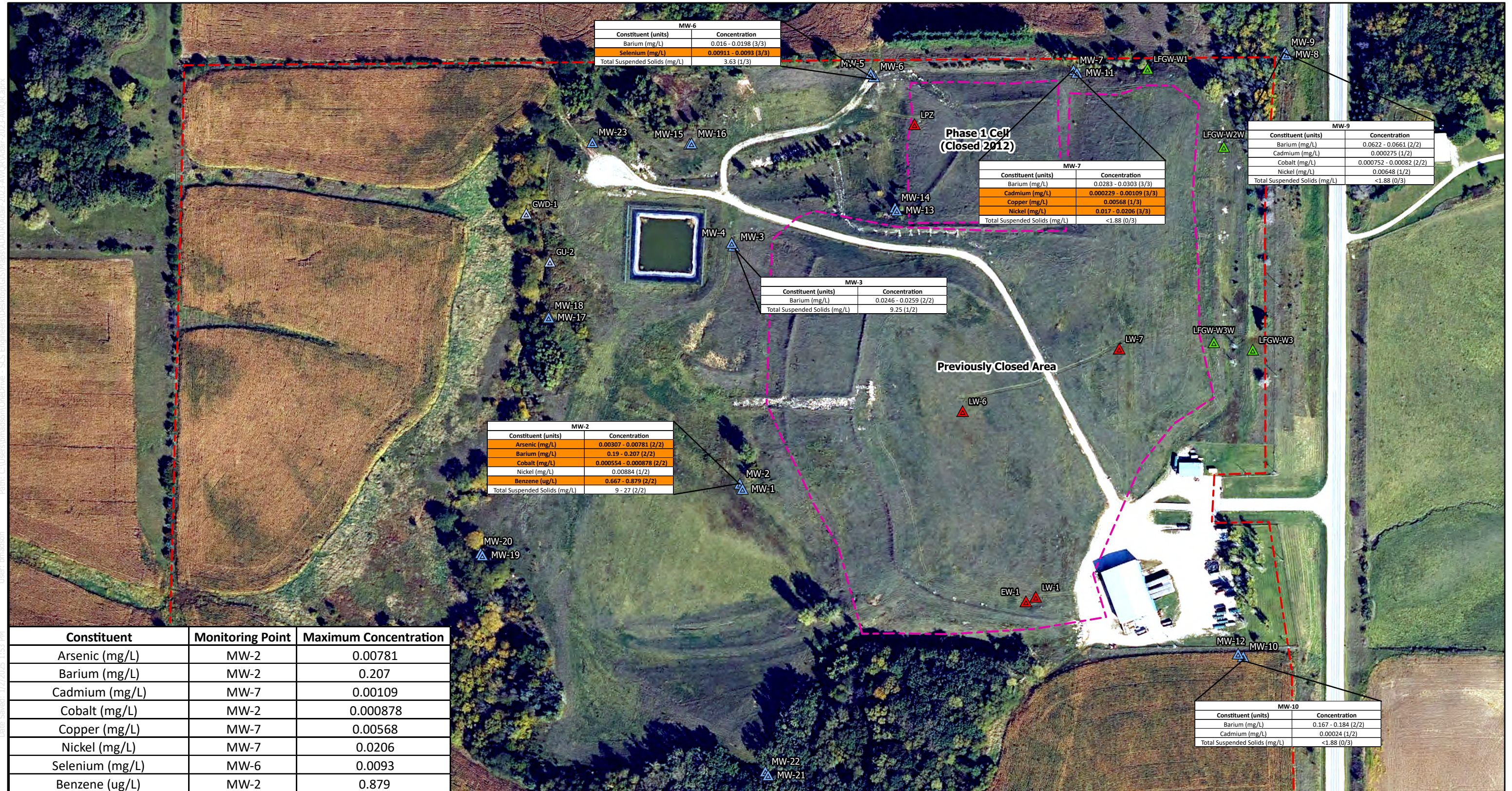


Figure 2

SCS ENGINEERS, Inc. 11201 E. 15th Avenue, Suite 100, Denver, CO 80232, USA. Phone: 303.751.1000. Fax: 303.751.1001. Email: info@scsengineers.com



Reporting Period Detection Summary

Legend

- Monitoring Well
- Landfill Gas Monitoring Well
- Leachate Monitoring Point
- Approximate Waste Boundary
- Approximate Property Boundary

Adair County Sanitary Landfill
Adair, IA
Project No: 27224370.25
Drawing Date: January 2025

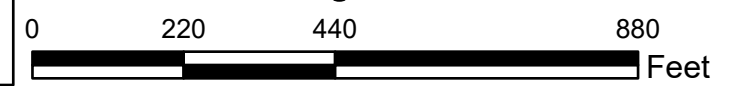
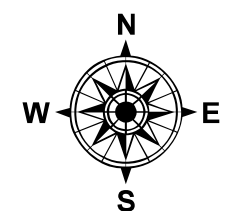



Figure 3





Appendix A
Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project: Adair County Sanitary Landfill	
Monitoring Well/Piezometer ID: MW-3	Date: 7/25/2024
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):	28.02
Initial Static Water Level (feet):	14.66
Initial Groundwater Elevation (ft-amsl):	1211.85
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)	
12:13 PM	Purging start time.						
12:16 PM	16.3	1.7	1519.6	6.85	126.3	3.1	
12:19 PM	15.8	0.9	1479.8	6.82	126.6	4.1	
12:22 PM	16.1	0.8	1467.0	6.81	126.6	6.7	
12:25 PM	16.1	0.8	1465.7	6.79	126.5	10.4	
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
----------------------	----------------------------



Appendix B-1
Laboratory Analytical Data Sheets

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/27/2024 2:53:36 PM

JOB DESCRIPTION

1st 2024 Semi-Annual Groundwater Sampling
Adair County Sanitary Landfill

JOB NUMBER

310-277199-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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3/27/2024 2:53:36 PM

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



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Case Narrative

Client: SCS Engineers
Project: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1

Job ID: 310-277199-1

Eurofins Cedar Falls

Job Narrative 310-277199-1

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 3/20/2024 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.1°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-416634 recovered above the upper control limit for Trichlorofluoromethane (27.4%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 310-416634/4).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-416634 recovered outside control limits for the following analytes: Chlorodibromomethane. 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.

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-277199-1	MW-2	Water	03/19/24 12:30	03/20/24 16:20
310-277199-2	MW-3	Water	03/19/24 11:48	03/20/24 16:20
310-277199-3	MW-6	Water	03/19/24 11:15	03/20/24 16:20
310-277199-4	MW-7	Water	03/19/24 10:37	03/20/24 16:20
310-277199-5	MW-9	Water	03/19/24 14:01	03/20/24 16:20
310-277199-6	MW-10	Water	03/19/24 13:14	03/20/24 16:20
310-277199-7	Dup-1	Water	03/19/24 10:37	03/20/24 16:20
310-277199-8	Trip Blank	Water	03/19/24 00:00	03/20/24 16:20

1

2

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15

Detection Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Client Sample ID: MW-2

Lab Sample ID: 310-277199-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.667		0.500		ug/L	1		8260D	Total/NA
Arsenic	0.00307		0.00200		mg/L	1		6020B	Total/NA
Barium	0.190		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.000878		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.00884		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	9.00		3.75		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 310-277199-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0259		0.00200		mg/L	1		6020B	Total/NA
Total Suspended Solids	9.25		1.88		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 310-277199-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0198		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.00911		0.00500		mg/L	1		6020B	Total/NA
Total Suspended Solids	3.63		1.88		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 310-277199-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0283		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000229		0.000200		mg/L	1		6020B	Total/NA
Nickel	0.0196		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 310-277199-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0622		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.000752		0.000500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 310-277199-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.184		0.00200		mg/L	1		6020B	Total/NA

Client Sample ID: Dup-1

Lab Sample ID: 310-277199-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0283		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000256		0.000200		mg/L	1		6020B	Total/NA
Nickel	0.0170		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 310-277199-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-2

Lab Sample ID: 310-277199-1

Date Collected: 03/19/24 12:30

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 03:15	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 03:15	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 03:15	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 03:15	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 03:15	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 03:15	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 03:15	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 03:15	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 03:15	1
Acetone	<10.0		10.0		ug/L			03/22/24 03:15	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 03:15	1
Benzene	0.667		0.500		ug/L			03/22/24 03:15	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 03:15	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 03:15	1
Bromoform	<5.00		5.00		ug/L			03/22/24 03:15	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 03:15	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 03:15	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 03:15	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 03:15	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 03:15	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 03:15	1
Chloroform	<3.00		3.00		ug/L			03/22/24 03:15	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 03:15	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 03:15	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 03:15	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 03:15	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 03:15	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 03:15	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 03:15	1
Styrene	<1.00		1.00		ug/L			03/22/24 03:15	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 03:15	1
Toluene	<1.00		1.00		ug/L			03/22/24 03:15	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 03:15	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 03:15	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 03:15	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 03:15	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 03:15	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 03:15	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 03:15	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	114		73 - 130		03/22/24 03:15	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-2

Lab Sample ID: 310-277199-1

Date Collected: 03/19/24 12:30

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		03/22/24 03:15	1
4-Bromofluorobenzene (Surr)	102		80 - 120		03/22/24 03:15	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		03/22/24 09:00	03/25/24 15:11	1
Arsenic	0.00307		0.00200		mg/L		03/22/24 09:00	03/25/24 15:11	1
Barium	0.190		0.00200		mg/L		03/22/24 09:00	03/26/24 16:09	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:11	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 15:11	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Cobalt	0.000878		0.000500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Nickel	0.00884		0.00500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:11	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:11	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:11	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	9.00		3.75		mg/L			03/21/24 10:20	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-277199-2

Date Collected: 03/19/24 11:48

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 03:38	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 03:38	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 03:38	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 03:38	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 03:38	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 03:38	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 03:38	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 03:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 03:38	1
Acetone	<10.0		10.0		ug/L			03/22/24 03:38	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 03:38	1
Benzene	<0.500		0.500		ug/L			03/22/24 03:38	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 03:38	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 03:38	1
Bromoform	<5.00		5.00		ug/L			03/22/24 03:38	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 03:38	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 03:38	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 03:38	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 03:38	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 03:38	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 03:38	1
Chloroform	<3.00		3.00		ug/L			03/22/24 03:38	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 03:38	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 03:38	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 03:38	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 03:38	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 03:38	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 03:38	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 03:38	1
Styrene	<1.00		1.00		ug/L			03/22/24 03:38	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 03:38	1
Toluene	<1.00		1.00		ug/L			03/22/24 03:38	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 03:38	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 03:38	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 03:38	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 03:38	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 03:38	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 03:38	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 03:38	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	112		73 - 130		03/22/24 03:38	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-3

Lab Sample ID: 310-277199-2

Date Collected: 03/19/24 11:48

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		03/22/24 03:38	1
4-Bromofluorobenzene (Surr)	103		80 - 120		03/22/24 03:38	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		03/22/24 09:00	03/25/24 15:13	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:13	1
Barium	0.0259		0.00200		mg/L		03/22/24 09:00	03/26/24 16:11	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:13	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 15:13	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Nickel	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:13	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:13	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:13	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	9.25		1.88		mg/L			03/21/24 10:20	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-6

Lab Sample ID: 310-277199-3

Date Collected: 03/19/24 11:15

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 04:01	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 04:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 04:01	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:01	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 04:01	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:01	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 04:01	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 04:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 04:01	1
Acetone	<10.0		10.0		ug/L			03/22/24 04:01	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 04:01	1
Benzene	<0.500		0.500		ug/L			03/22/24 04:01	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 04:01	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 04:01	1
Bromoform	<5.00		5.00		ug/L			03/22/24 04:01	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 04:01	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 04:01	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 04:01	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 04:01	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 04:01	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 04:01	1
Chloroform	<3.00		3.00		ug/L			03/22/24 04:01	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 04:01	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:01	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:01	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 04:01	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 04:01	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 04:01	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 04:01	1
Styrene	<1.00		1.00		ug/L			03/22/24 04:01	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 04:01	1
Toluene	<1.00		1.00		ug/L			03/22/24 04:01	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:01	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 04:01	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 04:01	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 04:01	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 04:01	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 04:01	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 04:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	115		73 - 130		03/22/24 04:01	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-6

Lab Sample ID: 310-277199-3

Date Collected: 03/19/24 11:15

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		03/22/24 04:01	1
4-Bromofluorobenzene (Surr)	102		80 - 120		03/22/24 04:01	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		03/22/24 09:00	03/25/24 15:16	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:16	1
Barium	0.0198		0.00200		mg/L		03/22/24 09:00	03/26/24 16:14	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:16	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 15:16	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Nickel	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Selenium	0.00911		0.00500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:16	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:16	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:16	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	3.63		1.88		mg/L			03/21/24 10:20	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-7

Lab Sample ID: 310-277199-4

Date Collected: 03/19/24 10:37

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 04:23	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 04:23	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 04:23	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:23	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 04:23	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:23	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 04:23	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 04:23	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 04:23	1
Acetone	<10.0		10.0		ug/L			03/22/24 04:23	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 04:23	1
Benzene	<0.500		0.500		ug/L			03/22/24 04:23	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 04:23	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 04:23	1
Bromoform	<5.00		5.00		ug/L			03/22/24 04:23	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 04:23	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 04:23	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 04:23	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 04:23	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 04:23	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 04:23	1
Chloroform	<3.00		3.00		ug/L			03/22/24 04:23	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 04:23	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:23	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:23	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 04:23	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 04:23	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 04:23	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 04:23	1
Styrene	<1.00		1.00		ug/L			03/22/24 04:23	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 04:23	1
Toluene	<1.00		1.00		ug/L			03/22/24 04:23	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:23	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:23	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 04:23	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 04:23	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 04:23	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 04:23	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 04:23	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	116		73 - 130		03/22/24 04:23	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-7

Lab Sample ID: 310-277199-4

Date Collected: 03/19/24 10:37

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		03/22/24 04:23	1
4-Bromofluorobenzene (Surr)	102		80 - 120		03/22/24 04:23	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		03/22/24 09:00	03/25/24 15:18	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:18	1
Barium	0.0283		0.00200		mg/L		03/22/24 09:00	03/26/24 16:16	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:18	1
Cadmium	0.000229		0.000200		mg/L		03/22/24 09:00	03/25/24 15:18	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Nickel	0.0196		0.00500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:18	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:18	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:18	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			03/21/24 10:20	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-9

Lab Sample ID: 310-277199-5

Date Collected: 03/19/24 14:01

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 04:46	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 04:46	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 04:46	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:46	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 04:46	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 04:46	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 04:46	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 04:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 04:46	1
Acetone	<10.0		10.0		ug/L			03/22/24 04:46	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 04:46	1
Benzene	<0.500		0.500		ug/L			03/22/24 04:46	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 04:46	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 04:46	1
Bromoform	<5.00		5.00		ug/L			03/22/24 04:46	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 04:46	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 04:46	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 04:46	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 04:46	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 04:46	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 04:46	1
Chloroform	<3.00		3.00		ug/L			03/22/24 04:46	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 04:46	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:46	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:46	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 04:46	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 04:46	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 04:46	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 04:46	1
Styrene	<1.00		1.00		ug/L			03/22/24 04:46	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 04:46	1
Toluene	<1.00		1.00		ug/L			03/22/24 04:46	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 04:46	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 04:46	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 04:46	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 04:46	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 04:46	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 04:46	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 04:46	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	115		73 - 130		03/22/24 04:46	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-9

Lab Sample ID: 310-277199-5

Date Collected: 03/19/24 14:01

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		03/22/24 04:46	1
4-Bromofluorobenzene (Surr)	100		80 - 120		03/22/24 04:46	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		03/22/24 09:00	03/25/24 15:29	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:29	1
Barium	0.0622		0.00200		mg/L		03/22/24 09:00	03/26/24 16:27	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:29	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 15:29	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Cobalt	0.000752		0.000500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Nickel	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:29	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:29	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:29	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			03/21/24 11:21	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-10

Lab Sample ID: 310-277199-6

Date Collected: 03/19/24 13:14

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 05:09	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 05:09	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 05:09	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 05:09	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 05:09	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 05:09	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 05:09	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 05:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 05:09	1
Acetone	<10.0		10.0		ug/L			03/22/24 05:09	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 05:09	1
Benzene	<0.500		0.500		ug/L			03/22/24 05:09	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 05:09	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 05:09	1
Bromoform	<5.00		5.00		ug/L			03/22/24 05:09	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 05:09	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 05:09	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 05:09	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 05:09	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 05:09	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 05:09	1
Chloroform	<3.00		3.00		ug/L			03/22/24 05:09	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 05:09	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 05:09	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 05:09	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 05:09	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 05:09	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 05:09	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 05:09	1
Styrene	<1.00		1.00		ug/L			03/22/24 05:09	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 05:09	1
Toluene	<1.00		1.00		ug/L			03/22/24 05:09	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 05:09	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 05:09	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 05:09	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 05:09	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 05:09	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 05:09	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 05:09	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 05:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	118		73 - 130		03/22/24 05:09	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-10

Lab Sample ID: 310-277199-6

Date Collected: 03/19/24 13:14

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		03/22/24 05:09	1
4-Bromofluorobenzene (Surr)	102		80 - 120		03/22/24 05:09	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		03/22/24 09:00	03/25/24 15:31	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:31	1
Barium	0.184		0.00200		mg/L		03/22/24 09:00	03/26/24 16:29	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:31	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 15:31	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Nickel	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:31	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:31	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:31	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			03/21/24 11:21	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: Dup-1

Lab Sample ID: 310-277199-7

Date Collected: 03/19/24 10:37

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 05:32	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 05:32	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 05:32	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 05:32	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 05:32	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 05:32	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 05:32	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 05:32	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 05:32	1
Acetone	<10.0		10.0		ug/L			03/22/24 05:32	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 05:32	1
Benzene	<0.500		0.500		ug/L			03/22/24 05:32	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 05:32	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 05:32	1
Bromoform	<5.00		5.00		ug/L			03/22/24 05:32	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 05:32	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 05:32	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 05:32	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 05:32	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 05:32	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 05:32	1
Chloroform	<3.00		3.00		ug/L			03/22/24 05:32	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 05:32	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 05:32	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 05:32	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 05:32	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 05:32	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 05:32	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 05:32	1
Styrene	<1.00		1.00		ug/L			03/22/24 05:32	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 05:32	1
Toluene	<1.00		1.00		ug/L			03/22/24 05:32	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 05:32	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 05:32	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 05:32	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 05:32	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 05:32	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 05:32	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 05:32	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 05:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	115		73 - 130		03/22/24 05:32	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: Dup-1

Lab Sample ID: 310-277199-7

Date Collected: 03/19/24 10:37

Matrix: Water

Date Received: 03/20/24 16:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		03/22/24 05:32	1
4-Bromofluorobenzene (Surr)	100		80 - 120		03/22/24 05:32	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		03/22/24 09:00	03/25/24 15:36	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 15:36	1
Barium	0.0283		0.00200		mg/L		03/22/24 09:00	03/26/24 16:34	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:36	1
Cadmium	0.000256		0.000200		mg/L		03/22/24 09:00	03/25/24 15:36	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Nickel	0.0170		0.00500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:36	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 15:36	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 15:36	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/26/24 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			03/21/24 11:21	1

Client Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-277199-8

Date Collected: 03/19/24 00:00

Matrix: Water

Date Received: 03/20/24 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 02:29	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 02:29	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 02:29	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 02:29	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 02:29	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 02:29	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 02:29	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 02:29	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 02:29	1
Acetone	<10.0		10.0		ug/L			03/22/24 02:29	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 02:29	1
Benzene	<0.500		0.500		ug/L			03/22/24 02:29	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 02:29	1
Bromodichloromethane	<1.00	*+	1.00		ug/L			03/22/24 02:29	1
Bromoform	<5.00		5.00		ug/L			03/22/24 02:29	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 02:29	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 02:29	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 02:29	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 02:29	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 02:29	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 02:29	1
Chloroform	<3.00		3.00		ug/L			03/22/24 02:29	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 02:29	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 02:29	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 02:29	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 02:29	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 02:29	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 02:29	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 02:29	1
Styrene	<1.00		1.00		ug/L			03/22/24 02:29	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 02:29	1
Toluene	<1.00		1.00		ug/L			03/22/24 02:29	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 02:29	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 02:29	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 02:29	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 02:29	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 02:29	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 02:29	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 02:29	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 02:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	118		73 - 130		03/22/24 02:29	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-277199-8

Date Collected: 03/19/24 00:00

Matrix: Water

Date Received: 03/20/24 16:20

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

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Toluene-d8 (Surr)	100		80 - 120		03/22/24 02:29	1
4-Bromofluorobenzene (Surr)	100		80 - 120		03/22/24 02:29	1

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Definitions/Glossary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Qualifiers

GC/MS VOA

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

Glossary

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

Surrogate Summary

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (73-130)	TOL (80-120)	BFB (80-120)
310-277199-1	MW-2	114	98	102
310-277199-1 MS	MW-2	101	100	103
310-277199-1 MSD	MW-2	99	100	102
310-277199-2	MW-3	112	98	103
310-277199-3	MW-6	115	97	102
310-277199-4	MW-7	116	97	102
310-277199-5	MW-9	115	97	100
310-277199-6	MW-10	118	96	102
310-277199-7	Dup-1	115	98	100
310-277199-8	Trip Blank	118	100	100
LCS 310-416634/6	Lab Control Sample	98	100	101
LCS 310-416634/7	Lab Control Sample	112	97	103
MB 310-416634/5	Method Blank	114	99	100

Surrogate Legend

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



QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: MB 310-416634/5
Matrix: Water
Analysis Batch: 416634

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,1-Dichloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,1-Dichloroethene	<2.00		2.00		ug/L			03/22/24 01:21	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			03/22/24 01:21	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			03/22/24 01:21	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 01:21	1
1,2-Dichloroethane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,2-Dichloropropane	<1.00		1.00		ug/L			03/22/24 01:21	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			03/22/24 01:21	1
2-Butanone (MEK)	<10.0		10.0		ug/L			03/22/24 01:21	1
2-Hexanone	<10.0		10.0		ug/L			03/22/24 01:21	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			03/22/24 01:21	1
Acetone	<10.0		10.0		ug/L			03/22/24 01:21	1
Acrylonitrile	<5.00		5.00		ug/L			03/22/24 01:21	1
Benzene	<0.500		0.500		ug/L			03/22/24 01:21	1
Bromochloromethane	<5.00		5.00		ug/L			03/22/24 01:21	1
Bromodichloromethane	<1.00		1.00		ug/L			03/22/24 01:21	1
Bromoform	<5.00		5.00		ug/L			03/22/24 01:21	1
Bromomethane	<4.00		4.00		ug/L			03/22/24 01:21	1
Carbon disulfide	<1.00		1.00		ug/L			03/22/24 01:21	1
Carbon tetrachloride	<2.00		2.00		ug/L			03/22/24 01:21	1
Chlorobenzene	<1.00		1.00		ug/L			03/22/24 01:21	1
Chlorodibromomethane	<5.00		5.00		ug/L			03/22/24 01:21	1
Chloroethane	<4.00		4.00		ug/L			03/22/24 01:21	1
Chloroform	<3.00		3.00		ug/L			03/22/24 01:21	1
Chloromethane	<3.00		3.00		ug/L			03/22/24 01:21	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 01:21	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 01:21	1
Dibromomethane	<1.00		1.00		ug/L			03/22/24 01:21	1
Ethylbenzene	<1.00		1.00		ug/L			03/22/24 01:21	1
Iodomethane	<10.0		10.0		ug/L			03/22/24 01:21	1
Methylene chloride	<5.00		5.00		ug/L			03/22/24 01:21	1
Styrene	<1.00		1.00		ug/L			03/22/24 01:21	1
Tetrachloroethene	<1.00		1.00		ug/L			03/22/24 01:21	1
Toluene	<1.00		1.00		ug/L			03/22/24 01:21	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			03/22/24 01:21	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			03/22/24 01:21	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			03/22/24 01:21	1
Trichloroethene	<1.00		1.00		ug/L			03/22/24 01:21	1
Trichlorofluoromethane	<4.00		4.00		ug/L			03/22/24 01:21	1
Vinyl acetate	<10.0		10.0		ug/L			03/22/24 01:21	1
Vinyl chloride	<1.00		1.00		ug/L			03/22/24 01:21	1
Xylenes, Total	<3.00		3.00		ug/L			03/22/24 01:21	1

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: MB 310-416634/5
Matrix: Water
Analysis Batch: 416634

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

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	114		73 - 130		03/22/24 01:21	1
Toluene-d8 (Surr)	99		80 - 120		03/22/24 01:21	1
4-Bromofluorobenzene (Surr)	100		80 - 120		03/22/24 01:21	1

Lab Sample ID: LCS 310-416634/6
Matrix: Water
Analysis Batch: 416634

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				Limits
1,1,1,2-Tetrachloroethane	20.0	22.55		ug/L		113	71 - 120
1,1,1,1-Trichloroethane	20.0	24.69		ug/L		123	73 - 129
1,1,1,2,2-Tetrachloroethane	20.0	22.64		ug/L		113	68 - 124
1,1,2-Trichloroethane	20.0	23.39		ug/L		117	73 - 123
1,1-Dichloroethane	20.0	24.63		ug/L		123	70 - 127
1,1-Dichloroethane	20.0	23.15		ug/L		116	63 - 132
1,2,3-Trichloropropane	20.0	22.22		ug/L		111	65 - 127
1,2-Dibromo-3-chloropropane	20.0	21.81		ug/L		109	50 - 150
1,2-Dibromoethane (EDB)	20.0	23.19		ug/L		116	75 - 125
1,2-Dichlorobenzene	20.0	22.97		ug/L		115	74 - 120
1,2-Dichloroethane	20.0	24.72		ug/L		124	71 - 125
1,2-Dichloropropane	20.0	24.63		ug/L		123	73 - 124
1,4-Dichlorobenzene	20.0	23.47		ug/L		117	72 - 120
2-Butanone (MEK)	40.0	47.09		ug/L		118	50 - 150
2-Hexanone	40.0	47.21		ug/L		118	60 - 140
4-Methyl-2-pentanone (MIBK)	40.0	46.41		ug/L		116	60 - 139
Acetone	40.0	45.67		ug/L		114	50 - 150
Acrylonitrile	200	239.0		ug/L		120	50 - 150
Benzene	20.0	23.22		ug/L		116	72 - 124
Bromochloromethane	20.0	23.21		ug/L		116	73 - 130
Bromodichloromethane	20.0	24.77	*+	ug/L		124	74 - 122
Bromoform	20.0	21.32		ug/L		107	61 - 122
Carbon disulfide	20.0	24.44		ug/L		122	59 - 135
Carbon tetrachloride	20.0	24.89		ug/L		124	67 - 132
Chlorobenzene	20.0	23.56		ug/L		118	76 - 120
Chlorodibromomethane	20.0	22.90		ug/L		114	71 - 121
Chloroform	20.0	22.08		ug/L		110	72 - 125
cis-1,2-Dichloroethene	20.0	22.72		ug/L		114	74 - 123
cis-1,3-Dichloropropene	20.0	22.87		ug/L		114	71 - 125
Dibromomethane	20.0	23.72		ug/L		119	74 - 125
Ethylbenzene	20.0	23.77		ug/L		119	74 - 122
Iodomethane	20.0	21.71		ug/L		109	10 - 150
Methylene chloride	20.0	20.96		ug/L		105	50 - 150
Styrene	20.0	23.01		ug/L		115	74 - 121
Tetrachloroethene	20.0	23.55		ug/L		118	71 - 130
Toluene	20.0	23.87		ug/L		119	74 - 123
trans-1,2-Dichloroethene	20.0	23.37		ug/L		117	70 - 126
trans-1,3-Dichloropropene	20.0	22.68		ug/L		113	69 - 123
trans-1,4-Dichloro-2-butene	20.0	21.54		ug/L		108	50 - 150

QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: LCS 310-416634/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 416634

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Trichloroethene	20.0	23.36		ug/L		117	72 - 126
Vinyl acetate	40.0	45.72		ug/L		114	50 - 150
Xylenes, Total	40.0	45.88		ug/L		115	73 - 123

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	98		73 - 130
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120

Lab Sample ID: LCS 310-416634/7

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 416634

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	19.74		ug/L		99	23 - 150
Chloroethane	20.0	22.35		ug/L		112	54 - 136
Chloromethane	20.0	21.24		ug/L		106	38 - 150
Trichlorofluoromethane	20.0	25.15		ug/L		126	54 - 149
Vinyl chloride	20.0	23.70		ug/L		118	56 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	112		73 - 130
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120

Lab Sample ID: 310-277199-1 MS

Client Sample ID: MW-2

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 416634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1,1,1,2-Tetrachloroethane	<1.00		20.0	19.79		ug/L		99	55 - 130
1,1,1-Trichloroethane	<1.00		20.0	20.51		ug/L		103	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		20.0	18.80		ug/L		94	54 - 130
1,1,2-Trichloroethane	<1.00		20.0	19.71		ug/L		99	58 - 130
1,1-Dichloroethane	<1.00		20.0	20.81		ug/L		104	49 - 130
1,1-Dichloroethene	<2.00		20.0	19.52		ug/L		98	37 - 132
1,2,3-Trichloropropane	<1.00		20.0	19.81		ug/L		99	49 - 130
1,2-Dibromo-3-chloropropane	<5.00		20.0	19.11		ug/L		96	38 - 150
1,2-Dibromoethane (EDB)	<1.00		20.0	20.48		ug/L		102	60 - 130
1,2-Dichlorobenzene	<1.00		20.0	19.11		ug/L		96	59 - 130
1,2-Dichloroethane	<1.00		20.0	22.31		ug/L		112	51 - 130
1,2-Dichloropropane	<1.00		20.0	21.17		ug/L		106	57 - 130
1,4-Dichlorobenzene	<1.00		20.0	20.06		ug/L		100	57 - 130
2-Butanone (MEK)	<10.0		40.0	41.29		ug/L		103	38 - 150
2-Hexanone	<10.0		40.0	41.61		ug/L		104	46 - 140
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	40.40		ug/L		101	47 - 139
Acetone	<10.0		40.0	41.45		ug/L		104	31 - 150
Acrylonitrile	<5.00		200	207.4		ug/L		104	40 - 150

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: 310-277199-1 MS
Matrix: Water
Analysis Batch: 416634

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	0.667		20.0	20.28		ug/L		98		46 - 130
Bromochloromethane	<5.00		20.0	20.51		ug/L		103		57 - 130
Bromodichloromethane	<1.00	*+	20.0	21.14		ug/L		106		57 - 130
Bromoform	<5.00		20.0	17.45		ug/L		87		44 - 130
Carbon disulfide	<1.00		20.0	21.61		ug/L		108		38 - 135
Carbon tetrachloride	<2.00		20.0	20.72		ug/L		104		45 - 132
Chlorobenzene	<1.00		20.0	20.13		ug/L		101		59 - 130
Chlorodibromomethane	<5.00		20.0	19.30		ug/L		97		54 - 130
Chloroform	<3.00		20.0	18.44		ug/L		92		51 - 130
cis-1,2-Dichloroethene	<1.00		20.0	19.79		ug/L		99		45 - 130
cis-1,3-Dichloropropene	<5.00		20.0	18.76		ug/L		94		53 - 130
Dibromomethane	<1.00		20.0	20.77		ug/L		104		59 - 130
Ethylbenzene	<1.00		20.0	20.31		ug/L		102		45 - 130
Iodomethane	<10.0		20.0	18.90		ug/L		95		10 - 150
Methylene chloride	<5.00		20.0	18.80		ug/L		94		37 - 150
Styrene	<1.00		20.0	19.79		ug/L		99		47 - 130
Tetrachloroethene	<1.00		20.0	19.22		ug/L		96		47 - 130
Toluene	<1.00		20.0	20.19		ug/L		101		51 - 130
trans-1,2-Dichloroethene	<1.00		20.0	19.67		ug/L		98		48 - 130
trans-1,3-Dichloropropene	<5.00		20.0	18.56		ug/L		93		50 - 130
trans-1,4-Dichloro-2-butene	<10.0		20.0	18.10		ug/L		91		26 - 150
Trichloroethene	<1.00		20.0	18.96		ug/L		95		51 - 130
Vinyl acetate	<10.0		40.0	37.75		ug/L		94		29 - 150
Xylenes, Total	<3.00		40.0	41.01		ug/L		103		43 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	101		73 - 130
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120

Lab Sample ID: 310-277199-1 MSD
Matrix: Water
Analysis Batch: 416634

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		20.0	18.64		ug/L		93		55 - 130	6	20
1,1,1-Trichloroethane	<1.00		20.0	20.34		ug/L		102		52 - 130	1	20
1,1,1,2,2-Tetrachloroethane	<1.00		20.0	18.49		ug/L		92		54 - 130	2	20
1,1,2-Trichloroethane	<1.00		20.0	19.00		ug/L		95		58 - 130	4	20
1,1-Dichloroethane	<1.00		20.0	19.70		ug/L		99		49 - 130	5	20
1,1-Dichloroethene	<2.00		20.0	18.80		ug/L		94		37 - 132	4	26
1,2,3-Trichloropropane	<1.00		20.0	18.27		ug/L		91		49 - 130	8	26
1,2-Dibromo-3-chloropropane	<5.00		20.0	18.00		ug/L		90		38 - 150	6	20
1,2-Dibromoethane (EDB)	<1.00		20.0	19.87		ug/L		99		60 - 130	3	20
1,2-Dichlorobenzene	<1.00		20.0	19.31		ug/L		97		59 - 130	1	20
1,2-Dichloroethane	<1.00		20.0	21.43		ug/L		107		51 - 130	4	20
1,2-Dichloropropane	<1.00		20.0	20.16		ug/L		101		57 - 130	5	20
1,4-Dichlorobenzene	<1.00		20.0	19.33		ug/L		97		57 - 130	4	20

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: 310-277199-1 MSD
Matrix: Water
Analysis Batch: 416634

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2-Butanone (MEK)	<10.0		40.0	40.81		ug/L		102	38 - 150	1	20
2-Hexanone	<10.0		40.0	40.21		ug/L		101	46 - 140	3	20
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	40.12		ug/L		100	47 - 139	1	20
Acetone	<10.0		40.0	41.49		ug/L		104	31 - 150	0	29
Acrylonitrile	<5.00		200	202.7		ug/L		101	40 - 150	2	20
Benzene	0.667		20.0	19.56		ug/L		94	46 - 130	4	20
Bromochloromethane	<5.00		20.0	19.73		ug/L		99	57 - 130	4	20
Bromodichloromethane	<1.00	+	20.0	20.38		ug/L		102	57 - 130	4	20
Bromoform	<5.00		20.0	17.48		ug/L		87	44 - 130	0	20
Carbon disulfide	<1.00		20.0	19.88		ug/L		99	38 - 135	8	30
Carbon tetrachloride	<2.00		20.0	20.14		ug/L		101	45 - 132	3	20
Chlorobenzene	<1.00		20.0	19.41		ug/L		97	59 - 130	4	20
Chlorodibromomethane	<5.00		20.0	18.96		ug/L		95	54 - 130	2	20
Chloroform	<3.00		20.0	18.06		ug/L		90	51 - 130	2	20
cis-1,2-Dichloroethene	<1.00		20.0	18.96		ug/L		95	45 - 130	4	20
cis-1,3-Dichloropropene	<5.00		20.0	18.49		ug/L		92	53 - 130	1	20
Dibromomethane	<1.00		20.0	20.14		ug/L		101	59 - 130	3	20
Ethylbenzene	<1.00		20.0	19.06		ug/L		95	45 - 130	6	20
Iodomethane	<10.0		20.0	19.04		ug/L		95	10 - 150	1	35
Methylene chloride	<5.00		20.0	18.08		ug/L		90	37 - 150	4	24
Styrene	<1.00		20.0	18.77		ug/L		94	47 - 130	5	20
Tetrachloroethene	<1.00		20.0	18.64		ug/L		93	47 - 130	3	20
Toluene	<1.00		20.0	19.39		ug/L		97	51 - 130	4	20
trans-1,2-Dichloroethene	<1.00		20.0	18.76		ug/L		94	48 - 130	5	22
trans-1,3-Dichloropropene	<5.00		20.0	17.99		ug/L		90	50 - 130	3	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	16.46		ug/L		82	26 - 150	10	23
Trichloroethene	<1.00		20.0	18.58		ug/L		93	51 - 130	2	20
Vinyl acetate	<10.0		40.0	37.06		ug/L		93	29 - 150	2	23
Xylenes, Total	<3.00		40.0	38.57		ug/L		96	43 - 130	6	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	99		73 - 130
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-416659/1-A
Matrix: Water
Analysis Batch: 416957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 416659

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 14:38	1
Arsenic	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 14:38	1
Barium	<0.00200		0.00200		mg/L		03/22/24 09:00	03/25/24 14:38	1
Beryllium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 14:38	1
Cadmium	<0.000200		0.000200		mg/L		03/22/24 09:00	03/25/24 14:38	1
Chromium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Cobalt	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 14:38	1

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: MB 310-416659/1-A
Matrix: Water
Analysis Batch: 416957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 416659

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Copper	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Lead	<0.000500		0.000500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Nickel	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Selenium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Silver	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 14:38	1
Thallium	<0.00100		0.00100		mg/L		03/22/24 09:00	03/25/24 14:38	1
Vanadium	<0.00500		0.00500		mg/L		03/22/24 09:00	03/25/24 14:38	1
Zinc	<0.0200		0.0200		mg/L		03/22/24 09:00	03/25/24 14:38	1

Lab Sample ID: LCS 310-416659/2-A
Matrix: Water
Analysis Batch: 416957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 416659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2127		mg/L		106	80 - 120
Barium	0.100	0.1079		mg/L		108	80 - 120
Beryllium	0.100	0.09906		mg/L		99	80 - 120
Cadmium	0.100	0.1030		mg/L		103	80 - 120
Chromium	0.100	0.1054		mg/L		105	80 - 120
Cobalt	0.100	0.1071		mg/L		107	80 - 120
Copper	0.200	0.2089		mg/L		104	80 - 120
Lead	0.200	0.2083		mg/L		104	80 - 120
Nickel	0.200	0.2104		mg/L		105	80 - 120
Selenium	0.400	0.4075		mg/L		102	80 - 120
Silver	0.100	0.1000		mg/L		100	80 - 120
Thallium	0.100	0.1137		mg/L		114	80 - 120
Vanadium	0.100	0.1056		mg/L		106	80 - 120
Zinc	0.200	0.1966		mg/L		98	80 - 120

Lab Sample ID: 310-277199-6 DU
Matrix: Water
Analysis Batch: 416957

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 416659

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	<0.00200		<0.00200		mg/L		NC	20
Barium	0.202		0.1888		mg/L		7	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	<0.000200		<0.000200		mg/L		NC	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
Nickel	<0.00500		<0.00500		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

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QC Sample Results

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

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

Lab Sample ID: 310-277199-6 DU
Matrix: Water
Analysis Batch: 416957

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 416659

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

Lab Sample ID: 310-277199-6 DU
Matrix: Water
Analysis Batch: 417067

Client Sample ID: MW-10
Prep Type: Total/NA
Prep Batch: 416659

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Barium	0.184		0.1772		mg/L		4	20
Zinc	<0.0200		<0.0200		mg/L		NC	20

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

Lab Sample ID: MB 310-416592/1
Matrix: Water
Analysis Batch: 416592

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00		mg/L			03/21/24 10:20	1

Lab Sample ID: LCS 310-416592/2
Matrix: Water
Analysis Batch: 416592

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Suspended Solids	100	97.00		mg/L		97	75 - 116

Lab Sample ID: MB 310-416600/1
Matrix: Water
Analysis Batch: 416600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00		mg/L			03/21/24 11:21	1

Lab Sample ID: LCS 310-416600/2
Matrix: Water
Analysis Batch: 416600

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Suspended Solids	100	99.00		mg/L		99	75 - 116

QC Association Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

GC/MS VOA

Analysis Batch: 416634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-1	MW-2	Total/NA	Water	8260D	
310-277199-2	MW-3	Total/NA	Water	8260D	
310-277199-3	MW-6	Total/NA	Water	8260D	
310-277199-4	MW-7	Total/NA	Water	8260D	
310-277199-5	MW-9	Total/NA	Water	8260D	
310-277199-6	MW-10	Total/NA	Water	8260D	
310-277199-7	Dup-1	Total/NA	Water	8260D	
310-277199-8	Trip Blank	Total/NA	Water	8260D	
MB 310-416634/5	Method Blank	Total/NA	Water	8260D	
LCS 310-416634/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-416634/7	Lab Control Sample	Total/NA	Water	8260D	
310-277199-1 MS	MW-2	Total/NA	Water	8260D	
310-277199-1 MSD	MW-2	Total/NA	Water	8260D	

Metals

Prep Batch: 416659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-1	MW-2	Total/NA	Water	3005A	
310-277199-2	MW-3	Total/NA	Water	3005A	
310-277199-3	MW-6	Total/NA	Water	3005A	
310-277199-4	MW-7	Total/NA	Water	3005A	
310-277199-5	MW-9	Total/NA	Water	3005A	
310-277199-6	MW-10	Total/NA	Water	3005A	
310-277199-7	Dup-1	Total/NA	Water	3005A	
MB 310-416659/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-416659/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-277199-6 DU	MW-10	Total/NA	Water	3005A	

Analysis Batch: 416957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-1	MW-2	Total/NA	Water	6020B	416659
310-277199-2	MW-3	Total/NA	Water	6020B	416659
310-277199-3	MW-6	Total/NA	Water	6020B	416659
310-277199-4	MW-7	Total/NA	Water	6020B	416659
310-277199-5	MW-9	Total/NA	Water	6020B	416659
310-277199-6	MW-10	Total/NA	Water	6020B	416659
310-277199-7	Dup-1	Total/NA	Water	6020B	416659
MB 310-416659/1-A	Method Blank	Total/NA	Water	6020B	416659
LCS 310-416659/2-A	Lab Control Sample	Total/NA	Water	6020B	416659
310-277199-6 DU	MW-10	Total/NA	Water	6020B	416659

Analysis Batch: 417067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-1	MW-2	Total/NA	Water	6020B	416659
310-277199-2	MW-3	Total/NA	Water	6020B	416659
310-277199-3	MW-6	Total/NA	Water	6020B	416659
310-277199-4	MW-7	Total/NA	Water	6020B	416659
310-277199-5	MW-9	Total/NA	Water	6020B	416659
310-277199-6	MW-10	Total/NA	Water	6020B	416659
310-277199-7	Dup-1	Total/NA	Water	6020B	416659

Eurofins Cedar Falls

QC Association Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Metals (Continued)

Analysis Batch: 417067 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-6 DU	MW-10	Total/NA	Water	6020B	416659

General Chemistry

Analysis Batch: 416592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-1	MW-2	Total/NA	Water	I-3765-85	
310-277199-2	MW-3	Total/NA	Water	I-3765-85	
310-277199-3	MW-6	Total/NA	Water	I-3765-85	
310-277199-4	MW-7	Total/NA	Water	I-3765-85	
MB 310-416592/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-416592/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 416600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-277199-5	MW-9	Total/NA	Water	I-3765-85	
310-277199-6	MW-10	Total/NA	Water	I-3765-85	
310-277199-7	Dup-1	Total/NA	Water	I-3765-85	
MB 310-416600/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-416600/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-2
 Date Collected: 03/19/24 12:30
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-1
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 03:15
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:11
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:09
Total/NA	Analysis	I-3765-85		1	416592	DGU1	EET CF	03/21/24 10:20

Client Sample ID: MW-3
 Date Collected: 03/19/24 11:48
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-2
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 03:38
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:13
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:11
Total/NA	Analysis	I-3765-85		1	416592	DGU1	EET CF	03/21/24 10:20

Client Sample ID: MW-6
 Date Collected: 03/19/24 11:15
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-3
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 04:01
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:16
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:14
Total/NA	Analysis	I-3765-85		1	416592	DGU1	EET CF	03/21/24 10:20

Client Sample ID: MW-7
 Date Collected: 03/19/24 10:37
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-4
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 04:23
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:18
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:16
Total/NA	Analysis	I-3765-85		1	416592	DGU1	EET CF	03/21/24 10:20

Lab Chronicle

Client: SCS Engineers
 Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
 SDG: Adair County Sanitary Landfill

Client Sample ID: MW-9
 Date Collected: 03/19/24 14:01
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-5
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 04:46
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:29
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:27
Total/NA	Analysis	I-3765-85		1	416600	DGU1	EET CF	03/21/24 11:21

Client Sample ID: MW-10
 Date Collected: 03/19/24 13:14
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-6
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 05:09
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:31
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:29
Total/NA	Analysis	I-3765-85		1	416600	DGU1	EET CF	03/21/24 11:21

Client Sample ID: Dup-1
 Date Collected: 03/19/24 10:37
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-7
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 05:32
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	416957	NFT2	EET CF	03/25/24 15:36
Total/NA	Prep	3005A			416659	QTZ5	EET CF	03/22/24 09:00
Total/NA	Analysis	6020B		1	417067	NFT2	EET CF	03/26/24 16:34
Total/NA	Analysis	I-3765-85		1	416600	DGU1	EET CF	03/21/24 11:21

Client Sample ID: Trip Blank
 Date Collected: 03/19/24 00:00
 Date Received: 03/20/24 16:20

Lab Sample ID: 310-277199-8
 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	416634	FE5V	EET CF	03/22/24 02:29

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-24

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

Method Summary

Client: SCS Engineers
Project/Site: 1st 2024 Semi-Annual Groundwater Sampling

Job ID: 310-277199-1
SDG: Adair County Sanitary Landfill

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

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

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





Environment Testing
America



310-277199 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SLS Engineers</u>			
City/State:	CITY <u>West Du Moines</u>	STATE <u>IA</u>	Project:
Receipt Information			
Date/Time Received:	DATE <u>3/20/24</u>	TIME <u>1620</u>	Received By: <u>STJ</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	<u>Y</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>-0.1</u>	Corrected Temp (°C):	<u>-0.1</u>
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Project Manager: Sean Marczewski PW NPDES RCRA Other

Site Contact: Sean Marczewski **Date:** _____
Lab Contact: Mary Yang **Carrier:** _____

Client Contact: SCS Engineers
1690 All-State Court, Suite 100
West Des Moines, IA 50265
515-631-6160

Project Name: 1st 2024 Semi-Annual Groundwater Sampling
Site: Adair County Sanitary Landfill
P O #: 27223238.24

Analysis Turnaround Time: CALENDAR DAYS WORKING DAYS
Other: 2 weeks 1 week 2 days 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Appendix I	Total Suspended Solids	Trip Blank	Sample Specific Notes
MW-2	3/19/24	12:30	G	W				X			
MW-3	3/19/24	11:48	G	W				X			
MW-6	3/19/24	11:15	G	W				X			
MW-7	3/19/24	10:37	G	W				X			
MW-9	3/19/24	14:01	G	W				X			
MW-10	3/19/24	13:14	G	W				X			
GU-2			G	W				X			
GWD-1			G	W				X			
DUP-1	3/19/24	10:37	G	W				X			
Trip Blank			Blank	Blank					X		Trip blanks in every cooler containing VOC vials.

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No	Company	Date/Time	Received by	Company	Date/Time	Received by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
	SCS Engineers	3/19/24 13:30							SB	Eurofins	3/20/24 16:20

Cooler Temp (°C) Obs'd: _____ **Corr'd:** _____ **Therm ID No:** _____

Relinquished by: *Callie Spencer* **Company:** SCS Engineers **Date/Time:** 3/19/24 13:30

Relinquished by: _____ **Company:** _____ **Date/Time:** _____

Relinquished by: _____ **Company:** _____ **Date/Time:** _____

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-277199-1
SDG Number: Adair County Sanitary Landfill

Login Number: 277199

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/12/2024 11:18:48 AM

JOB DESCRIPTION

2nd 2024 Semi-Annual GW Sampling

JOB NUMBER

310-286883-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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8/12/2024 11:18:48 AM

Authorized for release by
Mary Yang, Client Service Manager
Mary.Yang@ET.EurofinsUS.com
(319)595-2025



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Case Narrative

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

Job ID: 310-286883-1

Job ID: 310-286883-1

Eurofins Cedar Falls

Job Narrative 310-286883-1

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 7/26/2024 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

GC/MS VOA

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

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

Job ID: 310-286883-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-286883-1	MW-2	Water	07/25/24 15:08	07/26/24 16:30
310-286883-2	MW-3	Water	07/25/24 12:41	07/26/24 16:30
310-286883-3	MW-6	Water	07/25/24 10:43	07/26/24 16:30
310-286883-4	MW-7	Water	07/25/24 11:30	07/26/24 16:30
310-286883-5	MW-9	Water	07/25/24 16:20	07/26/24 16:30
310-286883-6	MW-10	Water	07/25/24 17:04	07/26/24 16:30
310-286883-7	Dup-1	Water	07/25/24 10:43	07/26/24 16:30
310-286883-8	Trip Blank	Water	07/25/24 00:00	07/26/24 16:30

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Detection Summary

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

Job ID: 310-286883-1

Client Sample ID: MW-2

Lab Sample ID: 310-286883-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.879		0.500		ug/L	1		8260D	Total/NA
Arsenic	0.00781		0.00200		mg/L	1		6020B	Total/NA
Barium	0.207		0.00200		mg/L	1		6020B	Total/NA
Cobalt	0.000554		0.000500		mg/L	1		6020B	Total/NA
Total Suspended Solids	27.0		7.50		mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 310-286883-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0246		0.00200		mg/L	1		6020B	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 310-286883-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0163		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.00912		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 310-286883-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0303		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.00109		0.000200		mg/L	1		6020B	Total/NA
Copper	0.00568		0.00500		mg/L	1		6020B	Total/NA
Nickel	0.0206		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 310-286883-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0661		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000275		0.000200		mg/L	1		6020B	Total/NA
Cobalt	0.000820		0.000500		mg/L	1		6020B	Total/NA
Nickel	0.00648		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 310-286883-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.167		0.00200		mg/L	1		6020B	Total/NA
Cadmium	0.000240		0.000200		mg/L	1		6020B	Total/NA

Client Sample ID: Dup-1

Lab Sample ID: 310-286883-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0160		0.00200		mg/L	1		6020B	Total/NA
Selenium	0.00930		0.00500		mg/L	1		6020B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 310-286883-8

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-2

Lab Sample ID: 310-286883-1

Date Collected: 07/25/24 15:08

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 20:51	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 20:51	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 20:51	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 20:51	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 20:51	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 20:51	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 20:51	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 20:51	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 20:51	1
Acetone	<10.0		10.0		ug/L			07/30/24 20:51	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 20:51	1
Benzene	0.879		0.500		ug/L			07/30/24 20:51	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 20:51	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 20:51	1
Bromoform	<5.00		5.00		ug/L			07/30/24 20:51	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 20:51	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 20:51	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 20:51	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 20:51	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 20:51	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 20:51	1
Chloroform	<3.00		3.00		ug/L			07/30/24 20:51	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 20:51	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 20:51	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 20:51	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 20:51	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 20:51	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 20:51	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 20:51	1
Styrene	<1.00		1.00		ug/L			07/30/24 20:51	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 20:51	1
Toluene	<1.00		1.00		ug/L			07/30/24 20:51	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 20:51	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 20:51	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 20:51	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 20:51	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 20:51	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 20:51	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 20:51	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130		07/30/24 20:51	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-2

Lab Sample ID: 310-286883-1

Date Collected: 07/25/24 15:08

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		07/30/24 20:51	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/30/24 20:51	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		07/30/24 09:00	07/31/24 17:32	1
Arsenic	0.00781		0.00200		mg/L		07/30/24 09:00	07/31/24 17:32	1
Barium	0.207		0.00200		mg/L		07/30/24 09:00	07/31/24 17:32	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:32	1
Cadmium	<0.000200		0.000200		mg/L		07/30/24 09:00	07/31/24 17:32	1
Chromium	<0.00500	*+	0.00500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Cobalt	0.000554		0.000500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Nickel	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Selenium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:32	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:32	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:32	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	27.0		7.50		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-3

Lab Sample ID: 310-286883-2

Date Collected: 07/25/24 12:41

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 21:14	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 21:14	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 21:14	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:14	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 21:14	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:14	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 21:14	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 21:14	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 21:14	1
Acetone	<10.0		10.0		ug/L			07/30/24 21:14	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 21:14	1
Benzene	<0.500		0.500		ug/L			07/30/24 21:14	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 21:14	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 21:14	1
Bromoform	<5.00		5.00		ug/L			07/30/24 21:14	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 21:14	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 21:14	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 21:14	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 21:14	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 21:14	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 21:14	1
Chloroform	<3.00		3.00		ug/L			07/30/24 21:14	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 21:14	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:14	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:14	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 21:14	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 21:14	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 21:14	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 21:14	1
Styrene	<1.00		1.00		ug/L			07/30/24 21:14	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 21:14	1
Toluene	<1.00		1.00		ug/L			07/30/24 21:14	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:14	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:14	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 21:14	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 21:14	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 21:14	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 21:14	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 21:14	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 21:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		73 - 130		07/30/24 21:14	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-3

Lab Sample ID: 310-286883-2

Date Collected: 07/25/24 12:41

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		07/30/24 21:14	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/30/24 21:14	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		07/30/24 09:00	07/31/24 17:35	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:35	1
Barium	0.0246		0.00200		mg/L		07/30/24 09:00	07/31/24 17:35	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:35	1
Cadmium	<0.000200		0.000200		mg/L		07/30/24 09:00	07/31/24 17:35	1
Chromium	<0.00500	*+	0.00500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Cobalt	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Nickel	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Selenium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:35	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:35	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:35	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-6

Lab Sample ID: 310-286883-3

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 21:36	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 21:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 21:36	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:36	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 21:36	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:36	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 21:36	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 21:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 21:36	1
Acetone	<10.0		10.0		ug/L			07/30/24 21:36	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 21:36	1
Benzene	<0.500		0.500		ug/L			07/30/24 21:36	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 21:36	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 21:36	1
Bromoform	<5.00		5.00		ug/L			07/30/24 21:36	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 21:36	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 21:36	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 21:36	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 21:36	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 21:36	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 21:36	1
Chloroform	<3.00		3.00		ug/L			07/30/24 21:36	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 21:36	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:36	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:36	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 21:36	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 21:36	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 21:36	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 21:36	1
Styrene	<1.00		1.00		ug/L			07/30/24 21:36	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 21:36	1
Toluene	<1.00		1.00		ug/L			07/30/24 21:36	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:36	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 21:36	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 21:36	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 21:36	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 21:36	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 21:36	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		73 - 130		07/30/24 21:36	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-6

Lab Sample ID: 310-286883-3

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		07/30/24 21:36	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/30/24 21:36	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		07/30/24 09:00	07/31/24 17:37	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:37	1
Barium	0.0163		0.00200		mg/L		07/30/24 09:00	07/31/24 17:37	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:37	1
Cadmium	<0.000200		0.000200		mg/L		07/30/24 09:00	07/31/24 17:37	1
Chromium	<0.00500	*+	0.00500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Cobalt	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Nickel	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Selenium	0.00912		0.00500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:37	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:37	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:37	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-7

Lab Sample ID: 310-286883-4

Date Collected: 07/25/24 11:30

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 21:59	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 21:59	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 21:59	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:59	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 21:59	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 21:59	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 21:59	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 21:59	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 21:59	1
Acetone	<10.0		10.0		ug/L			07/30/24 21:59	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 21:59	1
Benzene	<0.500		0.500		ug/L			07/30/24 21:59	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 21:59	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 21:59	1
Bromoform	<5.00		5.00		ug/L			07/30/24 21:59	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 21:59	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 21:59	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 21:59	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 21:59	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 21:59	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 21:59	1
Chloroform	<3.00		3.00		ug/L			07/30/24 21:59	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 21:59	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:59	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:59	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 21:59	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 21:59	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 21:59	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 21:59	1
Styrene	<1.00		1.00		ug/L			07/30/24 21:59	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 21:59	1
Toluene	<1.00		1.00		ug/L			07/30/24 21:59	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 21:59	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 21:59	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 21:59	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 21:59	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 21:59	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 21:59	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 21:59	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		07/30/24 21:59	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-7

Lab Sample ID: 310-286883-4

Date Collected: 07/25/24 11:30

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		07/30/24 21:59	1
4-Bromofluorobenzene (Surr)	100		80 - 120		07/30/24 21:59	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		07/30/24 09:00	07/31/24 17:39	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:39	1
Barium	0.0303		0.00200		mg/L		07/30/24 09:00	07/31/24 17:39	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:39	1
Cadmium	0.00109		0.000200		mg/L		07/30/24 09:00	07/31/24 17:39	1
Chromium	<0.00500	*+	0.00500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Cobalt	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Copper	0.00568		0.00500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Nickel	0.0206		0.00500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Selenium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:39	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:39	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:39	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-9

Lab Sample ID: 310-286883-5

Date Collected: 07/25/24 16:20

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 22:22	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 22:22	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 22:22	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 22:22	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 22:22	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 22:22	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 22:22	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 22:22	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 22:22	1
Acetone	<10.0		10.0		ug/L			07/30/24 22:22	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 22:22	1
Benzene	<0.500		0.500		ug/L			07/30/24 22:22	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 22:22	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 22:22	1
Bromoform	<5.00		5.00		ug/L			07/30/24 22:22	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 22:22	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 22:22	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 22:22	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 22:22	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 22:22	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 22:22	1
Chloroform	<3.00		3.00		ug/L			07/30/24 22:22	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 22:22	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 22:22	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 22:22	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 22:22	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 22:22	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 22:22	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 22:22	1
Styrene	<1.00		1.00		ug/L			07/30/24 22:22	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 22:22	1
Toluene	<1.00		1.00		ug/L			07/30/24 22:22	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 22:22	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 22:22	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 22:22	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 22:22	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 22:22	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 22:22	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 22:22	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		73 - 130		07/30/24 22:22	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-9

Lab Sample ID: 310-286883-5

Date Collected: 07/25/24 16:20

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		07/30/24 22:22	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/30/24 22:22	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		07/30/24 09:00	07/31/24 17:41	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:41	1
Barium	0.0661		0.00200		mg/L		07/30/24 09:00	07/31/24 17:41	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:41	1
Cadmium	0.000275		0.000200		mg/L		07/30/24 09:00	07/31/24 17:41	1
Chromium	<0.00500	*+	0.00500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Cobalt	0.000820		0.000500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Nickel	0.00648		0.00500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Selenium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:41	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:41	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:41	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-10

Lab Sample ID: 310-286883-6

Date Collected: 07/25/24 17:04

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 22:44	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 22:44	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 22:44	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 22:44	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 22:44	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 22:44	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 22:44	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 22:44	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 22:44	1
Acetone	<10.0		10.0		ug/L			07/30/24 22:44	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 22:44	1
Benzene	<0.500		0.500		ug/L			07/30/24 22:44	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 22:44	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 22:44	1
Bromoform	<5.00		5.00		ug/L			07/30/24 22:44	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 22:44	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 22:44	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 22:44	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 22:44	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 22:44	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 22:44	1
Chloroform	<3.00		3.00		ug/L			07/30/24 22:44	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 22:44	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 22:44	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 22:44	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 22:44	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 22:44	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 22:44	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 22:44	1
Styrene	<1.00		1.00		ug/L			07/30/24 22:44	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 22:44	1
Toluene	<1.00		1.00		ug/L			07/30/24 22:44	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 22:44	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 22:44	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 22:44	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 22:44	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 22:44	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 22:44	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 22:44	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		07/30/24 22:44	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: MW-10

Lab Sample ID: 310-286883-6

Date Collected: 07/25/24 17:04

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		07/30/24 22:44	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/30/24 22:44	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		07/30/24 09:00	07/31/24 17:52	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:52	1
Barium	0.167		0.00200		mg/L		07/30/24 09:00	07/31/24 17:52	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:52	1
Cadmium	0.000240		0.000200		mg/L		07/30/24 09:00	07/31/24 17:52	1
Chromium	<0.00500		0.00500		mg/L		07/30/24 09:00	08/01/24 14:29	1
Cobalt	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:52	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:52	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:52	1
Nickel	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:52	1
Selenium	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:52	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:52	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:52	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	08/01/24 14:29	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: Dup-1

Lab Sample ID: 310-286883-7

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 23:06	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 23:06	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 23:06	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 23:06	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 23:06	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 23:06	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 23:06	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 23:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 23:06	1
Acetone	<10.0		10.0		ug/L			07/30/24 23:06	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 23:06	1
Benzene	<0.500		0.500		ug/L			07/30/24 23:06	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 23:06	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 23:06	1
Bromoform	<5.00		5.00		ug/L			07/30/24 23:06	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 23:06	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 23:06	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 23:06	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 23:06	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 23:06	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 23:06	1
Chloroform	<3.00		3.00		ug/L			07/30/24 23:06	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 23:06	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 23:06	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 23:06	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 23:06	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 23:06	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 23:06	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 23:06	1
Styrene	<1.00		1.00		ug/L			07/30/24 23:06	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 23:06	1
Toluene	<1.00		1.00		ug/L			07/30/24 23:06	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 23:06	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 23:06	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 23:06	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 23:06	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 23:06	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 23:06	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 23:06	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 23:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		73 - 130		07/30/24 23:06	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: Dup-1

Lab Sample ID: 310-286883-7

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		07/30/24 23:06	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/30/24 23:06	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		07/30/24 09:00	07/31/24 17:54	1
Arsenic	<0.00200		0.00200		mg/L		07/30/24 09:00	07/31/24 17:54	1
Barium	0.0160		0.00200		mg/L		07/30/24 09:00	07/31/24 17:54	1
Beryllium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:54	1
Cadmium	<0.000200		0.000200		mg/L		07/30/24 09:00	07/31/24 17:54	1
Chromium	<0.00500		0.00500		mg/L		07/30/24 09:00	08/01/24 14:33	1
Cobalt	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:54	1
Copper	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:54	1
Lead	<0.000500		0.000500		mg/L		07/30/24 09:00	07/31/24 17:54	1
Nickel	<0.00500		0.00500		mg/L		07/30/24 09:00	07/31/24 17:54	1
Selenium	0.00930		0.00500		mg/L		07/30/24 09:00	07/31/24 17:54	1
Silver	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:54	1
Thallium	<0.00100		0.00100		mg/L		07/30/24 09:00	07/31/24 17:54	1
Vanadium	<0.00500		0.00500		mg/L		07/30/24 09:00	08/01/24 14:33	1
Zinc	<0.0200		0.0200		mg/L		07/30/24 09:00	07/31/24 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88		mg/L			07/31/24 08:47	1

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: Trip Blank

Lab Sample ID: 310-286883-8

Date Collected: 07/25/24 00:00

Matrix: Water

Date Received: 07/26/24 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 18:36	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 18:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 18:36	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 18:36	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 18:36	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 18:36	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 18:36	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 18:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 18:36	1
Acetone	<10.0		10.0		ug/L			07/30/24 18:36	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 18:36	1
Benzene	<0.500		0.500		ug/L			07/30/24 18:36	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 18:36	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 18:36	1
Bromoform	<5.00		5.00		ug/L			07/30/24 18:36	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 18:36	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 18:36	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 18:36	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 18:36	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 18:36	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 18:36	1
Chloroform	<3.00		3.00		ug/L			07/30/24 18:36	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 18:36	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 18:36	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 18:36	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 18:36	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 18:36	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 18:36	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 18:36	1
Styrene	<1.00		1.00		ug/L			07/30/24 18:36	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 18:36	1
Toluene	<1.00		1.00		ug/L			07/30/24 18:36	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 18:36	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 18:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 18:36	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 18:36	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 18:36	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 18:36	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 18:36	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		07/30/24 18:36	1

Eurofins Cedar Falls

Client Sample Results

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

Job ID: 310-286883-1

Client Sample ID: Trip Blank

Lab Sample ID: 310-286883-8

Date Collected: 07/25/24 00:00

Matrix: Water

Date Received: 07/26/24 16:30

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

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Toluene-d8 (Surr)	99		80 - 120		07/30/24 18:36	1
4-Bromofluorobenzene (Surr)	102		80 - 120		07/30/24 18:36	1

- 1
- 2
- 3
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- 15

Definitions/Glossary

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

Job ID: 310-286883-1

Qualifiers

Metals

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

Glossary

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

Surrogate Summary

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

Job ID: 310-286883-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBFM	TOL	BFB
		(73-130)	(80-120)	(80-120)
310-286883-1	MW-2	101	97	99
310-286883-2	MW-3	103	96	102
310-286883-3	MW-6	103	98	102
310-286883-4	MW-7	102	97	100
310-286883-5	MW-9	99	98	99
310-286883-6	MW-10	102	97	102
310-286883-7	Dup-1	105	97	101
310-286883-8	Trip Blank	102	99	102
LCS 310-428828/6	Lab Control Sample	102	98	98
LCS 310-428828/7	Lab Control Sample	102	98	99
MB 310-428828/5	Method Blank	101	98	103

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

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

Job ID: 310-286883-1

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

Lab Sample ID: MB 310-428828/5

Matrix: Water

Analysis Batch: 428828

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,1,1-Trichloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,1,2,2-Tetrachloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,1,2-Trichloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,1-Dichloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,1-Dichloroethene	<2.00		2.00		ug/L			07/30/24 17:06	1
1,2,3-Trichloropropane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,2-Dibromo-3-chloropropane	<5.00		5.00		ug/L			07/30/24 17:06	1
1,2-Dibromoethane (EDB)	<1.00		1.00		ug/L			07/30/24 17:06	1
1,2-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 17:06	1
1,2-Dichloroethane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,2-Dichloropropane	<1.00		1.00		ug/L			07/30/24 17:06	1
1,4-Dichlorobenzene	<1.00		1.00		ug/L			07/30/24 17:06	1
2-Butanone (MEK)	<10.0		10.0		ug/L			07/30/24 17:06	1
2-Hexanone	<10.0		10.0		ug/L			07/30/24 17:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0		ug/L			07/30/24 17:06	1
Acetone	<10.0		10.0		ug/L			07/30/24 17:06	1
Acrylonitrile	<5.00		5.00		ug/L			07/30/24 17:06	1
Benzene	<0.500		0.500		ug/L			07/30/24 17:06	1
Bromochloromethane	<5.00		5.00		ug/L			07/30/24 17:06	1
Bromodichloromethane	<1.00		1.00		ug/L			07/30/24 17:06	1
Bromoform	<5.00		5.00		ug/L			07/30/24 17:06	1
Bromomethane	<4.00		4.00		ug/L			07/30/24 17:06	1
Carbon disulfide	<1.00		1.00		ug/L			07/30/24 17:06	1
Carbon tetrachloride	<2.00		2.00		ug/L			07/30/24 17:06	1
Chlorobenzene	<1.00		1.00		ug/L			07/30/24 17:06	1
Chlorodibromomethane	<5.00		5.00		ug/L			07/30/24 17:06	1
Chloroethane	<4.00		4.00		ug/L			07/30/24 17:06	1
Chloroform	<3.00		3.00		ug/L			07/30/24 17:06	1
Chloromethane	<3.00		3.00		ug/L			07/30/24 17:06	1
cis-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 17:06	1
cis-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 17:06	1
Dibromomethane	<1.00		1.00		ug/L			07/30/24 17:06	1
Ethylbenzene	<1.00		1.00		ug/L			07/30/24 17:06	1
Iodomethane	<10.0		10.0		ug/L			07/30/24 17:06	1
Methylene chloride	<5.00		5.00		ug/L			07/30/24 17:06	1
Styrene	<1.00		1.00		ug/L			07/30/24 17:06	1
Tetrachloroethene	<1.00		1.00		ug/L			07/30/24 17:06	1
Toluene	<1.00		1.00		ug/L			07/30/24 17:06	1
trans-1,2-Dichloroethene	<1.00		1.00		ug/L			07/30/24 17:06	1
trans-1,3-Dichloropropene	<5.00		5.00		ug/L			07/30/24 17:06	1
trans-1,4-Dichloro-2-butene	<10.0		10.0		ug/L			07/30/24 17:06	1
Trichloroethene	<1.00		1.00		ug/L			07/30/24 17:06	1
Trichlorofluoromethane	<4.00		4.00		ug/L			07/30/24 17:06	1
Vinyl acetate	<10.0		10.0		ug/L			07/30/24 17:06	1
Vinyl chloride	<1.00		1.00		ug/L			07/30/24 17:06	1
Xylenes, Total	<3.00		3.00		ug/L			07/30/24 17:06	1

Eurofins Cedar Falls

QC Sample Results

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

Job ID: 310-286883-1

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

Lab Sample ID: MB 310-428828/5
Matrix: Water
Analysis Batch: 428828

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	101		73 - 130		07/30/24 17:06	1
Toluene-d8 (Surr)	98		80 - 120		07/30/24 17:06	1
4-Bromofluorobenzene (Surr)	103		80 - 120		07/30/24 17:06	1

Lab Sample ID: LCS 310-428828/6
Matrix: Water
Analysis Batch: 428828

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.30		ug/L		102	71 - 120
1,1,1,1-Trichloroethane	20.0	22.63		ug/L		113	73 - 129
1,1,1,2,2-Tetrachloroethane	20.0	19.69		ug/L		98	68 - 124
1,1,2-Trichloroethane	20.0	21.43		ug/L		107	73 - 123
1,1-Dichloroethane	20.0	21.22		ug/L		106	70 - 127
1,1-Dichloroethane	20.0	22.90		ug/L		114	63 - 132
1,2,3-Trichloropropane	20.0	20.16		ug/L		101	65 - 127
1,2-Dibromo-3-chloropropane	20.0	17.80		ug/L		89	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.57		ug/L		103	75 - 125
1,2-Dichlorobenzene	20.0	20.67		ug/L		103	74 - 120
1,2-Dichloroethane	20.0	20.79		ug/L		104	71 - 125
1,2-Dichloropropane	20.0	21.75		ug/L		109	73 - 124
1,4-Dichlorobenzene	20.0	19.86		ug/L		99	72 - 120
2-Butanone (MEK)	40.0	36.73		ug/L		92	50 - 150
2-Hexanone	40.0	39.34		ug/L		98	60 - 140
4-Methyl-2-pentanone (MIBK)	40.0	39.19		ug/L		98	60 - 139
Acetone	40.0	41.73		ug/L		104	50 - 150
Acrylonitrile	200	196.1		ug/L		98	50 - 150
Benzene	20.0	21.60		ug/L		108	72 - 124
Bromochloromethane	20.0	22.11		ug/L		111	73 - 130
Bromodichloromethane	20.0	20.40		ug/L		102	74 - 122
Bromoform	20.0	19.38		ug/L		97	61 - 122
Carbon disulfide	20.0	22.57		ug/L		113	59 - 135
Carbon tetrachloride	20.0	20.20		ug/L		101	67 - 132
Chlorobenzene	20.0	20.49		ug/L		102	76 - 120
Chlorodibromomethane	20.0	20.79		ug/L		104	71 - 121
Chloroform	20.0	21.00		ug/L		105	72 - 125
cis-1,2-Dichloroethene	20.0	22.01		ug/L		110	74 - 123
cis-1,3-Dichloropropene	20.0	21.06		ug/L		105	71 - 125
Dibromomethane	20.0	20.41		ug/L		102	74 - 125
Ethylbenzene	20.0	21.21		ug/L		106	74 - 122
Iodomethane	20.0	18.78		ug/L		94	10 - 150
Methylene chloride	20.0	21.46		ug/L		107	50 - 150
Styrene	20.0	21.48		ug/L		107	74 - 121
Tetrachloroethene	20.0	21.84		ug/L		109	71 - 130
Toluene	20.0	21.37		ug/L		107	74 - 123
trans-1,2-Dichloroethene	20.0	22.89		ug/L		114	70 - 126
trans-1,3-Dichloropropene	20.0	18.29		ug/L		91	69 - 123
trans-1,4-Dichloro-2-butene	20.0	18.33		ug/L		92	50 - 150

QC Sample Results

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

Job ID: 310-286883-1

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

Lab Sample ID: LCS 310-428828/6

Matrix: Water

Analysis Batch: 428828

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Trichloroethene	20.0	22.01		ug/L		110	72 - 126
Vinyl acetate	40.0	37.81		ug/L		95	50 - 150
Xylenes, Total	40.0	42.84		ug/L		107	73 - 123

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	102		73 - 130
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Lab Sample ID: LCS 310-428828/7

Matrix: Water

Analysis Batch: 428828

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Bromomethane	20.0	20.41		ug/L		102	23 - 150
Chloroethane	20.0	19.72		ug/L		99	54 - 136
Chloromethane	20.0	19.95		ug/L		100	38 - 150
Trichlorofluoromethane	20.0	19.76		ug/L		99	54 - 149
Vinyl chloride	20.0	20.37		ug/L		102	56 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	102		73 - 130
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 310-428758/2-A

Matrix: Water

Analysis Batch: 429160

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 428758

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Chromium	0.100	0.1045		mg/L		104	80 - 120

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

Lab Sample ID: MB 310-428941/1

Matrix: Water

Analysis Batch: 428941

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00		mg/L			07/31/24 08:47	1

Lab Sample ID: LCS 310-428941/2

Matrix: Water

Analysis Batch: 428941

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Total Suspended Solids	100	100.0		mg/L		100	81 - 116

Eurofins Cedar Falls

QC Association Summary

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

Job ID: 310-286883-1

GC/MS VOA

Analysis Batch: 428828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286883-1	MW-2	Total/NA	Water	8260D	
310-286883-2	MW-3	Total/NA	Water	8260D	
310-286883-3	MW-6	Total/NA	Water	8260D	
310-286883-4	MW-7	Total/NA	Water	8260D	
310-286883-5	MW-9	Total/NA	Water	8260D	
310-286883-6	MW-10	Total/NA	Water	8260D	
310-286883-7	Dup-1	Total/NA	Water	8260D	
310-286883-8	Trip Blank	Total/NA	Water	8260D	
MB 310-428828/5	Method Blank	Total/NA	Water	8260D	
LCS 310-428828/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-428828/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 428758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286883-1	MW-2	Total/NA	Water	3005A	
310-286883-2	MW-3	Total/NA	Water	3005A	
310-286883-3	MW-6	Total/NA	Water	3005A	
310-286883-4	MW-7	Total/NA	Water	3005A	
310-286883-5	MW-9	Total/NA	Water	3005A	
310-286883-6	MW-10	Total/NA	Water	3005A	
310-286883-7	Dup-1	Total/NA	Water	3005A	
LCS 310-428758/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 429081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286883-1	MW-2	Total/NA	Water	6020B	428758
310-286883-2	MW-3	Total/NA	Water	6020B	428758
310-286883-3	MW-6	Total/NA	Water	6020B	428758
310-286883-4	MW-7	Total/NA	Water	6020B	428758
310-286883-5	MW-9	Total/NA	Water	6020B	428758
310-286883-6	MW-10	Total/NA	Water	6020B	428758
310-286883-7	Dup-1	Total/NA	Water	6020B	428758

Analysis Batch: 429160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286883-6	MW-10	Total/NA	Water	6020B	428758
310-286883-7	Dup-1	Total/NA	Water	6020B	428758
LCS 310-428758/2-A	Lab Control Sample	Total/NA	Water	6020B	428758

General Chemistry

Analysis Batch: 428941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286883-1	MW-2	Total/NA	Water	I-3765-85	
310-286883-2	MW-3	Total/NA	Water	I-3765-85	
310-286883-3	MW-6	Total/NA	Water	I-3765-85	
310-286883-4	MW-7	Total/NA	Water	I-3765-85	
310-286883-5	MW-9	Total/NA	Water	I-3765-85	
310-286883-6	MW-10	Total/NA	Water	I-3765-85	
310-286883-7	Dup-1	Total/NA	Water	I-3765-85	

Eurofins Cedar Falls

QC Association Summary

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

Job ID: 310-286883-1

General Chemistry (Continued)

Analysis Batch: 428941 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-428941/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-428941/2	Lab Control Sample	Total/NA	Water	I-3765-85	

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Lab Chronicle

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

Job ID: 310-286883-1

Client Sample ID: MW-2

Lab Sample ID: 310-286883-1

Date Collected: 07/25/24 15:08

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 20:51
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:32
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: MW-3

Lab Sample ID: 310-286883-2

Date Collected: 07/25/24 12:41

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 21:14
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:35
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: MW-6

Lab Sample ID: 310-286883-3

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 21:36
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:37
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: MW-7

Lab Sample ID: 310-286883-4

Date Collected: 07/25/24 11:30

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 21:59
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:39
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: MW-9

Lab Sample ID: 310-286883-5

Date Collected: 07/25/24 16:20

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 22:22
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:41
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Lab Chronicle

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

Job ID: 310-286883-1

Client Sample ID: MW-10

Lab Sample ID: 310-286883-6

Date Collected: 07/25/24 17:04

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 22:44
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429160	NFT2	EET CF	08/01/24 14:29
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:52
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: Dup-1

Lab Sample ID: 310-286883-7

Date Collected: 07/25/24 10:43

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 23:06
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429160	NFT2	EET CF	08/01/24 14:33
Total/NA	Prep	3005A			428758	QTZ5	EET CF	07/30/24 09:00
Total/NA	Analysis	6020B		1	429081	NFT2	EET CF	07/31/24 17:54
Total/NA	Analysis	I-3765-85		1	428941	WZC8	EET CF	07/31/24 08:47

Client Sample ID: Trip Blank

Lab Sample ID: 310-286883-8

Date Collected: 07/25/24 00:00

Matrix: Water

Date Received: 07/26/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428828	WSE8	EET CF	07/30/24 18:36

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: 310-286883-1

Project/Site: 2nd 2024 Semi-Annual GW Sampling

Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	IA100001	09-29-24

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Method Summary

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

Job ID: 310-286883-1

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





Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>7/26/24</u>	TIME <u>1630</u>	Received By <u>XB</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>all</u>			
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>X</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>0.6</u>		Corrected Temp (°C): <u>0.6</u>	
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g , bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Client Information Client Contact: Sean Marczewski Company: SCS Engineers Address: 1690 All State Court Suite 100 City: West Des Moines State, Zip: IA, 50265 Phone: 27223238 24 Email: SMarczewski@scsengineers.com Project Name: 2nd 2024 Semi-Annual GW Sampling Site:		Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 27223238 24 WO #: Project #: 31012737 SSOW#:		Sampler: <i>W. Clark</i> Lab PM: Yang, Mary E E-Mail: Mary Yang@ET EurofinsUS.com PWSID:		Carrier Tracking No(s): 310-94997-25048 1 State of Origin: Page 1 of 1 Job #:					
Preservation Codes: D - HNO3 A - HCL N - None		Other:		Total Number of containers:		Special Instructions/Note:					
Sample Identification		Sample Date 5/24	Sample Time 2:00	Sample Type (C=Comp, G=grab) C	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air) Water	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - Appendix I List (Iowa)	8260D - Appendix I Volatile List (Iowa)	13766 85 - Residue, Non-Filterable (TSS)	Analysis Requested
MW-2		5/24	2:00	C	Water			X	X	X	
MW-3		5/24	2:05	C	Water			X	X	X	
MW-6		5/24	3:43	C	Water			X	X	X	
MW-7		5/24	3:44	C	Water			X	X	X	
MW-9		5/24	3:44	C	Water			X	X	X	
MW-10		5/24	3:44	C	Water			X	X	X	
GU-2					Water			X	X	X	
GWD-1					Water			X	X	X	
DUP-1					Water			X	X	X	
Trip Blank					Water			X	X	X	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)											
Empty Kit Relinquished by:											
Relinquished by: <i>Marczewski</i> Date/Time: 5/24 19:00 Company:											
Relinquished by: Date/Time: Company:											
Relinquished by: Date/Time: Company:											
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:											
Date: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time: Date/Time:											
Method of Shipment:											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements:											
NO SAMPLE NO SAMPLE											



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-286883-1

SDG Number:

Login Number: 286883


List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Appendix B-2


Data Validation

QA/QC Completed by: Sean Marczewski
 Sample Date: 3/19/2024
 Site Name: Adair County Sanitary Landfill
 Sample Delivery Group: N/A
 Project Type: Adair County Sanitary Landfill - 1st 2024 Semi-Annual Groundwater Sampling Event
 Laboratory: Eurofins TestAmerica, Cedar Falls
 Lab Job ID: 310-277199-1
 Lab Report Date: 3/27/2024

	OK	NO	N/A	NOTES
Sample Collection and Sample Holding				
Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Correct Constituents Analyzed	X			
Case Narrative	X			
Holding Times	X			
Analytical Sensitivity and Blanks				
Method Blank Detections	X			
Trip Blank Detections	X			
Accuracy				
ICV/CCV		X		Method 8260D: The continuing calibration verification (CCV) associated with batch 310-416634 recovered above the upper control limit for Trichlorofluoromethane (27.4%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 310-416634/4).
LCS/LCSD		X		Method 8260D: The laboratory control sample (LCS) for analytical batch 310-416634 recovered outside control limits for the following analytes: Chlorodibromomethane. These analytes were 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			A field duplicate sample was collected at MW-7. RPD for analyzed parameters was <50%.

QA/QC Completed by: Sean Marczewski
 Sample Date: 7/25/2024
 Site Name: Adair County Sanitary Landfill
 Sample Delivery Group: N/A
 Project Type: Adair County Sanitary Landfill - 2nd 2024 Semi-Annual Groundwater Sampling Event
 Laboratory: Eurofins TestAmerica, Cedar Falls
 Lab Job ID: 310-286883-1
 Lab Report Date: 8/12/2024

	OK	NO	N/A	NOTES
Sample Collection and Sample Holding				
Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Correct Constituents Analyzed	X			
Case Narrative	X			
Holding Times	X			
Analytical Sensitivity and Blanks				
Method Blank Detections	X			
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			A field duplicate sample was collected at MW-6. RPD for analyzed parameters was <50%.



Appendix C
Summary of Groundwater Chemistry

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	2/5/2008	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A
	4/21/2008	< 0.006	< 0.006	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A
	6/10/2008	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A
	9/5/2008	< 0.006	< 0.006	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A
	9/5/2008	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A
	12/8/2008	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	12/8/2008	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.006	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A
	4/13/2009	< 0.006	< 0.006	< 0.006	0.00622	< 0.006	< 0.006	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	8/28/2009	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	8/28/2009	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.006	N/A	N/A	N/A	N/A	< 0.018	N/A
	4/21/2010	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A
	8/31/2010	< 0.006	< 0.006	< 0.006	0.00821	< 0.006	< 0.006	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A
	2/23/2011	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A
	4/26/2011	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	7/25/2011	N/A	N/A	0.00651	< 0.006	0.00695	N/A	N/A	N/A
	10/11/2011	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
	10/11/2011	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A
	4/16/2012	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	7/30/2012	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.006	< 0.006	0.00637	0.00734	0.00719	0.00938	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A
	7/9/2013	< 0.006	< 0.006	< 0.006	0.00674	< 0.006	< 0.006	N/A	N/A
	7/9/2013	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.006	0.00352	< 0.006	0.00497	< 0.006	< 0.006	N/A	N/A
	8/7/2014	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	3/24/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	10/20/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	5/16/2017	< 0.001	< 0.001	0.000232*	< 0.001	< 0.001	< 0.001	< 0.001	N/A
10/19/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000539*	< 0.001	N/A	
10/26/2018	N/A	0.000457*	N/A	N/A	N/A	N/A	N/A	N/A	
10/28/2020	N/A	0.000881*	N/A	N/A	N/A	N/A	N/A	N/A	
8/23/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
8/23/2021	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.000795*	< 0.002	N/A	
3/15/2022	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
8/10/2022	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
6/22/2023	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	
3/19/2024	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	
7/25/2024	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	
Arsenic, mg/L (CAS NO - 7440-38-2)	2/5/2008	N/A	0.00315	0.00454	N/A	0.0162	0.0215	N/A	N/A
	4/21/2008	< 0.001	0.0657	0.00346	N/A	0.00269	0.00131	N/A	N/A
	6/10/2008	0.00147	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.0251	0.00291	N/A	0.00423	0.00363	N/A	N/A
	9/5/2008	0.0165	0.0272	0.00127	N/A	0.0184	0.00429	N/A	N/A
	9/5/2008	N/A	0.024	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	0.00148	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	12/8/2008	0.00184	0.0387	0.00213	0.00978	0.00288	0.00382	N/A	N/A
	12/8/2008	N/A	0.0297	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.00183	N/A	N/A	0.00418	N/A	N/A	N/A	N/A
	4/13/2009	< 0.001	0.0792	0.00187	0.0108	0.00191	0.00107	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/28/2009	0.00196	0.00815	0.00431	0.00342	0.00211	0.00226	N/A	N/A
	8/28/2009	N/A	N/A	0.00393	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.0226	N/A	N/A	N/A	0.00531	N/A	N/A
	4/21/2010	< 0.001	0.0251	< 0.003	< 0.003	< 0.003	0.00103	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	8/31/2010	< 0.001	0.0104	< 0.001	< 0.003	0.00224	< 0.004	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	4/26/2011	< 0.001	0.00578	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	7/25/2011	N/A	N/A	< 0.002	< 0.084	< 0.006	N/A	N/A	N/A
	10/11/2011	< 0.001	0.0108	< 0.002	< 0.005	< 0.002	0.0072	0.00435	0.0043
	10/11/2011	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.008	0.036	0.0303	0.0777	0.0117	0.0157	< 0.004	N/A
	4/16/2012	N/A	N/A	0.008	N/A	N/A	N/A	N/A	N/A
	7/30/2012	0.00107	0.00813	0.00287	0.0215	0.00128	0.00223	N/A	N/A
	7/30/2012	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.001	0.0107	0.00371	0.0128	0.00178	0.00266	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.00187	N/A	N/A	N/A
	7/9/2013	< 0.001	0.00776	0.00315	0.0141	0.00405	0.00641	N/A	N/A
	7/9/2013	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.001	0.00461	< 0.003	< 0.005	< 0.002	0.00208	N/A	N/A
	8/7/2014	< 0.001	0.00854	0.00514	0.00589	0.00412	0.00244	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.000587	N/A	N/A
	3/24/2015	< 0.002	0.00597	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	10/20/2015	< 0.002	0.00427	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	5/5/2016	< 0.002	0.00391	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.01
	5/5/2016	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.002	0.00348	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	5/16/2017	< 0.002	0.00433	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	10/19/2017	< 0.002	0.00375	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	5/9/2018	< 0.002	0.00348	< 0.002	< 0.002	0.001*	< 0.002	< 0.002	N/A
	10/26/2018	N/A	0.00292	N/A	N/A	0.000781*	N/A	N/A	N/A
	4/10/2019	N/A	0.00242	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2019	N/A	0.00293	N/A	N/A	0.000776*	N/A	N/A	N/A
	4/6/2020	N/A	0.00281	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	0.00336	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2021	N/A	0.00285	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 0.002	0.00219	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
8/23/2021	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.002	0.0018*	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
3/15/2022	N/A	0.00156*	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 0.002	0.00195*	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
8/10/2022	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.002	0.00528	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
6/22/2023	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.002	0.00353	< 0.002	< 0.002	< 0.002	0.000534	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	
3/19/2024	< 0.002	0.00307	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	
7/25/2024	< 0.002	0.00781	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	
Barium, mg/L (CAS NO - 7440-39-3)	2/5/2008	N/A	0.183	0.203	N/A	0.245	0.289	N/A	N/A
	4/21/2008	0.357	0.46	0.126	N/A	0.083	0.0861	N/A	N/A
	6/10/2008	0.219	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	0.252	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.373	0.0953	N/A	0.0804	0.121	N/A	N/A
	9/5/2008	0.445	0.423	0.146	N/A	0.262	0.192	N/A	N/A
	9/5/2008	N/A	0.426	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	0.0424	N/A	N/A	N/A	N/A
	12/8/2008	0.693	0.75	0.0832	0.162	0.0772	0.159	N/A	N/A
	12/8/2008	N/A	0.885	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.619	N/A	N/A	0.337	N/A	N/A	N/A	N/A
	4/13/2009	0.369	0.486	0.112	0.214	0.0868	0.148	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.346	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Barium, mg/L (CAS NO - 7440-39-3)	8/28/2009	0.363	0.332	0.112	0.0496	0.0933	0.117	N/A	N/A
	8/28/2009	N/A	N/A	0.107	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.521	N/A	N/A	N/A	0.148	N/A	N/A
	4/21/2010	0.21	0.19	0.0879	0.0362	0.0667	0.103	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.0419	N/A	N/A	N/A
	8/31/2010	0.23	0.249	0.175	0.055	0.0776	0.169	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	0.0977	N/A	N/A	N/A
	4/26/2011	0.233	0.151	0.0922	0.0421	0.0728	0.161	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.128	N/A	N/A
	7/25/2011	N/A	N/A	< 0.03	0.127	0.112	N/A	N/A	N/A
	10/11/2011	0.213	0.228	0.0681	0.0657	0.0623	0.094	0.207	0.203
	10/11/2011	0.346	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.374	0.9	0.442	0.893	0.223	0.21	0.154	N/A
	4/16/2012	N/A	N/A	0.59	N/A	N/A	N/A	N/A	N/A
	7/30/2012	0.345	0.437	0.0677	0.235	0.0876	0.12	N/A	N/A
	7/30/2012	0.395	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	0.193	0.319	0.0845	0.11	0.0915	0.15	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.0974	N/A	N/A	N/A
	7/9/2013	0.192	0.392	0.0727	0.0611	0.0852	0.164	N/A	N/A
	7/9/2013	0.215	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.256	0.481	0.0622	0.0617	0.0778	0.115	N/A	N/A
	8/7/2014	0.299	0.181	0.0588	0.0414	0.0686	0.128	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.108	N/A	N/A
	3/24/2015	0.191	0.219	0.0396	0.0323	0.0579	0.104	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.0526	N/A	N/A	N/A
	10/20/2015	0.169	0.189	0.0363	0.0246	0.0466	0.0879	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	0.0899	N/A	N/A
	5/5/2016	0.175	0.17	0.0304	0.0202	0.0396	0.0763	0.0552	0.0345
	5/5/2016	N/A	N/A	0.0302	N/A	N/A	N/A	N/A	N/A
	10/14/2016	0.156	0.194	0.0306	0.0206	0.0371	0.0792	0.0521	N/A
	5/16/2017	0.175	0.258	0.0295	0.0326	0.0372	0.0749	0.0513	N/A
	10/19/2017	0.176	0.266	0.032	0.0268	0.0414	0.0832	0.0554	N/A
	5/9/2018	0.184	0.341	0.031	0.0232	0.0418	0.0763	0.051	N/A
	10/26/2018	0.183	0.304	0.0336	0.0273	0.0499	0.0856	0.0536	N/A
	4/10/2019	0.175	0.296	0.0252	0.0313	0.0311	0.0738	0.0478	N/A
	10/8/2019	0.159	0.323	0.0308	0.0299	0.0386	0.0808	0.0498	N/A
	4/6/2020	0.178	0.314	0.025	0.025	0.0318	0.0695	0.0504	N/A
	10/28/2020	0.181	0.389	0.0305	0.0296	0.0356	0.0977	N/A	N/A
	3/31/2021	0.195	0.34	0.0275	0.0212	0.0396	0.076	0.0409	N/A
	8/23/2021	0.172	0.287	0.0263	0.0246	0.0372	0.0777	N/A	N/A
	8/23/2021	0.173	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	0.176	0.29	0.0269	0.0234	0.0308	0.0623	N/A	N/A
	3/15/2022	N/A	0.28	N/A	N/A	N/A	N/A	N/A	N/A
8/10/2022	0.179	0.128	0.0278	0.0234	0.0343	0.08	N/A	N/A	
8/10/2022	N/A	N/A	0.0259	N/A	N/A	N/A	N/A	N/A	
6/22/2023	0.167	0.23	0.0234	0.0191	0.0291	0.0663	N/A	N/A	
6/22/2023	N/A	N/A	0.0238	N/A	N/A	N/A	N/A	N/A	
11/13/2023	0.158	0.187	0.0267	0.0498	0.0316	0.0675	N/A	N/A	
11/13/2023	N/A	N/A	N/A	0.0406	N/A	N/A	N/A	N/A	
3/19/2024	0.184	0.19	0.0259	0.0198	0.0283	0.0622	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	0.0283	N/A	N/A	N/A	
7/25/2024	0.167	0.207	0.0246	0.016	0.0303	0.0661	N/A	N/A	
7/25/2024	N/A	N/A	N/A	0.0163	N/A	N/A	N/A	N/A	
Beryllium, mg/L (CAS NO - 7440-41-7)	2/5/2008	N/A	< 0.001	< 0.001	N/A	0.00118	0.00155	N/A	N/A
	4/21/2008	< 0.001	< 0.001	0.00105	N/A	< 0.001	< 0.001	N/A	N/A
	6/10/2008	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.00187	< 0.001	N/A	< 0.001	< 0.001	N/A	N/A
	9/5/2008	0.00155	< 0.001	< 0.001	N/A	0.00428	< 0.001	N/A	N/A
	9/5/2008	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	12/8/2008	0.00292	0.0048	< 0.001	0.00424	< 0.001	< 0.001	N/A	N/A
	12/8/2008	N/A	0.00452	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.00242	N/A	N/A	0.00492	N/A	N/A	N/A	N/A
	4/13/2009	< 0.001	0.00326	< 0.001	0.00528	0.00138	< 0.001	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/28/2009	0.00104	< 0.001	0.0011	0.00101	< 0.001	< 0.001	N/A	N/A
	8/28/2009	N/A	N/A	0.00164	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.00133	N/A	N/A	N/A	0.00108	N/A	N/A
	4/21/2010	< 0.001	< 0.001	< 0.001	< 0.001	0.00111	< 0.001	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Beryllium, mg/L (CAS NO - 7440-41-7)	8/31/2010	< 0.001	< 0.001	< 0.001	0.00162	< 0.001	0.00205	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/26/2011	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	7/25/2011	N/A	N/A	0.0012	< 0.001	0.00135	N/A	N/A	N/A
	10/11/2011	< 0.001	< 0.001	< 0.001	0.00217	< 0.001	< 0.001	< 0.001	< 0.001
	10/11/2011	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.004	0.0044	< 0.004	0.0052	< 0.004	< 0.004	< 0.004	N/A
	4/16/2012	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.001	0.0029	< 0.001	0.00223	< 0.001	< 0.001	N/A	N/A
	7/30/2012	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.001	0.0015	0.00145	0.00449	< 0.001	0.00103	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	7/9/2013	< 0.001	0.00239	< 0.001	0.00345	< 0.001	< 0.001	N/A	N/A
	7/9/2013	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.000398	0.00588	0.00313	0.00591	0.00228	0.00695	N/A	N/A
	8/7/2014	0.000625	0.000836	0.00139	0.00162	0.00136	0.00625	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.000256	N/A	N/A
	3/24/2015	< 0.001	< 0.001	0.000068	0.000063	< 0.001	< 0.001	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	10/20/2015	< 0.001	< 0.001	< 0.001	< 0.001	0.000048*	< 0.001	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	10/19/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	8/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A
	8/23/2021	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
8/10/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
8/10/2022	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
6/22/2023	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	
3/19/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	
7/25/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	
Cadmium, mg/L (CAS NO - 7440-43-9)	2/5/2008	N/A	0.00332	0.019	N/A	0.0026	0.00224	N/A	N/A
	4/21/2008	0.00121	0.000652	0.00152	N/A	0.000734	< 0.0005	N/A	N/A
	6/10/2008	0.00069	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	0.000887	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.00189	0.00103	N/A	0.00173	0.000969	N/A	N/A
	9/5/2008	0.00119	0.00115	< 0.0005	N/A	0.00346	0.000566	N/A	N/A
	9/5/2008	N/A	0.00152	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	0.00138	N/A	N/A	N/A	N/A
	12/8/2008	0.00238	0.00322	0.00111	0.00684	0.0027	0.00121	N/A	N/A
	12/8/2008	N/A	0.00362	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.00183	N/A	N/A	0.00908	N/A	N/A	N/A	N/A
	4/13/2009	0.00127	0.00354	0.00192	0.0103	0.00183	0.00118	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.00234	N/A	N/A
	8/28/2009	0.000954	0.00104	0.00284	0.00166	0.00169	0.000535	N/A	N/A
	8/28/2009	N/A	N/A	0.0037	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.00408	N/A	N/A	N/A	0.00121	N/A	N/A
	4/21/2010	< 0.0005	0.000822	< 0.0005	0.00158	0.000773	0.000702	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.00193	N/A	N/A	N/A
	8/31/2010	< 0.0005	0.000686	0.000508	0.00261	0.000972	0.00191	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	0.00144	N/A	N/A	N/A
	4/26/2011	< 0.0005	0.000853	0.00471	0.00184	0.00388	0.00161	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.00224	N/A	N/A
	6/15/2011	N/A	N/A	0.00417	N/A	0.00204	N/A	N/A	N/A
	7/25/2011	N/A	N/A	0.00476	< 0.0005	0.00254	N/A	N/A	N/A
	10/11/2011	0.00282	0.00102	0.0011	0.00278	0.00129	0.00366	< 0.0005	< 0.0005
	10/11/2011	0.00114	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.0008	0.007	0.0019	0.0101	0.0019	0.0016	< 0.0008	N/A
	4/16/2012	N/A	N/A	0.0044	N/A	N/A	N/A	N/A	N/A

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 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Cadmium, mg/L (CAS NO - 7440-43-9)	7/30/2012	0.00141	0.00219	0.00602	0.00714	0.000826	0.00283	N/A	N/A
	7/30/2012	0.00121	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.0005	0.0012	0.00422	0.0189	0.00129	0.0058	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.00105	N/A	N/A	N/A
	7/9/2013	< 0.0005	0.00187	0.00183	0.0175	0.00241	0.00176	N/A	N/A
	7/9/2013	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.000347	0.000928	0.00328	0.00581	0.00138	0.000659	N/A	N/A
	8/7/2014	0.000616	0.000485	0.00196	0.0033	0.00227	0.000387	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.000987	N/A	N/A
	3/24/2015	0.00099	0.000374	0.00119	0.000969	0.000772	< 0.0005	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.000351	N/A	N/A	N/A
	10/20/2015	< 0.0005	0.000233*	< 0.0005	0.000126*	0.000429*	< 0.0005	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	5/5/2016	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000232*	0.000048*	0.000072*	< 0.0005
	5/5/2016	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.0005	0.000055*	0.000089*	0.000074*	0.000372*	0.00009*	0.000167*	N/A
	5/16/2017	0.000062*	0.000046*	0.000112*	0.000084*	0.000428*	0.000096*	0.000056*	N/A
	10/19/2017	< 0.0005	< 0.0005	0.000046*	0.000054*	0.000441*	< 0.0005	0.000115*	N/A
	5/9/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000278*	< 0.0005	< 0.0005	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.000499*	0.000077*	0.000094*	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.000286*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.000333	0.000089*	0.000063*	N/A
	4/6/2020	N/A	0.000105	0.000056*	0.000097*	0.000644	0.00013	0.000061*	N/A
	10/28/2020	N/A	N/A	N/A	0.000077*	0.000377	0.000143	N/A	N/A
	3/31/2021	0.000055*	0.000135	N/A	0.000053*	0.000471	0.000057*	0.000104	N/A
	8/23/2021	< 0.0001	< 0.0001	< 0.0001	0.000055	0.000358	0.000066	N/A	N/A
	8/23/2021	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	0.000064	< 0.0001	< 0.0001	0.00006*	0.000403	0.000202	N/A	N/A
	3/15/2022	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	0.000066	0.000076*	0.000069*	0.000431	0.000383	0.000199	N/A	N/A
	8/10/2022	N/A	N/A	0.000067*	N/A	N/A	N/A	N/A	N/A
	6/22/2023	0.000372	0.000306	< 0.0002	0.000152*	0.000274	< 0.0002	N/A	N/A
	6/22/2023	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.000362	< 0.0002	N/A	N/A
	11/13/2023	N/A	N/A	N/A	0.000143	N/A	N/A	N/A	N/A
	3/19/2024	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.000229	< 0.0002	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	0.000256	N/A	N/A	N/A
	7/25/2024	0.00024	< 0.0002	< 0.0002	< 0.0002	0.00109	0.000275	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A
	Chromium, mg/L (CAS NO - 7440-47-3)	2/5/2008	N/A	< 0.02	< 0.02	N/A	0.0275	0.0417	N/A
4/21/2008		< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
6/10/2008		< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/10/2008		< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/20/2008		N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
9/5/2008		0.0428	< 0.02	< 0.02	N/A	0.033	< 0.02	N/A	N/A
9/5/2008		N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
9/24/2008		N/A	N/A	N/A	0.00138	N/A	N/A	N/A	N/A
12/8/2008		< 0.02	0.0449	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
12/8/2008		N/A	0.0646	N/A	N/A	N/A	N/A	N/A	N/A
2/27/2009		< 0.02	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
4/13/2009		< 0.02	< 0.02	< 0.02	< 0.04	< 0.02	< 0.02	N/A	N/A
4/13/2009		N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
8/28/2009		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
8/28/2009		N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
11/13/2009		N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A
4/21/2010		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
4/21/2010		N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
8/31/2010		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
8/31/2010		N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
4/26/2011		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
4/26/2011		N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
7/25/2011		N/A	N/A	< 0.06	< 0.02	< 0.02	N/A	N/A	N/A
10/11/2011		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
10/11/2011		< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/16/2012		< 0.02	0.0434	0.051	0.103	< 0.02	< 0.02	< 0.02	N/A
4/16/2012		N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
7/30/2012		< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	< 0.02	N/A	N/A
7/30/2012		< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/5/2013		< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
3/5/2013		N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chromium, mg/L (CAS NO - 7440-47-3)	7/9/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	7/9/2013	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.02	0.00708	0.00404	0.0134	0.00404	< 0.02	N/A	N/A
	8/7/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	3/24/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/20/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	5/5/2016	0.00047*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.000759*
	5/5/2016	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	10/19/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	5/9/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.000828*	< 0.005	< 0.005	N/A
	10/26/2018	N/A	N/A	0.00245*	N/A	N/A	N/A	N/A	N/A
	3/31/2021	N/A	0.00115*	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/23/2021	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/10/2022	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	6/22/2023	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	7/25/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	
Cobalt, mg/L (CAS NO - 7440-48-4)	2/5/2008	N/A	< 0.02	< 0.02	N/A	0.0344	0.0576	N/A	N/A
	4/21/2008	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.02	< 0.02	N/A	< 0.02	0.0244	N/A	N/A
	9/5/2008	0.0425	< 0.02	< 0.02	N/A	0.0346	0.0403	N/A	N/A
	9/5/2008	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	12/8/2008	0.0546	0.0368	< 0.02	0.121	< 0.02	0.0517	N/A	N/A
	12/8/2008	N/A	0.0461	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.0716	N/A	N/A	0.177	N/A	N/A	N/A	N/A
	4/13/2009	0.031	< 0.02	< 0.02	0.112	0.0337	0.0279	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.033	N/A	N/A
	8/28/2009	0.0202	< 0.02	< 0.02	0.0305	< 0.02	< 0.02	N/A	N/A
	8/28/2009	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.022	N/A	N/A	N/A	0.0237	N/A	N/A
	4/21/2010	0.00729	0.00228	0.00646	0.0261	0.0344	0.0128	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.00879	N/A	N/A	N/A
	8/31/2010	0.00475	0.00436	0.0114	0.0294	0.0117	0.037	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	0.00589	N/A	N/A	N/A
	4/26/2011	0.00646	0.0043	0.0101	0.0323	0.013	0.0164	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.0249	N/A	N/A
	7/25/2011	N/A	N/A	0.102	0.0146	0.0252	N/A	N/A	N/A
	10/11/2011	0.0187	0.00199	< 0.00155	0.0565	0.00404	0.00383	< 0.00155	< 0.00155
	10/11/2011	0.00546	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.0183	0.0584	0.0123	0.17	0.0279	0.0208	< 0.001	N/A
	4/16/2012	N/A	N/A	0.0345	N/A	N/A	N/A	N/A	N/A
	7/30/2012	0.0302	0.0227	0.00458	0.0618	0.0145	0.0146	N/A	N/A
	7/30/2012	0.0211	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	0.00321	0.00986	0.0111	0.106	0.0223	0.0147	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.0169	N/A	N/A	N/A
	7/9/2013	0.00271	0.0197	0.00465	0.094	0.0139	0.0251	N/A	N/A
	7/9/2013	0.00745	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00799	0.0235	0.0132	0.0573	0.0178	0.0121	N/A	N/A
	8/7/2014	0.0111	0.00878	0.0219	0.0502	0.0233	0.0206	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.0123	N/A	N/A
3/24/2015	0.000225	0.00149	0.000499	0.00211	0.000218	0.000788	N/A	N/A	
3/24/2015	N/A	N/A	N/A	N/A	0.000737	N/A	N/A	N/A	
10/20/2015	0.00006*	0.000954	< 0.0005	0.000102*	0.000479*	0.00202	N/A	N/A	
10/20/2015	N/A	N/A	N/A	N/A	N/A	0.0045	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	5/5/2016	< 0.0005	0.00153	0.000034*	0.000044*	0.000116*	0.000695	0.000274*	0.00248
	5/5/2016	N/A	N/A	0.000033*	N/A	N/A	N/A	N/A	N/A
	10/14/2016	0.000038*	0.00122	0.000124*	0.000149*	0.000324*	0.00388	0.000419*	N/A
	5/16/2017	0.000056*	0.0025	0.000199*	0.000185*	0.000193*	0.000628	0.000217*	N/A
	10/19/2017	< 0.0005	0.00134	0.000058*	< 0.0005	0.000608	0.00297	0.000183*	N/A
	5/9/2018	< 0.0005	0.00295	< 0.0005	< 0.0005	0.000208*	0.000681	0.000129*	N/A
	10/26/2018	N/A	0.00244	0.000071*	N/A	0.000707	0.00316	0.000177*	N/A
	4/10/2019	N/A	0.00313	N/A	N/A	0.00015*	0.00171	0.000172*	N/A
	10/8/2019	N/A	0.00249	N/A	N/A	0.000977	0.00185	0.000257*	N/A
	4/6/2020	N/A	0.00328	0.000124*	0.000154*	0.000366*	0.00095	0.00023*	N/A
	10/28/2020	N/A	0.00324	N/A	0.000148*	0.00195	0.00738	N/A	N/A
	3/31/2021	N/A	0.00243	N/A	N/A	0.00166	0.00168	0.000175*	N/A
	8/23/2021	< 0.0005	0.00317	0.000153	0.000193	0.000753	0.00241	N/A	N/A
	8/23/2021	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.0005	0.00187	< 0.0005	0.000357*	0.000711	0.000694	N/A	N/A
	3/15/2022	N/A	0.00188	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.0005	0.00452	< 0.0005	0.00023*	0.000498*	0.00401	N/A	N/A
	8/10/2022	N/A	N/A	0.000198	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.0005	0.0051	0.000192*	0.000691	0.000304*	0.00158	N/A	N/A
	6/22/2023	N/A	N/A	0.000171*	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.0005	0.00561	< 0.0005	< 0.0005	0.000328	0.00276	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.0005	0.000878	< 0.0005	< 0.0005	< 0.0005	0.000752	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	7/25/2024	< 0.0005	0.000554	< 0.0005	< 0.0005	< 0.0005	0.00082	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	
Copper, mg/L (CAS NO - 7440-50-8)	2/5/2008	N/A	< 0.02	< 0.02	N/A	< 0.02	0.0406	N/A	N/A
	4/21/2008	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.02	< 0.02	N/A	0.0207	0.0246	N/A	N/A
	9/5/2008	0.0315	< 0.02	< 0.02	N/A	0.0272	< 0.02	N/A	N/A
	9/5/2008	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	12/8/2008	0.0242	0.0577	< 0.02	< 0.02	< 0.02	0.0345	N/A	N/A
	12/8/2008	N/A	0.043	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.0281	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
	4/13/2009	< 0.02	0.031	< 0.02	0.0614	0.0236	< 0.02	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.023	N/A	N/A
	8/28/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/28/2009	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.0241	N/A	N/A	N/A	0.0289	N/A	N/A
	4/21/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.0201	N/A	N/A	N/A
	8/31/2010	< 0.02	< 0.02	< 0.02	0.0218	< 0.02	0.048	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	4/26/2011	< 0.02	0.0256	0.0325	0.0415	0.0345	0.0427	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.0535	N/A	N/A
	6/15/2011	N/A	N/A	0.0279	0.0413	0.0339	N/A	N/A	N/A
	7/25/2011	N/A	N/A	< 0.06	0.0348	0.0375	N/A	N/A	N/A
	10/11/2011	< 0.02	< 0.02	< 0.02	0.0571	< 0.02	0.0241	< 0.02	< 0.02
	10/11/2011	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.02	0.0492	< 0.02	0.129	< 0.02	0.0349	< 0.02	N/A
	4/16/2012	N/A	N/A	0.0521	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	< 0.02	N/A	N/A
	7/30/2012	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.02	< 0.02	< 0.02	0.0258	< 0.02	< 0.02	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	7/9/2013	< 0.02	< 0.02	< 0.02	0.0548	< 0.02	0.0327	N/A	N/A
	7/9/2013	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00563	< 0.02	0.0172	< 0.02	0.0778	0.0121	N/A	N/A
8/7/2014	0.00656	< 0.02	0.0192	0.0184	0.0175	0.0179	N/A	N/A	
8/7/2014	N/A	N/A	N/A	N/A	N/A	0.00821	N/A	N/A	
3/24/2015	0.00132	0.000522	0.0025	0.00188	0.00194	0.00108	N/A	N/A	
3/24/2015	N/A	N/A	N/A	N/A	0.00215	N/A	N/A	N/A	
10/20/2015	< 0.002	0.000569*	< 0.002	0.00111*	0.00181*	0.000578*	N/A	N/A	
10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	
5/5/2016	< 0.005	< 0.005	< 0.005	< 0.005	0.00187*	< 0.005	< 0.005	< 0.005	
5/5/2016	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 0.005	< 0.005	< 0.005	0.00198*	0.00176*	< 0.005	< 0.005	N/A	
5/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Copper, mg/L (CAS NO - 7440-50-8)	10/19/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	5/9/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.00182*	< 0.005	< 0.005	N/A
	3/31/2021	N/A	N/A	N/A	N/A	0.00155*	N/A	N/A	N/A
	8/23/2021	0.00153	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/23/2021	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.005	< 0.005	< 0.005	0.00249*	0.00226*	< 0.005	N/A	N/A
	8/10/2022	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.005	0.00235*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	6/22/2023	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
7/25/2024	< 0.005	< 0.005	< 0.005	< 0.005	0.00568	< 0.005	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	
Lead, mg/L (CAS NO - 7439-92-1)	2/5/2008	N/A	< 0.004	0.0055	N/A	0.0168	0.0195	N/A	N/A
	4/21/2008	0.0139	< 0.004	0.0114	N/A	0.00528	< 0.004	N/A	N/A
	6/10/2008	0.0045	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	0.00644	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.0317	0.00819	N/A	0.0107	0.00698	N/A	N/A
	9/5/2008	0.029	0.0067	< 0.004	N/A	0.0172	< 0.004	N/A	N/A
	9/5/2008	N/A	0.00507	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	0.00401	N/A	N/A	N/A	N/A
	12/8/2008	0.0205	0.035	0.0061	0.0226	0.0103	0.00796	N/A	N/A
	12/8/2008	N/A	0.0356	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.0334	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A
	4/13/2009	0.0185	0.0383	0.0108	0.0197	0.0175	0.00624	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.0122	N/A	N/A
	8/28/2009	0.0109	0.0102	0.00999	0.0137	0.0103	0.00561	N/A	N/A
	8/28/2009	N/A	N/A	0.0122	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.0256	N/A	N/A	N/A	0.00998	N/A	N/A
	4/21/2010	0.00487	< 0.004	< 0.004	0.00839	0.0109	0.00641	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.0043	N/A	N/A	N/A
	8/31/2010	< 0.004	0.00941	< 0.004	0.0113	0.00945	0.0133	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	0.00584	N/A	N/A	N/A
	4/26/2011	< 0.004	< 0.004	< 0.004	0.00857	0.00631	0.00694	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.00546	N/A	N/A
	7/25/2011	N/A	N/A	0.00912	< 0.004	0.0105	N/A	N/A	N/A
	10/11/2011	0.0112	< 0.004	< 0.004	0.0145	< 0.004	0.00484	< 0.004	< 0.004
	10/11/2011	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.0164	0.0619	0.0393	0.106	0.0292	0.0194	< 0.004	N/A
	4/16/2012	N/A	N/A	0.0169	N/A	N/A	N/A	N/A	N/A
	7/30/2012	0.017	0.0168	0.00964	0.0242	0.00816	0.00669	N/A	N/A
	7/30/2012	0.013	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.004	0.0148	0.0101	0.0266	0.0111	0.00616	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.00648	N/A	N/A	N/A
	7/9/2013	< 0.004	0.0107	< 0.004	0.0359	0.00884	0.0119	N/A	N/A
	7/9/2013	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00551	0.00718	0.00987	0.0169	0.0194	0.00482	N/A	N/A
	8/7/2014	0.0083	0.00224	0.00812	0.0236	0.0131	0.00435	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	3/24/2015	0.000355	0.000516	0.00115	0.00191	0.000569	< 0.0005	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.00096	N/A	N/A	N/A
	10/20/2015	0.00012*	0.000219*	0.000098*	0.000132*	0.00025*	< 0.0005	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	5/5/2016	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/5/2016	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.0005	< 0.0005	0.00023*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	5/16/2017	< 0.0005	< 0.0005	0.000441*	0.000405*	< 0.0005	< 0.0005	< 0.0005	N/A
	10/19/2017	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
5/9/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000518	< 0.0005	< 0.0005	N/A	
10/8/2019	N/A	N/A	0.000574	N/A	N/A	N/A	N/A	N/A	
4/6/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.00273	N/A	
10/28/2020	N/A	N/A	N/A	0.000202*	N/A	N/A	N/A	N/A	
3/31/2021	N/A	0.000255*	N/A	N/A	N/A	N/A	N/A	N/A	
8/23/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	
8/23/2021	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	
3/15/2022	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Lead, mg/L (CAS NO - 7439-92-1)	8/10/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	8/10/2022	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	6/22/2023	0.00522	0.000653	< 0.0005	0.000445*	< 0.0005	< 0.0005	N/A	N/A
	6/22/2023	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	7/25/2024	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	
Mercury, mg/L (CAS NO - 7439-97-6)	8/28/2009	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A
	8/31/2010	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A
	7/25/2011	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A
	10/11/2011	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A
	7/30/2012	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A
	5/16/2017	N/A	N/A	0.000124*	0.000144*	0.000121*	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A
	3/15/2022	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A
Nickel, mg/L (CAS NO - 7440-02-0)	2/5/2008	N/A	< 0.05	< 0.05	N/A	0.0524	0.0618	N/A	N/A
	4/21/2008	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A
	6/10/2008	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A
	9/5/2008	0.0622	< 0.05	< 0.05	N/A	0.0693	< 0.05	N/A	N/A
	9/5/2008	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A
	12/8/2008	< 0.05	0.0878	< 0.05	0.0903	< 0.05	< 0.05	N/A	N/A
	12/8/2008	N/A	0.111	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.05	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A
	4/13/2009	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.05	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	8/28/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	8/28/2009	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.0505	N/A	N/A	N/A	< 0.05	N/A	N/A
	4/21/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/31/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	4/26/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/25/2011	N/A	N/A	< 0.15	< 0.05	< 0.05	N/A	N/A	N/A
	10/11/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	10/11/2011	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.05	0.152	0.0755	0.234	0.0555	< 0.05	< 0.05	N/A
	4/16/2012	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.05	0.0593	< 0.05	< 0.15	< 0.05	< 0.05	N/A	N/A
	7/30/2012	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.05	< 0.05	< 0.05	0.0847	< 0.05	< 0.05	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	7/9/2013	< 0.05	0.0651	< 0.05	0.0775	< 0.05	< 0.05	N/A	N/A
	7/9/2013	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00806	0.0764	0.022	0.081	0.0321	0.018	N/A	N/A
	8/7/2014	0.012	0.0194	0.0177	0.0305	0.0262	0.0185	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.0129	N/A	N/A
	3/24/2015	< 0.005	0.0134	0.00296	0.0032	0.0212	0.00988	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.023	N/A	N/A	N/A
	10/20/2015	< 0.005	0.0126	0.00163*	0.00106*	0.0207	0.00984	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	0.01	N/A	N/A
5/5/2016	< 0.005	0.018	0.0016*	< 0.005	0.0182	0.00712	0.00478*	0.00943	
5/5/2016	N/A	N/A	0.00156*	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 0.005	0.0154	< 0.005	< 0.005	0.0193	0.00883	0.00808	N/A	
5/16/2017	< 0.005	0.0283	0.00192*	0.00118*	0.0207	0.00564	0.00608	N/A	
10/19/2017	< 0.005	0.0148	0.00227*	0.00121*	0.0257	0.00967	0.00582	N/A	
5/9/2018	< 0.005	0.029	0.00118*	< 0.005	0.0207	0.00487*	0.0058	N/A	
10/26/2018	N/A	0.0263	0.00216*	0.00117*	0.0238	0.00961	0.00533	N/A	
4/10/2019	N/A	0.0304	0.00182*	N/A	0.0168	0.00625	0.00568	N/A	
10/8/2019	N/A	0.0255	0.00179*	N/A	0.0291	0.00996	0.00463*	N/A	
4/6/2020	N/A	0.0285	N/A	N/A	0.025	0.0041*	0.00506	N/A	
10/28/2020	N/A	0.023	0.00238*	N/A	0.0269	0.0113	N/A	N/A	
3/31/2021	N/A	0.019	N/A	N/A	0.0279	0.00605	0.00509	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	8/23/2021	< 0.005	0.0228	< 0.005	< 0.005	0.0223	0.0083	N/A	N/A
	8/23/2021	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.005	0.0131	0.00191*	< 0.005	0.0183	0.00553	N/A	N/A
	3/15/2022	N/A	0.0136	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.005	0.0284	0.00253*	< 0.005	0.02	0.00908	N/A	N/A
	8/10/2022	N/A	N/A	0.00232*	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.005	0.00954	< 0.005	< 0.005	0.0148	0.0054	N/A	N/A
	6/22/2023	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.005	0.0815	< 0.005	< 0.005	0.0196	0.00709	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.005	0.00884	< 0.005	< 0.005	0.0196	< 0.005	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	0.017	N/A	N/A	N/A
7/25/2024	< 0.005	< 0.005	< 0.005	< 0.005	0.0206	0.00648	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	
Selenium, mg/L (CAS NO - 7782-49-2)	2/5/2008	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A
	4/21/2008	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A
	6/10/2008	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A
	9/5/2008	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A
	9/5/2008	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	12/8/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	12/8/2008	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	4/13/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	8/28/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/28/2009	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A
	4/21/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/31/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	4/26/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	7/25/2011	N/A	N/A	< 0.005	0.00576	< 0.005	N/A	N/A	N/A
	10/11/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/11/2011	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.005	0.0052	0.0054	0.0139	< 0.005	< 0.005	< 0.005	N/A
	4/16/2012	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	7/30/2012	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	7/9/2013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	7/9/2013	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00104	0.000848	0.00146	0.00103	0.00119	0.001	N/A	N/A
	8/7/2014	0.000601	0.00195	0.00189	0.00211	0.00181	0.00169	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.00229	N/A	N/A
	3/24/2015	< 0.005	< 0.005	< 0.005	0.00715	< 0.005	< 0.005	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/20/2015	< 0.005	< 0.005	< 0.005	0.00601	< 0.005	< 0.005	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
5/5/2016	0.00091*	< 0.005	0.00116*	0.0074	0.000673*	< 0.005	0.00187*	< 0.005	
5/5/2016	N/A	N/A	0.00123*	N/A	N/A	N/A	N/A	N/A	
10/14/2016	0.000922*	< 0.005	0.000785*	0.00593	< 0.005	< 0.005	0.000639*	N/A	
5/16/2017	0.00111*	< 0.005	0.00165*	0.00695	< 0.005	< 0.005	0.00127*	N/A	
10/19/2017	< 0.005	< 0.005	< 0.005	0.00516	< 0.005	< 0.005	< 0.005	N/A	
5/9/2018	0.00114*	< 0.005	< 0.005	0.00821	0.00157*	< 0.005	< 0.005	N/A	
10/26/2018	0.00111*	N/A	0.000988*	0.00927	0.00101*	N/A	0.00226*	N/A	
4/10/2019	N/A	N/A	0.00105*	0.00566	N/A	N/A	0.00102*	N/A	
10/8/2019	N/A	N/A	N/A	0.00694	N/A	N/A	0.00171*	N/A	
4/6/2020	N/A	N/A	0.00134*	0.00687	N/A	N/A	0.00155*	N/A	
10/28/2020	N/A	N/A	0.00102*	N/A	N/A	N/A	N/A	N/A	
3/31/2021	0.00133*	0.00103*	0.00166*	0.00952	N/A	N/A	0.00146*	N/A	
8/23/2021	0.00132	< 0.005	0.00163	0.00673	< 0.005	< 0.005	N/A	N/A	
8/23/2021	0.00114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.005	< 0.005	< 0.005	0.00694	< 0.005	< 0.005	N/A	N/A	
3/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Selenium, mg/L (CAS NO - 7782-49-2)	8/10/2022	< 0.005	< 0.005	< 0.005	0.00281*	< 0.005	< 0.005	N/A	N/A
	8/10/2022	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.005	0.00164*	< 0.005	0.00929	< 0.005	< 0.005	N/A	N/A
	6/22/2023	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/19/2024	< 0.005	< 0.005	< 0.005	0.00911	< 0.005	< 0.005	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	7/25/2024	< 0.005	< 0.005	< 0.005	0.0093	< 0.005	< 0.005	N/A	N/A
7/25/2024	N/A	N/A	N/A	0.00912	N/A	N/A	N/A	N/A	
Silver, mg/L (CAS NO - 7440-22-4)	2/5/2008	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	4/21/2008	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	9/5/2008	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A
	9/5/2008	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	12/8/2008	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	12/8/2008	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.02	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
	4/13/2009	< 0.02	< 0.02	< 0.02	< 0.04	< 0.02	< 0.02	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	8/28/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/28/2009	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A
	4/21/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/31/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	4/26/2011	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/25/2011	N/A	N/A	< 0.06	< 0.02	< 0.02	N/A	N/A	N/A
	10/11/2011	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	10/11/2011	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	4/16/2012	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	< 0.02	N/A	N/A
	7/30/2012	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	7/9/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	7/9/2013	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/7/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	3/24/2015	< 0.001	0.000078	0.00007	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	10/20/2015	< 0.001	< 0.001	< 0.001	0.000098*	< 0.001	< 0.001	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/5/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
5/16/2017	< 0.001	< 0.001	0.000148*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
10/19/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
8/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
8/23/2021	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
3/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
8/10/2022	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
6/22/2023	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	
3/19/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	
7/25/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Thallium, mg/L (CAS NO - 7440-28-0)	2/5/2008	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A
	4/21/2008	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A
	6/10/2008	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A
	9/5/2008	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A
	9/5/2008	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	12/8/2008	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	12/8/2008	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.002	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	4/13/2009	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	8/28/2009	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	8/28/2009	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A
	4/21/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	8/31/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	4/26/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	7/25/2011	N/A	N/A	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	10/11/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/11/2011	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.002	< 0.002	< 0.002	0.0021	< 0.002	< 0.002	< 0.002	N/A
	4/16/2012	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	7/30/2012	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	7/9/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	7/9/2013	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	8/7/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	3/24/2015	< 0.001	< 0.001	0.000043	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.000037	N/A	N/A	N/A
	10/20/2015	< 0.001	< 0.001	< 0.001	< 0.001	0.000068*	0.000089*	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	0.000103*	N/A	N/A
	5/5/2016	< 0.001	< 0.001	< 0.001	< 0.001	0.000028*	0.000061*	< 0.001	< 0.001
	5/5/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.001	< 0.001	< 0.001	< 0.001	0.000047*	0.000082*	< 0.001	N/A
5/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
10/19/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000074*	< 0.001	N/A	
5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
3/31/2021	0.00129	0.0012	N/A	N/A	N/A	N/A	N/A	N/A	
8/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
8/23/2021	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
3/15/2022	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
8/10/2022	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.001	0.00581	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
6/22/2023	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	
3/19/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	
7/25/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	
Tin, mg/L (CAS NO - 7440-31-5)	8/28/2009	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A
	8/31/2010	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A
	7/25/2011	N/A	N/A	< 0.3	< 0.1	< 0.1	N/A	N/A	N/A
	10/11/2011	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A
	7/30/2012	N/A	N/A	< 0.1	< 0.3	< 0.1	N/A	N/A	N/A
	5/5/2016	N/A	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A
	5/16/2017	N/A	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
3/15/2022	N/A	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Vanadium, mg/L (CAS NO - 7440-62-2)	2/5/2008	N/A	< 0.05	< 0.05	N/A	0.0737	0.105	N/A	N/A
	4/21/2008	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A
	6/10/2008	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A
	9/5/2008	0.0958	< 0.05	< 0.05	N/A	0.0781	< 0.05	N/A	N/A
	9/5/2008	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A
	12/8/2008	< 0.05	0.126	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	12/8/2008	N/A	0.164	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.05	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A
	4/13/2009	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.05	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	8/28/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	8/28/2009	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A
	4/21/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/31/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	4/26/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/25/2011	N/A	N/A	< 0.15	< 0.05	< 0.05	N/A	N/A	N/A
	10/11/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
	10/11/2011	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.05	0.151	< 0.05	0.252	< 0.05	< 0.05	< 0.05	N/A
	4/16/2012	N/A	N/A	0.131	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.05	0.0557	< 0.05	< 0.15	< 0.05	< 0.05	N/A	N/A
	7/30/2012	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.05	< 0.05	< 0.05	0.0856	< 0.05	< 0.05	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	7/9/2013	< 0.05	0.0577	< 0.05	0.0879	< 0.05	< 0.05	N/A	N/A
	7/9/2013	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.00592	0.0645	0.019	0.106	0.0304	0.00838	N/A	N/A
	8/7/2014	0.0112	0.0152	0.0226	0.0411	0.0192	0.0054	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.0119	N/A	N/A
	3/24/2015	0.00135	0.00183	0.00194	0.00293	0.00152	0.000557	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	0.000828	N/A	N/A	N/A
	10/20/2015	0.000893*	0.0012*	0.000776*	0.000807*	0.000982*	< 0.005	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	5/5/2016	0.000655*	0.00072*	0.000355*	0.000379*	0.00046*	< 0.005	0.000291*	0.000938*
	5/5/2016	N/A	N/A	0.000384*	N/A	N/A	N/A	N/A	N/A
	10/14/2016	0.00084*	0.000905*	0.000983*	0.000988*	0.000758*	0.000449*	0.000576*	N/A
	5/16/2017	< 0.005	0.00101*	0.000911*	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	10/19/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
5/9/2018	0.000621*	0.000744*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	
10/26/2018	0.000924*	0.000634*	0.000823*	0.00108*	0.00118*	N/A	0.000681*	N/A	
10/8/2019	N/A	N/A	N/A	0.000858*	N/A	N/A	N/A	N/A	
4/6/2020	0.00117*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10/28/2020	0.00116*	N/A	N/A	0.00107*	N/A	N/A	N/A	N/A	
3/31/2021	0.0012*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/23/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
8/23/2021	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
3/15/2022	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
8/10/2022	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
6/22/2023	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.005	0.00121	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	
3/19/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	
7/25/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	
Zinc, mg/L (CAS NO - 7440-66-6)	2/5/2008	N/A	0.0392	0.0521	N/A	0.0949	0.136	N/A	N/A
	4/21/2008	0.0347	0.0311	0.0506	N/A	0.0459	0.0348	N/A	N/A
	6/10/2008	0.0578	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	0.0528	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.203	0.152	N/A	0.273	0.197	N/A	N/A

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 Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Zinc, mg/L (CAS NO - 7440-66-6)	9/5/2008	0.0928	0.0688	0.0477	N/A	0.144	0.065	N/A	N/A
	9/5/2008	N/A	0.0781	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	0.116	N/A	N/A	N/A	N/A
	12/8/2008	0.0947	0.237	0.0592	0.523	0.0805	0.0924	N/A	N/A
	12/8/2008	N/A	0.198	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	0.0943	N/A	N/A	2.02	N/A	N/A	N/A	N/A
	4/13/2009	0.0584	0.121	0.101	1.08	0.165	0.116	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	0.0561	N/A	N/A
	8/28/2009	0.0604	0.119	0.19	0.283	0.177	0.121	N/A	N/A
	8/28/2009	N/A	N/A	0.144	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	0.18	N/A	N/A	N/A	0.157	N/A	N/A
	4/21/2010	< 0.02	< 0.02	< 0.02	0.0392	< 0.02	< 0.02	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	0.0421	N/A	N/A	N/A
	8/31/2010	0.031	0.0621	0.0586	0.117	0.0683	0.101	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	0.0836	N/A	N/A	N/A
	4/26/2011	< 0.02	< 0.02	0.0709	0.0403	< 0.02	0.0391	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	0.0504	N/A	N/A
	7/25/2011	N/A	N/A	0.239	< 0.02	< 0.02	N/A	N/A	N/A
	10/11/2011	0.0239	< 0.02	< 0.02	0.344	< 0.02	< 0.02	0.0207	< 0.02
	10/11/2011	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	0.0367	0.278	0.0378	1.4	0.0454	0.0751	< 0.02	N/A
	4/16/2012	N/A	N/A	0.134	N/A	N/A	N/A	N/A	N/A
	7/30/2012	0.0521	0.0871	0.0473	0.548	< 0.02	0.0713	N/A	N/A
	7/30/2012	0.0459	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	0.0211	0.106	0.081	0.406	0.0723	0.0928	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	0.0748	N/A	N/A	N/A
	7/9/2013	0.0271	0.0891	0.0536	0.288	0.11	0.152	N/A	N/A
	7/9/2013	0.0264	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.078	0.257	0.262	0.478	0.25	0.222	N/A	N/A
	8/7/2014	< 0.02	0.0631	0.0639	0.0669	0.0764	0.0223	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.0451	N/A	N/A
	3/24/2015	< 0.01	< 0.01	< 0.01	0.00814	< 0.01	< 0.01	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	10/20/2015	< 0.01	< 0.01	< 0.01	< 0.01	0.0154	< 0.01	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A
	5/5/2016	< 0.01	< 0.01	< 0.01	0.012	0.0291	< 0.01	< 0.01	0.0202
	5/5/2016	N/A	N/A	0.0125	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A
	5/16/2017	< 0.02	< 0.02	< 0.02	0.017*	< 0.02	< 0.02	< 0.02	N/A
	10/19/2017	< 0.02	< 0.02	< 0.02	0.0272	< 0.02	< 0.02	< 0.02	N/A
	5/9/2018	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	4/10/2019	0.0128*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/23/2021	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	3/15/2022	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	8/10/2022	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.02	< 0.02	0.00654*	0.00949*	< 0.02	< 0.02	N/A	N/A
	6/22/2023	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	3/19/2024	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	7/25/2024	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/L (CAS NO - TSS)	2/11/2014	334	9870	3230	3200	1480	945	N/A	N/A
	8/7/2014	445	1710	2840	2250	1560	2400	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	1440	N/A	N/A
	3/24/2015	12.2	48.7	77.7	321	44.3	16.4	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	13.8	N/A	N/A	N/A
	10/20/2015	5.37	16	12.6	5.63	15	5.63	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	6.38	N/A	N/A
	5/5/2016	< 1.88	6	< 1.88	1.5*	0.875*	1.38*	< 1.88	72.8
	5/5/2016	N/A	N/A	0.625*	N/A	N/A	N/A	N/A	N/A
	10/14/2016	2.88	9.63	19.1	8.63	2.63	3.75	0.875*	N/A
	5/16/2017	2.25	18.9	33.5	21	2.25	2.38	< 1.88	N/A
	10/19/2017	< 1.88	2.75	< 1.88	1.63*	1*	0.625*	< 1.88	N/A
	5/9/2018	< 1.88	6.67	< 1.88	0.875*	0.875*	< 1.88	< 1.88	N/A
	10/26/2018	N/A	3.5	1*	0.875*	N/A	1.25*	N/A	N/A
	4/10/2019	N/A	3.38	N/A	2.13	1*	0.875*	0.75*	N/A

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Summary of Groundwater Chemistry
Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
Project #27224370.25

Total Metals Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Total Suspended Solids, mg/L (CAS NO - TSS)	10/8/2019	1*	6.4	N/A	1.13*	1.38*	5.37	1.13*	N/A
	4/6/2020	1.38*	7.5	7.63	14.5	4.25	3.5	4.63	N/A
	10/28/2020	N/A	2.75	N/A	21.3	N/A	2.63	N/A	N/A
	3/31/2021	N/A	6.25	1*	2.75	N/A	2.25	N/A	N/A
	8/23/2021	< 1.88	4.75	< 1.88	13.4	1	N/A	N/A	N/A
	8/23/2021	< 1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	1.25	3.25	4.88	60	2.75	2	N/A	N/A
	3/15/2022	N/A	3.67	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	0.75	4.38	3.38	9.25	1.75	4	N/A	N/A
	8/10/2022	N/A	N/A	3.13	N/A	N/A	N/A	N/A	N/A
	6/22/2023	2.5	12.6	2.63	35.9	2	3.87	N/A	N/A
	6/22/2023	N/A	N/A	3.87	N/A	N/A	N/A	N/A	N/A
	11/13/2023	2.88	5	9.38	15.7	1.25	16.8	N/A	N/A
	11/13/2023	N/A	N/A	N/A	22.9	N/A	N/A	N/A	N/A
	3/19/2024	< 1.88	9	9.25	3.63	< 1.88	< 1.88	N/A	N/A
3/19/2024	N/A	N/A	N/A	N/A	< 1.88	N/A	N/A	N/A	
7/25/2024	< 1.88	27	< 1.88	< 1.88	< 1.88	< 1.88	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1.88	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
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	2/5/2008	N/A	< 0.33	< 0.33	N/A	< 0.33	< 0.33	N/A	N/A
	4/21/2008	< 0.33	< 0.33	< 0.33	N/A	< 0.33	< 0.33	N/A	N/A
	6/10/2008	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.33	< 0.33	N/A	< 0.33	< 0.33	N/A	N/A
	9/5/2008	< 0.33	< 0.33	< 0.33	N/A	< 0.33	< 0.33	N/A	N/A
	9/5/2008	N/A	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	2/5/2008	N/A	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	4/21/2008	< 0.19	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	9/5/2008	< 0.19	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	9/5/2008	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	2/5/2008	N/A	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	4/21/2008	< 0.23	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	6/10/2008	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	9/5/2008	< 0.23	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	9/5/2008	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	2/5/2008	N/A	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	4/21/2008	< 0.37	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	< 0.37	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	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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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	2/5/2008	N/A	< 0.19	< 0.19	N/A	< 0.19	1.56	N/A	N/A
	4/21/2008	< 0.19	0.421	< 0.19	N/A	< 0.19	1.64	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.45	< 0.19	N/A	< 0.19	1.3	N/A	N/A
	9/5/2008	< 0.19	0.38	< 0.19	N/A	< 0.19	1.23	N/A	N/A
	9/5/2008	N/A	0.39	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	1.22	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	1.16	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	1.22	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	1.23	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	1.09	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	0.471*	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	0.573*	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	0.54*	N/A	N/A
	3/24/2015	< 1	0.425*	< 1	< 1	< 1	0.492*	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	0.561*	N/A	N/A
5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 1	< 1	< 1	< 1	< 1	0.49*	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	0.373*	< 1	N/A
	10/26/2018	N/A	N/A	N/A	N/A	N/A	0.447*	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	N/A	0.331*	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	N/A	0.434*	N/A	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	0.53*	N/A	N/A
	3/31/2021	N/A	N/A	N/A	N/A	N/A	0.372*	N/A	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	0.269*	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	0.236*	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	2/5/2008	N/A	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	4/21/2008	< 0.37	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	< 0.37	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	12/8/2008	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	12/8/2008	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	4/13/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/28/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/28/2009	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	4/21/2010	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/31/2010	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	4/26/2011	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/11/2011	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/30/2012	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/9/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/9/2013	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/7/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	3/24/2015	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	10/20/2015	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	5/5/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/5/2016	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	5/16/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
10/19/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	
5/9/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	
8/23/2021	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	
8/23/2021	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	
3/15/2022	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	8/10/2022	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/10/2022	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	6/22/2023	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	3/19/2024	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/25/2024	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	2/5/2008	N/A	< 0.7	< 0.7	N/A	< 0.7	< 0.7	N/A	N/A
	4/21/2008	< 0.7	< 0.7	< 0.7	N/A	< 0.7	< 0.7	N/A	N/A
	6/10/2008	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.7	< 0.7	N/A	< 0.7	< 0.7	N/A	N/A
	9/5/2008	< 0.7	< 0.7	< 0.7	N/A	< 0.7	< 0.7	N/A	N/A
	9/5/2008	N/A	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	2/5/2008	N/A	< 0.86	< 0.86	N/A	< 0.86	< 0.86	N/A	N/A
	4/21/2008	< 0.86	< 0.86	< 0.86	N/A	< 0.86	< 0.86	N/A	N/A
	6/10/2008	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.86	< 0.86	N/A	< 0.86	< 0.86	N/A	N/A
	9/5/2008	< 0.86	< 0.86	< 0.86	N/A	< 0.86	< 0.86	N/A	N/A
	9/5/2008	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A
	12/8/2008	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A
	12/8/2008	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.86	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A
	4/13/2009	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A
	8/28/2009	< 0.498	< 10	< 0.498	< 0.498	< 0.498	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 0.498	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.498	N/A	N/A	N/A	< 0.498	N/A	N/A
	4/21/2010	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A
	8/31/2010	< 0.498	< 10	< 0.498	< 0.498	< 0.498	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A
	4/26/2011	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A
	7/25/2011	N/A	N/A	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	10/11/2011	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
	10/11/2011	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A
	4/16/2012	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	7/30/2012	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A
	7/9/2013	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	7/9/2013	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	8/7/2014	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A
	3/24/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	10/20/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	5/5/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/5/2016	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
5/16/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
10/19/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
5/9/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
8/23/2021	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	
8/23/2021	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	
3/15/2022	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	
8/10/2022	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	
6/22/2023	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	
3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	2/5/2008	N/A	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	4/21/2008	< 0.25	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	6/10/2008	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	9/5/2008	< 0.25	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	9/5/2008	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A
	12/8/2008	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A
	12/8/2008	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A
2/27/2009	< 0.25	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	4/13/2009	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A
	8/28/2009	< 0.255	< 10	< 0.255	< 0.255	< 0.255	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 0.255	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.255	N/A	N/A	N/A	< 0.255	N/A	N/A
	4/21/2010	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A
	8/31/2010	< 0.255	< 10	< 0.255	< 0.255	< 0.255	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A
	4/26/2011	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A
	7/25/2011	N/A	N/A	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	10/11/2011	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	10/11/2011	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A
	4/16/2012	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	7/30/2012	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A
	7/9/2013	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	7/9/2013	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	8/7/2014	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A
	3/24/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A
	10/20/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A
	5/5/2016	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	5/5/2016	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A
	5/16/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A
	10/19/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A
	5/9/2018	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A
	8/23/2021	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A
	8/23/2021	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A
	3/15/2022	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A
8/10/2022	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	
6/22/2023	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	2/5/2008	N/A	< 0.21	< 0.21	N/A	< 0.21	< 0.21	N/A	N/A
	4/21/2008	< 0.21	< 0.21	< 0.21	N/A	< 0.21	< 0.21	N/A	N/A
	6/10/2008	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.21	< 0.21	N/A	< 0.21	< 0.21	N/A	N/A
	9/5/2008	< 0.21	< 0.21	< 0.21	N/A	< 0.21	< 0.21	N/A	N/A
	9/5/2008	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 2	< 2	< 1	< 1	< 2	< 2	N/A	N/A
	12/8/2008	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A

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 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	2/5/2008	N/A	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	4/21/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	9/5/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	9/5/2008	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	2/5/2008	N/A	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A
4/21/2008		< 0.4	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
6/10/2008		< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/10/2008		< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/20/2008		N/A	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
9/5/2008		< 0.4	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
9/5/2008		N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A
9/24/2008		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
12/8/2008		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
12/8/2008		N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
2/27/2009		< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
4/13/2009		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
4/13/2009		N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
8/28/2009		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/28/2009		N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
11/13/2009		N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
4/21/2010		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
4/21/2010		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
8/31/2010		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/31/2010		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
4/26/2011		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
4/26/2011		N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
7/25/2011		N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
10/11/2011		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
10/11/2011		< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/16/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
4/16/2012		N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
7/30/2012		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
7/30/2012		< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/5/2013		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
3/5/2013		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
7/9/2013		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
7/9/2013		< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/11/2014		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/7/2014		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/7/2014		N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/24/2015		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
3/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
10/20/2015		< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
10/20/2015		N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	2/5/2008	N/A	0.17	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	4/21/2008	< 0.16	< 0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	6/10/2008	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	9/5/2008	< 0.16	< 0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	9/5/2008	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 2	< 2	< 1	< 1	< 2	< 2	N/A	N/A
	12/8/2008	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
2-Butanone, ug/L (CAS NO - 78-93-3)	2/5/2008	N/A	< 0.91	< 0.91	N/A	< 0.91	< 0.91	N/A	N/A
	4/21/2008	< 0.91	< 0.91	< 0.91	N/A	< 0.91	< 0.91	N/A	N/A
	6/10/2008	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.91	< 0.91	N/A	< 0.91	< 0.91	N/A	N/A
	9/5/2008	< 0.91	< 0.91	< 0.91	N/A	< 0.91	< 0.91	N/A	N/A
	9/5/2008	N/A	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	1.6*	N/A	
10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	2.43*	N/A	
8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
2-Hexanone, ug/L (CAS NO - 591-78-6)	2/5/2008	N/A	< 1.76	< 1.76	N/A	< 1.76	< 1.76	N/A	N/A
	4/21/2008	< 1.76	< 1.76	< 1.76	N/A	< 1.76	< 1.76	N/A	N/A
	6/10/2008	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 1.76	< 1.76	N/A	< 1.76	< 1.76	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
2-Hexanone, ug/L (CAS NO - 591-78-6)	9/5/2008	< 1.76	< 1.76	< 1.76	N/A	< 1.76	< 1.76	N/A	N/A
	9/5/2008	N/A	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	2/5/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	4/21/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
Acetone, ug/L (CAS NO - 67-64-1)	2/5/2008	N/A	< 4.62	< 4.62	N/A	< 4.62	< 4.62	N/A	N/A
	4/21/2008	< 4.62	< 4.62	< 4.62	N/A	< 4.62	< 4.62	N/A	N/A
	6/10/2008	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 4.62	< 4.62	N/A	< 4.62	< 4.62	N/A	N/A
	9/5/2008	< 4.62	< 4.62	< 4.62	N/A	< 4.62	< 4.62	N/A	N/A
	9/5/2008	N/A	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Acetone, ug/L (CAS NO - 67-64-1)	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	3.87*	< 10	< 10	< 10	9.7*	4.93*	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	5.56*	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	2.22*	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	3.19*	< 10	N/A
	5/16/2017	< 10	< 10	< 10	< 10	1.8*	< 10	< 10	N/A
	10/19/2017	2.32*	< 10	2.61*	2.93*	5.46*	< 10	< 10	N/A
	5/9/2018	< 10	1.85*	< 10	1.83*	2.49*	1.93*	< 10	N/A
	10/26/2018	N/A	3.14*	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 10	< 10	< 10	3.1	3.71	< 10	N/A	N/A
	8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
Acrylonitrile, ug/L (CAS NO - 107-13-1)	2/5/2008	N/A	< 1.28	< 1.28	N/A	< 1.28	< 1.28	N/A	N/A
	4/21/2008	< 1.28	< 1.28	< 1.28	N/A	< 1.28	< 1.28	N/A	N/A
	6/10/2008	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 1.28	< 1.28	N/A	< 1.28	< 1.28	N/A	N/A
	9/5/2008	< 1.28	< 1.28	< 1.28	N/A	< 1.28	< 1.28	N/A	N/A
	9/5/2008	N/A	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Acrylonitrile, ug/L (CAS NO - 107-13-1)	3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
Benzene, ug/L (CAS NO - 71-43-2)	2/5/2008	N/A	< 0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	4/21/2008	< 0.16	< 0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	6/10/2008	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.16	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	9/5/2008	< 0.16	0.4	< 0.16	N/A	< 0.16	< 0.16	N/A	N/A
	9/5/2008	N/A	0.45	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	12/8/2008	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	12/8/2008	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 0.5	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	4/13/2009	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	8/28/2009	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/28/2009	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A
	4/21/2010	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/31/2010	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	4/26/2011	< 0.5	1.26	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	7/25/2011	N/A	N/A	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/11/2011	< 0.5	1.89	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/11/2011	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 0.5	1.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	4/16/2012	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 0.5	2.26	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	7/30/2012	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	7/9/2013	< 0.5	1.32	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	7/9/2013	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 0.5	0.731	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/7/2014	< 0.5	1.44	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
3/24/2015	< 0.5	1.72	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	
3/24/2015	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	
10/20/2015	< 0.5	3.39	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	
10/20/2015	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	
5/5/2016	< 0.5	2.15	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
5/5/2016	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 0.5	3.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
5/16/2017	< 0.5	2.56	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
10/19/2017	< 0.5	2.48	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
5/9/2018	< 0.5	2.55	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
10/26/2018	N/A	2.65	N/A	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Benzene, ug/L (CAS NO - 71-43-2)	4/10/2019	N/A	2.28	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2019	N/A	2.36	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2020	N/A	2.44	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	1.23	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2021	N/A	0.811	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 0.5	1.93	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/23/2021	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.5	0.648	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/15/2022	N/A	0.781	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 0.5	1.67	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/10/2022	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 0.5	1.74	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	6/22/2023	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 0.5	0.7	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	3/19/2024	< 0.5	0.667	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
7/25/2024	< 0.5	0.879	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	
Bromochloromethane, ug/L (CAS NO - 74-97-5)	2/5/2008	N/A	< 0.76	< 0.76	N/A	< 0.76	< 0.76	N/A	N/A
	4/21/2008	< 0.76	< 0.76	< 0.76	N/A	< 0.76	< 0.76	N/A	N/A
	6/10/2008	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.76	< 0.76	N/A	< 0.76	< 0.76	N/A	N/A
	9/5/2008	< 0.76	< 0.76	< 0.76	N/A	< 0.76	< 0.76	N/A	N/A
	9/5/2008	N/A	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	2/5/2008	N/A	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	4/21/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	9/5/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	9/5/2008	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Bromoform, ug/L (CAS NO - 75-25-2)	2/5/2008	N/A	< 0.43	< 0.43	N/A	< 0.43	< 0.43	N/A	N/A
	4/21/2008	< 0.43	< 0.43	< 0.43	N/A	< 0.43	< 0.43	N/A	N/A

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Bromoform, ug/L (CAS NO - 75-25-2)	6/10/2008	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.43	< 0.43	N/A	< 0.43	< 0.43	N/A	N/A
	9/5/2008	< 0.43	< 0.43	< 0.43	N/A	< 0.43	< 0.43	N/A	N/A
	9/5/2008	N/A	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
Bromomethane, ug/L (CAS NO - 74-83-9)	2/5/2008	N/A	< 0.48	< 0.48	N/A	< 0.48	< 0.48	N/A	N/A
	4/21/2008	< 0.48	< 0.48	< 0.48	N/A	< 0.48	< 0.48	N/A	N/A
	6/10/2008	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.48	< 0.48	N/A	< 0.48	< 0.48	N/A	N/A
	9/5/2008	< 0.48	< 0.48	< 0.48	N/A	< 0.48	< 0.48	N/A	N/A
	9/5/2008	N/A	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	12/8/2008	< 0.48	< 0.48	< 4	< 4	< 0.48	< 0.48	N/A	N/A
	12/8/2008	N/A	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	4/13/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Bromomethane, ug/L (CAS NO - 74-83-9)	8/28/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/28/2009	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/26/2011	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/25/2011	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/11/2011	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
	10/11/2011	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 50	< 50	< 50	< 50	< 50	< 50	< 50	N/A
	4/16/2012	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/30/2012	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	7/9/2013	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/9/2013	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/7/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	3/24/2015	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/20/2015	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	5/5/2016	< 4	< 4	0.334*	< 4	< 4	< 4	0.335*	0.244*
	5/5/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	5/16/2017	0.782*	0.536*	0.568*	0.495*	< 4	0.399*	0.416*	N/A
	10/19/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	5/9/2018	< 4	0.309*	< 4	< 4	0.345*	0.547*	0.269*	N/A
	4/10/2019	N/A	1.48*	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/23/2021	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/10/2022	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
6/22/2023	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
6/22/2023	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
3/19/2024	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	
7/25/2024	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	2/5/2008	N/A	< 0.18	< 0.18	N/A	< 0.18	< 0.18	N/A	N/A
	4/21/2008	< 0.18	< 0.18	< 0.18	N/A	< 0.18	< 0.18	N/A	N/A
	6/10/2008	< 0.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.18	< 0.18	N/A	< 0.18	0.19	N/A	N/A
	9/5/2008	< 0.18	< 0.18	< 0.18	N/A	< 0.18	< 0.18	N/A	N/A
	9/5/2008	N/A	< 0.18	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 4	< 1	< 4	< 4	< 4	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	8.17	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	2/5/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	4/21/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 2	< 2	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	4/13/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/28/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/28/2009	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 5	< 4	< 5	< 5	< 5	< 4	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/26/2011	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/11/2011	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	4/16/2012	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/30/2012	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/9/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/9/2013	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/11/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	8/7/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	3/24/2015	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	10/20/2015	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	5/5/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/5/2016	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	5/16/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	10/19/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	5/9/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	8/23/2021	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/23/2021	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/15/2022	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/10/2022	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	6/22/2023	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	3/19/2024	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/25/2024	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	
Chlorobenzene, ug/L (CAS NO - 108-90-7)	2/5/2008	N/A	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	4/21/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	0.432*	< 1	< 1	< 1	< 1	N/A	N/A
3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
10/20/2015	< 1	1.32	< 1	< 1	< 1	< 1	N/A	N/A	
10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 1	1.34	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	1.02	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	1.06	< 1	< 1	< 1	< 1	< 1	N/A	

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	5/9/2018	< 1	0.752*	< 1	< 1	< 1	< 1	< 1	N/A
	10/26/2018	N/A	0.999*	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2019	N/A	1.21	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2020	N/A	1.01	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	0.56*	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 1	0.814	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	0.71*	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	2/5/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	4/21/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 10	< 5	< 10	< 10	< 10	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
Chloroethane, ug/L (CAS NO - 75-00-3)	2/5/2008	N/A	< 0.5	< 0.5	N/A	< 0.5	3.79	N/A	N/A
	4/21/2008	< 0.5	1.43	< 0.5	N/A	< 0.5	2.56	N/A	N/A
	6/10/2008	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	1.21	< 0.5	N/A	< 0.5	3.45	N/A	N/A
	9/5/2008	< 0.5	1.06	< 0.5	N/A	< 0.5	3.8	N/A	N/A
	9/5/2008	N/A	1.29	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	12/8/2008	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	12/8/2008	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	4/13/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	8/28/2009	< 4	< 4	< 4	< 4	< 4	4.63	N/A	N/A
	8/28/2009	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	4.3	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/26/2011	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/25/2011	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/11/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/11/2011	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	4/16/2012	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/30/2012	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	7/9/2013	< 4	< 4	< 4	5.29	< 4	< 4	N/A	N/A
	7/9/2013	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/7/2014	< 4	3.82*	< 4	< 4	< 4	1.42*	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	1.57*	N/A	N/A
	3/24/2015	< 4	3.55*	< 4	< 4	< 4	0.644*	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/20/2015	< 4	3.84*	< 4	< 4	< 4	0.814*	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	5/5/2016	< 4	3.58*	< 4	< 4	< 4	0.748*	< 4	< 4
	5/5/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 4	5.53	< 4	< 4	< 4	0.854*	< 4	N/A
	5/16/2017	< 4	3.73*	< 4	< 4	< 4	0.843*	< 4	N/A
	10/19/2017	< 4	< 4	< 4	< 4	< 4	1.45*	< 4	N/A
5/9/2018	< 4	4.17	< 4	< 4	< 4	0.384*	< 4	N/A	
10/26/2018	N/A	4.61	N/A	N/A	N/A	N/A	N/A	N/A	
4/10/2019	N/A	2.92*	N/A	N/A	N/A	N/A	N/A	N/A	
10/8/2019	N/A	N/A	N/A	N/A	N/A	1.2*	N/A	N/A	
4/6/2020	N/A	1.62*	N/A	N/A	N/A	N/A	N/A	N/A	
10/28/2020	N/A	N/A	N/A	N/A	N/A	1.16*	N/A	N/A	
8/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
8/23/2021	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
3/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
8/10/2022	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
6/22/2023	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
3/19/2024	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	7/25/2024	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
Chloroform, ug/L (CAS NO - 67-66-3)	2/5/2008	N/A	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	4/21/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 2.5	< 2.5	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 2	< 2	< 2	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
8/23/2021	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
8/10/2022	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
6/22/2023	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
3/19/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	
7/25/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
Chloromethane, ug/L (CAS NO - 74-87-3)	2/5/2008	N/A	0.31	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	4/21/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.2	< 0.2	N/A	< 0.2	0.31	N/A	N/A
	9/5/2008	< 0.2	< 0.2	< 0.2	N/A	< 0.2	< 0.2	N/A	N/A
	9/5/2008	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	12/8/2008	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	12/8/2008	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	4/13/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	8/28/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/28/2009	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	4/21/2010	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/31/2010	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	4/26/2011	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	7/25/2011	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	10/11/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/11/2011	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	4/16/2012	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 3	< 3	< 4	< 4	< 4	< 3	N/A	N/A
	7/30/2012	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	7/9/2013	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	7/9/2013	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/7/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	3/24/2015	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/20/2015	0.435*	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	5/5/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/5/2016	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	5/16/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	10/19/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	5/9/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	8/23/2021	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/23/2021	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/15/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
8/10/2022	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
6/22/2023	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
3/19/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	
7/25/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	2/5/2008	N/A	< 0.37	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	4/21/2008	< 0.37	1.51	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	1.82	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	< 0.37	2.02	< 0.37	N/A	< 0.37	< 0.37	N/A	N/A
	9/5/2008	N/A	1.96	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	1.04	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	1.07	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	8/31/2010	< 1	1.45	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	2	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	1.22	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	1.73	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	1.51	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	1.01	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	1.56	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	2.67	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	2.1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	1.82	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	1.82	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	1.15	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	0.725*	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	1.07	< 1	< 1	< 1	< 1	< 1	N/A
	10/26/2018	N/A	0.723*	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2019	N/A	0.83*	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2019	N/A	0.609*	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2020	N/A	0.579*	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	0.361*	N/A	N/A	N/A	N/A	N/A	N/A
	8/23/2021	< 1	0.386	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	0.271*	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	0.272*	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	2/5/2008	N/A	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	4/21/2008	< 0.23	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	6/10/2008	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	9/5/2008	< 0.23	< 0.23	< 0.23	N/A	< 0.23	< 0.23	N/A	N/A
	9/5/2008	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 10	< 5	< 10	< 10	< 10	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
Ethylbenzene, ug/L (CAS NO - 100-41-4)	2/5/2008	N/A	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	4/21/2008	< 0.25	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	6/10/2008	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	9/5/2008	< 0.25	< 0.25	< 0.25	N/A	< 0.25	< 0.25	N/A	N/A
	9/5/2008	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Ethylbenzene, ug/L (CAS NO - 100-41-4)	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
Iodomethane, ug/L (CAS NO - 74-88-4)	2/5/2008	N/A	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
	4/21/2008	< 0.4	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
	6/10/2008	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
	9/5/2008	< 0.4	< 0.4	< 0.4	N/A	< 0.4	< 0.4	N/A	N/A
	9/5/2008	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	< 10	4.99*	< 10	< 10	< 10	< 10	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Iodomethane, ug/L (CAS NO - 74-88-4)	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/31/2021	N/A	N/A	N/A	N/A	8.1*	N/A	N/A	N/A
	8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 10	8.99*	< 10	< 10	< 10	< 10	N/A	N/A
	8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
Methylene Bromide, ug/L (CAS NO - 74-95-3)	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Methylene Chloride, ug/L (CAS NO - 75-09-2)	2/5/2008	N/A	1.1	0.97	N/A	0.98	0.86	N/A	N/A
	4/21/2008	< 0.45	< 0.45	< 0.45	N/A	< 0.45	< 0.45	N/A	N/A
	6/10/2008	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.45	< 0.45	N/A	< 0.45	0.78	N/A	N/A
	9/5/2008	< 0.45	< 0.45	< 0.45	N/A	< 0.45	0.67	N/A	N/A
	9/5/2008	N/A	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	0.734*	< 5	< 5	< 5	0.785*	< 5	N/A	N/A
	8/7/2014	< 5	< 5	0.213*	0.607*	< 5	0.318*	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	0.215*	< 5	< 5	< 5	0.172*	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	0.299*	0.402*	< 5	0.342*	0.212*	0.406*	0.306*	N/A
	5/16/2017	0.319*	0.312*	0.323*	0.326*	< 5	0.408*	0.447*	N/A
	10/19/2017	< 5	< 5	< 5	< 5	< 5	0.48*	0.218*	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
Styrene, ug/L (CAS NO - 100-42-5)	2/5/2008	N/A	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	4/21/2008	< 0.19	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	9/5/2008	< 0.19	< 0.19	< 0.19	N/A	< 0.19	< 0.19	N/A	N/A
	9/5/2008	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 4	< 1	< 4	< 4	< 4	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Styrene, ug/L (CAS NO - 100-42-5)	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	2/5/2008	N/A	< 0.38	< 0.38	N/A	< 0.38	< 0.38	N/A	N/A
	4/21/2008	< 0.38	< 0.38	< 0.38	N/A	< 0.38	< 0.38	N/A	N/A
	6/10/2008	< 0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.38	< 0.38	N/A	< 0.38	< 0.38	N/A	N/A
	9/5/2008	< 0.38	< 0.38	< 0.38	N/A	< 0.38	< 0.38	N/A	N/A
	9/5/2008	N/A	< 0.38	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	0.243*	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
Toluene, ug/L (CAS NO - 108-88-3)	2/5/2008	N/A	< 0.14	< 0.14	N/A	< 0.14	< 0.14	N/A	N/A
	4/21/2008	< 0.14	< 0.14	< 0.14	N/A	< 0.14	< 0.14	N/A	N/A
	6/10/2008	< 0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	0.2	< 0.14	N/A	0.19	0.14	N/A	N/A
	9/5/2008	< 0.14	< 0.14	< 0.14	N/A	< 0.14	< 0.14	N/A	N/A
	9/5/2008	N/A	< 0.14	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Toluene, ug/L (CAS NO - 108-88-3)	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	2/5/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	4/21/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	< 0.31	< 0.31	< 0.31	N/A	< 0.31	< 0.31	N/A	N/A
	9/5/2008	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	0.221*	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	2/5/2008	N/A	0.18	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	4/21/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	< 0.17	< 0.17	< 0.17	N/A	< 0.17	< 0.17	N/A	N/A
	9/5/2008	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	12/8/2008	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	12/8/2008	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	4/13/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/28/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/28/2009	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	4/21/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/31/2010	< 10	< 5	< 10	< 10	< 10	< 5	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2011	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/30/2012	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/9/2013	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	7/9/2013	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/24/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/20/2015	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	5/5/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/5/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	5/16/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
10/19/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
8/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/23/2021	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/15/2022	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
8/10/2022	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
6/22/2023	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
3/19/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
7/25/2024	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	2/5/2008	N/A	< 1.8	< 1.8	N/A	< 1.8	< 1.8	N/A	N/A
	4/21/2008	< 1.8	< 1.8	< 1.8	N/A	< 1.8	< 1.8	N/A	N/A
	6/10/2008	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 1.8	< 1.8	N/A	< 1.8	< 1.8	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	9/5/2008	< 1.8	< 1.8	< 1.8	N/A	< 1.8	< 1.8	N/A	N/A
	9/5/2008	N/A	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	12/8/2008	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	12/8/2008	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	4/13/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/28/2009	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	4/21/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/31/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/26/2011	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2011	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/30/2012	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/9/2013	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	7/9/2013	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
Trichloroethene, ug/L (CAS NO - 79-01-6)	2/5/2008	N/A	< 0.24	< 0.24	N/A	< 0.24	< 0.24	N/A	N/A
	4/21/2008	< 0.24	< 0.24	< 0.24	N/A	< 0.24	< 0.24	N/A	N/A
	6/10/2008	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.24	< 0.24	N/A	< 0.24	< 0.24	N/A	N/A
	9/5/2008	< 0.24	< 0.24	< 0.24	N/A	< 0.24	< 0.24	N/A	N/A
	9/5/2008	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A

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Summary of Groundwater Chemistry
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Trichloroethene, ug/L (CAS NO - 79-01-6)	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	2/5/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	4/21/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	12/8/2008	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	12/8/2008	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	4/13/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	8/28/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/28/2009	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	4/21/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/31/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/26/2011	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/25/2011	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/11/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/11/2011	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	4/16/2012	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A

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 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	7/30/2012	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/30/2012	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	7/9/2013	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	7/9/2013	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/7/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	3/24/2015	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/20/2015	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	5/5/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/5/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	5/16/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	10/19/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	5/9/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	8/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	8/23/2021	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	3/15/2022	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	8/10/2022	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	6/22/2023	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	11/13/2023	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	3/19/2024	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
3/19/2024	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	
7/25/2024	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	
7/25/2024	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	2/5/2008	N/A	< 1.36	< 1.36	N/A	< 1.36	< 1.36	N/A	N/A
	4/21/2008	< 1.36	< 1.36	< 1.36	N/A	< 1.36	< 1.36	N/A	N/A
	6/10/2008	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 1.36	< 1.36	N/A	< 1.36	< 1.36	N/A	N/A
	9/5/2008	< 1.36	< 1.36	< 1.36	N/A	< 1.36	< 1.36	N/A	N/A
	9/5/2008	N/A	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	12/8/2008	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	12/8/2008	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	4/13/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/28/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/28/2009	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	4/21/2010	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/31/2010	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	4/26/2011	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/11/2011	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	4/16/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/30/2012	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
3/5/2013	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	
7/9/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	
7/9/2013	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
2/11/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	
8/7/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	
8/7/2014	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	
3/24/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
3/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
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 Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	10/20/2015	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	5/5/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/5/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	5/16/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/19/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	8/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/23/2021	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/15/2022	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	8/10/2022	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	6/22/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/19/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
7/25/2024	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	2/5/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	4/21/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	< 0.26	< 0.26	< 0.26	N/A	< 0.26	< 0.26	N/A	N/A
	9/5/2008	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	12/8/2008	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	12/8/2008	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	4/13/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/28/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/28/2009	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	4/21/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/31/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/26/2011	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2011	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	4/16/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	< 1	0.603*	< 1	< 1	< 1	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	0.821*	< 1	< 1	< 1	< 1	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/20/2015	< 1	1.11	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	0.762*	< 1	< 1	< 1	< 1	< 1	< 1
	5/5/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/14/2016	< 1	0.885*	< 1	< 1	< 1	< 1	< 1	N/A
	5/16/2017	< 1	0.861	< 1	< 1	< 1	< 1	< 1	N/A
10/19/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
5/9/2018	< 1	0.622*	< 1	< 1	< 1	< 1	< 1	N/A	
10/26/2018	N/A	0.752*	N/A	N/A	N/A	N/A	N/A	N/A	
8/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
8/23/2021	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
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Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	3/15/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/15/2022	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/10/2022	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	8/10/2022	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	6/22/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	6/22/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	11/13/2023	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	11/13/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/19/2024	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
7/25/2024	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	
7/25/2024	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
Xylenes, total, ug/L (CAS NO - 1330-20-7)	2/5/2008	N/A	< 0.3	< 0.3	N/A	< 0.3	< 0.3	N/A	N/A
	4/21/2008	< 0.3	< 0.3	< 0.3	N/A	< 0.3	< 0.3	N/A	N/A
	6/10/2008	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/10/2008	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/20/2008	N/A	< 0.3	< 0.3	N/A	< 0.3	< 0.3	N/A	N/A
	9/5/2008	< 0.3	< 0.3	< 0.3	N/A	< 0.3	< 0.3	N/A	N/A
	9/5/2008	N/A	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2008	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	12/8/2008	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	12/8/2008	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	2/27/2009	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	4/13/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/13/2009	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	8/28/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/28/2009	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	11/13/2009	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	4/21/2010	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/21/2010	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/31/2010	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/31/2010	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	4/26/2011	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	4/26/2011	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	7/25/2011	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	10/11/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/11/2011	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	4/16/2012	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	7/30/2012	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	7/30/2012	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	7/9/2013	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	7/9/2013	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/7/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	3/24/2015	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	3/24/2015	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/20/2015	< 3	< 3	< 3	< 3	0.287*	< 3	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	5/5/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/5/2016	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
10/14/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	
5/16/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	
10/19/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	
5/9/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	
8/23/2021	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
8/23/2021	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/15/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/15/2022	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	
8/10/2022	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
8/10/2022	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
6/22/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
6/22/2023	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	
11/13/2023	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
11/13/2023	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
3/19/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	
3/19/2024	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
Project #27224370.25

Appendix I VOC Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	7/25/2024	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A
	7/25/2024	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
M&P-Xylene, ug/L (CAS NO - 179601-23-1)	7/30/2012	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/30/2012	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/9/2013	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A
	7/9/2013	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/5/2016	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
3/15/2022	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	
O-Xylene, ug/L (CAS NO - 95-47-6)	7/30/2012	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/30/2012	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/5/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	3/5/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/9/2013	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	7/9/2013	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/5/2016	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/16/2017	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/15/2022	N/A	N/A	< 1	< 1	< 1	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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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	5/5/2016	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/16/2017	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/15/2022	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	8/28/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	8/31/2010	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/30/2012	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	5/5/2016	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	5/16/2017	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
3/15/2022	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	5/5/2016	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/16/2017	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/15/2022	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	
1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	5/5/2016	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/16/2017	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/15/2022	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	8/28/2009	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	8/31/2010	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/25/2011	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	10/11/2011	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	7/30/2012	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	5/5/2016	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A
	5/16/2017	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
3/15/2022	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A	
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	8/28/2009	N/A	< 0.21	N/A	N/A	N/A	< 0.2	N/A	N/A
	8/31/2010	N/A	< 0.53	N/A	N/A	N/A	< 0.5	N/A	N/A
	7/25/2011	N/A	N/A	< 0.24	< 0.24	< 0.24	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 0.43	< 0.43	< 0.43	N/A	N/A	N/A
	5/5/2016	N/A	< 1.14	N/A	N/A	N/A	< 1.11	N/A	N/A
	5/16/2017	N/A	N/A	< 1.03	< 1.03	< 1.03	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1.15	N/A	N/A
3/15/2022	N/A	N/A	< 0.158	< 0.156	< 0.157	N/A	N/A	N/A	
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	8/28/2009	N/A	< 0.21	N/A	N/A	N/A	< 0.2	N/A	N/A
	8/31/2010	N/A	< 0.53	N/A	N/A	N/A	< 0.5	N/A	N/A
	7/25/2011	N/A	N/A	< 0.24	< 0.24	< 0.24	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 0.29	< 0.29	< 0.29	N/A	N/A	N/A
	5/5/2016	N/A	< 1.14	N/A	N/A	N/A	< 1.11	N/A	N/A
	5/16/2017	N/A	N/A	< 1.03	< 1.03	< 1.03	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1.15	N/A	N/A
3/15/2022	N/A	N/A	< 0.0526	< 0.052	< 0.0524	N/A	N/A	N/A	

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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,4-D [2C], ug/L (CAS NO - 94-75-7)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1.1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 0.45	< 0.45	< 0.45	N/A	N/A	N/A
	10/11/2011	N/A	1.8	N/A	N/A	N/A	< 1	N/A	N/A
	4/16/2012	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/30/2012	N/A	1.1	< 0.47	< 0.47	< 0.47	N/A	N/A	N/A
	3/5/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	2/11/2014	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2014	N/A	< 1.04	N/A	N/A	N/A	N/A	N/A	N/A
	3/24/2015	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2015	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A
	5/5/2016	N/A	< 1.14	N/A	N/A	N/A	< 1.11	N/A	N/A
	5/16/2017	N/A	< 1.03	< 1.03	< 1.03	< 1.03	N/A	N/A	N/A
	10/19/2017	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1.15	N/A	N/A	
3/15/2022	N/A	N/A	< 0.632	< 0.624	< 0.629	N/A	N/A	N/A	
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	8/28/2009	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	8/31/2010	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	7/25/2011	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/11/2011	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	7/30/2012	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	5/5/2016	N/A	< 21.5	N/A	N/A	N/A	< 22	N/A	N/A
	5/16/2017	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A
3/15/2022	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
2-Methylphenol, ug/L (CAS NO - 95-48-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Naphthylamine, ug/L (CAS NO - 91-59-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 53.8	N/A	N/A	N/A	< 54.9	N/A	N/A
	5/16/2017	N/A	N/A	< 50	< 50	< 50	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
3-Chloropropene, ug/L (CAS NO - 107-05-1)	8/28/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	8/31/2010	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/30/2012	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	5/5/2016	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
3/15/2022	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4,4'-DDD, ug/L (CAS NO - 72-54-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00977*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	0.00428*	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.00591*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.00305*	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00625*	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
	3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A
4,4'-DDE, ug/L (CAS NO - 72-55-9)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00728*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	0.00287*	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.0055*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.00425*	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00511*	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
	3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A
4,4'-DDT, ug/L (CAS NO - 50-29-3)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.0333	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00634*	N/A	N/A	N/A
	10/28/2020	N/A	N/A	N/A	N/A	0.00408*	N/A	N/A	N/A
	3/31/2021	N/A	N/A	N/A	N/A	0.0097*	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
	3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
4-Nitrophenol, ug/L (CAS NO - 100-02-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Acenaphthene, ug/L (CAS NO - 83-32-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Acenaphthylene, ug/L (CAS NO - 208-96-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Acetonitrile, mg/L (CAS NO - 75-05-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	18.8	20.4	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A
	2/8/2012	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	4/16/2012	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	4/16/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	3/5/2013	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	7/9/2013	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	2/11/2014	N/A	N/A	0.197*	< 10	N/A	N/A	N/A	N/A
	8/7/2014	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	3/24/2015	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	10/20/2015	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
	5/5/2016	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A
	5/16/2017	N/A	N/A	< 10	1.65*	< 10	N/A	N/A	N/A
	5/9/2018	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Acetophenone, ug/L (CAS NO - 98-86-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Acrolein, ug/L (CAS NO - 107-02-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Aldrin, ug/L (CAS NO - 309-00-2)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Anthracene, ug/L (CAS NO - 120-12-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Alpha-BHC, ug/L (CAS NO - 319-84-6)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Beta-BHC, ug/L (CAS NO - 319-85-7)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00752*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Delta-BHC, ug/L (CAS NO - 319-86-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	0.00243*	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00251*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	

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 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	0.816*	N/A	N/A	N/A	0.833*	N/A	N/A
	5/16/2017	N/A	N/A	< 10	0.786*	0.805*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	< 10.2	< 10.2	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	< 10.1	< 10.1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Chlordane, ug/L (CAS NO - 57-74-9)	8/28/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	8/31/2010	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/30/2012	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	5/5/2016	N/A	< 2.15	N/A	N/A	N/A	< 2.15	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2.11	N/A	N/A
3/15/2022	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	
Alpha-Chlordane, ug/L (CAS NO - 5103-71-9)	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
Gamma-Chlordane, ug/L (CAS NO - 5566-34-7)	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Chloroprene, ug/L (CAS NO - 126-99-8)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	5/5/2016	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/16/2017	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
3/15/2022	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	
Chrysene, ug/L (CAS NO - 218-01-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Cyanide, mg/L (CAS NO - 57-12-5)	8/28/2009	N/A	< 0.01	N/A	N/A	N/A	< 0.01	N/A	N/A
	8/31/2010	N/A	< 0.01	N/A	N/A	N/A	< 0.01	N/A	N/A
	7/25/2011	N/A	N/A	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A
	10/11/2011	N/A	< 0.01	N/A	N/A	N/A	< 0.01	N/A	N/A
	7/30/2012	N/A	N/A	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A
	5/5/2016	N/A	< 0.01	N/A	N/A	N/A	< 0.01	N/A	N/A
	5/16/2017	N/A	N/A	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A
3/15/2022	N/A	N/A	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	0.592*	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Dibenzofuran, ug/L (CAS NO - 132-64-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	8/28/2009	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	8/31/2010	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	7/25/2011	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	10/11/2011	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A
	7/30/2012	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	5/5/2016	N/A	0.581*	N/A	N/A	N/A	0.274*	N/A	N/A
	5/16/2017	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
3/15/2022	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Dieldrin, ug/L (CAS NO - 60-57-1)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00694*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.00427*	N/A	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.00237*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.0021*	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00713*	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Dimethoate, ug/L (CAS NO - 60-51-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	2.14*	N/A	N/A	N/A	< 22	N/A	N/A
	5/16/2017	N/A	N/A	< 20	< 20	1.46*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 20.4	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 20.2	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A	
3/15/2022	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Dinoseb, ug/L (CAS NO - 88-85-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Diphenylamine, ug/L (CAS NO - 122-39-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Disulfoton, ug/L (CAS NO - 298-04-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Endosulfan I, ug/L (CAS NO - 959-98-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	0.00283*	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.0014*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	0.0048*	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.00521*	N/A	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.00418*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.0048*	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00716*	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Endosulfan II, ug/L (CAS NO - 33213-65-9)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	0.0045*	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.0178*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	0.00419*	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	0.00385*	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.00993*	N/A	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.0196*	N/A	N/A	N/A
	10/8/2019	N/A	N/A	N/A	N/A	0.006*	N/A	N/A	N/A
	10/28/2020	N/A	N/A	N/A	N/A	0.00385*	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Endrin, ug/L (CAS NO - 72-20-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	0.00424*	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.00462*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.0112*	N/A	N/A	N/A
	4/10/2019	N/A	N/A	N/A	N/A	0.0148*	N/A	N/A	N/A
	3/31/2021	N/A	N/A	N/A	N/A	0.014*	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
	3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	8/28/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	8/31/2010	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/30/2012	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	5/5/2016	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	3/15/2022	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Famphur, ug/L (CAS NO - 52-85-7)	8/28/2009	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	8/31/2010	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	7/25/2011	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	10/11/2011	N/A	< 20	N/A	N/A	N/A	< 20	N/A	N/A
	7/30/2012	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	5/5/2016	N/A	< 21.5	N/A	N/A	N/A	< 22	N/A	N/A
	5/16/2017	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Fluoranthene, ug/L (CAS NO - 206-44-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Fluorene, ug/L (CAS NO - 86-73-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Heptachlor, ug/L (CAS NO - 76-44-8)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.0109*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	4/6/2020	N/A	N/A	N/A	N/A	0.00678*	N/A	N/A	N/A
	3/31/2021	N/A	N/A	N/A	N/A	0.0173*	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	0.0191	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A
	3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 21.5	N/A	N/A	N/A	< 22	N/A	N/A
	5/16/2017	N/A	N/A	< 20	< 20	< 20	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Hexachloroethane, ug/L (CAS NO - 67-72-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
	3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Isobutanol, mg/L (CAS NO - 78-83-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Isodrin, ug/L (CAS NO - 465-73-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Isophorone, ug/L (CAS NO - 78-59-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Isosafrole, ug/L (CAS NO - 120-58-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Kepone, ug/L (CAS NO - 143-50-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Methacrylonitrile, ug/L (CAS NO - 126-98-7)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	10/11/2011	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	5/5/2016	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Methapyrilene, ug/L (CAS NO - 91-80-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	0.707*	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Methoxychlor, ug/L (CAS NO - 72-43-5)	8/28/2009	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	8/31/2010	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/25/2011	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	10/11/2011	N/A	< 0.032	N/A	N/A	N/A	< 0.032	N/A	N/A
	7/30/2012	N/A	N/A	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A
	5/5/2016	N/A	< 0.0344	N/A	N/A	N/A	< 0.0344	N/A	N/A
	5/16/2017	N/A	N/A	< 0.032	< 0.032	0.0236*	N/A	N/A	N/A
	10/19/2017	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A
	10/26/2018	N/A	N/A	N/A	N/A	0.00495*	N/A	N/A	N/A
	3/31/2021	N/A	N/A	N/A	N/A	0.00583*	N/A	N/A	N/A
8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	
3/15/2022	N/A	N/A	< 0.064	< 0.064	< 0.064	N/A	N/A	N/A	
Methyl Methacrylate, ug/L (CAS NO - 80-62-6)	8/28/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	8/31/2010	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/30/2012	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	5/5/2016	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
3/15/2022	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	
Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Naphthalene, ug/L (CAS NO - 91-20-3)	8/28/2009	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	8/31/2010	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/25/2011	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	10/11/2011	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	7/30/2012	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	5/5/2016	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A
	5/16/2017	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
3/15/2022	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	
Nitrobenzene, ug/L (CAS NO - 98-95-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
O-Toluidine, ug/L (CAS NO - 95-53-4)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
PCB-1016, ug/L (CAS NO - 12674-11-2)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
PCB-1221, ug/L (CAS NO - 11104-28-2)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
PCB-1232, ug/L (CAS NO - 11141-16-5)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
PCB-1242, ug/L (CAS NO - 53469-21-9)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
PCB-1248, ug/L (CAS NO - 12672-29-6)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
PCB-1254, ug/L (CAS NO - 11097-69-1)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
PCB-1260, ug/L (CAS NO - 11096-82-5)	8/28/2009	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	8/31/2010	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/25/2011	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	10/11/2011	N/A	< 0.8	N/A	N/A	N/A	< 0.8	N/A	N/A
	7/30/2012	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	5/5/2016	N/A	< 0.87	N/A	N/A	N/A	< 0.889	N/A	N/A
	5/16/2017	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A
3/15/2022	N/A	N/A	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
 Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
 Project #27224370.25

Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Phenacetin, ug/L (CAS NO - 62-44-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Phenanthrene, ug/L (CAS NO - 85-01-8)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Phenol, ug/L (CAS NO - 108-95-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Phorate, ug/L (CAS NO - 298-02-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Pronamide, ug/L (CAS NO - 23950-58-5)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Propionitrile, ug/L (CAS NO - 107-12-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Pyrene, ug/L (CAS NO - 129-00-0)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	

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Summary of Groundwater Chemistry
Adair County Sanitary Landfill (Closed) Permit # 01-SDP-01-74P
Project #27224370.25


Other Constituents	Sample Date	MW-10 UPG	MW-2 DNG	MW-3 DNG	MW-6 DNG	MW-7 DNG	MW-9 DNG	GU-2 DNG	GWD-1 DNG
Safrole, ug/L (CAS NO - 94-59-7)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Sulfide, mg/L (CAS NO - 18496-25-8)	8/28/2009	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	8/31/2010	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/25/2011	N/A	N/A	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	10/11/2011	N/A	1.7	N/A	N/A	N/A	1.5	N/A	N/A
	4/16/2012	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	7/30/2012	N/A	0.81	< 0.23	9.2	< 0.23	0.38	N/A	N/A
	3/5/2013	N/A	< 1	N/A	2.1	N/A	2.53	N/A	N/A
	7/9/2013	N/A	< 1	N/A	< 1	N/A	1.05	N/A	N/A
	2/11/2014	< 1	< 1	N/A	< 1	N/A	< 1	N/A	N/A
	8/7/2014	< 1	< 1	N/A	< 1	N/A	< 1	N/A	N/A
	8/7/2014	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/24/2015	< 1	< 1	N/A	< 1	N/A	< 1	N/A	N/A
	10/20/2015	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A
	10/20/2015	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	5/5/2016	< 1	< 1	N/A	< 1	N/A	< 1	N/A	N/A
	5/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A
	10/19/2017	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A
	5/9/2018	< 1	< 1	N/A	< 1	N/A	6.29	N/A	N/A
8/23/2021	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
3/15/2022	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	
Thionazin, ug/L (CAS NO - 297-97-2)	8/28/2009	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	8/31/2010	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/25/2011	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	10/11/2011	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A
	7/30/2012	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	5/5/2016	N/A	< 10.8	N/A	N/A	N/A	< 11	N/A	N/A
	5/16/2017	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A
3/15/2022	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	
Toxaphene, ug/L (CAS NO - 8001-35-2)	8/28/2009	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	8/31/2010	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/25/2011	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	10/11/2011	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A
	7/30/2012	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	5/5/2016	N/A	< 2.15	N/A	N/A	N/A	< 2.15	N/A	N/A
	5/16/2017	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/23/2021	N/A	N/A	N/A	N/A	N/A	< 2.11	N/A	N/A
3/15/2022	N/A	N/A	< 2	< 2	< 2	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.



Appendix D

Summary of 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 Adair County Sanitary Landfill (Landfill).

Statistical Method

Diagnostic and Exploratory Evaluations and Tests of Assumptions

The detection and assessment monitoring statistical programs include diagnostic and exploratory evaluations and statistical tests of assumptions, as appropriate, including the following:

- Time Series Plots
- Shapiro-Wilk test for normality
- Ohio Environmental Protection Agency (EPA) Method for identification of outliers
- Mann-Kendall/Sen's Slope trend test

Management of Non-Detect Data

Non-detect values in the dataset were managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data were non-detects, simple substitution was used, where non-detect values were assigned a concentration of one-half ($\frac{1}{2}$) of the practical quantification limit (PQL). If greater than 15% but less than 50% of the data were non-detects, the Kaplan-Meier estimator was used to define the distribution of the dataset. If non-detects comprised greater than 50% of the available data, non-parametric statistical methods were used.

Management of Outliers

Background datasets were evaluated for outliers using the Ohio EPA Method included in the Sanitas™ statistical software program and described below, which included the use of Dixon's, Rosner's, and Tukey's outlier tests, as appropriate based on the diagnostic tests, for the datasets that contained less than 75% of the measured concentrations below the PQL. Outliers were not confirmed unless a physical cause or explanation for the outlier was determined.

Management of Data (ND data < 75%)

If less than 75% of the background dataset is below the PQL, outliers were statistically evaluated using the following guidelines.

- A parametric dataset with $n < 20$ is evaluated with the Dixon's outlier test.
- A parametric dataset with $n \geq 20$ is evaluated with the Rosner's outlier test.
- A non-parametric dataset is evaluated with the Tukey's outlier test.

In accordance with the Ohio EPA Method, if a statistically significant outlier is not found using the above tests, but the highest value data point exceeds the second highest data point by an order of magnitude, the highest point is considered an outlier.

Management of Data (ND data \geq 75%)

If greater than or equal to 75% of the background dataset was less than the PQL, outliers were statistically evaluated using the following guidelines.

- Single detection \geq the PQL:
 - If \geq 50% of the background dataset has detections \geq the method detection limit (MDL), any value \geq two times the PQL of background was considered an outlier.
 - If $<$ 50% of the background dataset has detections \geq the MDL, any value \geq the PQL of background was considered an outlier.
- Two or more detections \geq the PQL:
 - If \geq 50% of the background dataset has detections \geq the MDL, any value \geq three times the PQL of background was considered an outlier.
 - If $<$ 50% of the background dataset has detections \geq the MDL, any value \geq two times the PQL of background was 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 method for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historic detections in background. Prediction limits were established using the process below. Data from the most recent sampling event was compared to the prediction limits for the determination of SSIs. Statistical outputs are included in Attachments A and B.

Interwell Prediction Limits with Retesting

- If the dataset had a normal distribution (or could be transformed to a normal distribution using Ladder of Powers), parametric interwell prediction limits were calculated if at least five datasets had been collected from the background monitoring point(s).
- If the dataset did not have a normal distribution (and could not be transformed to a normal distribution using Ladder of Powers) or had greater than 50% non-detects, nonparametric interwell prediction limits were calculated if at least five datasets had been collected from the background monitoring point(s).
- If an SSI above the prediction limit was indicated, retesting samples using the 1-of-2 retesting scheme should be 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 should be 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 Method

The quasi-statistical “double quantification” method was used for constituents not detected in the background monitoring points. If a constituent was detected in the compliance dataset that has not been historically detected in the background dataset, that constituent must be retested before the next semi-annual 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 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 monitoring statistical evaluations were performed using the most recent eight samples or all samples if less than eight samples were available. The confidence intervals or confidence bands used for the assessment monitoring statistical evaluation were established using the process below. Transformation of the distribution was not considered. Statistical outputs are included in Attachments A and B.

Confidence Intervals or Confidence Bands

- A parametric confidence interval around a normal mean was calculated if the dataset had a normal distribution and no statistically significant trend was present.
- A non-parametric confidence interval around a median was calculated if the dataset did not have a normal distribution and no statistically significant trend was present.
- Non-parametric confidence bands around a Theil-Sen trend line were calculated if the dataset had a statistically significant trend.

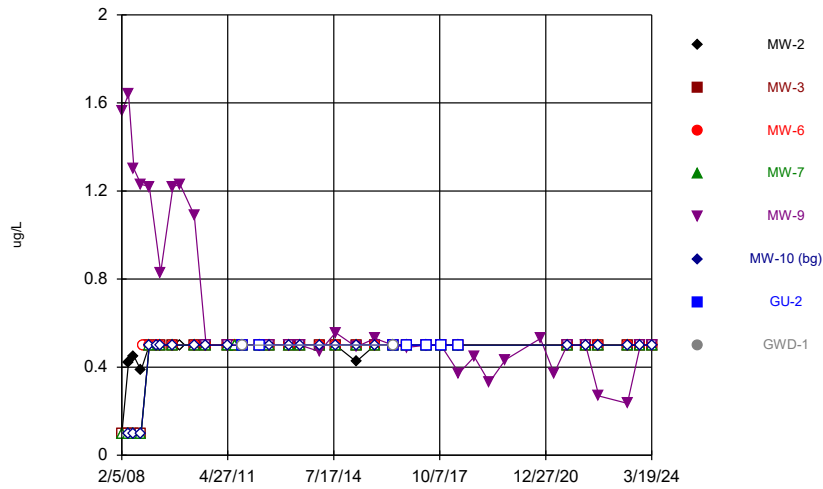
In the event that the lower confidence limit or any part of the lower confidence band, as appropriate, exceeds the GWPS, then the monitoring point is declared out of compliance, and an assessment of corrective measures (ACM) is required. Statistical outputs are included in Attachments A and B.



Attachment A
Spring 2024 Statistical Evaluation Output

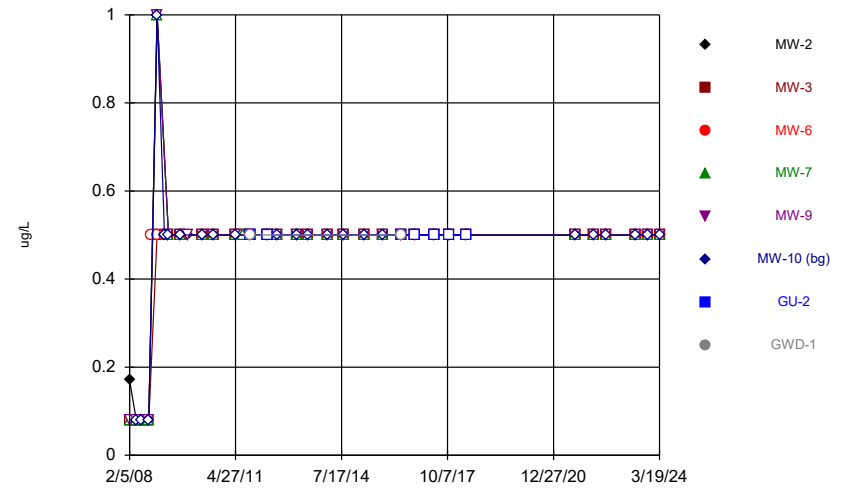
Attachment A.1
Time Series Plots

Time Series



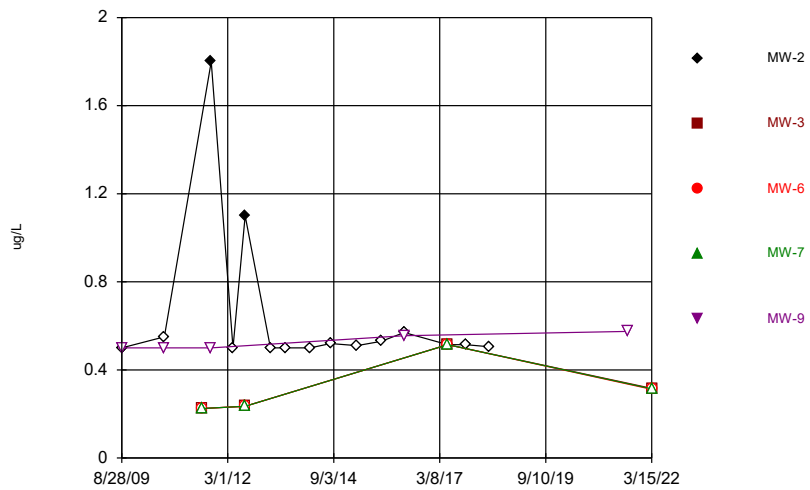
Constituent: 1,1-Dichloroethane Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



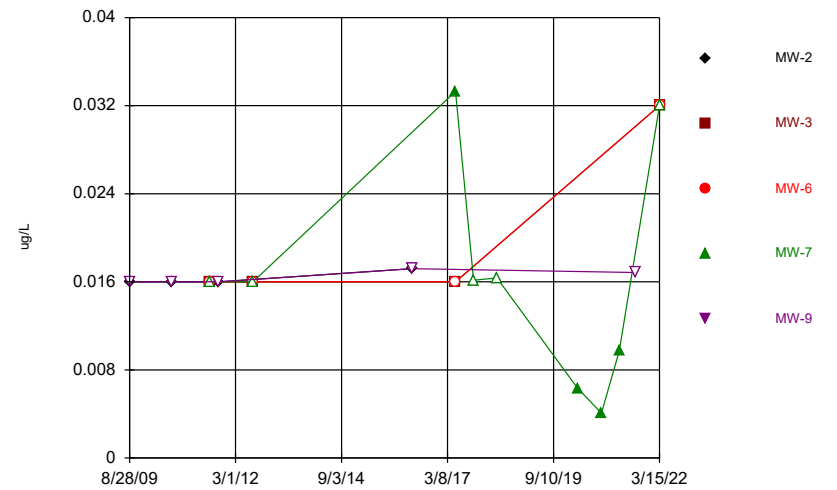
Constituent: 1,4-Dichlorobenzene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



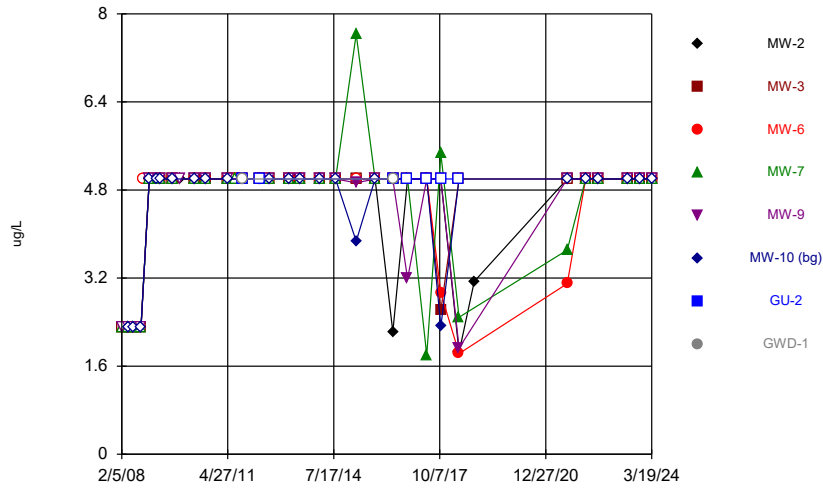
Constituent: 2,4-D Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



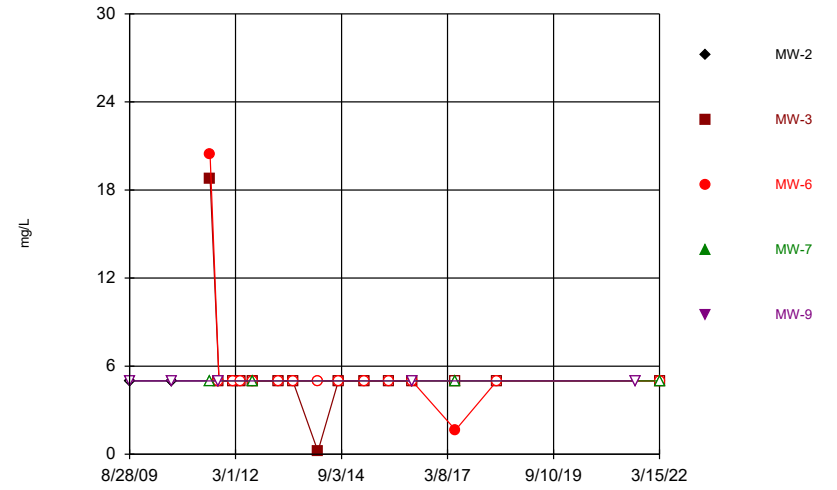
Constituent: 4,4'-DDT Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



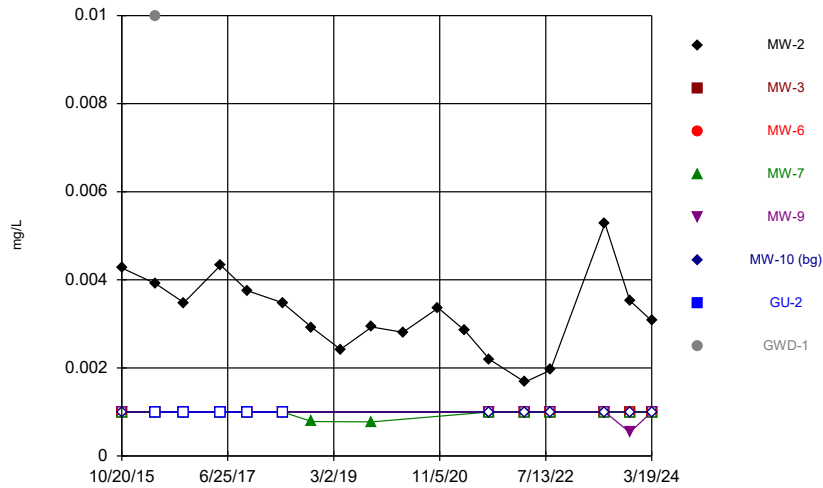
Constituent: Acetone Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



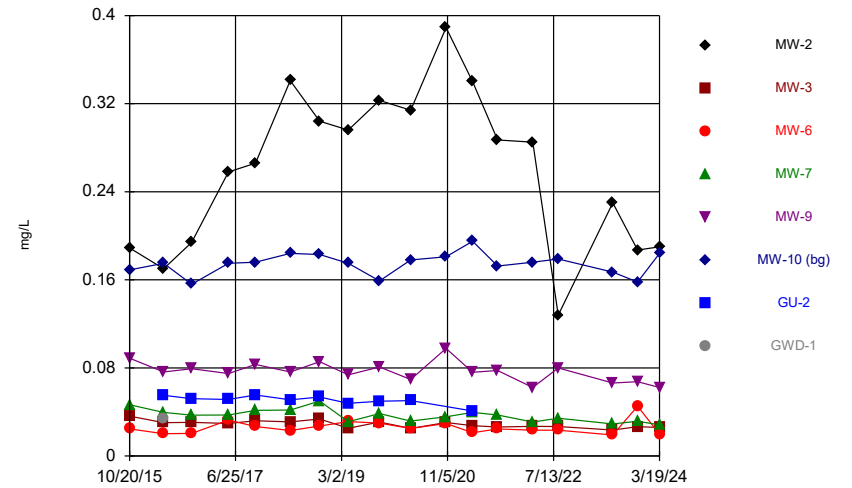
Constituent: Acetonitrile Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



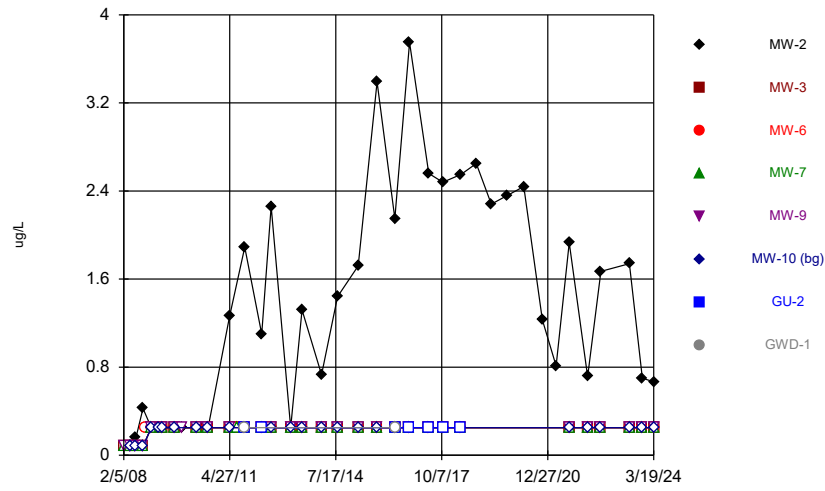
Constituent: Arsenic [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



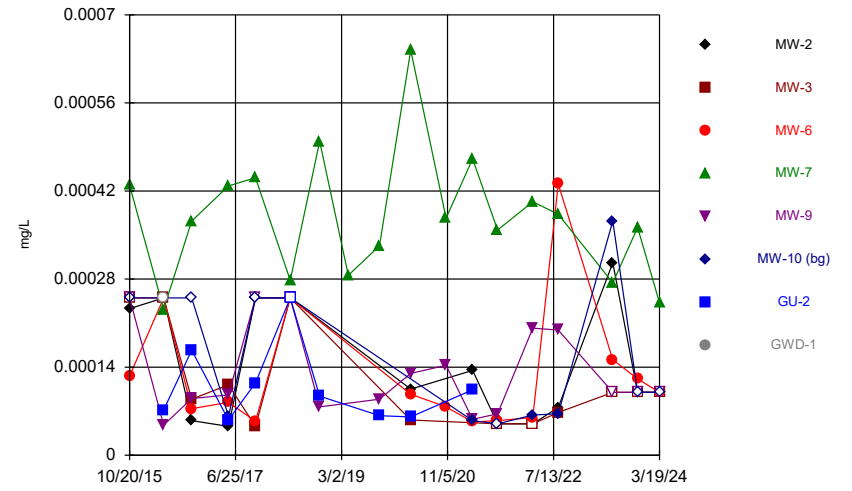
Constituent: Barium [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



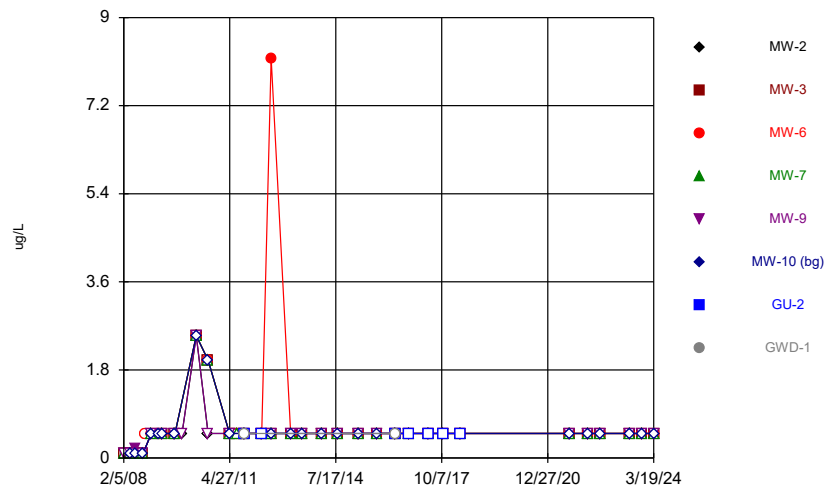
Constituent: Benzene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



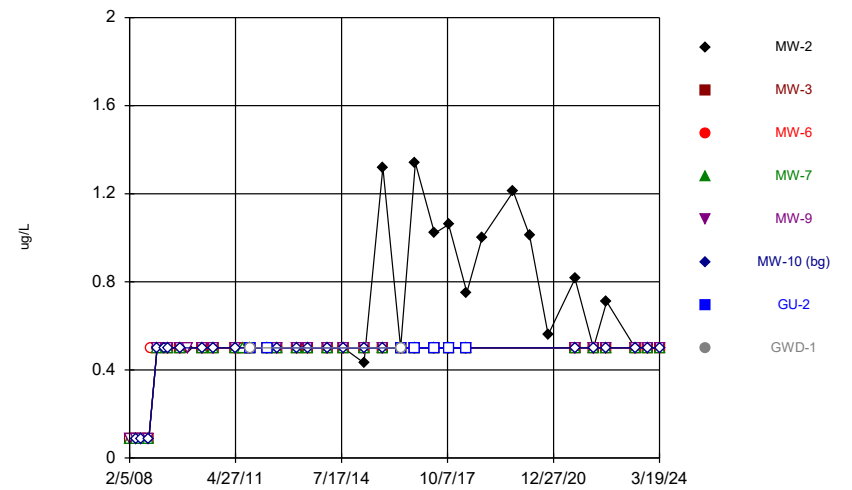
Constituent: Cadmium [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



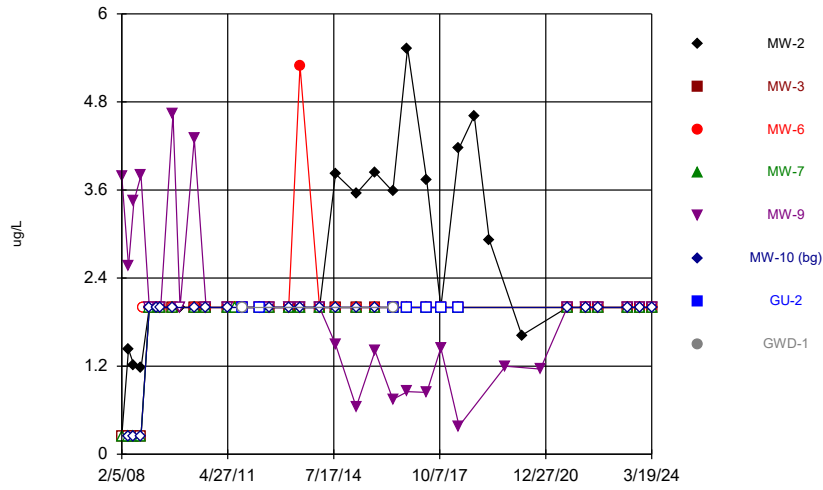
Constituent: Carbon disulfide Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



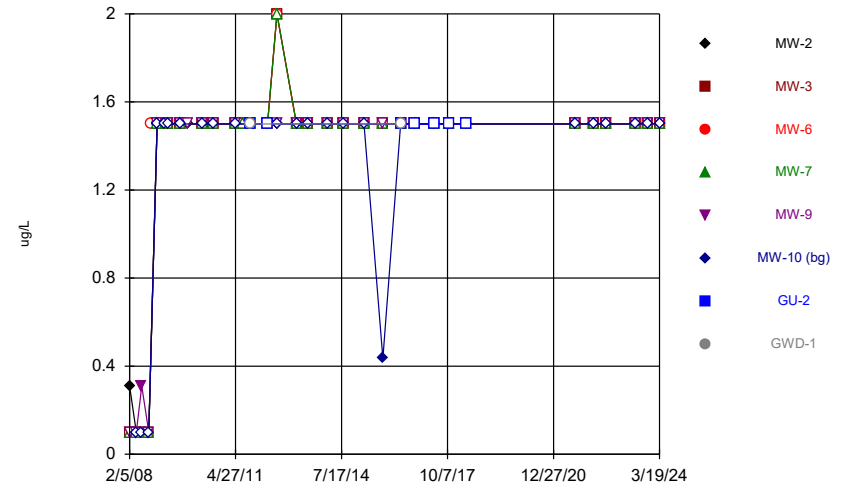
Constituent: Chlorobenzene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



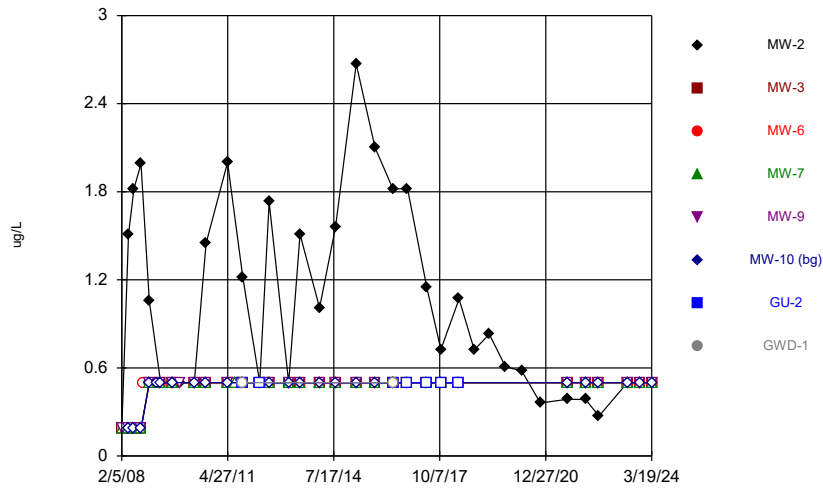
Constituent: Chloroethane Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



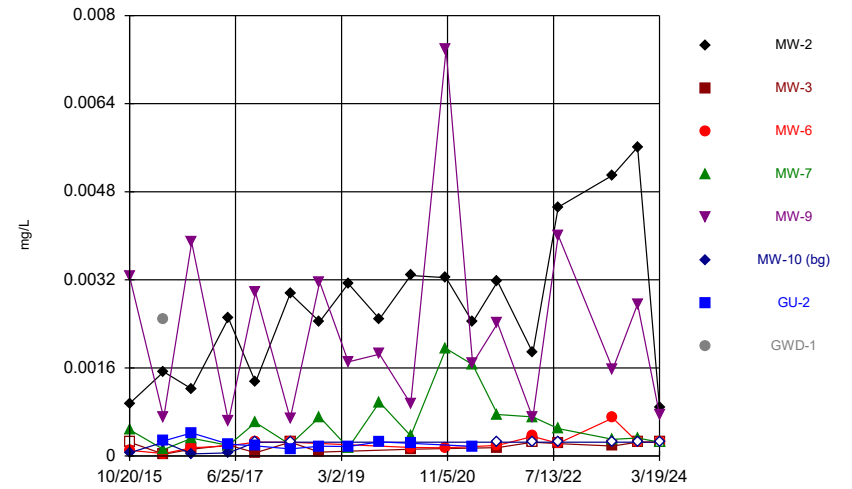
Constituent: Chloromethane Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



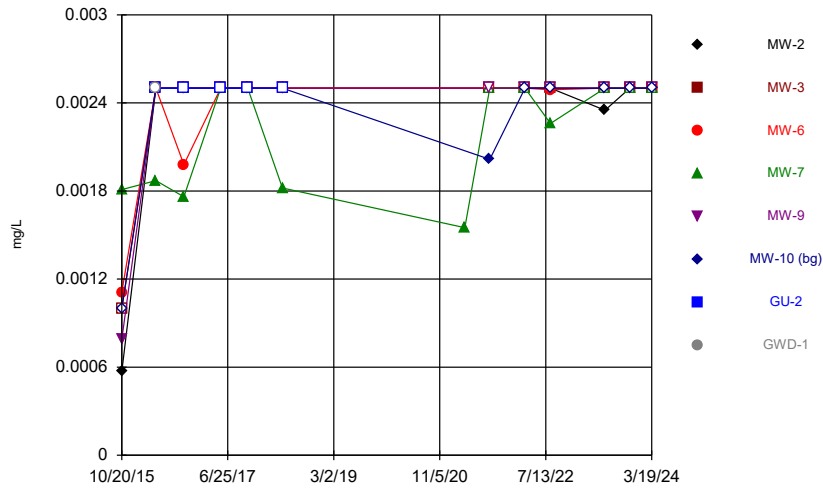
Constituent: cis-1,2-Dichloroethene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



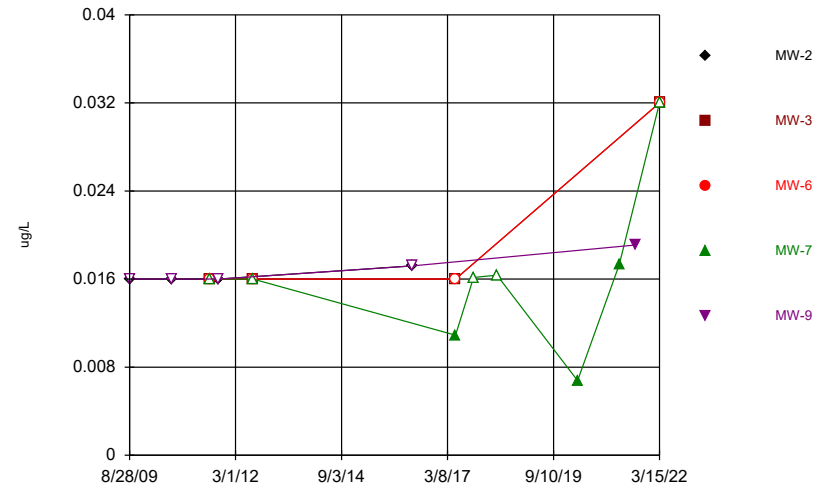
Constituent: Cobalt [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



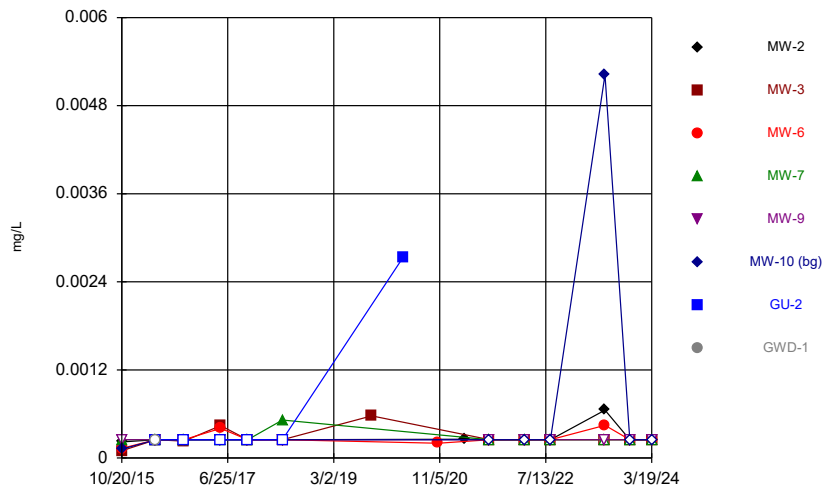
Constituent: Copper [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



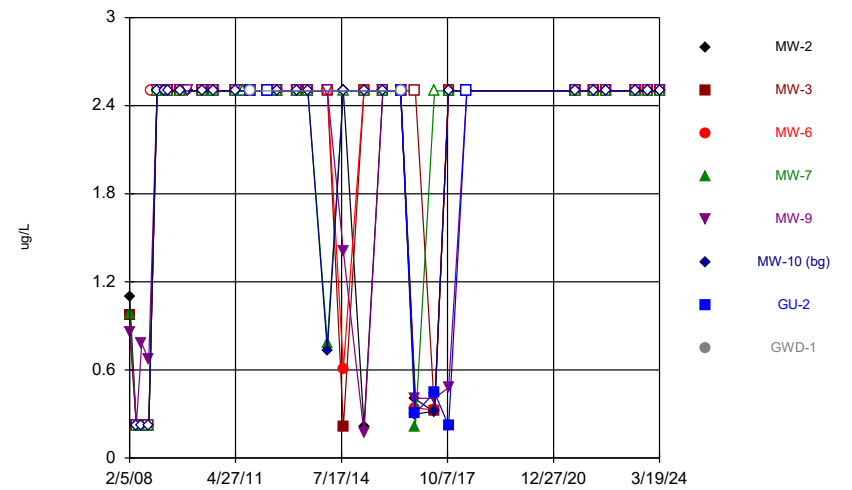
Constituent: Heptachlor Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



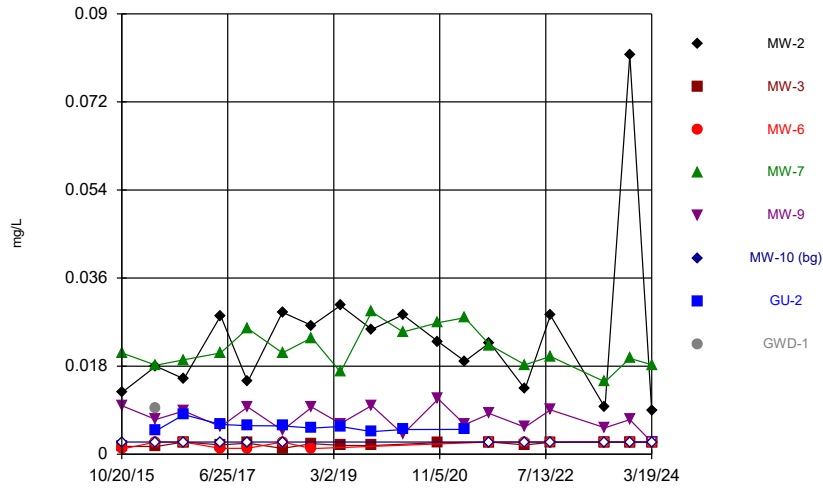
Constituent: Lead [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



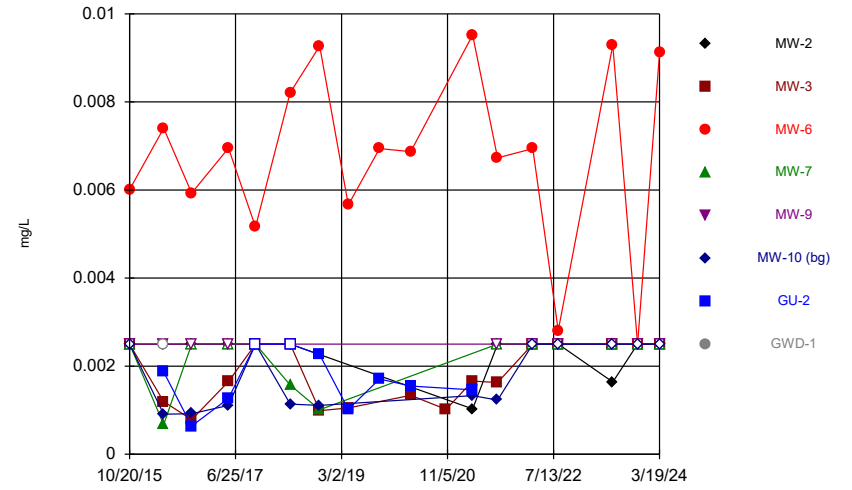
Constituent: Methylene Chloride Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



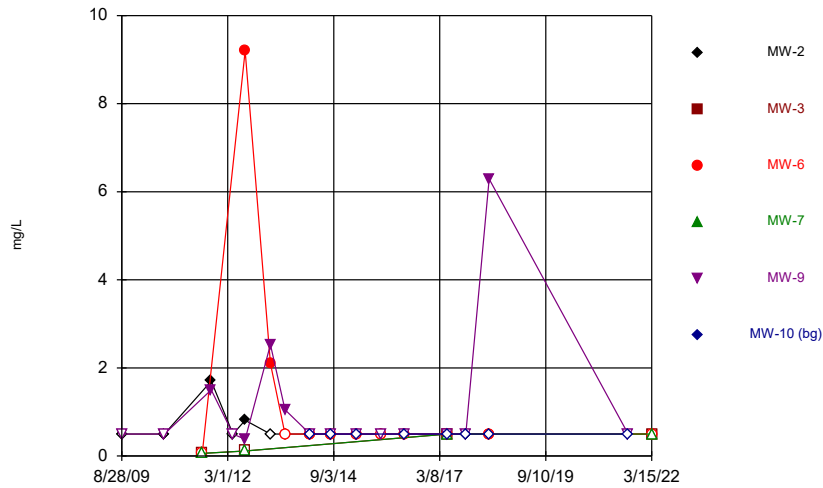
Constituent: Nickel [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



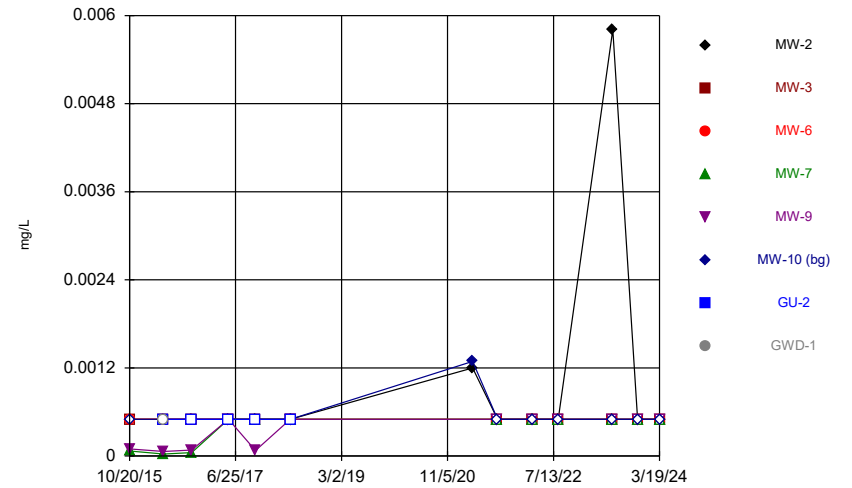
Constituent: Selenium [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



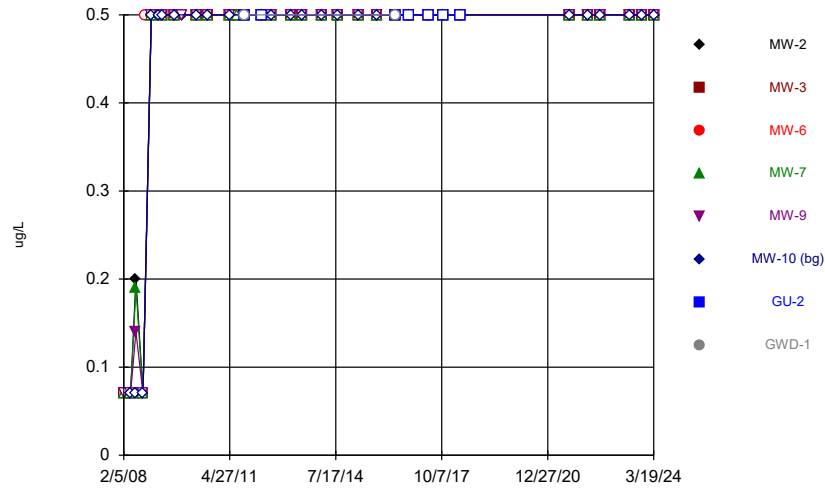
Constituent: Sulfide Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



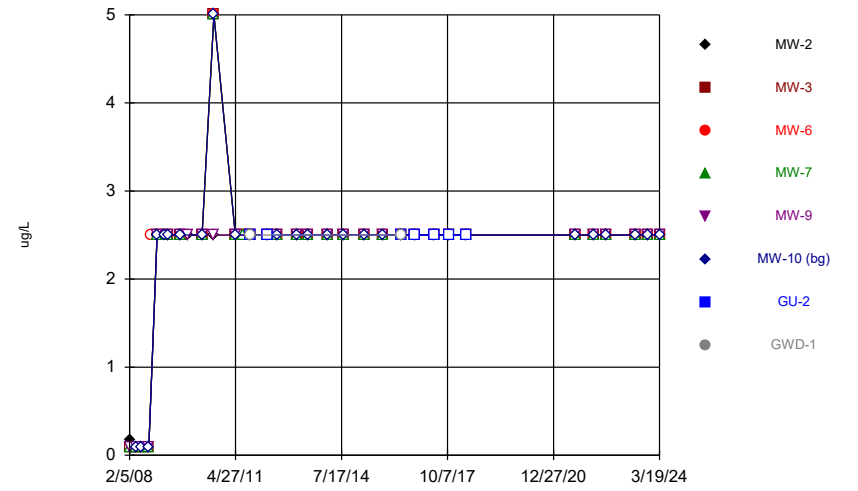
Constituent: Thallium [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



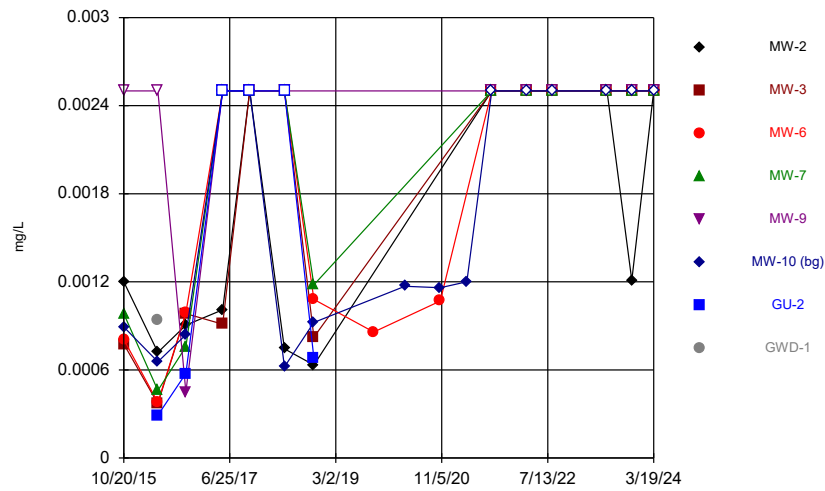
Constituent: Toluene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



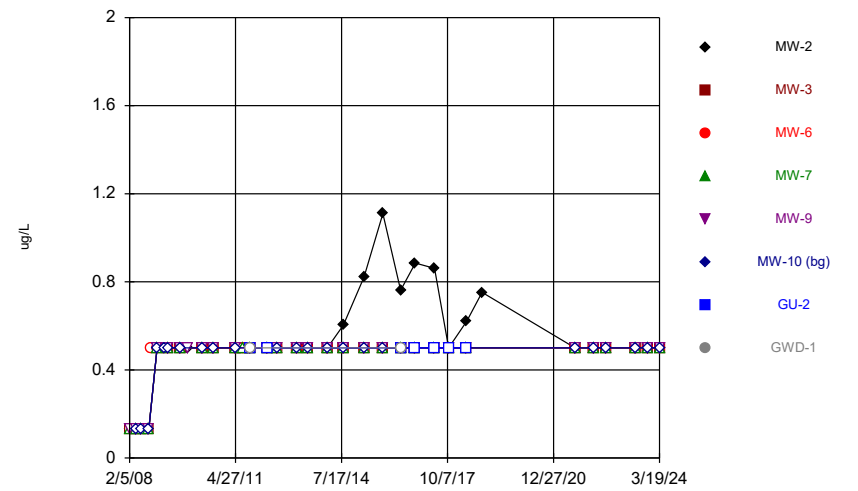
Constituent: trans-1,3-Dichloropropene Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



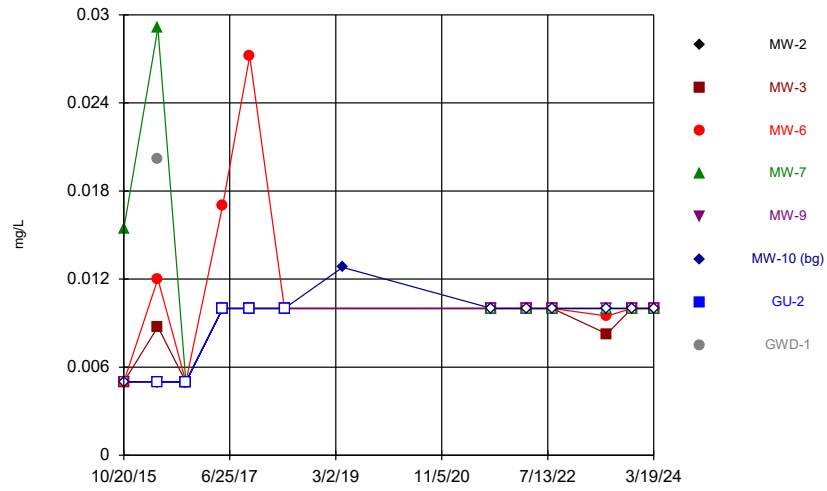
Constituent: Vanadium [total] Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



Constituent: Vinyl chloride Analysis Run 4/26/2024 5:08 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



Constituent: Zinc [total] Analysis Run 4/26/2024 5:09 PM View: 2024SSN - Time Series
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Attachment A.2

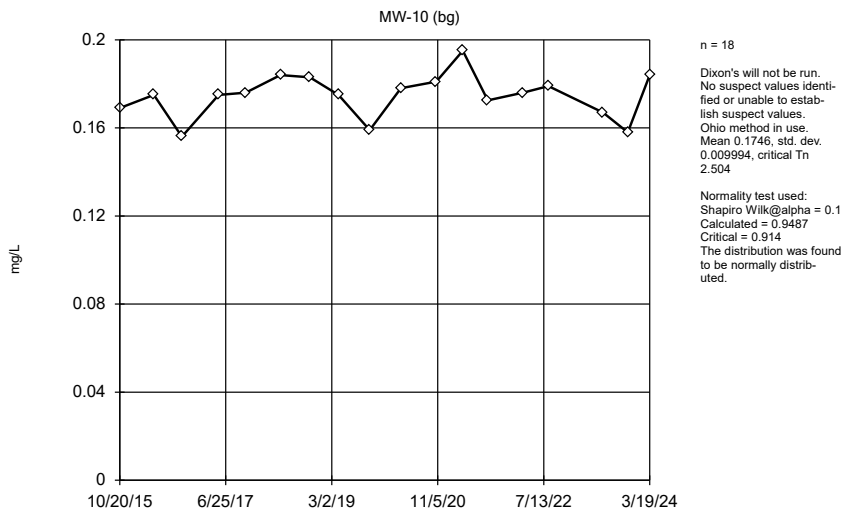
Outlier Analysis

Outlier Analysis

Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database Printed 4/29/2024, 3:04 PM

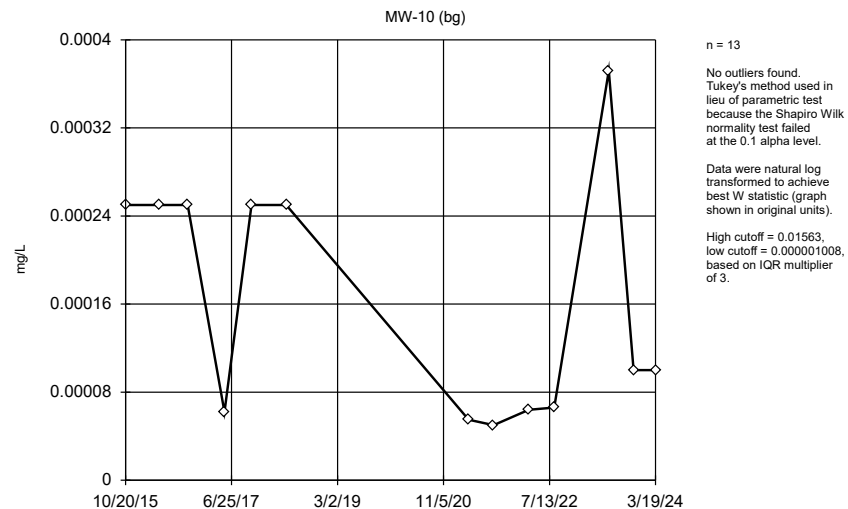
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Normality Test</u>
Barium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	EPA/OH	0.05	18	0.1746	0.009994	ShapiroWilk
Cadmium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	13	0.000163	0.0001093	ShapiroWilk
Chromium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	12	0.002331	0.000586	n/a
Cobalt [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	12	0.0002003	0.00008999	n/a
Copper [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	12	0.002335	0.0004428	n/a
Lead [total] (mg/L)	MW-10 (bg)	Yes	0.00522	6/22/2023	OH	NaN	12	0.0006533	0.001439	n/a
Selenium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	14	0.001804	0.0007299	ShapiroWilk
Thallium [total] (mg/L)	MW-10 (bg)	Yes	0.00129	3/31/2021	OH	NaN	13	0.0005608	0.0002191	n/a
Vanadium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	16	0.001716	0.0008241	ShapiroWilk
Zinc [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	13	0.009062	0.002439	n/a

EPA Screening (suspected outliers for Dixon's Test)



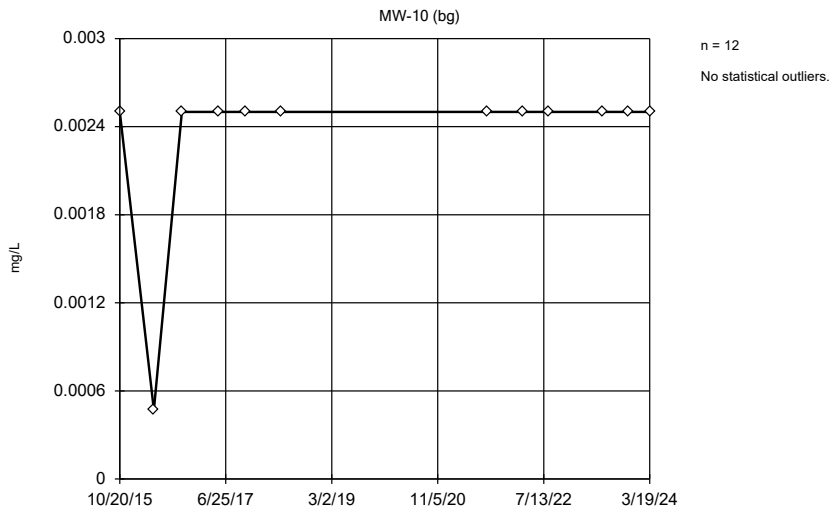
Constituent: Barium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



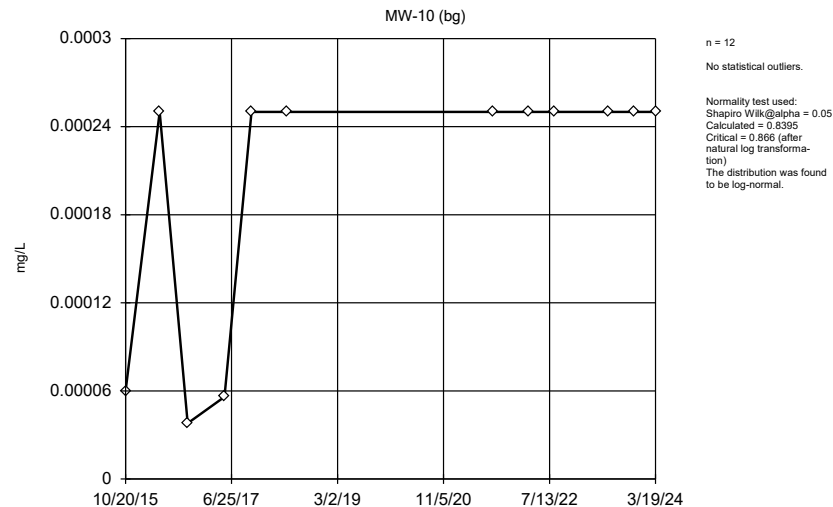
Constituent: Cadmium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm



Constituent: Chromium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

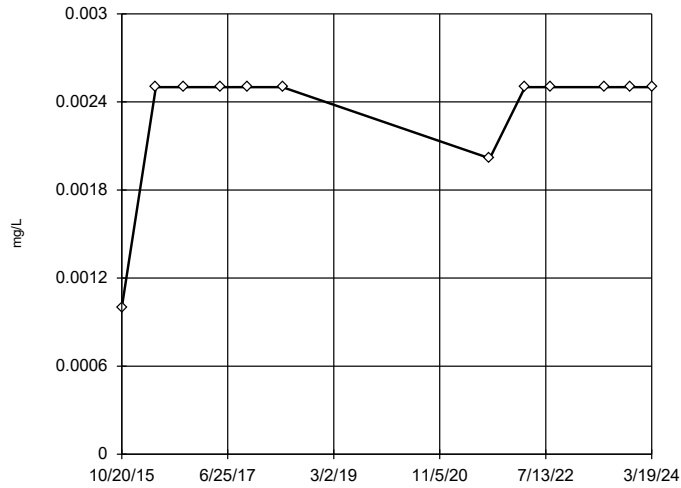
Ohio EPA 0715 Outlier Algorithm



Constituent: Cobalt [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

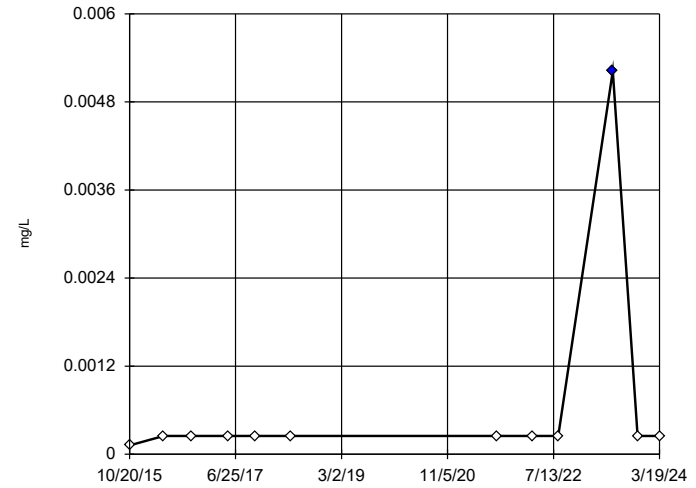


n = 12
No statistical outliers.

Constituent: Copper [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

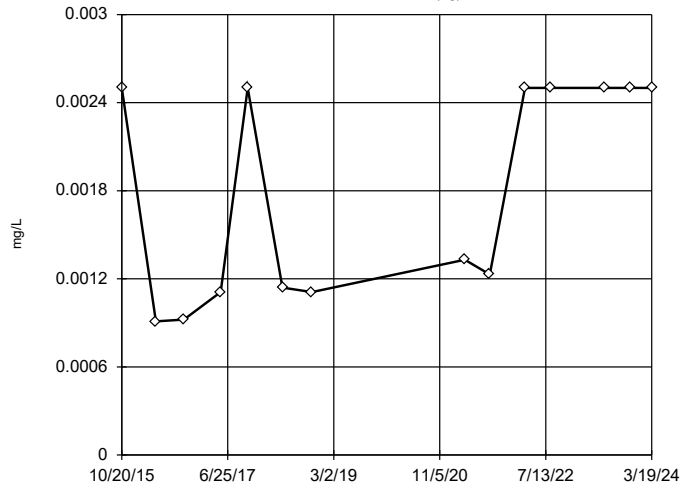


n = 12
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Lead [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

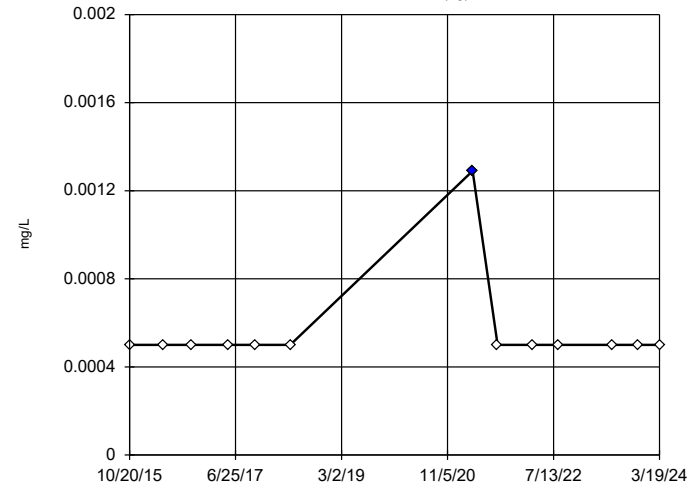


n = 14
No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.1 alpha level.
Data were natural log transformed to achieve best W statistic (graph shown in original units).
High cutoff = 0.02856, low cutoff = 0.00009716, based on IQR multiplier of 3.

Constituent: Selenium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

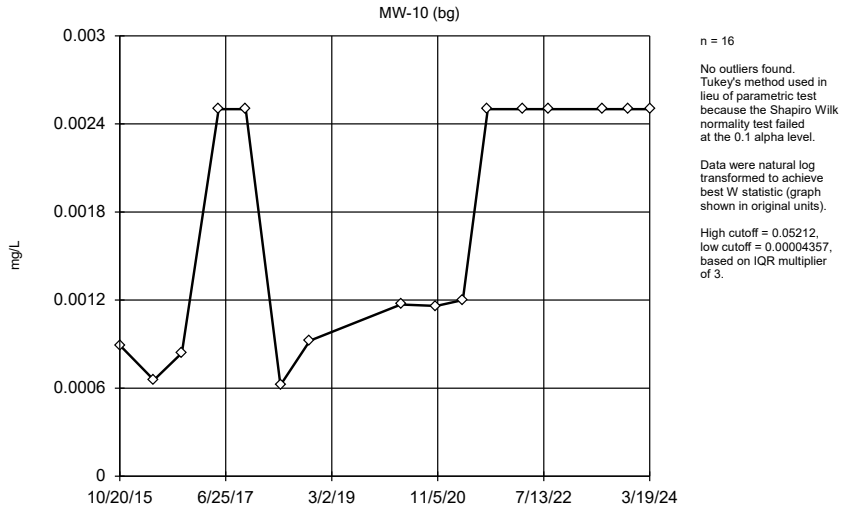
MW-10 (bg)



n = 13
Statistical outlier is drawn as solid.
Outlier per Ohio method.

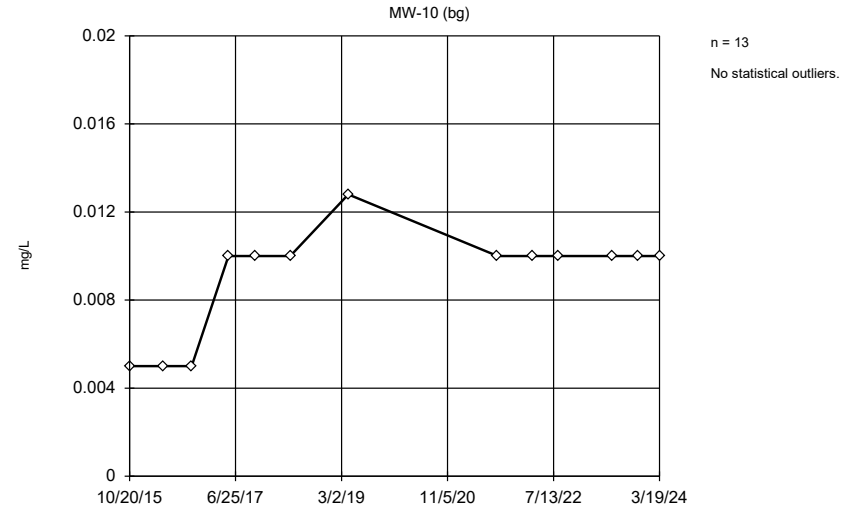
Constituent: Thallium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm




Constituent: Vanadium [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
 Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm



Constituent: Zinc [total] Analysis Run 4/29/2024 2:53 PM View: 2024SSN - BG Outliers
 Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database



Attachment A.3
Interwell Prediction Limits

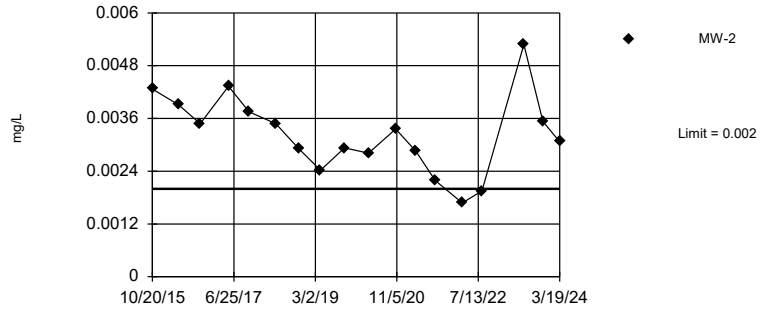
Prediction Limit

Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database Printed 4/29/2024, 3:45 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic [total] (mg/L)	MW-2	0.002	n/a	3/19/2024	0.00307	Yes	12	MW-10	n/a	n/a	100	n/a	n/a	0.009417	NP Inter (NDs) 1 of 2
Barium [total] (mg/L)	MW-2	0.1969	n/a	3/19/2024	0.19	No	18	MW-10	0.1746	0.009994	0	None	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-3	0.1969	n/a	3/19/2024	0.0259	No	18	MW-10	0.1746	0.009994	0	None	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-6	0.1969	n/a	3/19/2024	0.0198	No	18	MW-10	0.1746	0.009994	0	None	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-7	0.1969	n/a	3/19/2024	0.0283	No	18	MW-10	0.1746	0.009994	0	None	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-9	0.1969	n/a	3/19/2024	0.0622	No	18	MW-10	0.1746	0.009994	0	None	No	0.001053	Param Inter 1 of 2
Cadmium [total] (mg/L)	MW-7	0.000372	n/a	3/19/2024	0.0002425	No	13	MW-10	n/a	n/a	61.54	n/a	n/a	0.008527	NP Inter (NDs) 1 of 2
Cobalt [total] (mg/L)	MW-2	0.00025	n/a	3/19/2024	0.000878	Yes	12	MW-10	n/a	n/a	75	n/a	n/a	0.009417	NP Inter (NDs) 1 of 2
Cobalt [total] (mg/L)	MW-9	0.00025	n/a	3/19/2024	0.000752	Yes	12	MW-10	n/a	n/a	75	n/a	n/a	0.009417	NP Inter (NDs) 1 of 2
Nickel [total] (mg/L)	MW-2	0.005	n/a	3/19/2024	0.00884	Yes	12	MW-10	n/a	n/a	100	n/a	n/a	0.009417	NP Inter (NDs) 1 of 2
Nickel [total] (mg/L)	MW-7	0.005	n/a	3/19/2024	0.0183	Yes	12	MW-10	n/a	n/a	100	n/a	n/a	0.009417	NP Inter (NDs) 1 of 2
Selenium [total] (mg/L)	MW-6	0.0025	n/a	3/19/2024	0.00911	Yes	14	MW-10	n/a	n/a	50	n/a	n/a	0.007644	NP Inter (normality) 1 of 2

Exceeds Limit: MW-2

Prediction Limit
Interwell Non-parametric

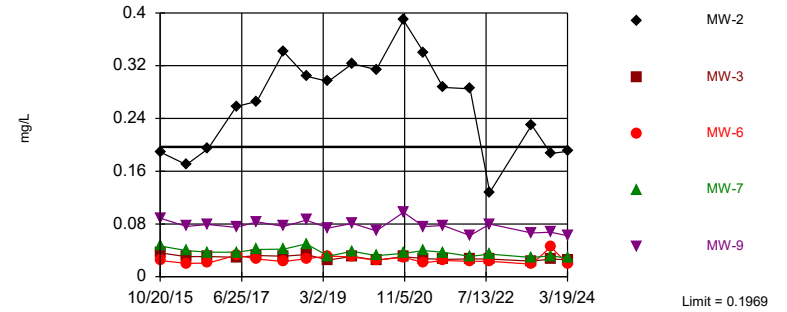


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.09028. Individual comparison alpha = 0.009417 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Arsenic [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Within Limit

Prediction Limit
Interwell Parametric

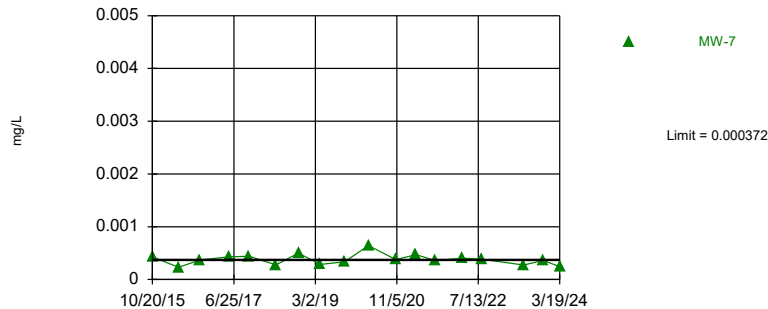


Background Data Summary: Mean=0.1746, Std. Dev.=0.009994, n=18. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9487, critical = 0.858. Kappa = 2.23 (c=10, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.005254. Individual comparison alpha = 0.001053. Comparing 5 points to limit.

Constituent: Barium [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Within Limit

Prediction Limit
Interwell Non-parametric

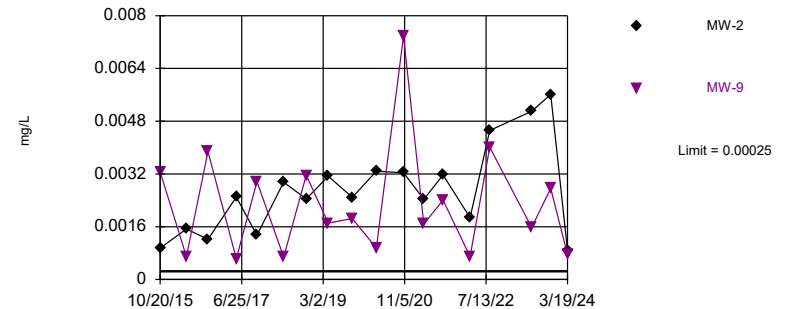


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 61.54% NDs. Annual per-constituent alpha = 0.08207. Individual comparison alpha = 0.008527 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cadmium [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-2, MW-9

Prediction Limit
Interwell Non-parametric

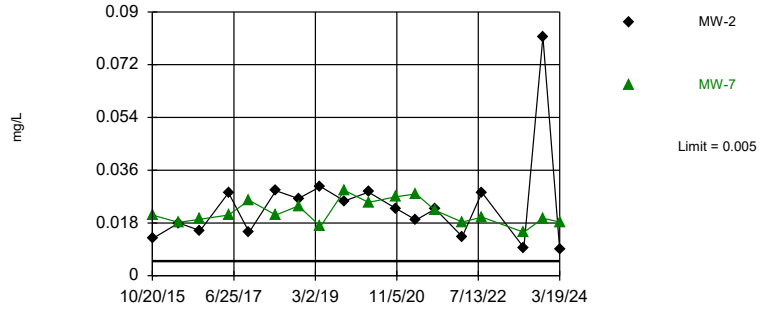


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Annual per-constituent alpha = 0.09028. Individual comparison alpha = 0.009417 (1 of 2). Comparing 2 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cobalt [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-2, MW-7

Prediction Limit
Interwell Non-parametric



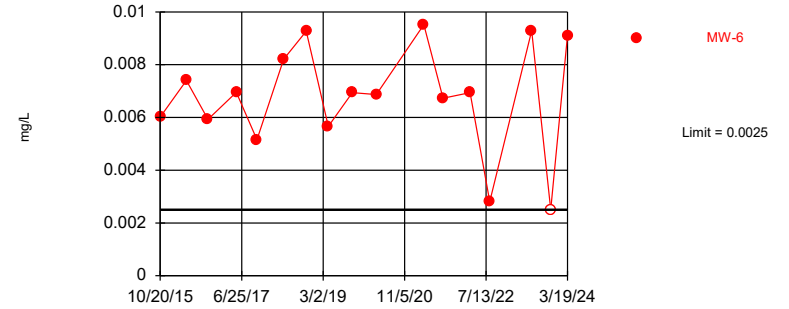
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.09028. Individual comparison alpha = 0.009417 (1 of 2). Comparing 2 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Nickel [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Hollow symbols indicate censored values.

Exceeds Limit: MW-6

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 50% NDs. Annual per-constituent alpha = 0.07386. Individual comparison alpha = 0.007644 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Selenium [total] Analysis Run 4/29/2024 3:45 PM View: 2024SSN - Prediction Limit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Attachment A.4
Sen's Slope/Mann-Kendall Trend Analysis

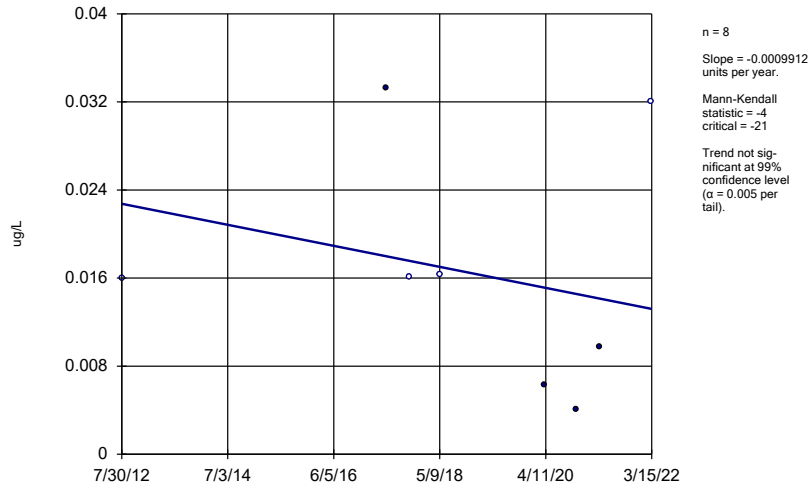
Trend Test

Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN Printed 4/29/2024, 4:36 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
4,4'-DDT (ug/L)	MW-7	-0.0009912	-4	-21	No	8	50	0.01	NP
Acetone (ug/L)	MW-6	0.3528	16	21	No	8	62.5	0.01	NP
Acetone (ug/L)	MW-7	0	4	21	No	8	62.5	0.01	NP
Arsenic (mg/L)	MW-2	0.00006496	2	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-9	0	-5	-21	No	8	87.5	0.01	NP
Barium (mg/L)	MW-2	-0.05794	-20	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-3	-0.0006091	-18	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-6	-0.001516	-7	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-7	-0.002762	-18	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-9	-0.006127	-14	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-2	-0.09788	-10	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-2	0.000007462	2	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-6	0.00001522	10	21	No	8	12.5	0.01	NP
Cadmium (mg/L)	MW-7	-0.000042	-14	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-9	0	1	21	No	8	37.5	0.01	NP
Chlorobenzene (ug/L)	MW-2	-0.1149	-16	-21	No	8	50	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-2	0.008889	3	21	No	8	37.5	0.01	NP
Cobalt (mg/L)	MW-2	0.0007099	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-3	0.00003251	19	21	No	8	37.5	0.01	NP
Cobalt (mg/L)	MW-6	0.00002916	15	21	No	8	25	0.01	NP
Cobalt (mg/L)	MW-7	-0.0003975	-26	-21	Yes	8	12.5	0.01	NP
Cobalt (mg/L)	MW-9	-0.0008182	-8	-21	No	8	0	0.01	NP
Heptachlor (ug/L)	MW-9	0.0002348	7	12	No	5	80	0.01	NP
Lead (mg/L)	MW-2	0	-1	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-3	0	-5	-21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-7	0	-5	-21	No	8	87.5	0.01	NP
Nickel (mg/L)	MW-2	-0.002618	-6	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-7	-0.002959	-17	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-9	-0.001444	-14	-21	No	8	12.5	0.01	NP
Selenium (mg/L)	MW-3	0.0003577	16	21	No	8	62.5	0.01	NP
Selenium (mg/L)	MW-6	-0.0001207	-4	-21	No	8	12.5	0.01	NP
Sulfide (mg/L)	MW-9	0	5	21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-2	0	-1	-21	No	8	75	0.01	NP
Vanadium (mg/L)	MW-2	0	8	21	No	8	62.5	0.01	NP
Zinc (mg/L)	MW-6	0	-9	-21	No	8	75	0.01	NP

Sen's Slope Estimator

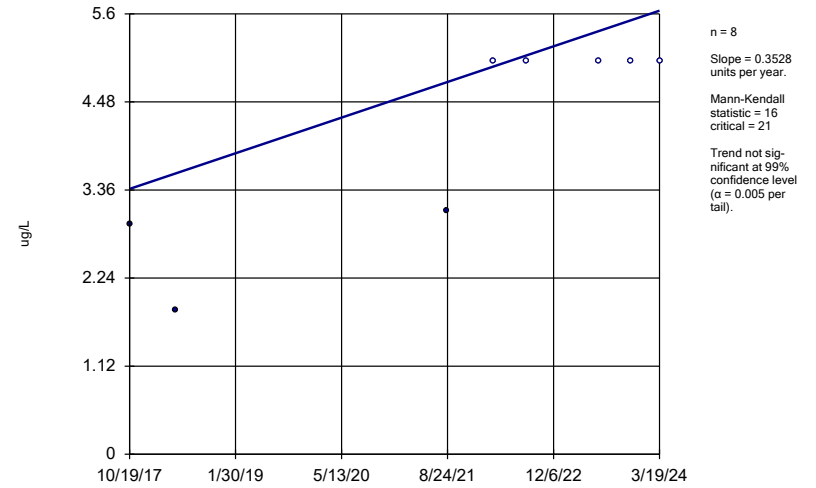
MW-7



Constituent: 4,4'-DDT Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

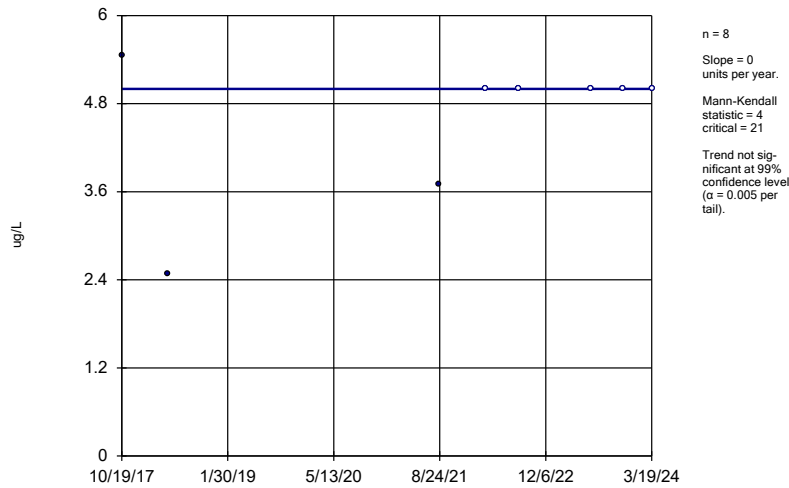
MW-6



Constituent: Acetone Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

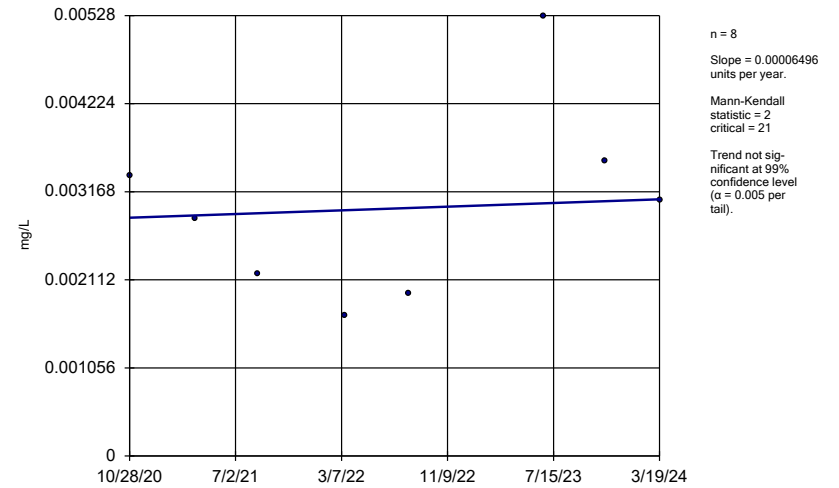
MW-7



Constituent: Acetone Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

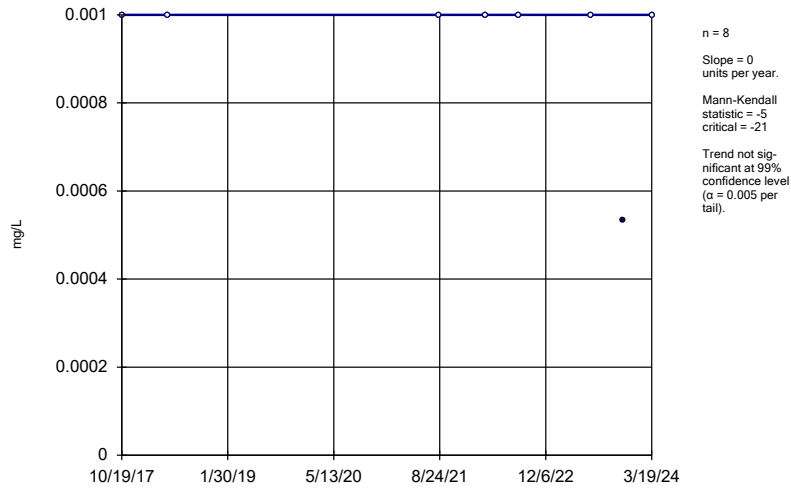
MW-2



Constituent: Arsenic Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

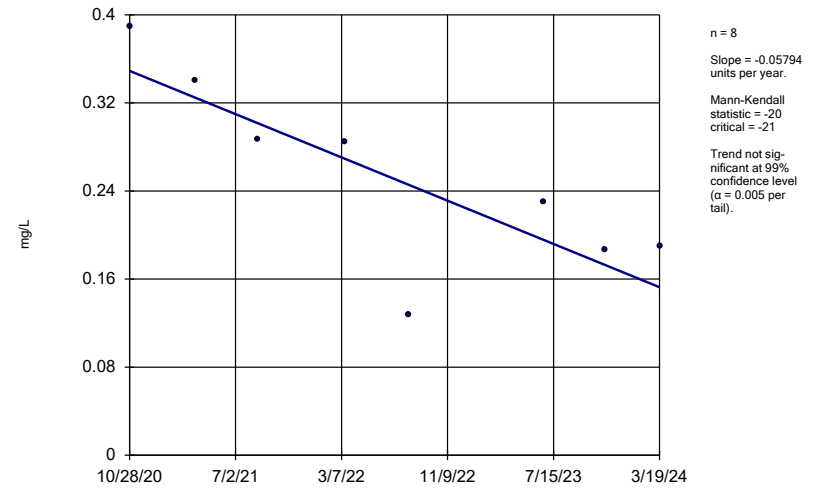
MW-9



Constituent: Arsenic Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

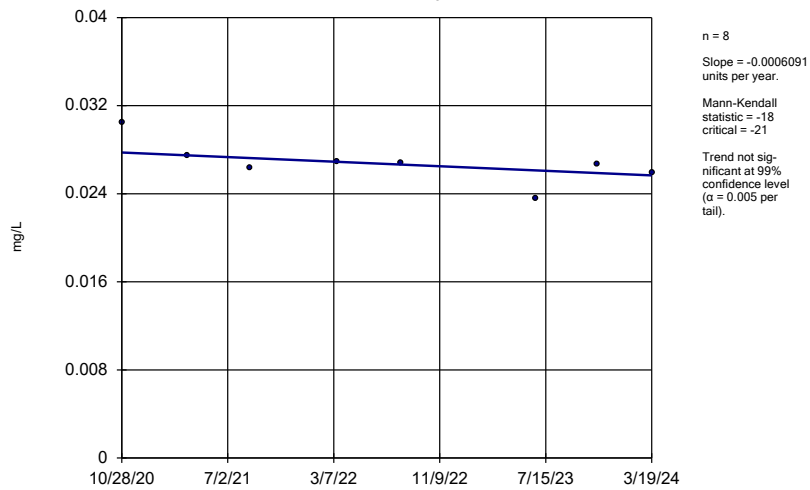
MW-2



Constituent: Barium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

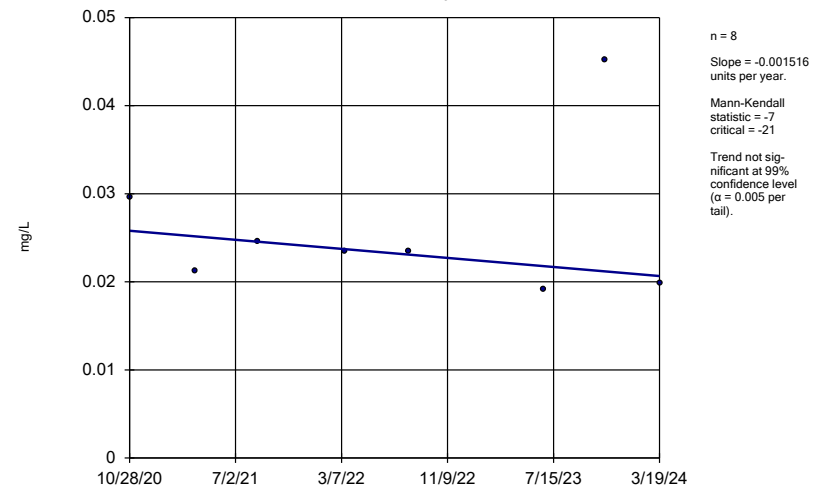
MW-3



Constituent: Barium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

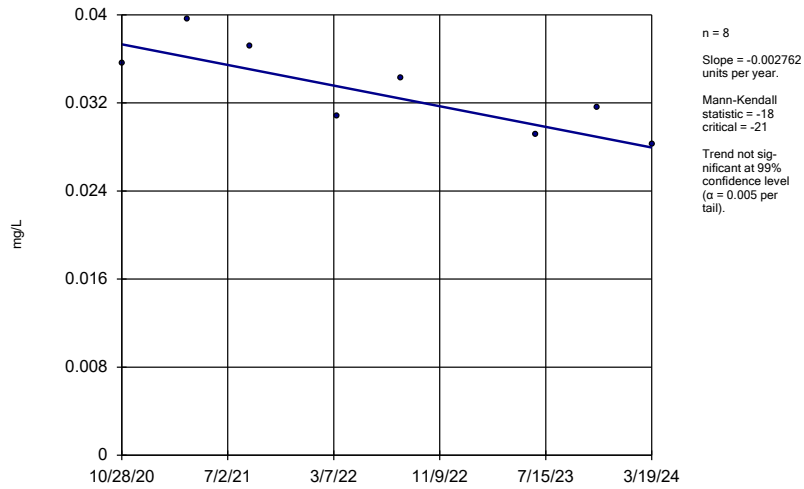
MW-6



Constituent: Barium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

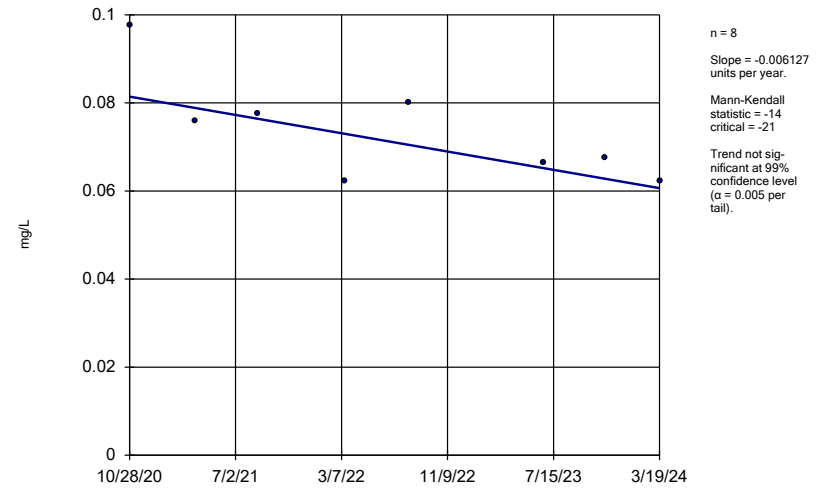
MW-7



Constituent: Barium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

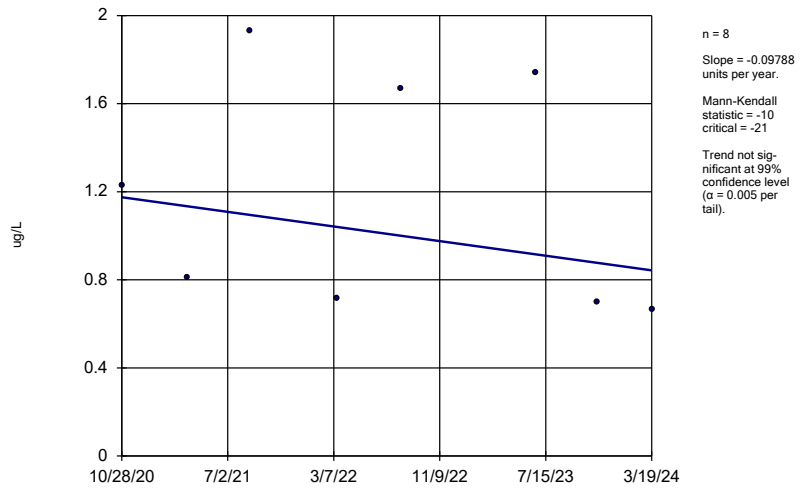
MW-9



Constituent: Barium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

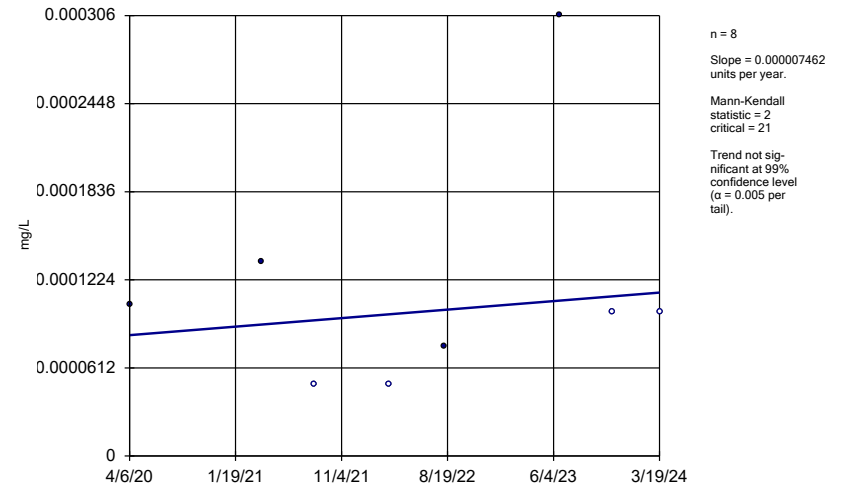
MW-2



Constituent: Benzene Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

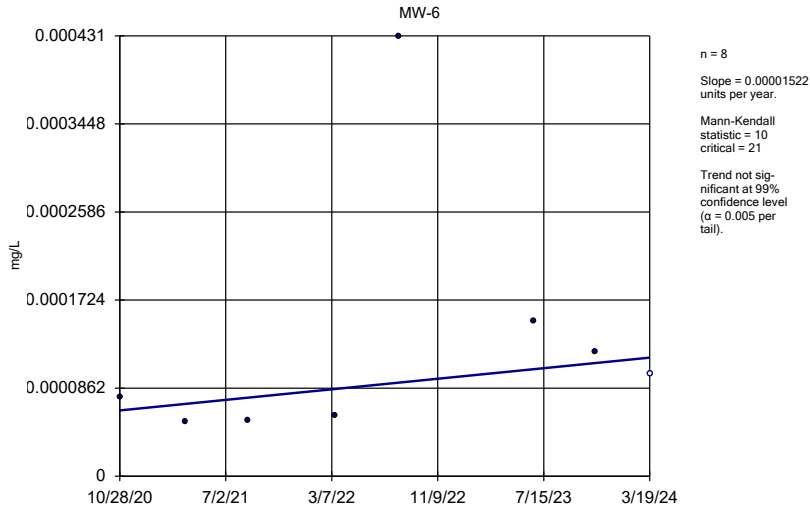
Sen's Slope Estimator

MW-2



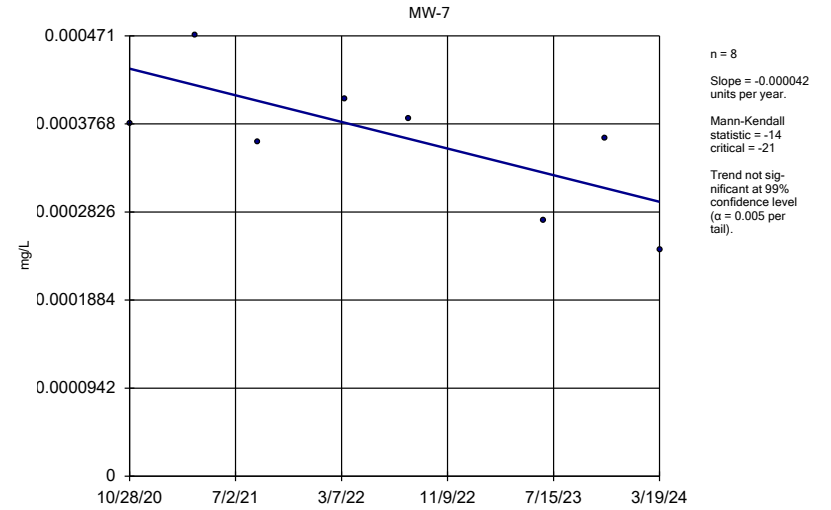
Constituent: Cadmium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator



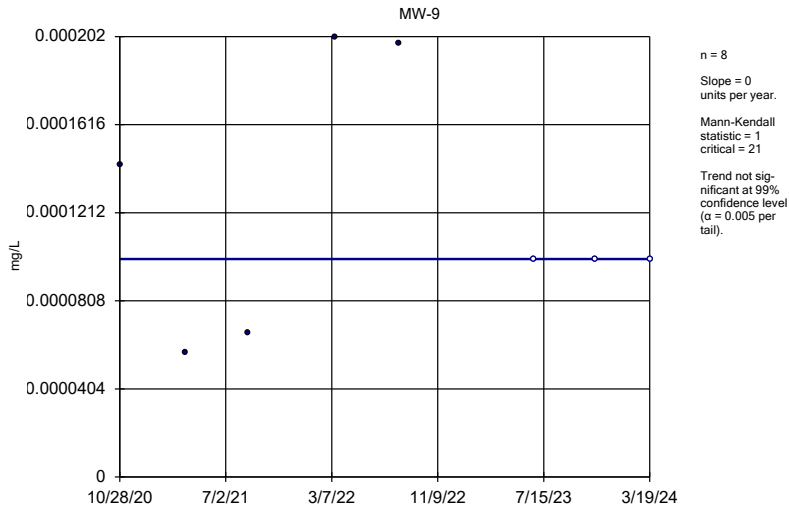
Constituent: Cadmium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator



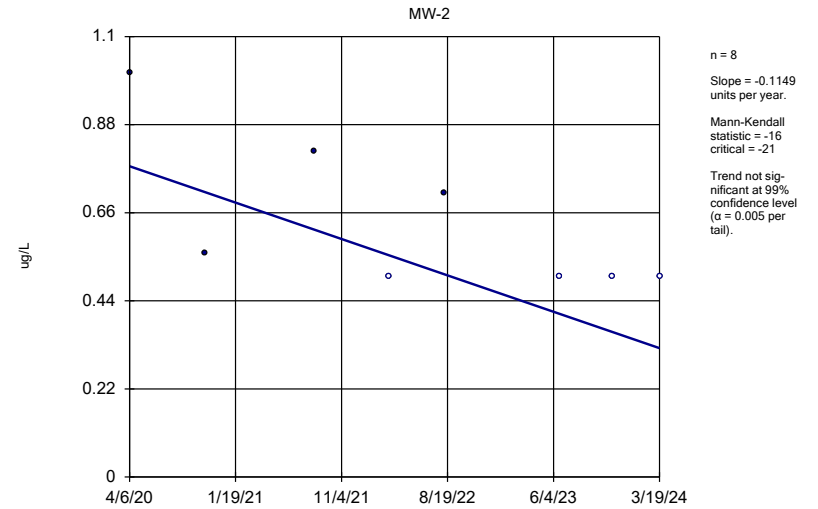
Constituent: Cadmium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator



Constituent: Cadmium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

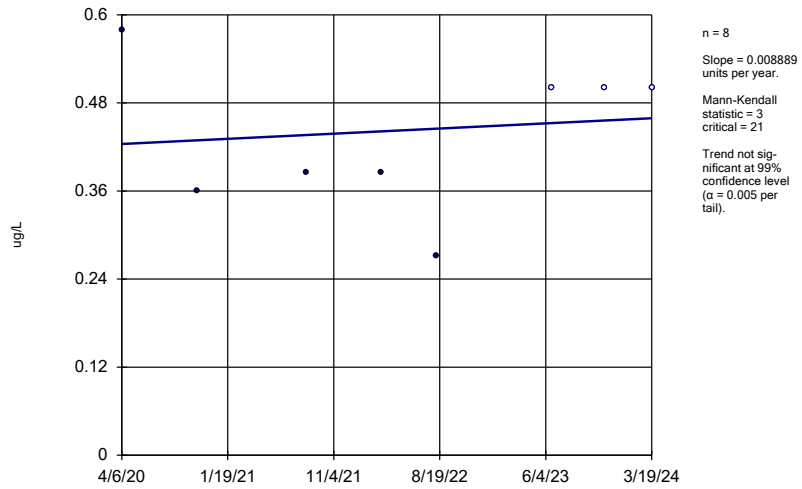
Sen's Slope Estimator



Constituent: Chlorobenzene Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

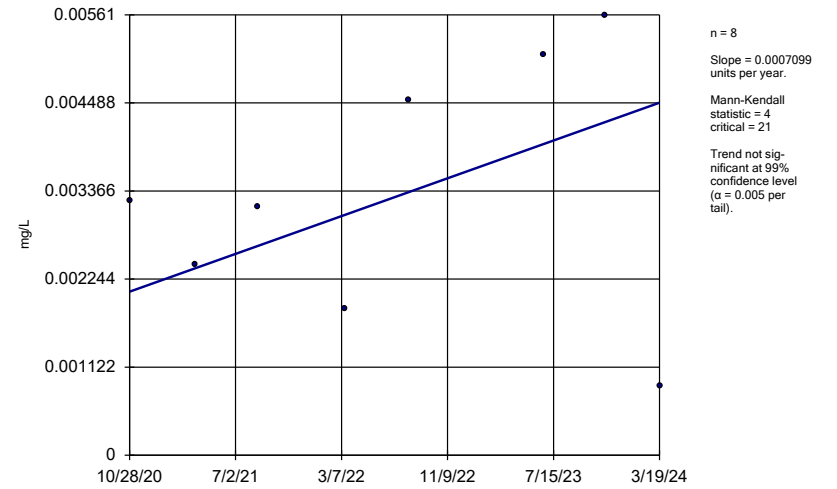
MW-2



Constituent: cis-1,2-Dichloroethene Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

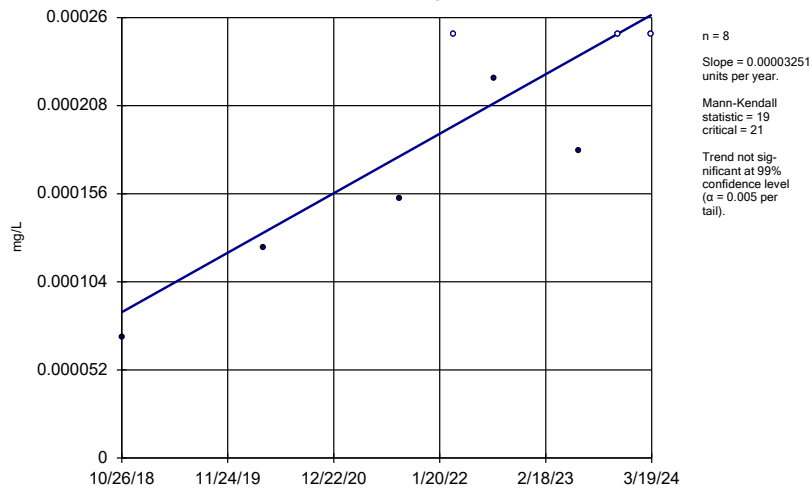
MW-2



Constituent: Cobalt Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

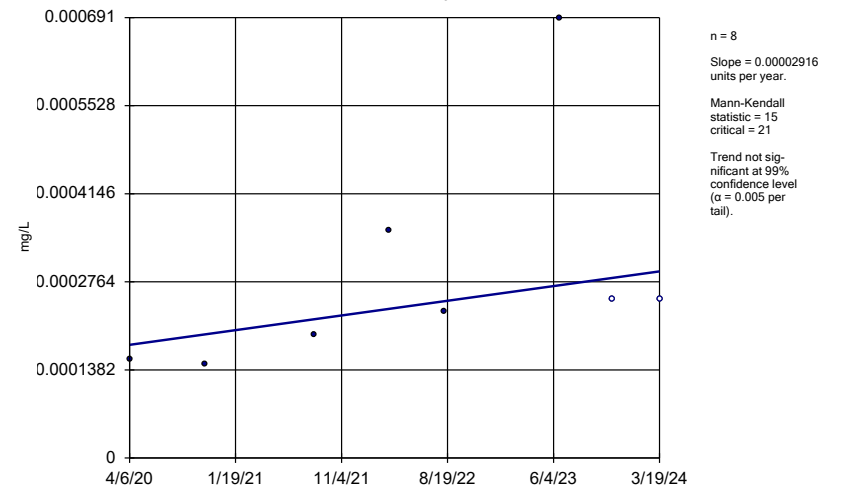
MW-3



Constituent: Cobalt Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

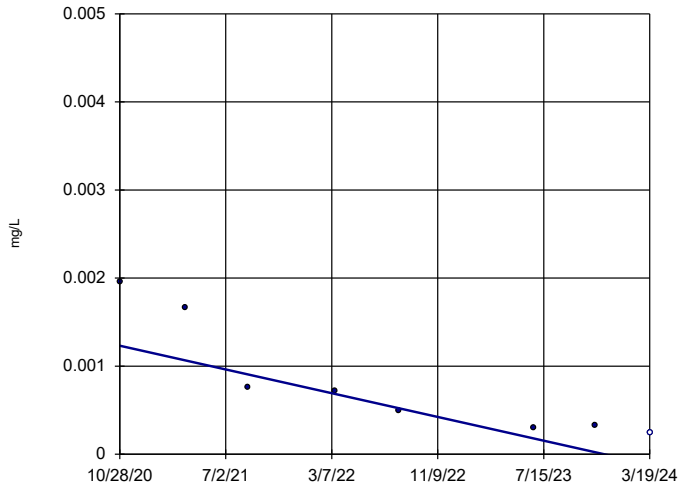
MW-6



Constituent: Cobalt Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-7

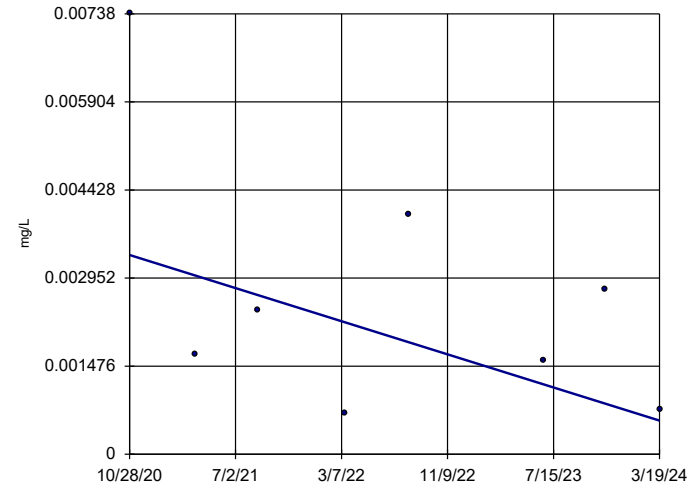


n = 8
Slope = -0.0003975 units per year.
Mann-Kendall statistic = -26
critical = -21
Decreasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Cobalt Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-9

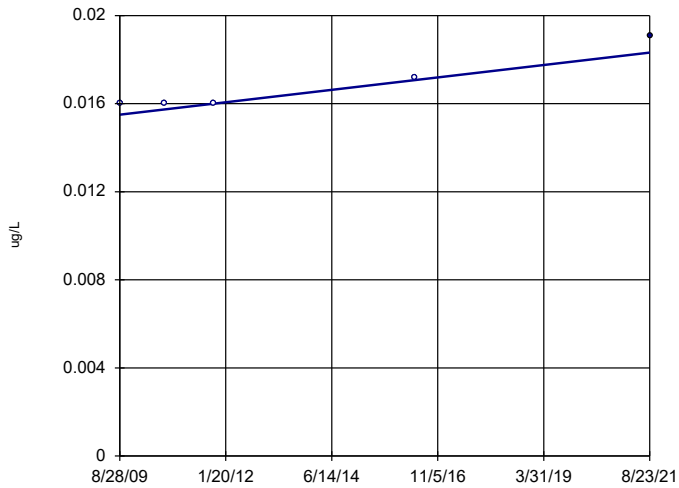


n = 8
Slope = -0.0008182 units per year.
Mann-Kendall statistic = -8
critical = -21
Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Cobalt Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-9

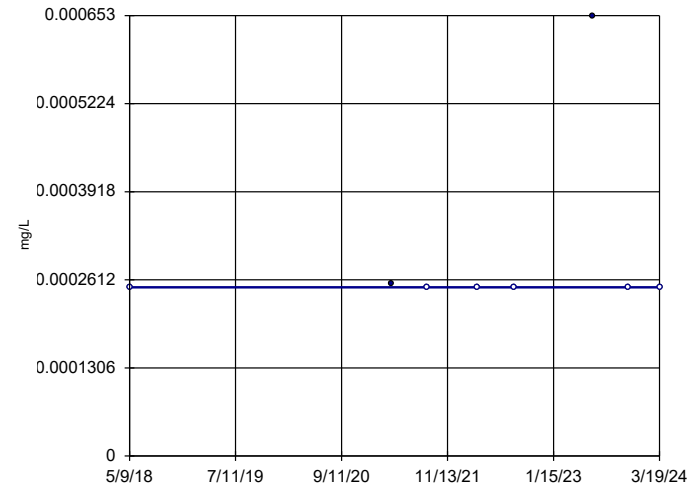


n = 5
Slope = 0.0002348 units per year.
Mann-Kendall statistic = 7
critical = 12
Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Heptachlor Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-2

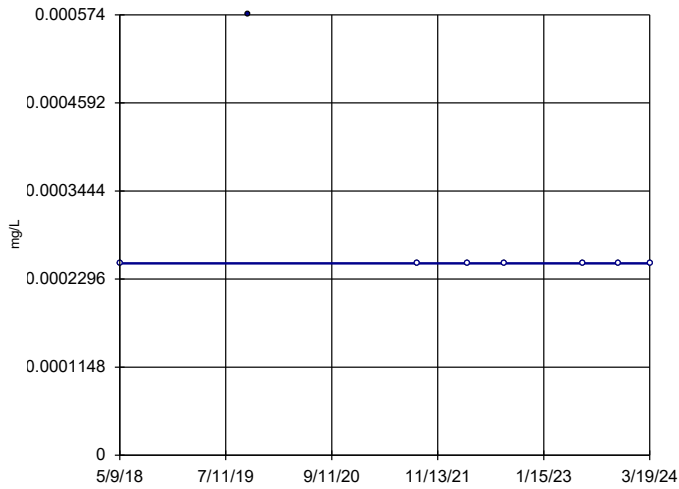


n = 8
Slope = 0 units per year.
Mann-Kendall statistic = -1
critical = -21
Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Lead Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-3

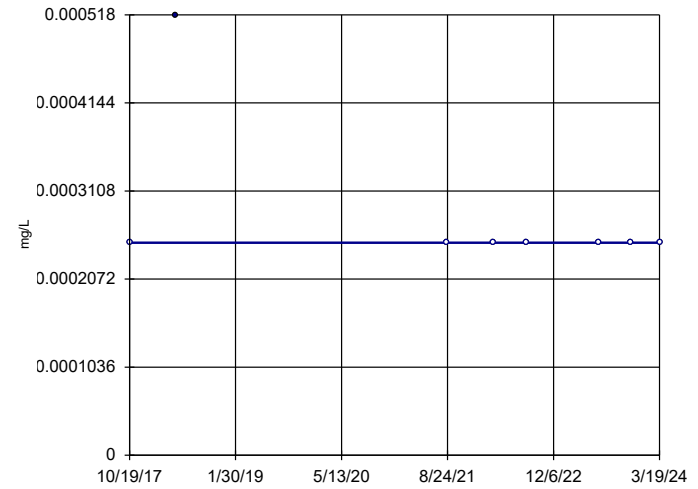


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Lead Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-7

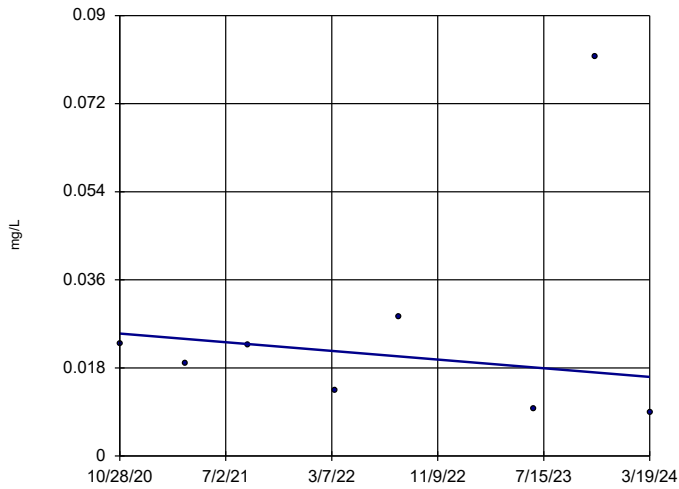


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Lead Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-2

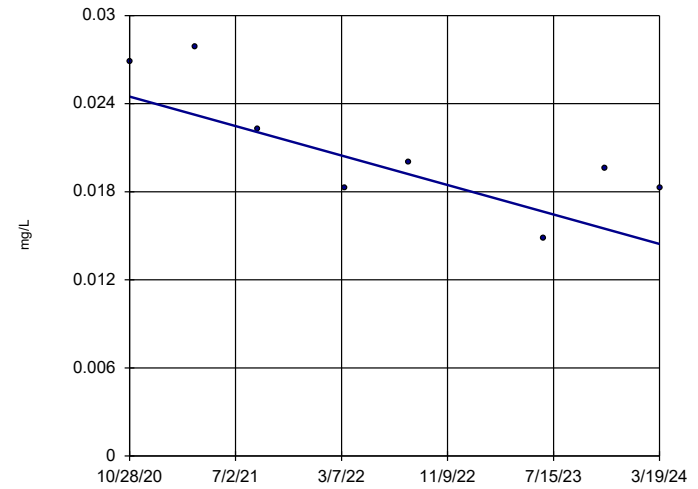


n = 8
Slope = -0.002618
units per year.
Mann-Kendall
statistic = -6
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Nickel Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-7

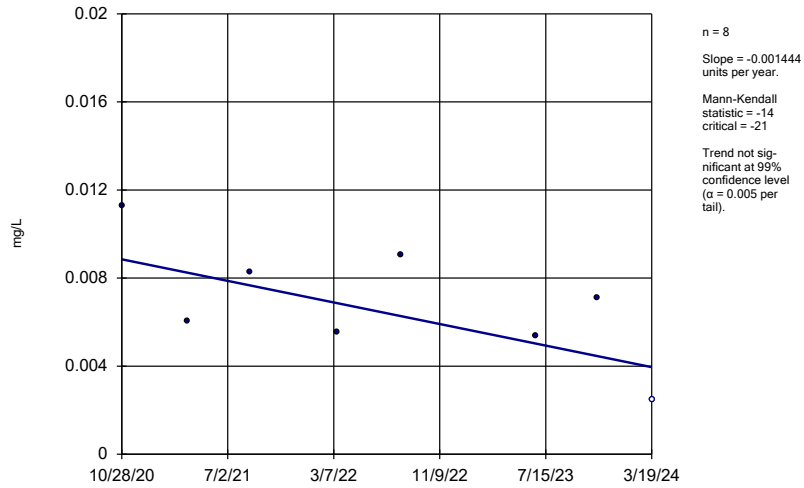


n = 8
Slope = -0.002959
units per year.
Mann-Kendall
statistic = -17
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Nickel Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

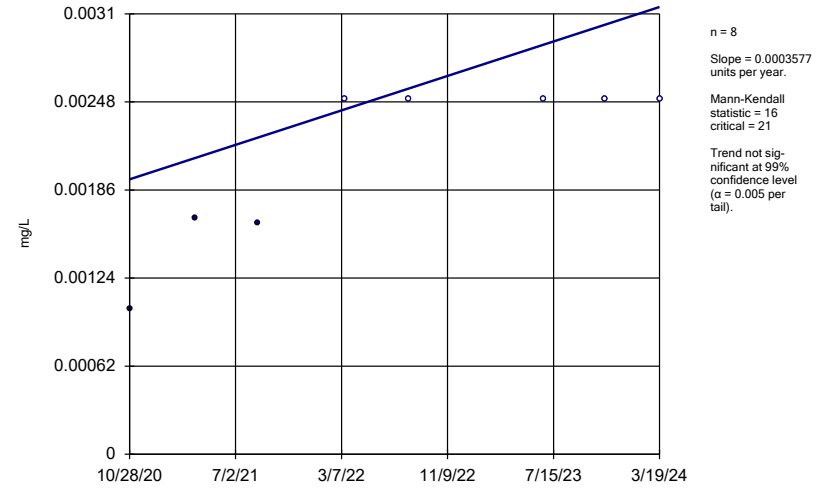
MW-9



Constituent: Nickel Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

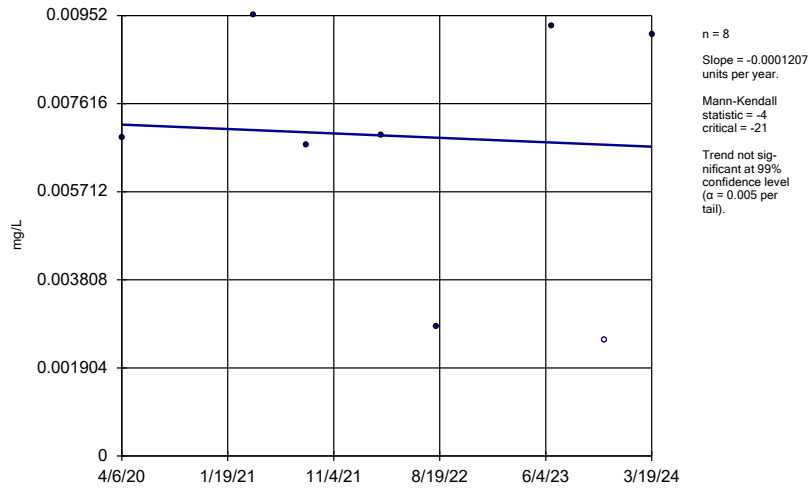
MW-3



Constituent: Selenium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

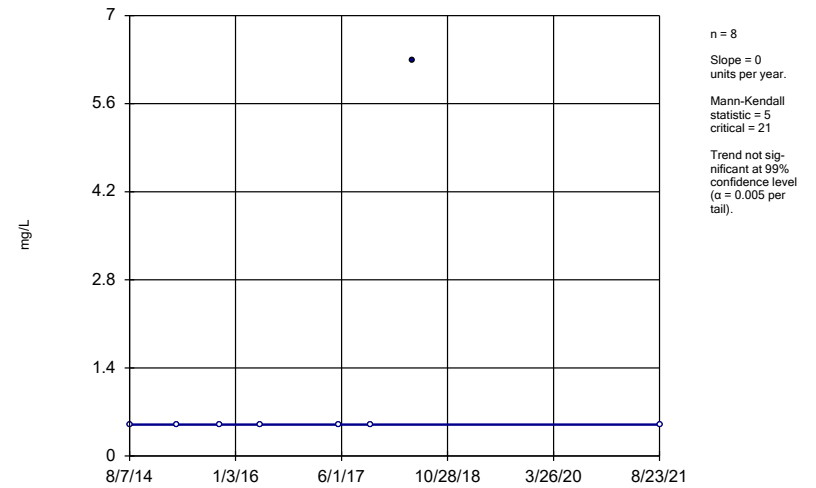
MW-6



Constituent: Selenium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

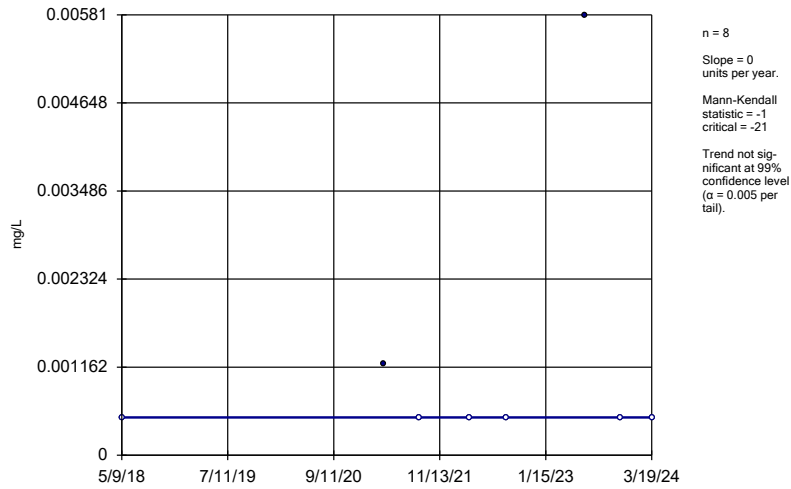
MW-9



Constituent: Sulfide Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

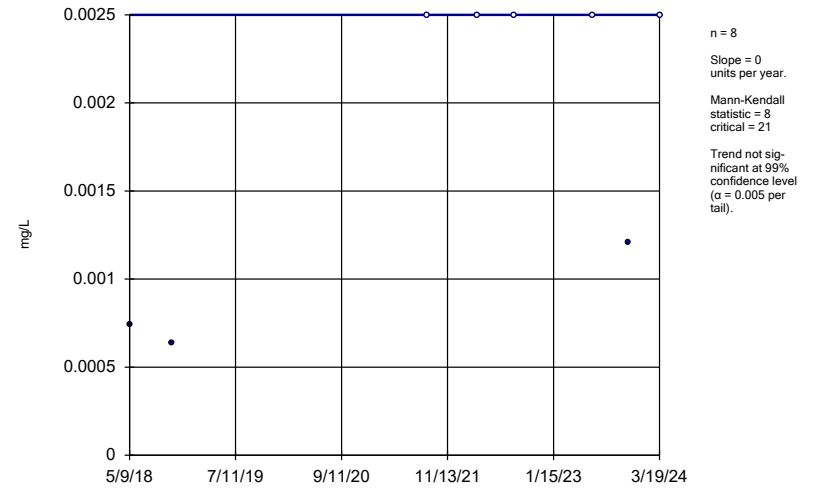
MW-2



Constituent: Thallium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

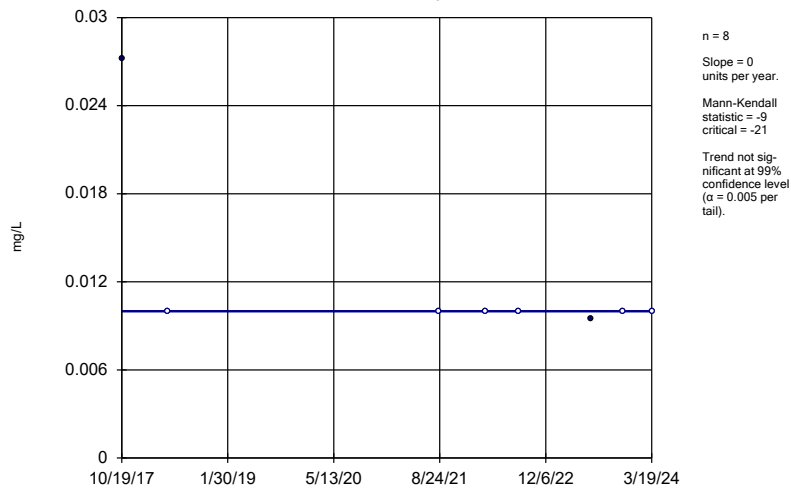
MW-2



Constituent: Vanadium Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Sen's Slope Estimator

MW-6



Constituent: Zinc Analysis Run 4/29/2024 4:35 PM View: 2024SSN - Mann Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

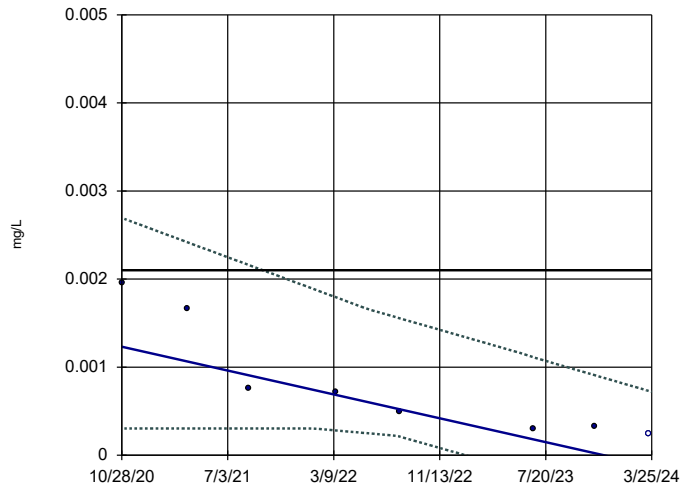
Theil Sen/Trend Test

Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN Printed 4/29/2024, 4:55 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MW-7	-0.0003975	-26	-21	Yes	8	12.5	0.01	NP


Sen's Slope and 99% Confidence Band

MW-7



n = 8
Slope = -0.0003975
units per year.
Mann-Kendall
statistic = -26
critical = -21
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).
Confidence band intersects
GWPS mg/L (0.0021)
on 10/03/21.

Constituent: Cobalt Analysis Run 4/29/2024 4:54 PM View: 2024SSN - Theil Sen
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN



Attachment A.5
Confidence Interval Analysis

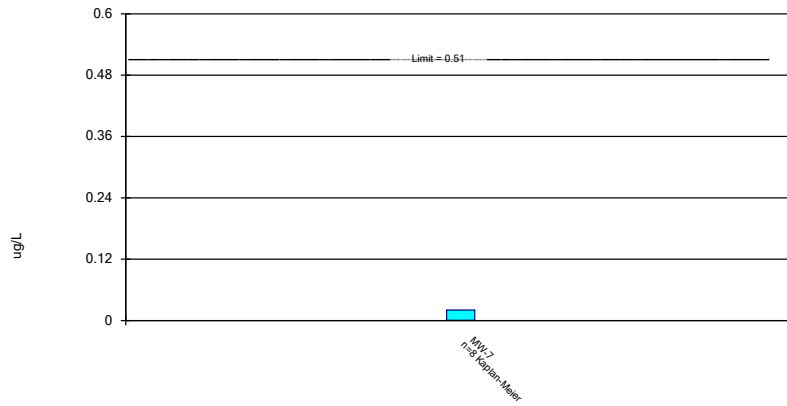
Confidence Interval

Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN Printed 4/29/2024, 4:50 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
4,4'-DDT (ug/L)	MW-7	0.02063	0.0003853	0.51	No	8	50	No	0.01	Param.
Acetone (ug/L)	MW-6	5	1.83	6300	No	8	62.5	No	0.004	NP (NDs)
Acetone (ug/L)	MW-7	5.46	2.49	6300	No	8	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-2	0.0042	0.001778	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-9	0.001	0.000534	0.01	No	8	87.5	No	0.004	NP (NDs)
Barium (mg/L)	MW-2	0.3465	0.1625	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-3	0.0288	0.02476	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-6	0.0348	0.01678	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-7	0.03757	0.02905	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-9	0.08633	0.06109	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-2	1.744	0.6212	5	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-2	0.000306	0.00005	0.005	No	8	50	No	0.004	NP (normality)
Cadmium (mg/L)	MW-6	0.000431	0.000053	0.005	No	8	12.5	No	0.004	NP (normality)
Cadmium (mg/L)	MW-7	0.000435	0.0002826	0.005	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-9	0.0001921	0.00006181	0.005	No	8	37.5	No	0.01	Param.
Chlorobenzene (ug/L)	MW-2	0.8854	0.5827	100	No	8	50	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-2	0.503	0.2904	70	No	8	37.5	No	0.01	Param.
Cobalt (mg/L)	MW-2	0.005086	0.00162	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-3	0.0002056	0.00009585	0.0021	No	8	37.5	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.000691	0.000148	0.0021	No	8	25	No	0.004	NP (normality)
Cobalt (mg/L)	MW-9	0.004988	0.0003289	0.0021	No	8	0	No	0.01	Param.
Heptachlor (ug/L)	MW-9	0.0191	0.016	0.4	No	5	80	No	0.031	NP (NDs)
Lead (mg/L)	MW-2	0.000653	0.00025	0.015	No	8	75	No	0.004	NP (NDs)
Lead (mg/L)	MW-3	0.000574	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-7	0.000518	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MW-2	0.0815	0.00884	0.1	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	MW-7	0.02575	0.01627	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-9	0.009748	0.004064	0.1	No	8	12.5	No	0.01	Param.
Selenium (mg/L)	MW-3	0.0025	0.00102	0.05	No	8	62.5	No	0.004	NP (NDs)
Selenium (mg/L)	MW-6	0.009647	0.003796	0.05	No	8	12.5	No	0.01	Param.
Sulfide (mg/L)	MW-9	6.29	0.5	1	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-2	0.00581	0.0005	0.002	No	8	75	No	0.004	NP (NDs)
Vanadium (mg/L)	MW-2	0.0025	0.000634	0.035	No	8	62.5	No	0.004	NP (NDs)
Zinc (mg/L)	MW-6	0.0272	0.00949	2	No	8	75	No	0.004	NP (NDs)

Parametric Confidence Interval

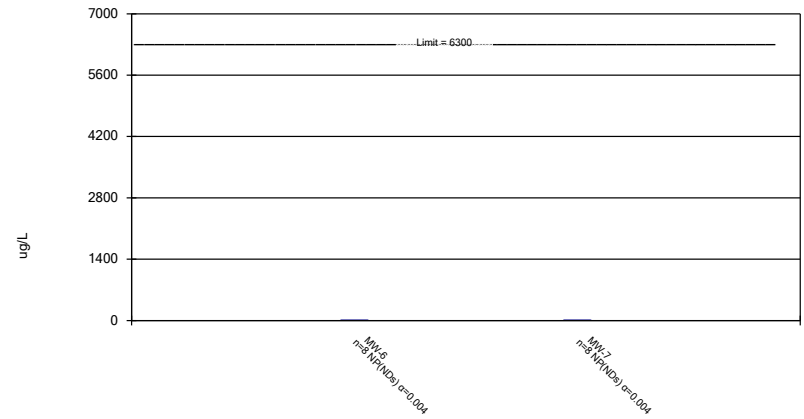
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 4,4'-DDT Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

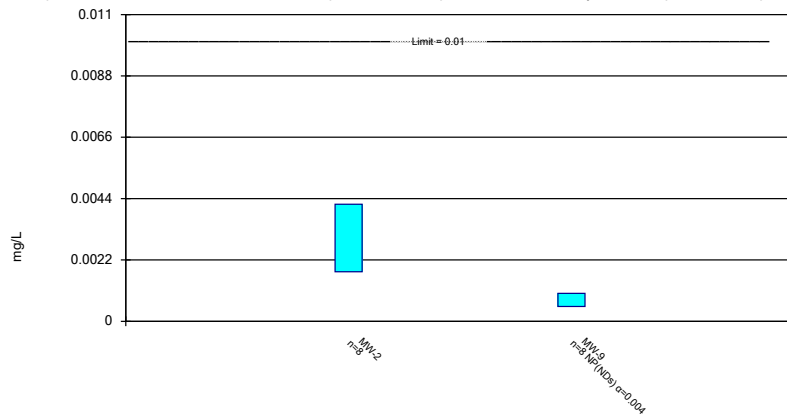
Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric and Non-Parametric (NP) Confidence Interval

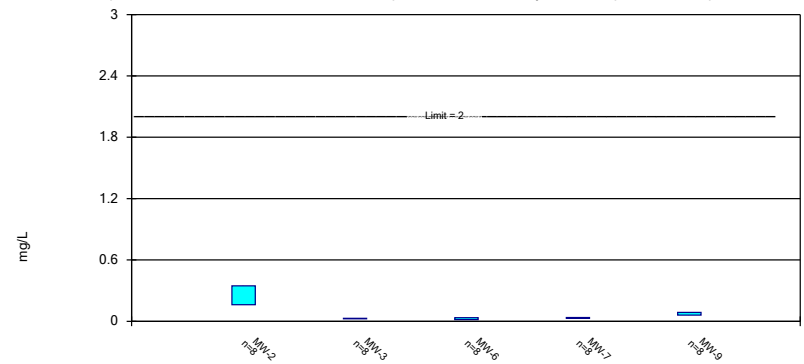
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric Confidence Interval

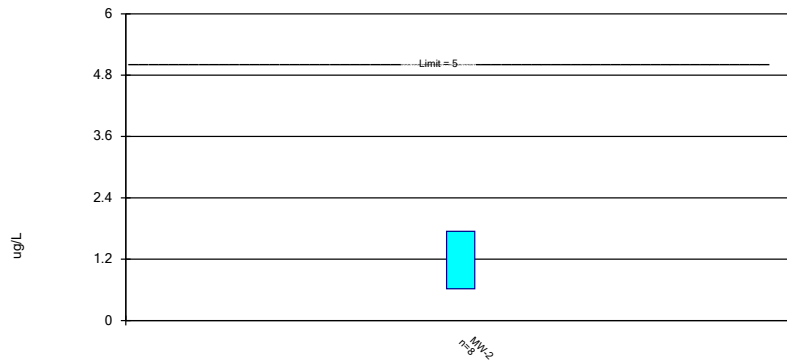
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric Confidence Interval

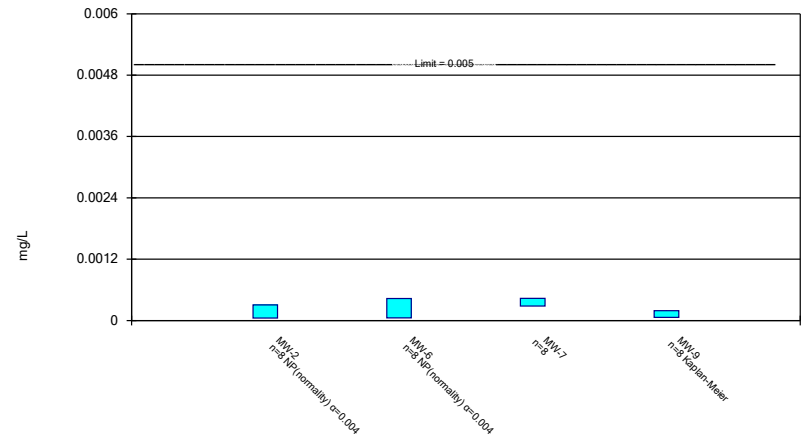
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric and Non-Parametric (NP) Confidence Interval

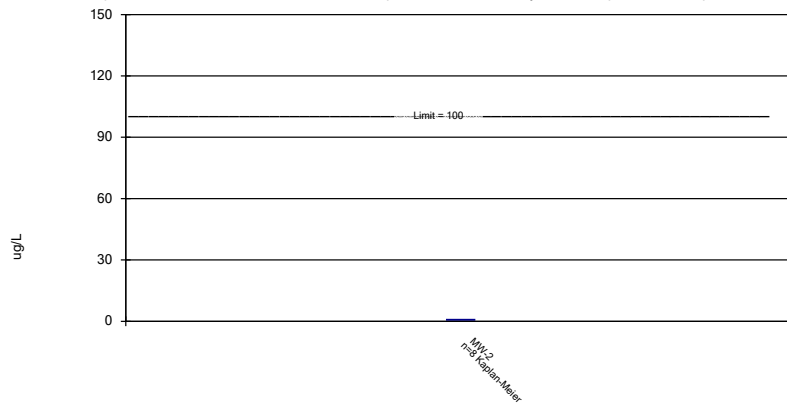
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric Confidence Interval

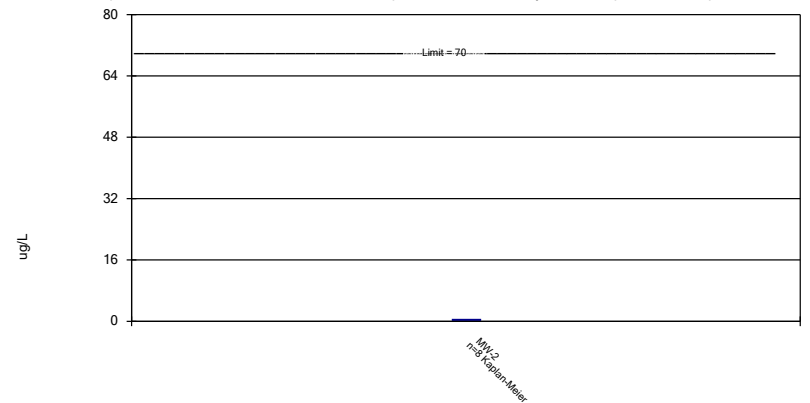
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric Confidence Interval

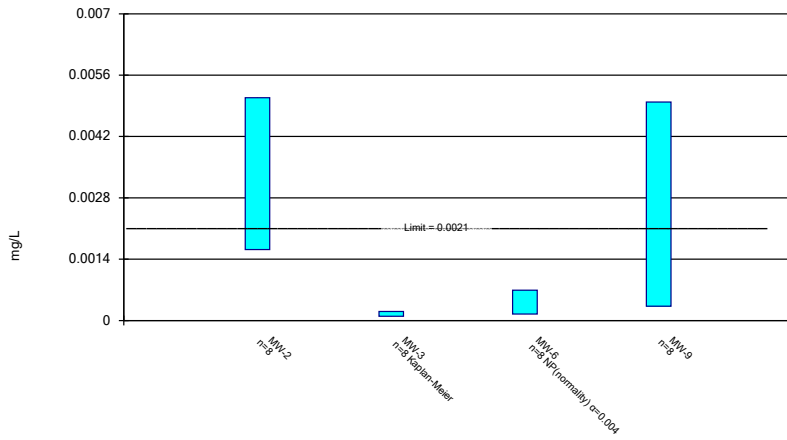
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric and Non-Parametric (NP) Confidence Interval

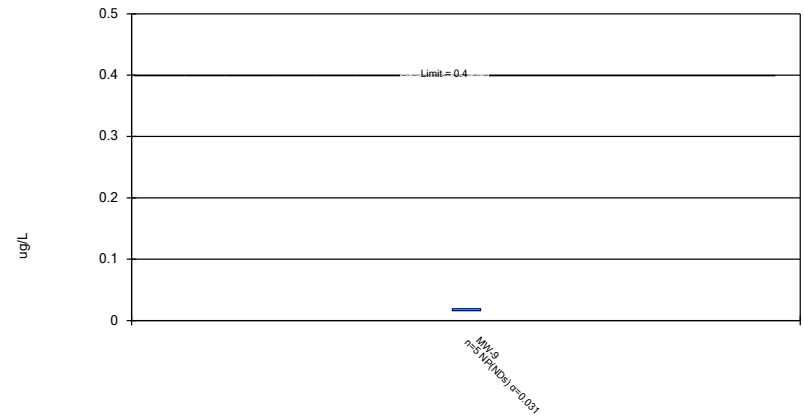
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

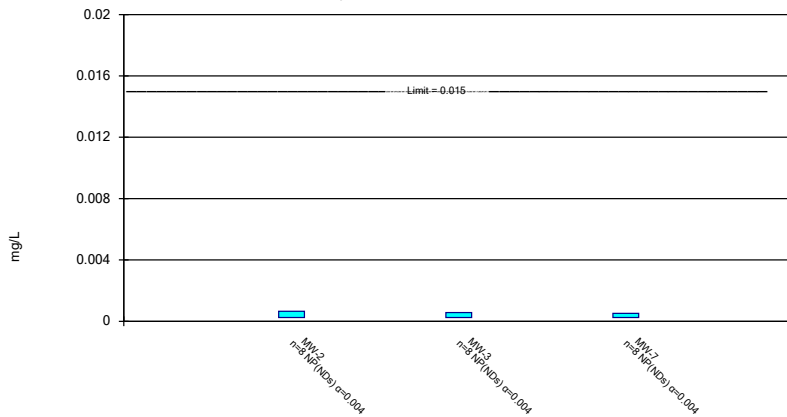
Compliance Limit is not exceeded.



Constituent: Heptachlor Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

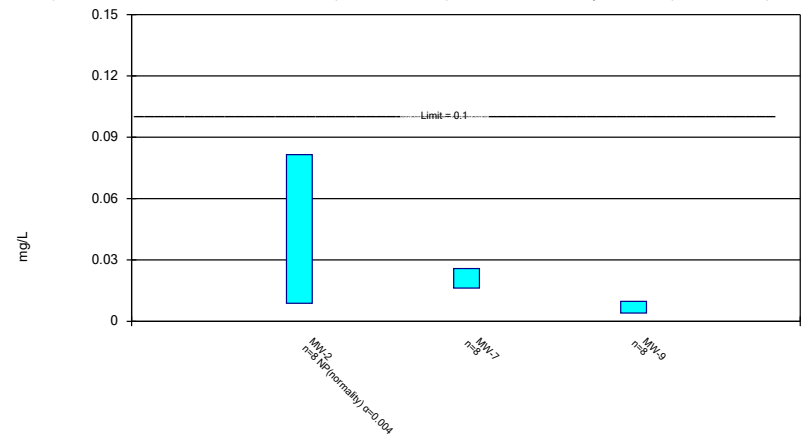
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric and Non-Parametric (NP) Confidence Interval

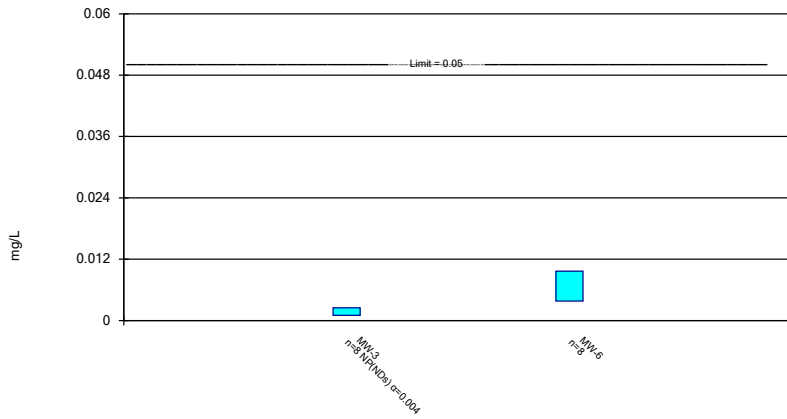
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Parametric and Non-Parametric (NP) Confidence Interval

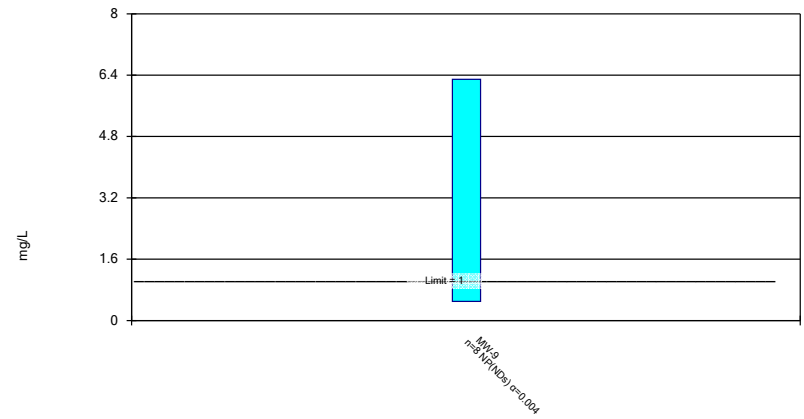
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Selenium Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

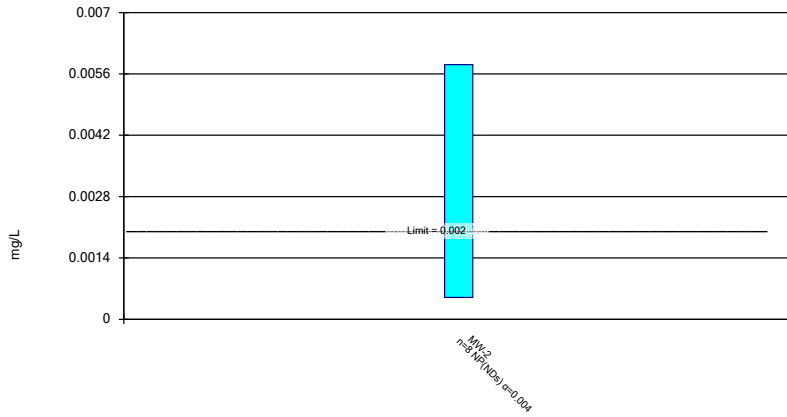
Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

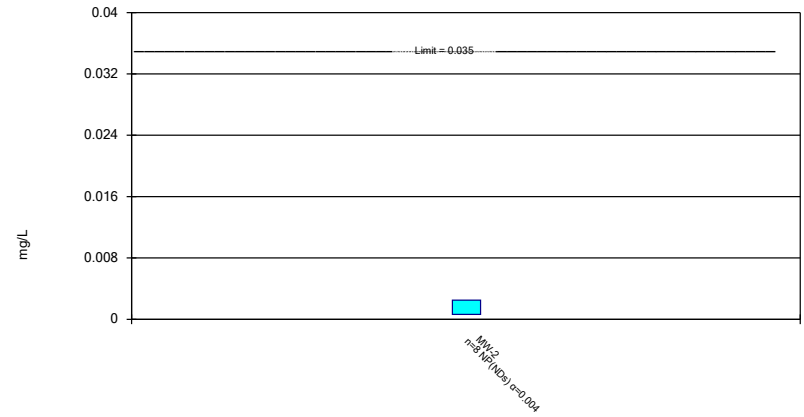
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

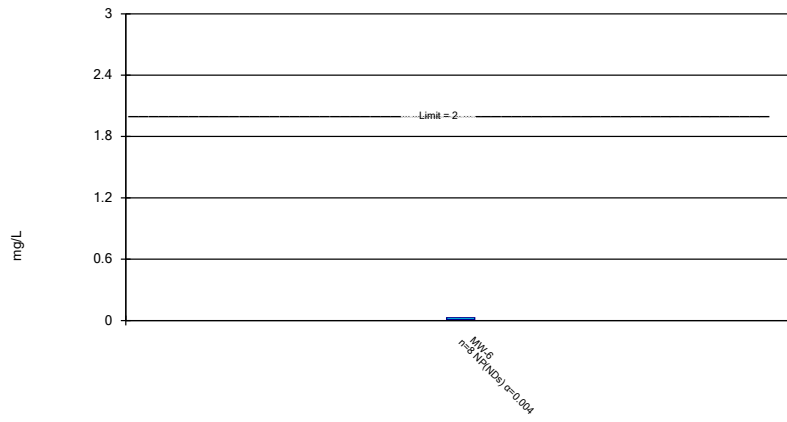
Compliance Limit is not exceeded.




Constituent: Vanadium Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



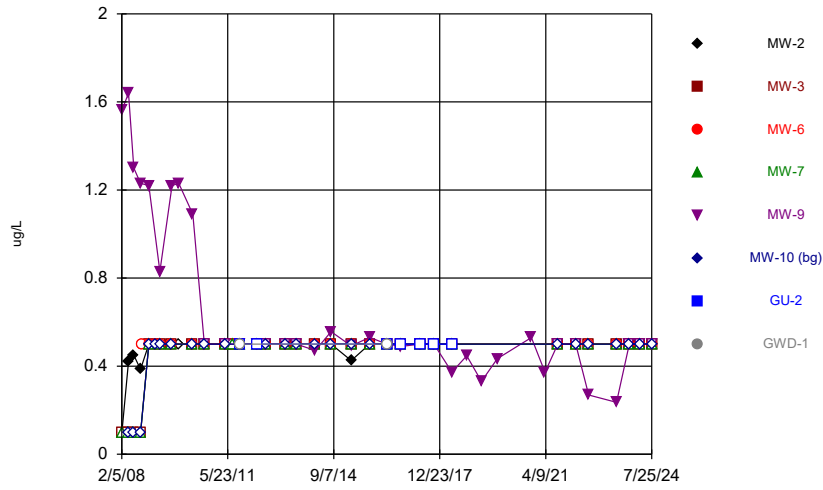
Constituent: Zinc Analysis Run 4/29/2024 4:48 PM View: 2024SSN - Confidence Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-AM 2024SSN



Attachment B
Fall 2024 Statistical Evaluation Output

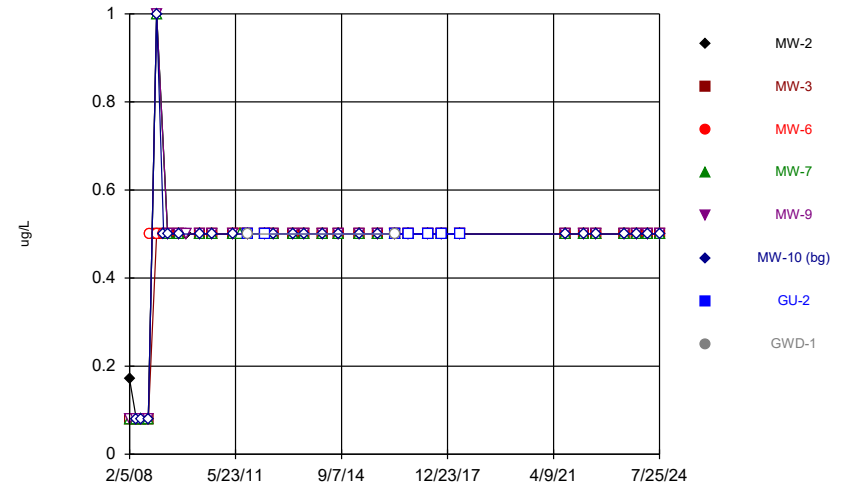
Attachment B.1
Time Series Plots

Time Series



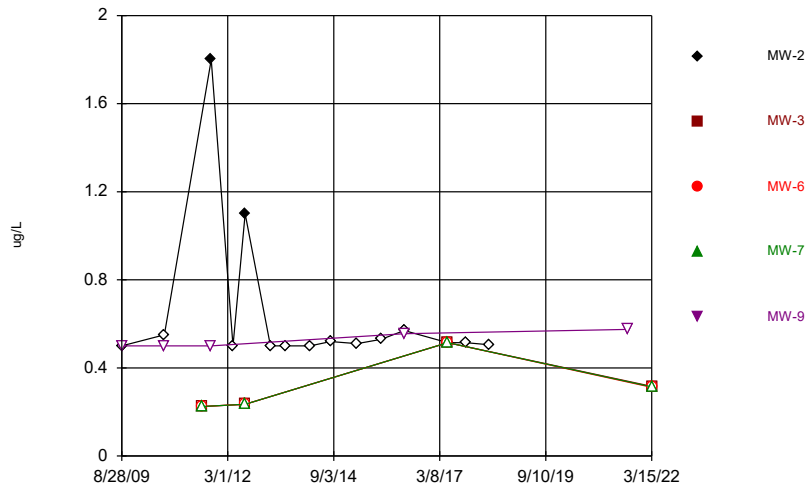
Constituent: 1,1-Dichloroethane Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



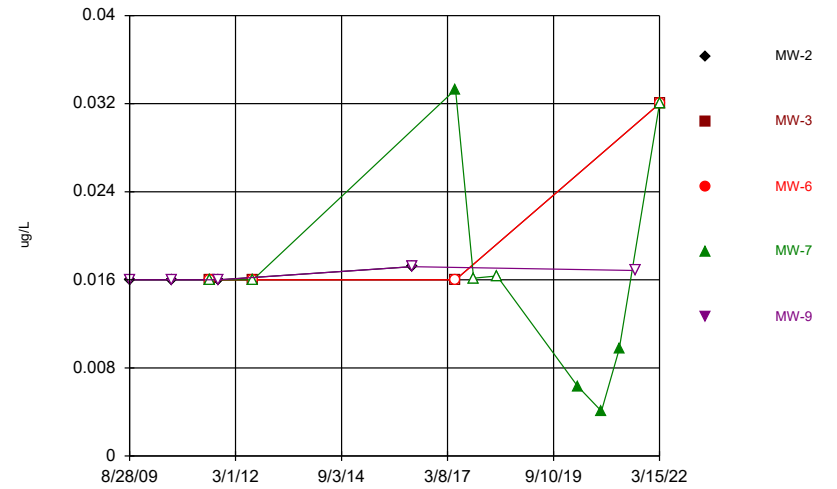
Constituent: 1,4-Dichlorobenzene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



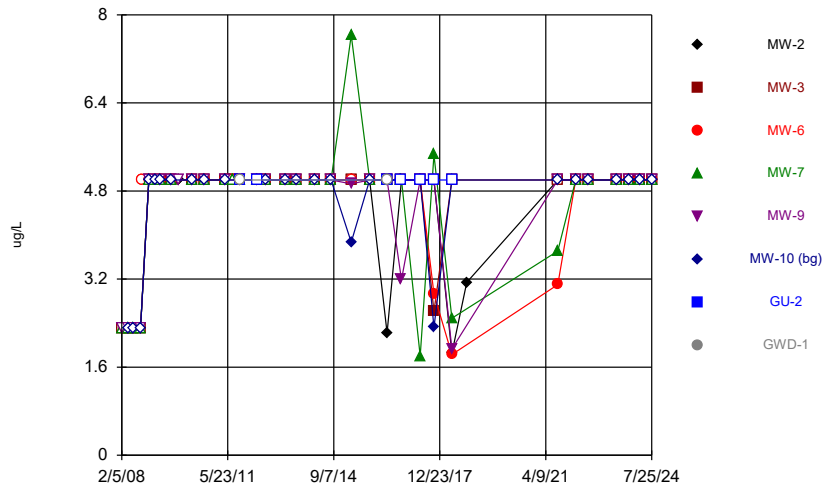
Constituent: 2,4-D Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



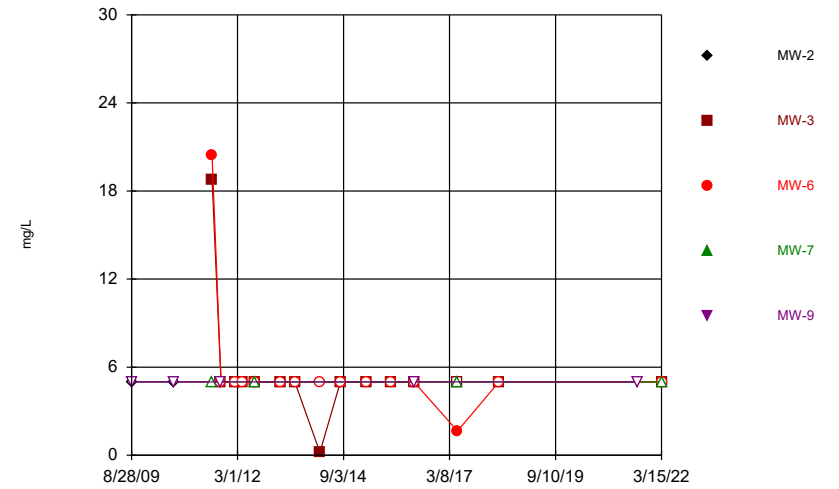
Constituent: 4,4'-DDT Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



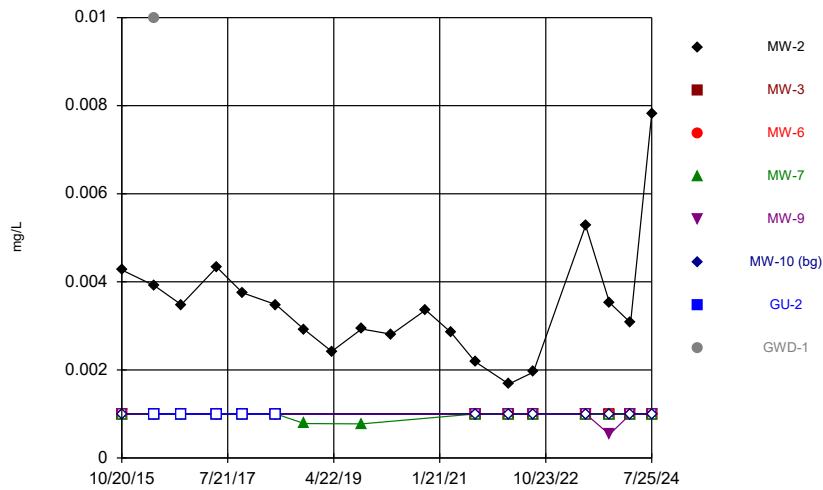
Constituent: Acetone Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



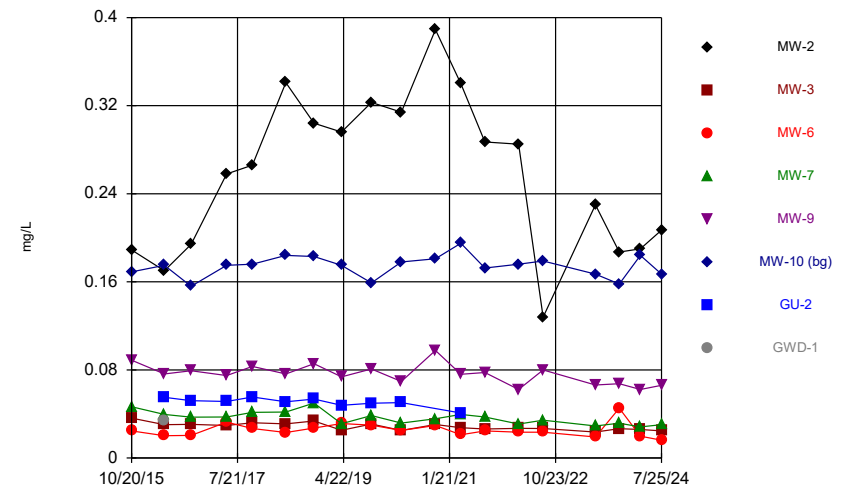
Constituent: Acetonitrile Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



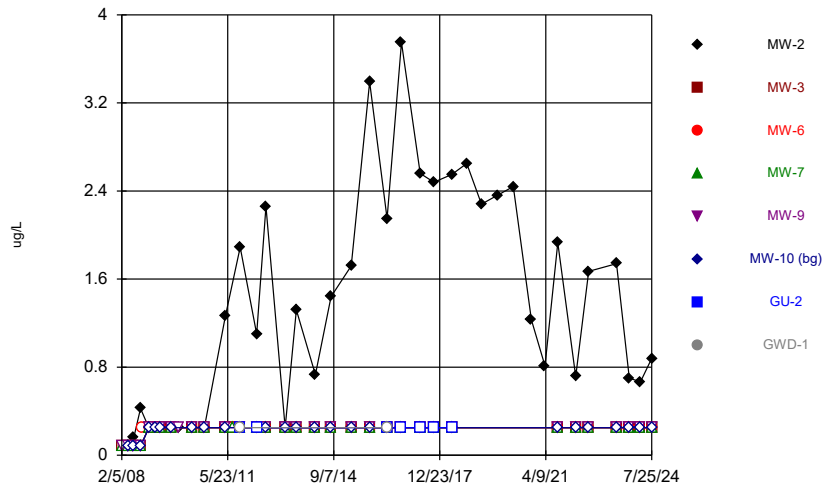
Constituent: Arsenic [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



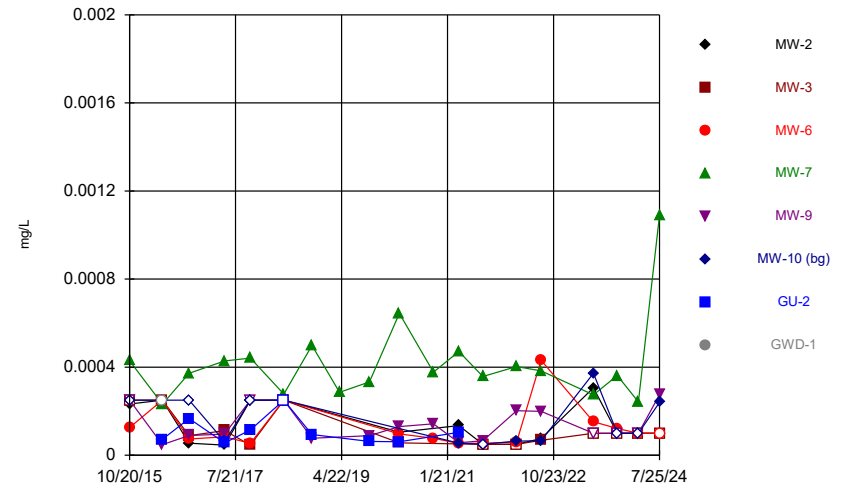
Constituent: Barium [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



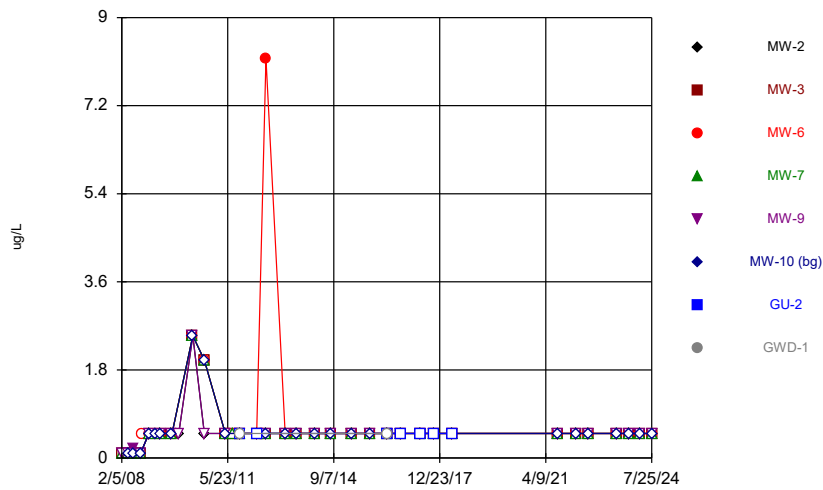
Constituent: Benzene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



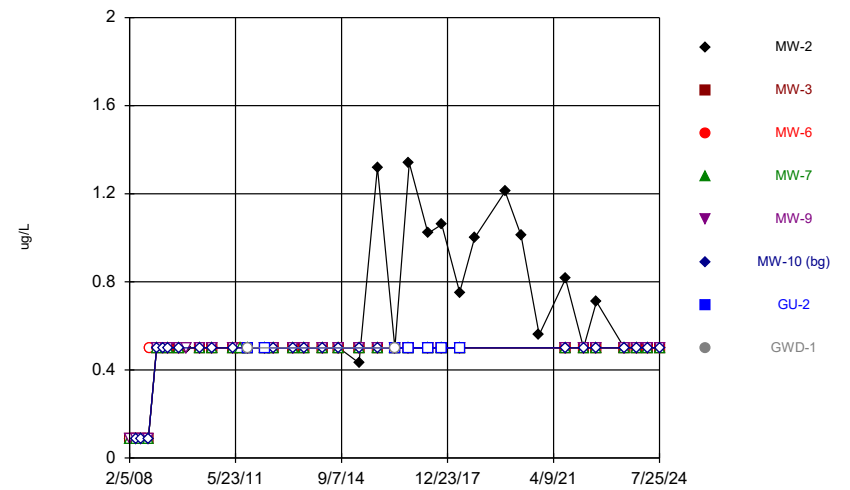
Constituent: Cadmium [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



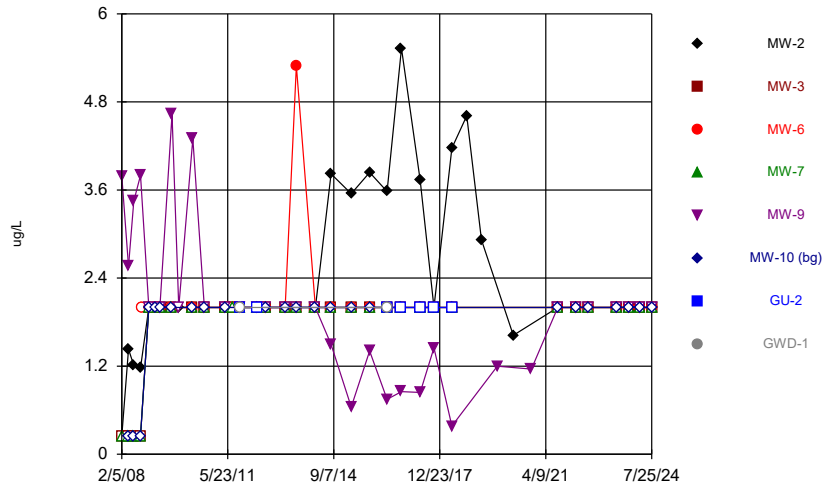
Constituent: Carbon disulfide Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



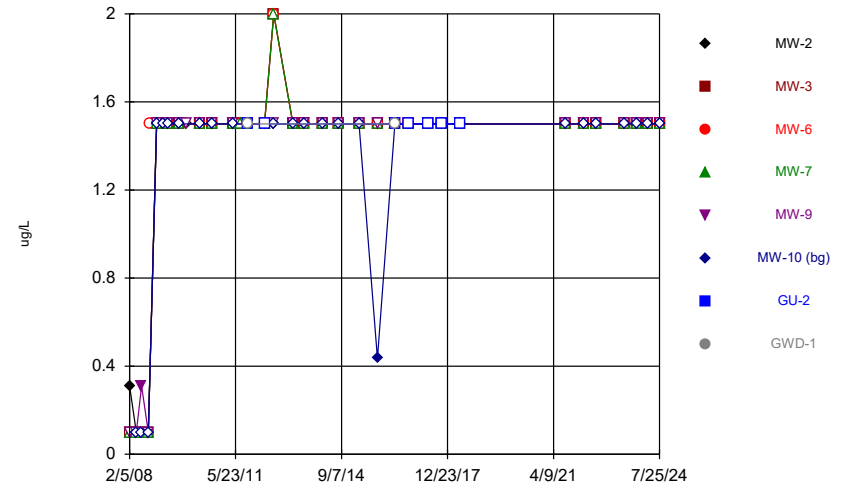
Constituent: Chlorobenzene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



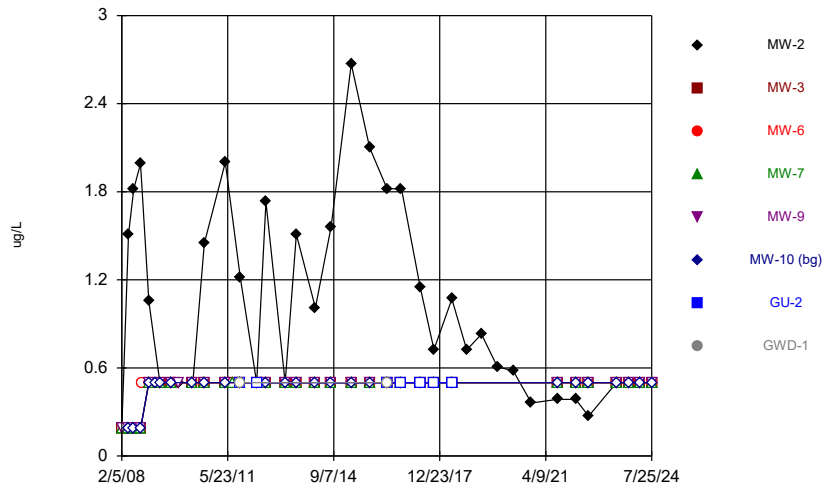
Constituent: Chloroethane Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



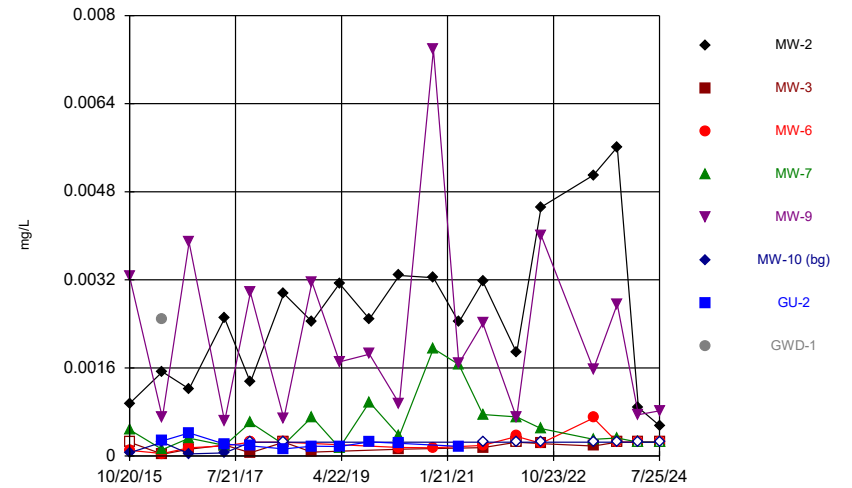
Constituent: Chloromethane Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



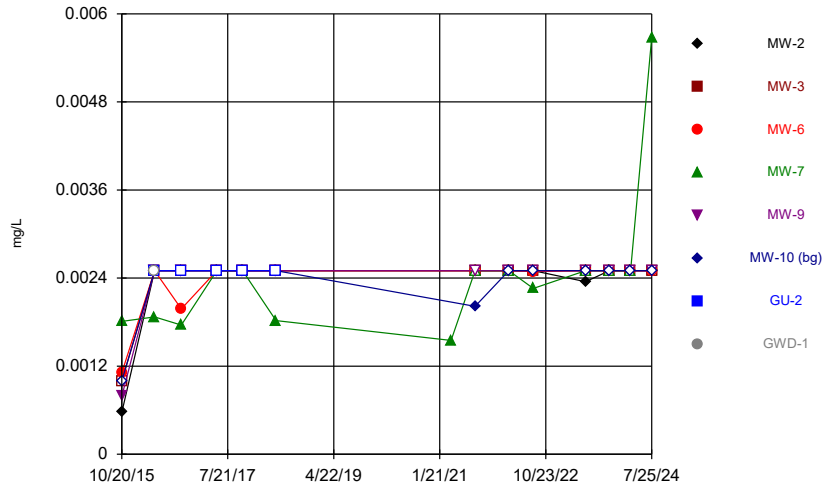
Constituent: cis-1,2-Dichloroethene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



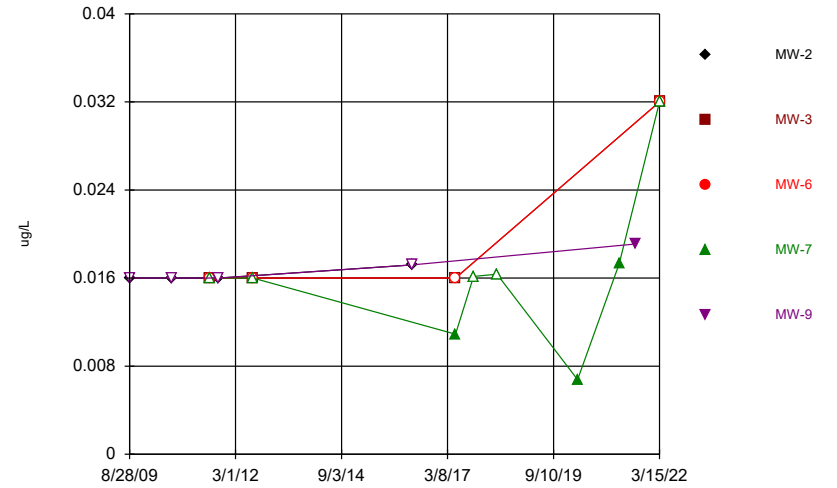
Constituent: Cobalt [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



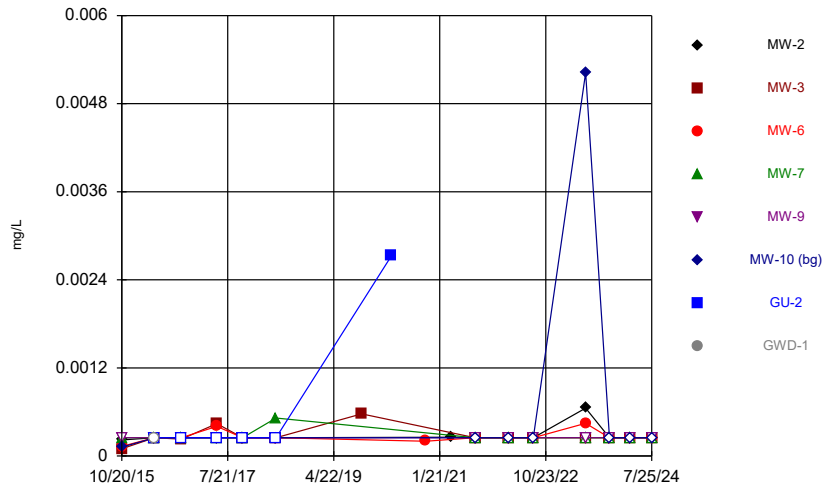
Constituent: Copper [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



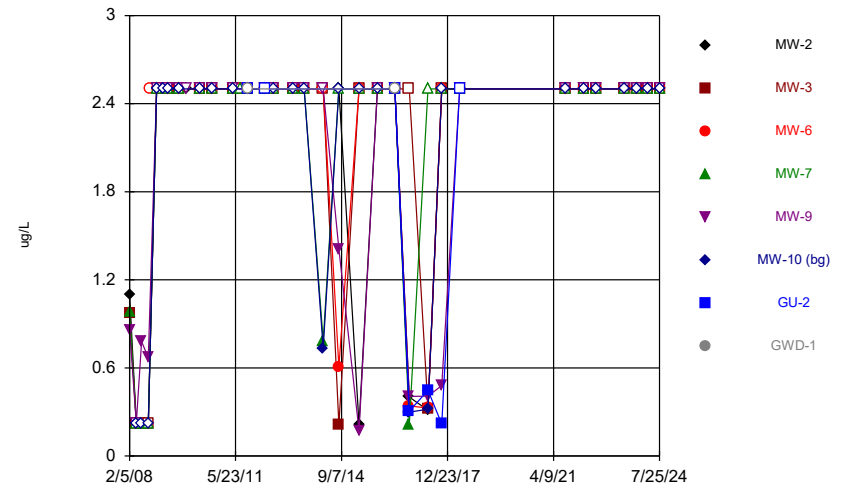
Constituent: Heptachlor Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



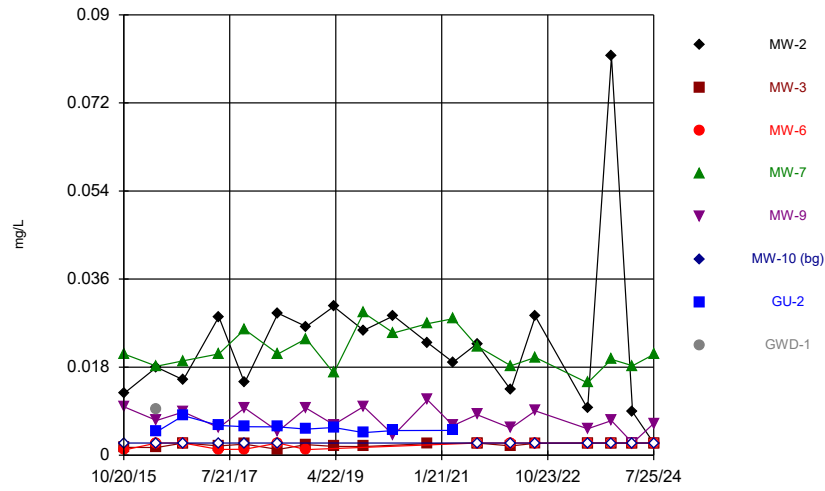
Constituent: Lead [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



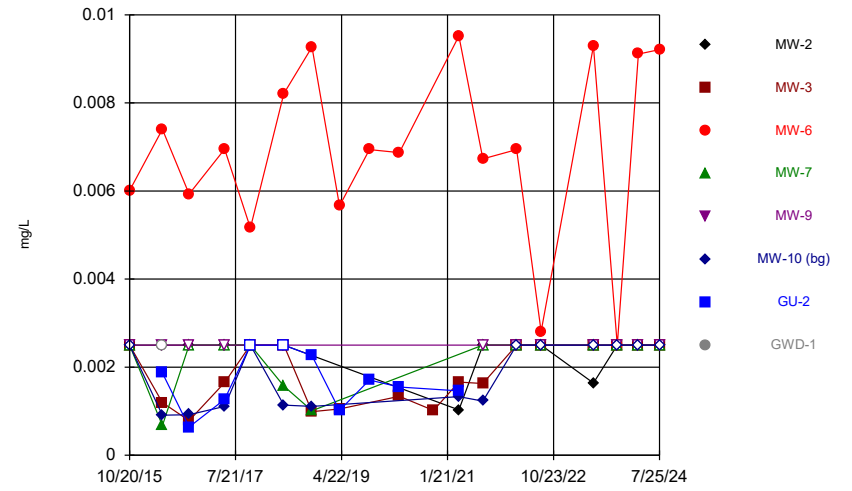
Constituent: Methylene Chloride Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



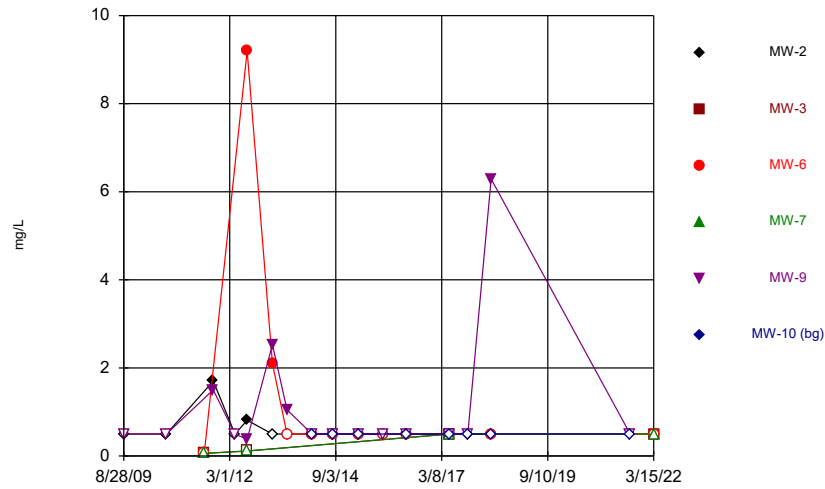
Constituent: Nickel [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



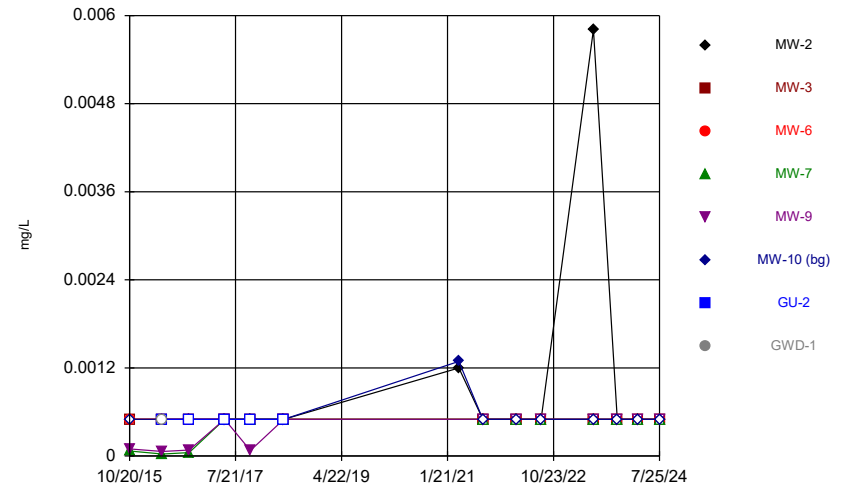
Constituent: Selenium [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



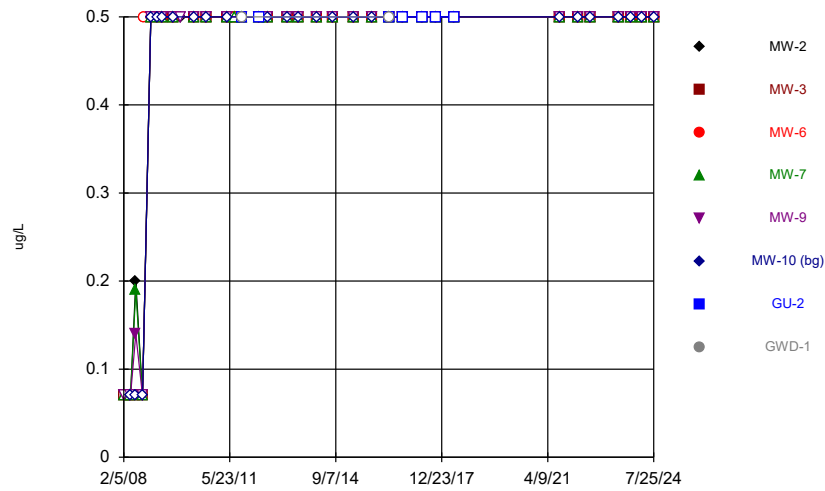
Constituent: Sulfide Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



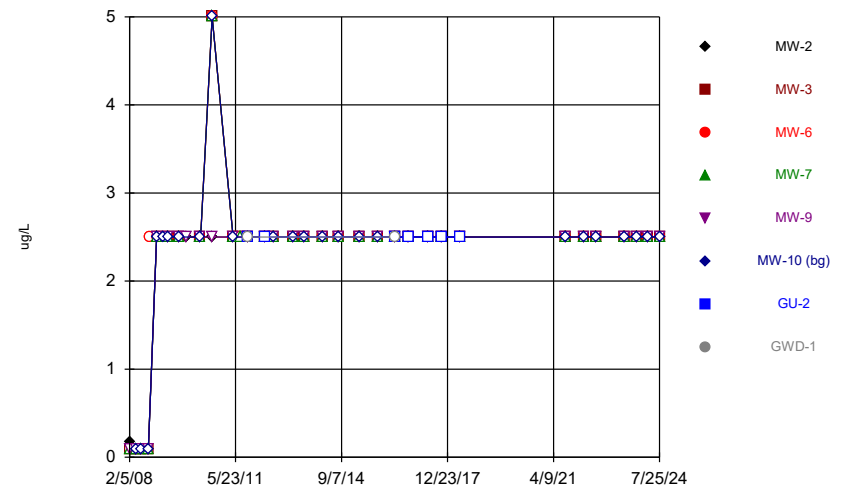
Constituent: Thallium [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



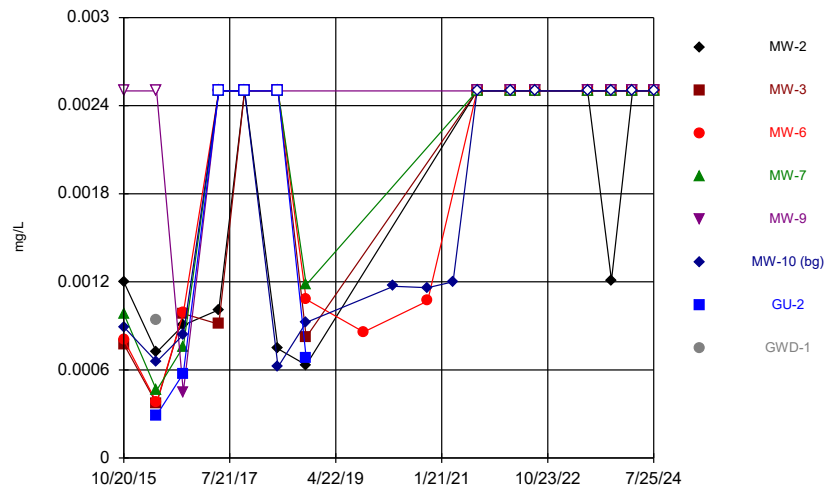
Constituent: Toluene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



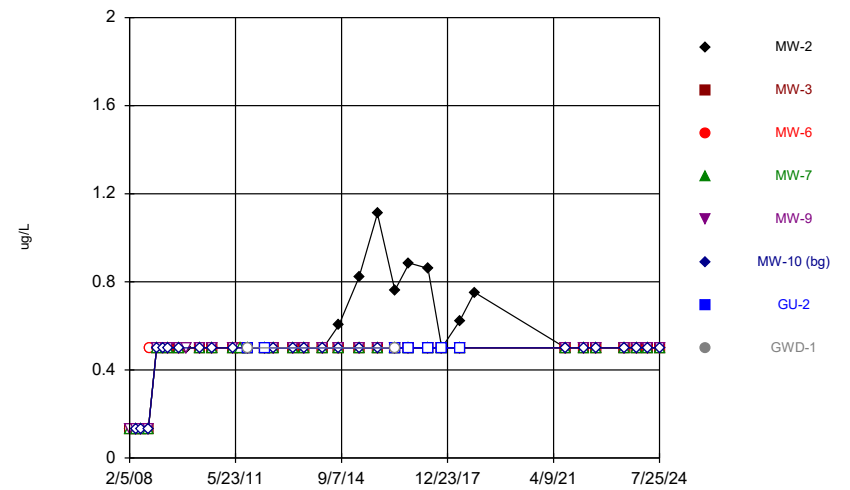
Constituent: trans-1,3-Dichloropropene Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



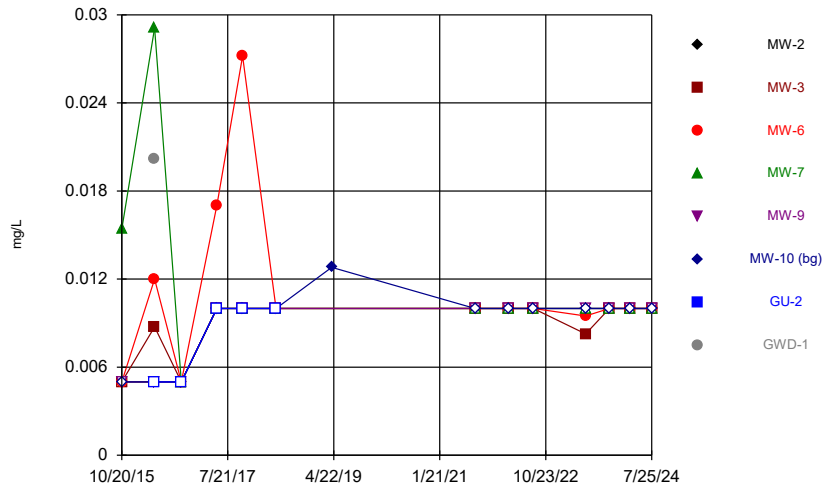
Constituent: Vanadium [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



Constituent: Vinyl chloride Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Time Series



Constituent: Zinc [total] Analysis Run 12/16/2024 1:56 PM View: 2024AWQR-TimeSeries
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Attachment B.2

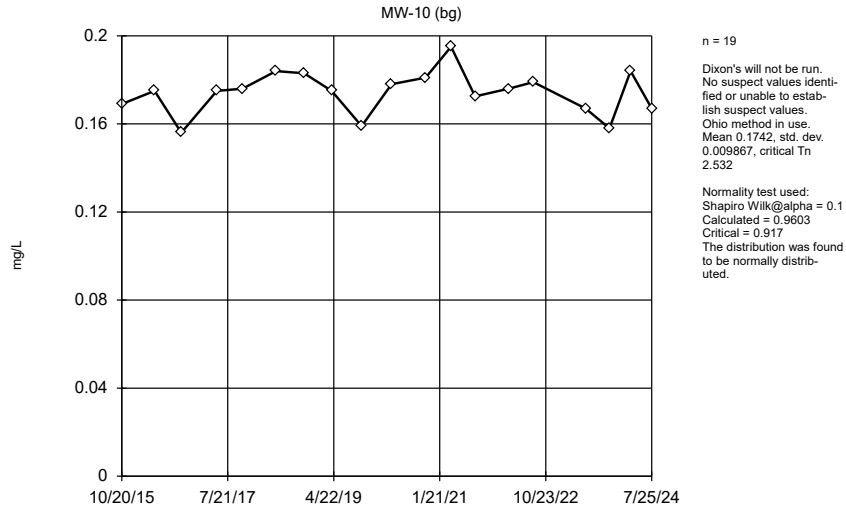
Outlier Analysis

BG Outlier Analysis

Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database Printed 12/16/2024, 3:29 PM

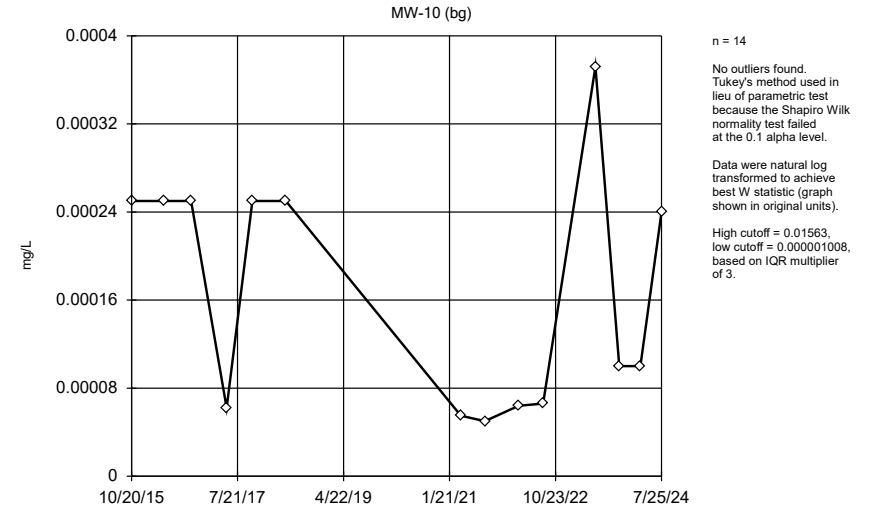
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Barium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	EPA/OH	0.05	19	0.1742	0.009867	normal	ShapiroWilk
Cadmium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	14	0.0001685	0.000107	unknown	ShapiroWilk
Chromium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	13	0.002344	0.000563	n/a	n/a
Cobalt [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	13	0.0002042	0.00008725	n/a	n/a
Copper [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	13	0.002347	0.0004264	n/a	n/a
Lead [total] (mg/L)	MW-10 (bg)	Yes	0.00522	6/22/2023	OH	NaN	13	0.0006223	0.001382	n/a	n/a
Selenium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	15	0.00185	0.000726	unknown	ShapiroWilk
Thallium [total] (mg/L)	MW-10 (bg)	Yes	0.00129	3/31/2021	OH	NaN	14	0.0005564	0.0002111	n/a	n/a
Vanadium [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	NP (nrm)/OH	NaN	17	0.001763	0.0008203	unknown	ShapiroWilk
Zinc [total] (mg/L)	MW-10 (bg)	No	n/a	n/a	OH	NaN	14	0.009129	0.002357	n/a	n/a

EPA Screening (suspected outliers for Dixon's Test)



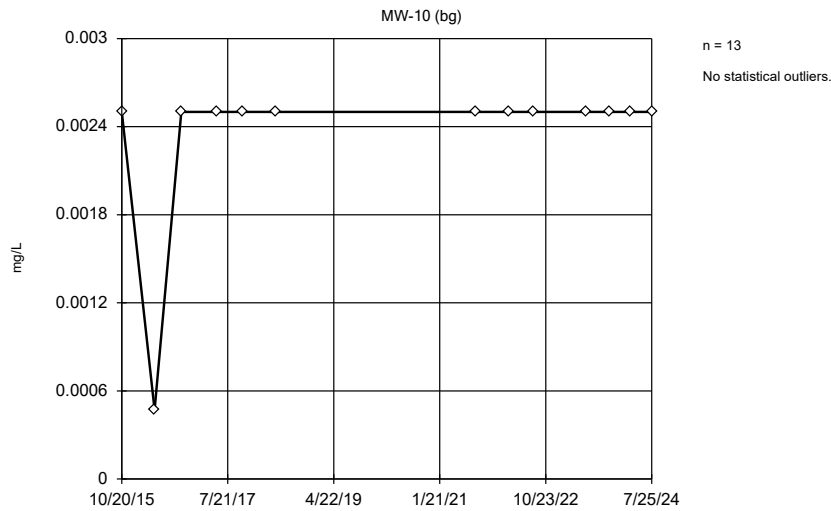
Constituent: Barium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



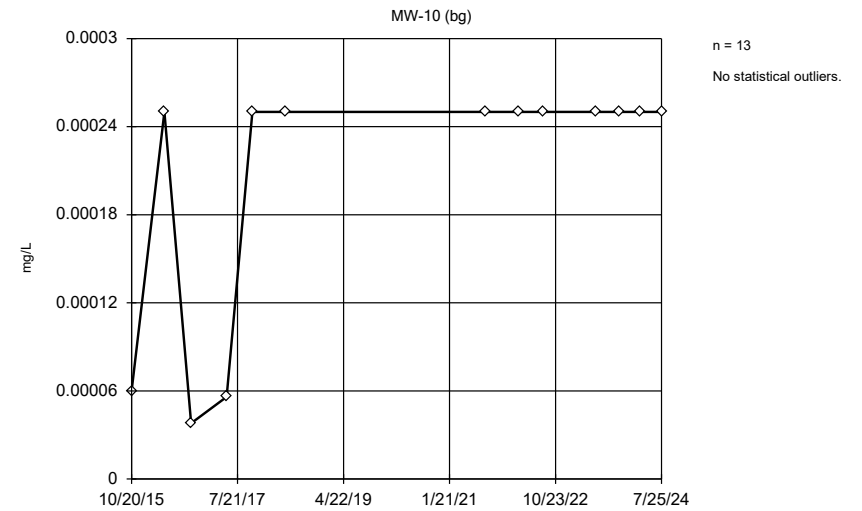
Constituent: Cadmium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm



Constituent: Chromium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

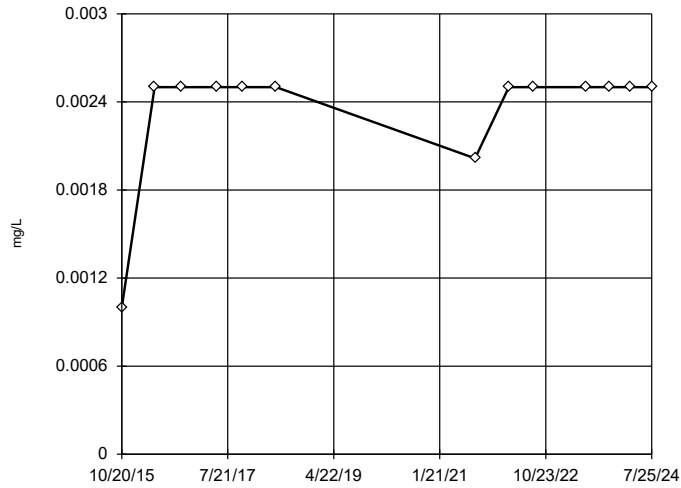
Ohio EPA 0715 Outlier Algorithm



Constituent: Cobalt [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

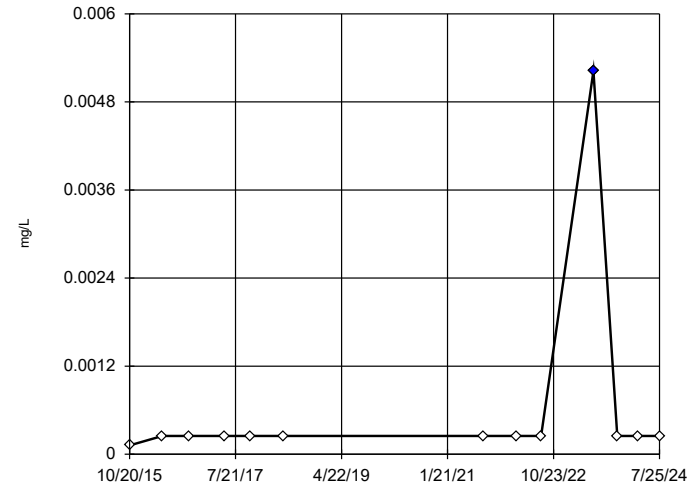


n = 13
No statistical outliers.

Constituent: Copper [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

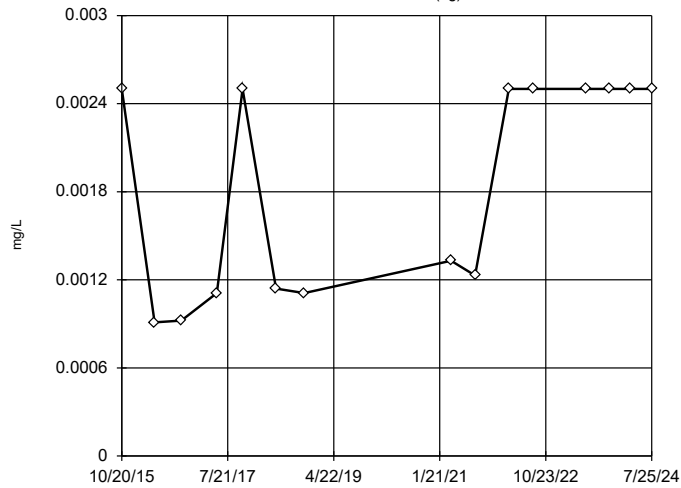


n = 13
Statistical outlier is drawn as solid. Outlier per Ohio method.

Constituent: Lead [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

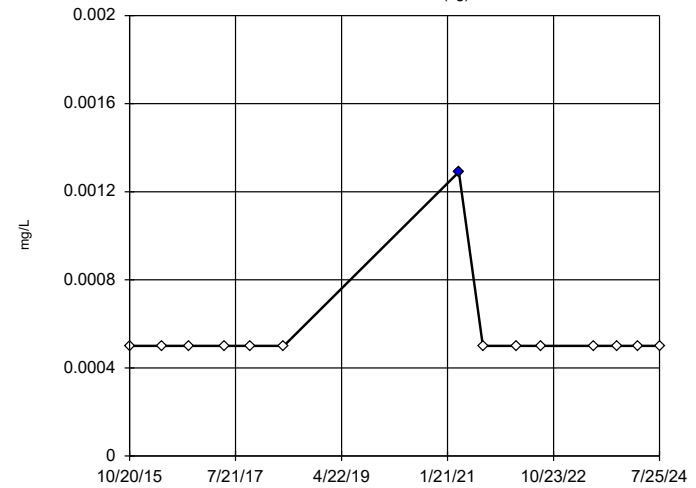


n = 15
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.1 alpha level.
Data were natural log transformed to achieve best W statistic (graph shown in original units).
High cutoff = 0.02856, low cutoff = 0.00009716, based on IQR multiplier of 3.

Constituent: Selenium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

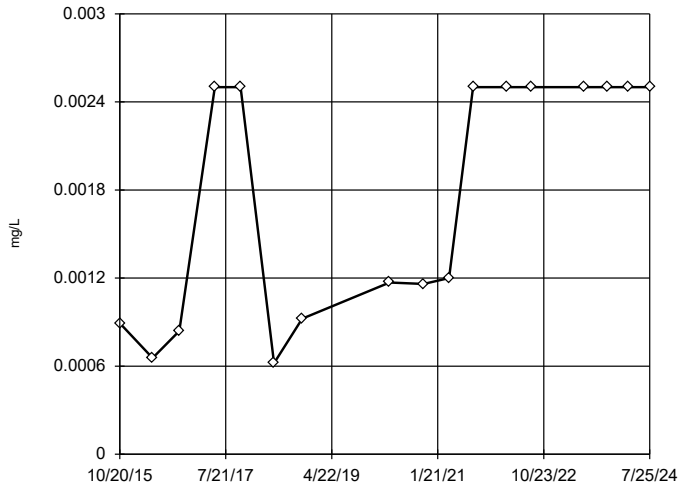


n = 14
Statistical outlier is drawn as solid. Outlier per Ohio method.

Constituent: Thallium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)

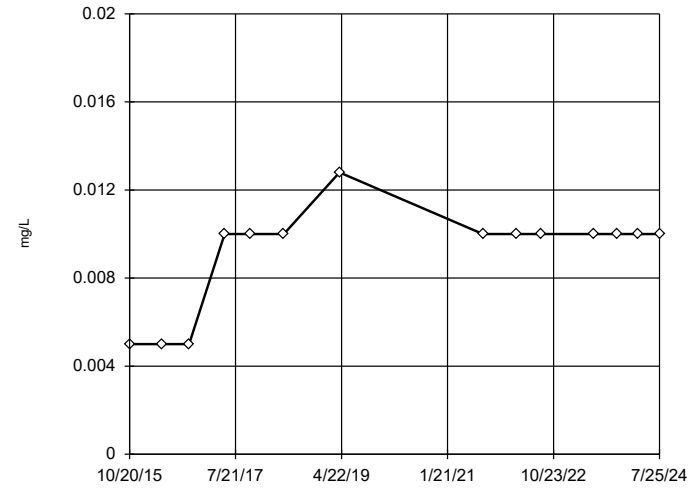


n = 17
 No outliers found.
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.1 alpha level.
 Data were natural log transformed to achieve best W statistic (graph shown in original units).
 High cutoff = 0.05212,
 low cutoff = 0.00004357,
 based on IQR multiplier of 3.

Constituent: Vanadium [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
 Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database


Ohio EPA 0715 Outlier Algorithm

MW-10 (bg)



n = 14
 No statistical outliers.

Constituent: Zinc [total] Analysis Run 12/16/2024 3:27 PM View: 2024AWQR-BG-Outliers
 Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database



Attachment B.3
Interwell Prediction Limits

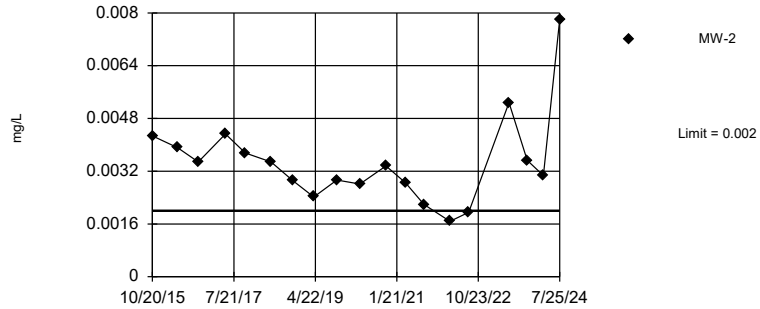
Prediction Limit

Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database Printed 12/17/2024, 10:01 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic [total] (mg/L)	MW-2	0.002	n/a	7/25/2024	0.00781	Yes	13	100	n/a	0.008527	NP Inter (NDs) 1 of 2
Barium [total] (mg/L)	MW-2	0.1959	n/a	7/25/2024	0.207	Yes	19	0	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-3	0.1959	n/a	7/25/2024	0.0246	No	19	0	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-6	0.1959	n/a	7/25/2024	0.01615	No	19	0	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-7	0.1959	n/a	7/25/2024	0.0303	No	19	0	No	0.001053	Param Inter 1 of 2
Barium [total] (mg/L)	MW-9	0.1959	n/a	7/25/2024	0.0661	No	19	0	No	0.001053	Param Inter 1 of 2
Cadmium [total] (mg/L)	MW-7	0.000372	n/a	7/25/2024	0.00109	Yes	14	57.14	n/a	0.007644	NP Inter (NDs) 1 of 2
Cadmium [total] (mg/L)	MW-9	0.000372	n/a	7/25/2024	0.000275	No	14	57.14	n/a	0.007644	NP Inter (NDs) 1 of 2
Cobalt [total] (mg/L)	MW-2	0.00025	n/a	7/25/2024	0.000554	Yes	13	76.92	n/a	0.008527	NP Inter (NDs) 1 of 2
Cobalt [total] (mg/L)	MW-9	0.00025	n/a	7/25/2024	0.00082	Yes	13	76.92	n/a	0.008527	NP Inter (NDs) 1 of 2
Copper [total] (mg/L)	MW-7	0.0025	n/a	7/25/2024	0.00568	Yes	13	92.31	n/a	0.008527	NP Inter (NDs) 1 of 2
Nickel [total] (mg/L)	MW-7	0.005	n/a	7/25/2024	0.0206	Yes	13	100	n/a	0.008527	NP Inter (NDs) 1 of 2
Nickel [total] (mg/L)	MW-9	0.005	n/a	7/25/2024	0.00648	Yes	13	100	n/a	0.008527	NP Inter (NDs) 1 of 2
Selenium [total] (mg/L)	MW-6	0.0025	n/a	7/25/2024	0.00921	Yes	15	53.33	n/a	0.006767	NP Inter (NDs) 1 of 2

Exceeds Limit: MW-2

Prediction Limit
Interwell Non-parametric

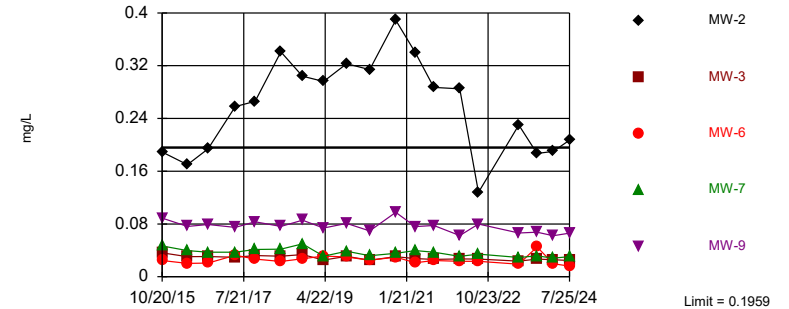


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 13) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.08207. Individual comparison alpha = 0.008527 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Arsenic [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-2

Prediction Limit
Interwell Parametric

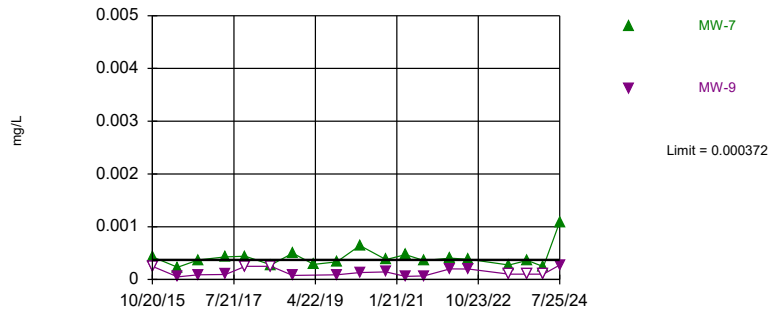


Background Data Summary: Mean=0.1742, Std. Dev.=0.009867, n=19. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9603, critical = 0.863. Kappa = 2.205 (c=10, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.005254. Individual comparison alpha = 0.001053. Comparing 5 points to limit.

Constituent: Barium [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-7

Prediction Limit
Interwell Non-parametric

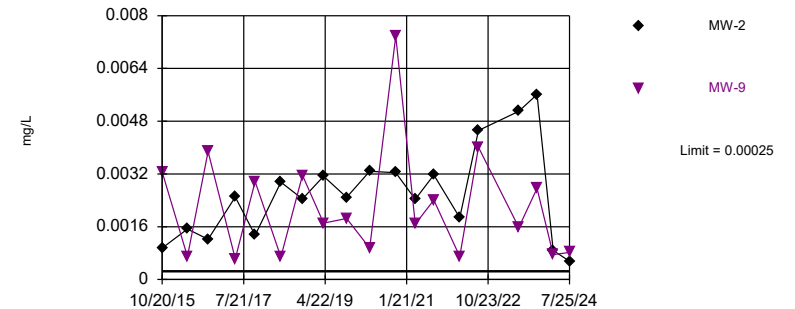


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 57.14% NDs. Annual per-constituent alpha = 0.07386. Individual comparison alpha = 0.007644 (1 of 2). Comparing 2 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cadmium [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-2, MW-9

Prediction Limit
Interwell Non-parametric

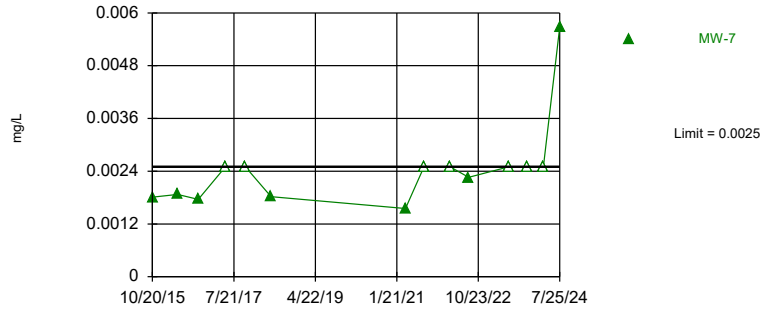


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 76.92% NDs. Annual per-constituent alpha = 0.08207. Individual comparison alpha = 0.008527 (1 of 2). Comparing 2 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cobalt [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-7

Prediction Limit
Interwell Non-parametric

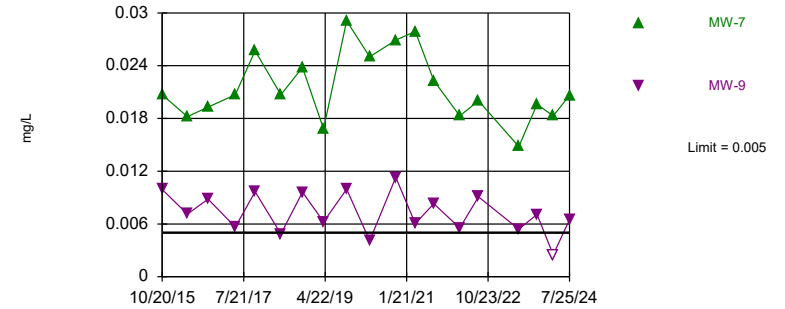


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Annual per-constituent alpha = 0.08207. Individual comparison alpha = 0.008527 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Copper [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-7, MW-9

Prediction Limit
Interwell Non-parametric

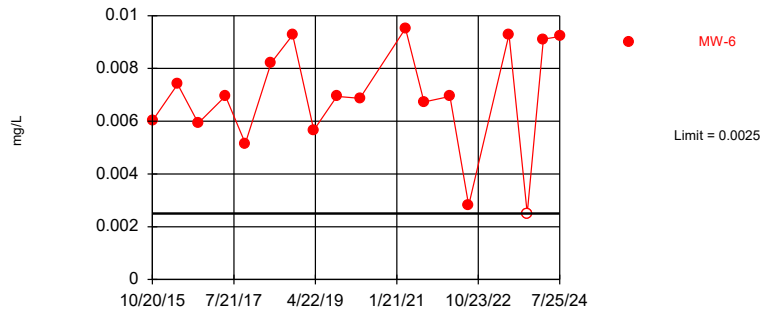


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 13) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.08207. Individual comparison alpha = 0.008527 (1 of 2). Comparing 2 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Nickel [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Exceeds Limit: MW-6

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Annual per-constituent alpha = 0.06565. Individual comparison alpha = 0.006767 (1 of 2). Assumes 4 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Selenium [total] Analysis Run 12/17/2024 10:00 AM View: 2024AWQR-PredictionLimit
Adair County Sanitary Landfill Client: Adair County Data: Adair County LF Database

Attachment B.4

Sen's Slope/Mann-Kendall Trend Analysis

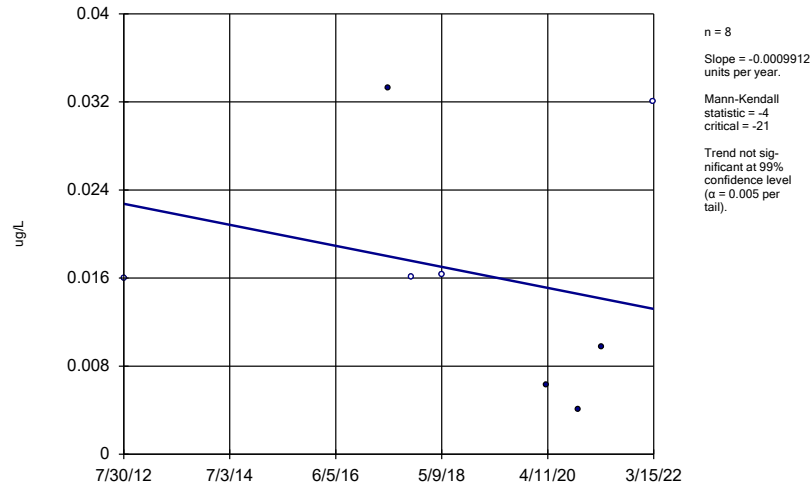
Trend Test

Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM Printed 12/17/2024, 11:01 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
4,4'-DDT (ug/L)	MW-7	-0.0009912	-4	-21	No	8	50	0.01	NP
Acetone (ug/L)	MW-6	0	13	21	No	8	75	0.01	NP
Acetone (ug/L)	MW-7	0	13	21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-2	0.0006933	12	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-9	0	-3	-21	No	8	87.5	0.01	NP
Barium (mg/L)	MW-2	-0.04166	-14	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-3	-0.0005601	-16	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-6	-0.001654	-9	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-7	-0.002659	-18	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-9	-0.003605	-10	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-2	-0.07166	-8	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-2	0.00001359	6	21	No	8	62.5	0.01	NP
Cadmium (mg/L)	MW-6	0.00001477	9	21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-7	-0.000042	-6	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-9	0.00001749	11	21	No	8	37.5	0.01	NP
Chlorobenzene (ug/L)	MW-2	-0.01686	-12	-21	No	8	62.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-2	0.03999	14	21	No	8	50	0.01	NP
Cobalt (mg/L)	MW-2	-0.0005088	-2	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-3	0.00002082	16	21	No	8	50	0.01	NP
Cobalt (mg/L)	MW-6	0.00002083	11	21	No	8	37.5	0.01	NP
Cobalt (mg/L)	MW-7	-0.0002241	-25	-21	Yes	8	25	0.01	NP
Cobalt (mg/L)	MW-9	-0.0002857	-4	-21	No	8	0	0.01	NP
Copper (mg/L)	MW-7	0.0002338	14	21	No	8	62.5	0.01	NP
Heptachlor (ug/L)	MW-9	0.0002348	7	12	No	5	80	0.01	NP
Lead (mg/L)	MW-2	0	-5	-21	No	8	75	0.01	NP
Lead (mg/L)	MW-3	0	-7	-21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-7	0	-7	-21	No	8	87.5	0.01	NP
Nickel (mg/L)	MW-2	-0.004418	-10	-21	No	8	12.5	0.01	NP
Nickel (mg/L)	MW-7	-0.001384	-9	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-9	-0.0005439	-6	-21	No	8	12.5	0.01	NP
Selenium (mg/L)	MW-3	0	11	21	No	8	75	0.01	NP
Selenium (mg/L)	MW-6	-0.00008327	-2	-21	No	8	12.5	0.01	NP
Sulfide (mg/L)	MW-9	0	5	21	No	8	87.5	0.01	NP
Thallium (mg/L)	MW-2	0	-5	-21	No	8	75	0.01	NP
Vanadium (mg/L)	MW-2	0	5	21	No	8	75	0.01	NP

Sen's Slope Estimator

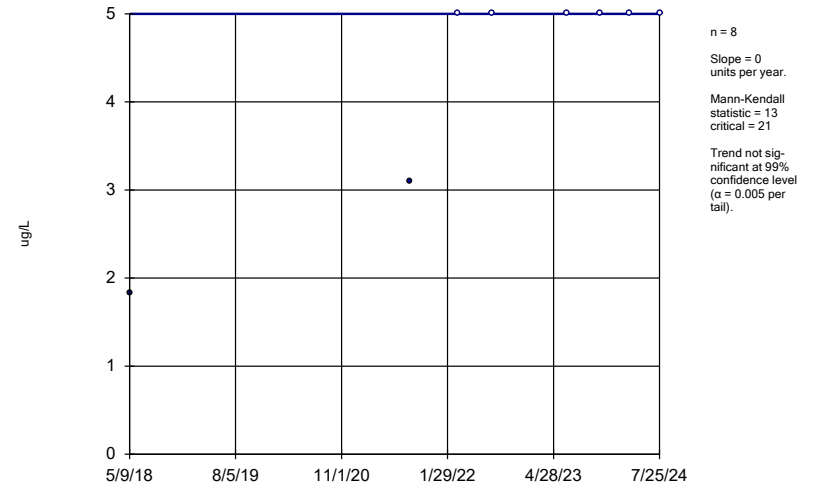
MW-7



Constituent: 4,4'-DDT Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

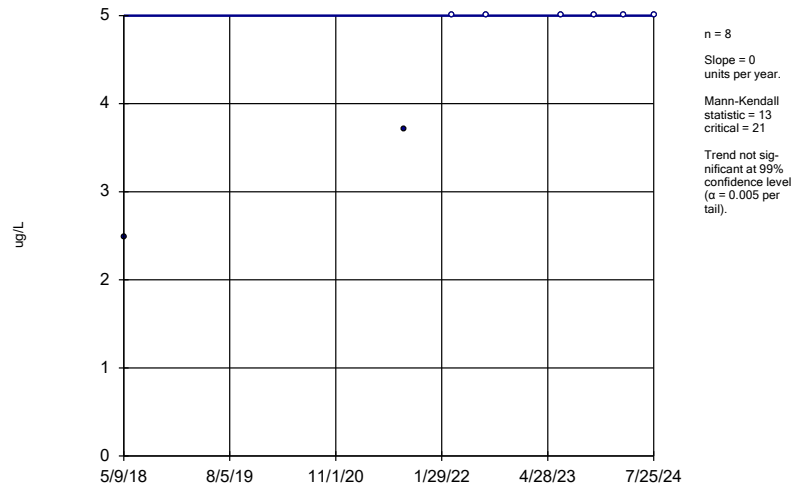
MW-6



Constituent: Acetone Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

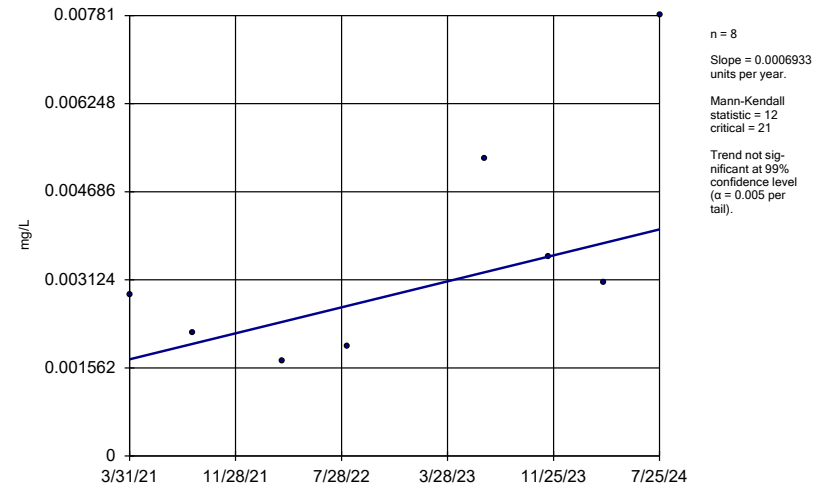
MW-7



Constituent: Acetone Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

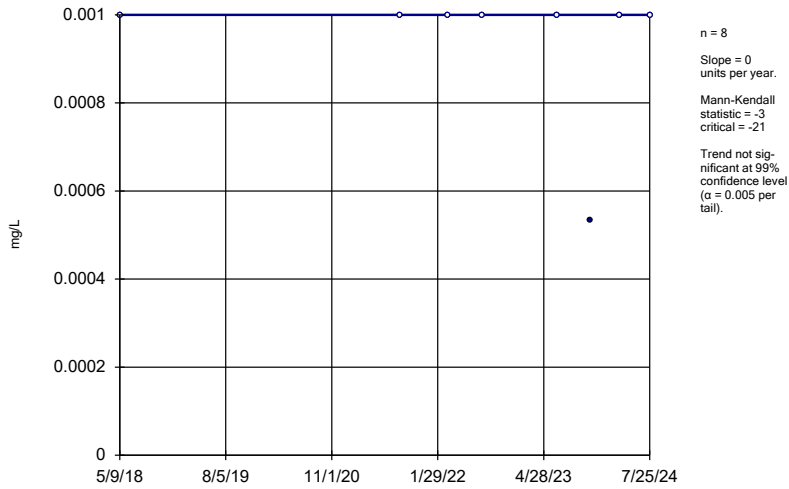
MW-2



Constituent: Arsenic Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

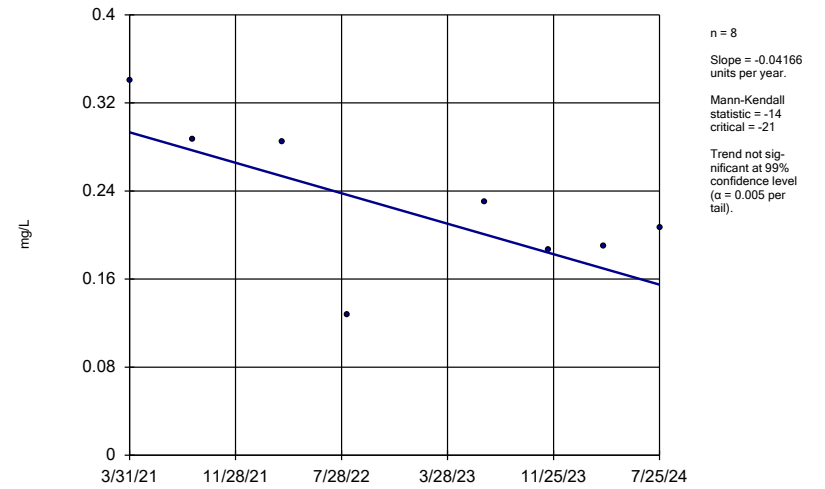
MW-9



Constituent: Arsenic Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

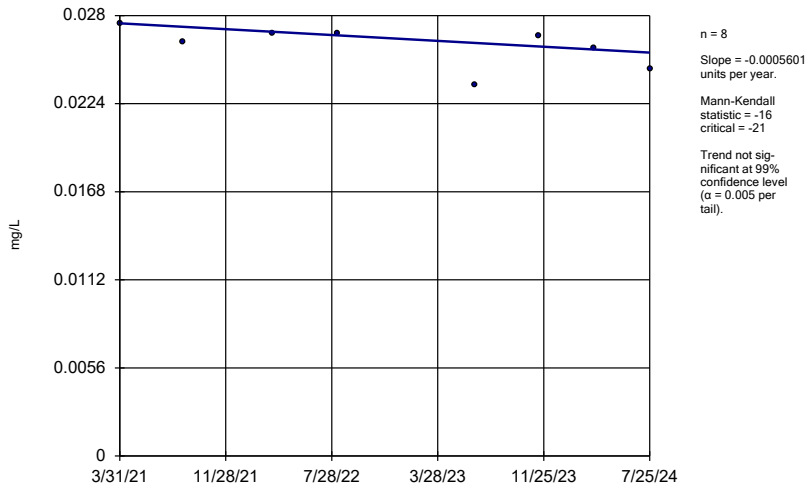
MW-2



Constituent: Barium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

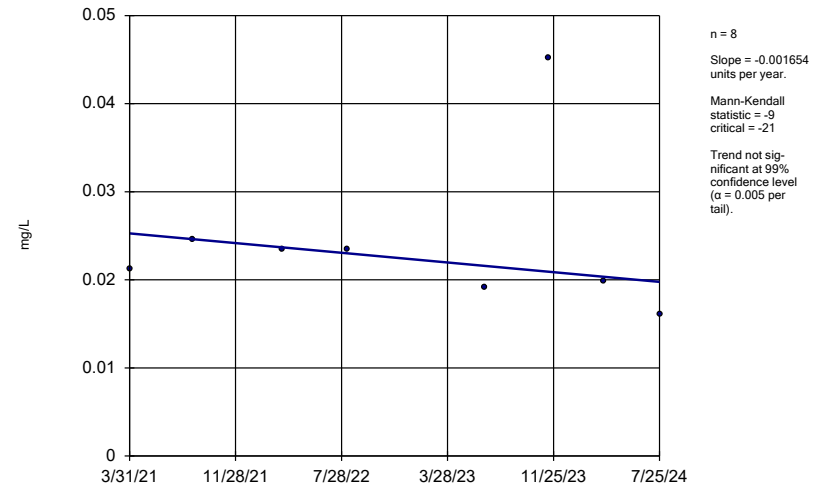
MW-3



Constituent: Barium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

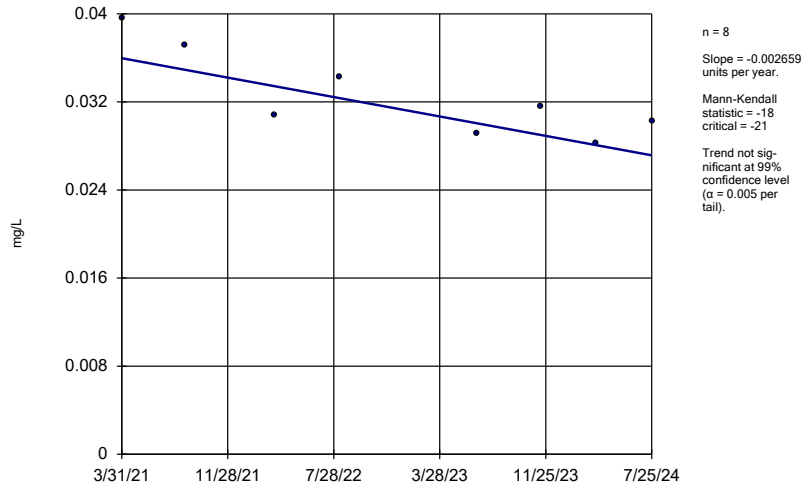
MW-6



Constituent: Barium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

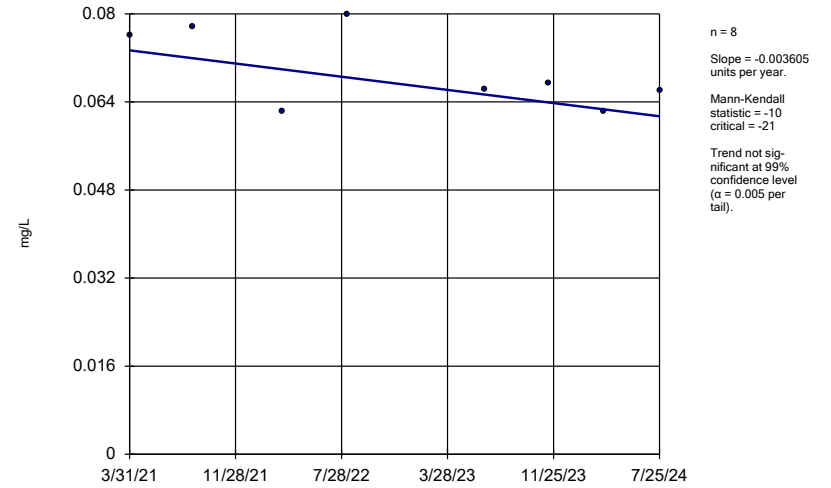
MW-7



Constituent: Barium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

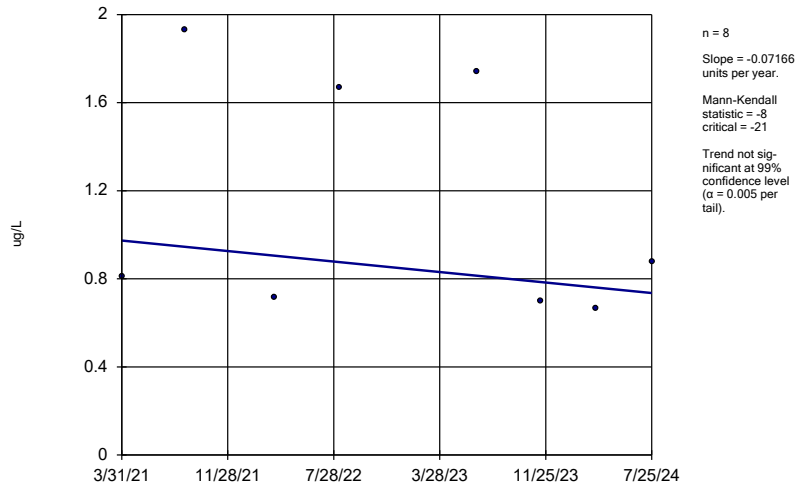
MW-9



Constituent: Barium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

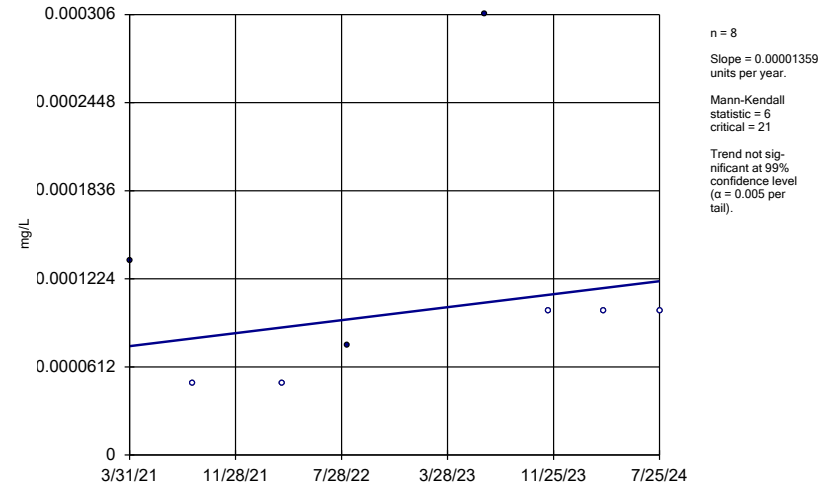
MW-2



Constituent: Benzene Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

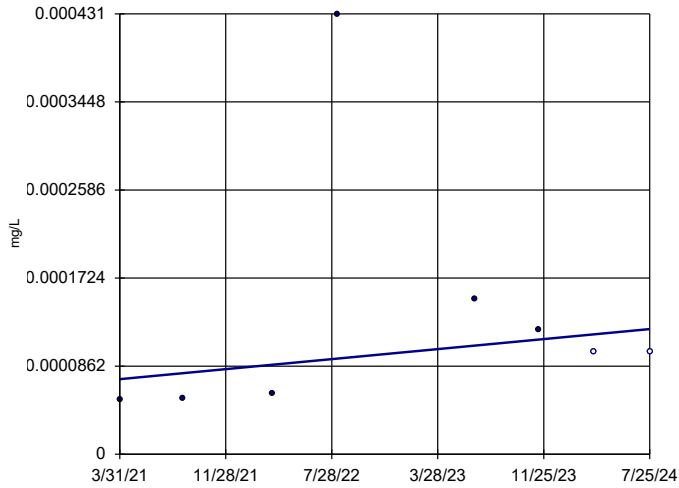
MW-2



Constituent: Cadmium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-6

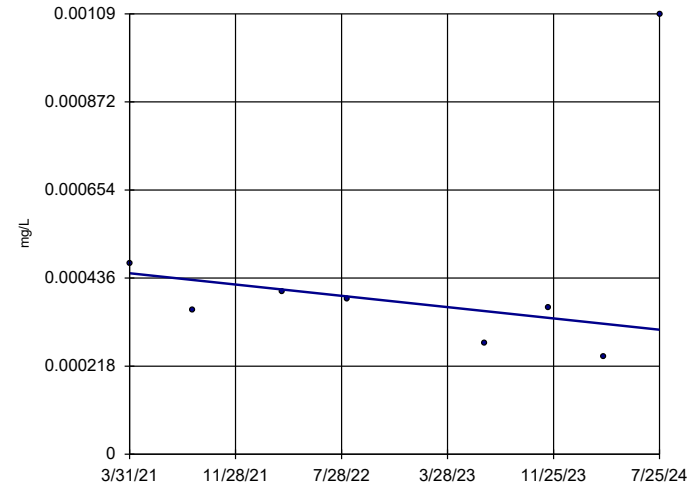


n = 8
Slope = 0.00001477 units per year.
Mann-Kendall statistic = 9
critical = 21
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-7

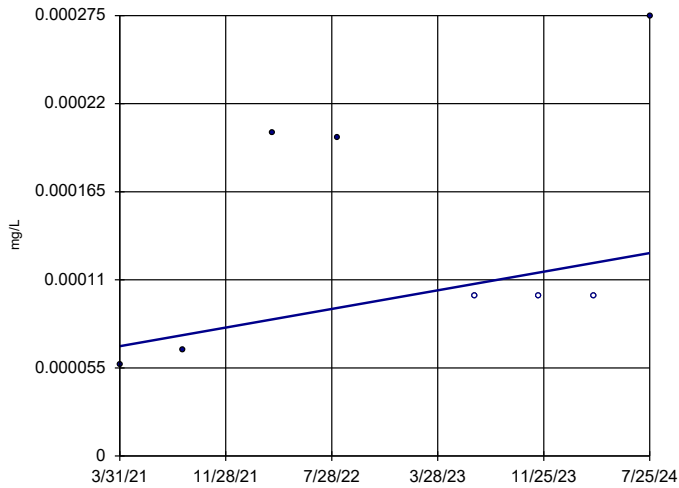


n = 8
Slope = -0.000042 units per year.
Mann-Kendall statistic = -6
critical = -21
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-9

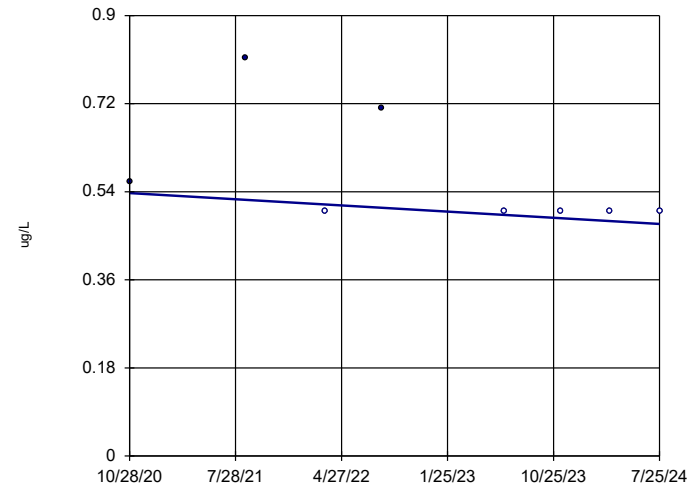


n = 8
Slope = 0.00001749 units per year.
Mann-Kendall statistic = 11
critical = 21
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-2

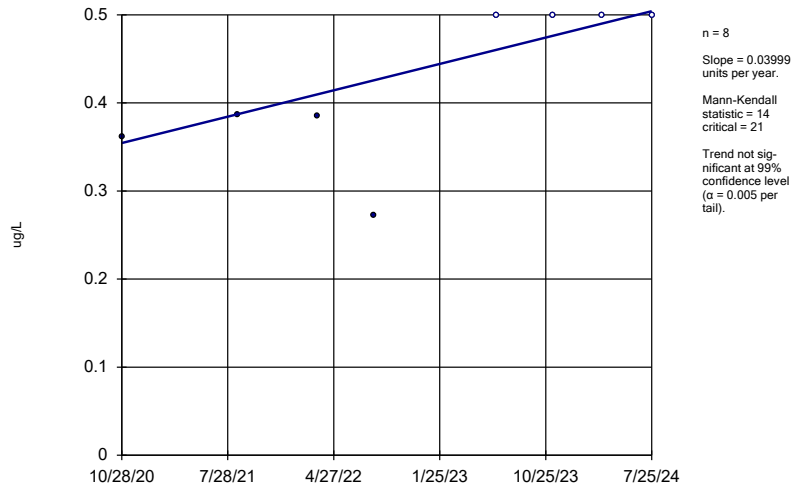


n = 8
Slope = -0.01686 units per year.
Mann-Kendall statistic = -12
critical = -21
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chlorobenzene Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

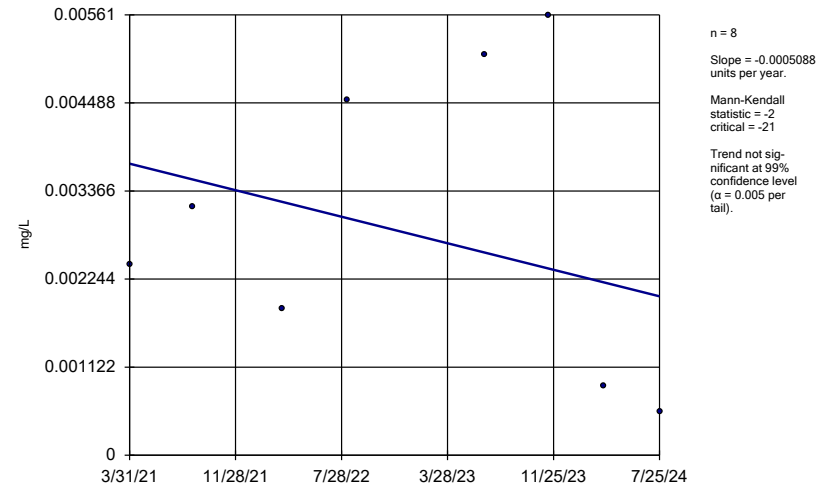
MW-2



Constituent: cis-1,2-Dichloroethene Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

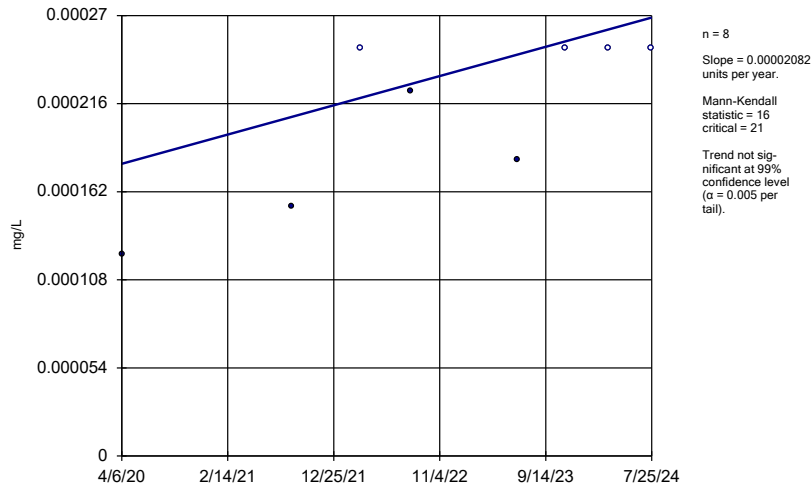
MW-2



Constituent: Cobalt Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

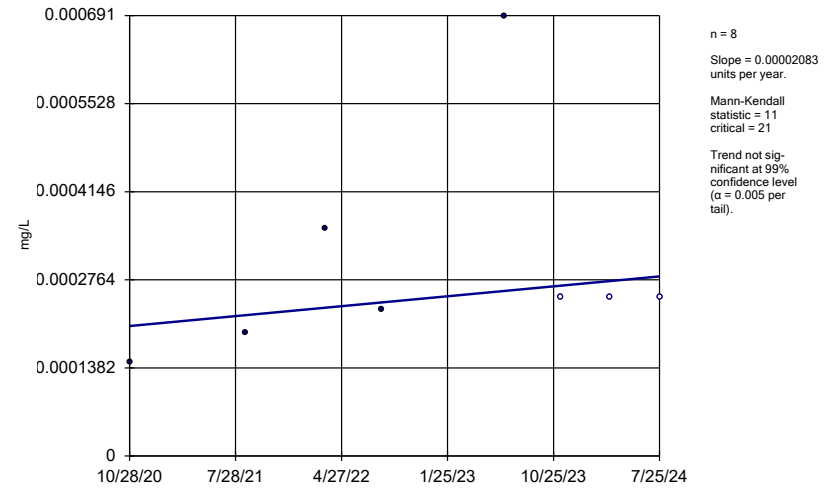
MW-3



Constituent: Cobalt Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

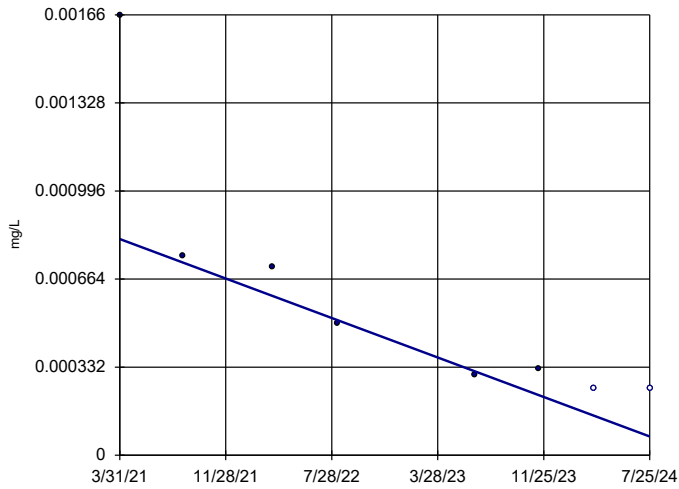
MW-6



Constituent: Cobalt Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-7

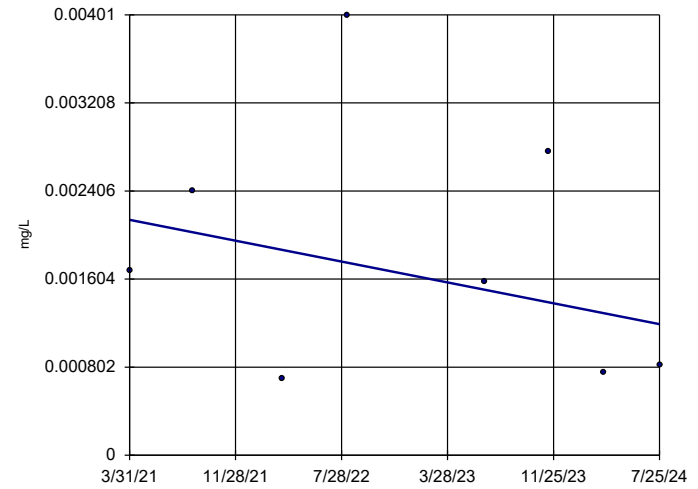


n = 8
Slope = -0.0002241
units per year.
Mann-Kendall
statistic = -25
critical = -21
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-9

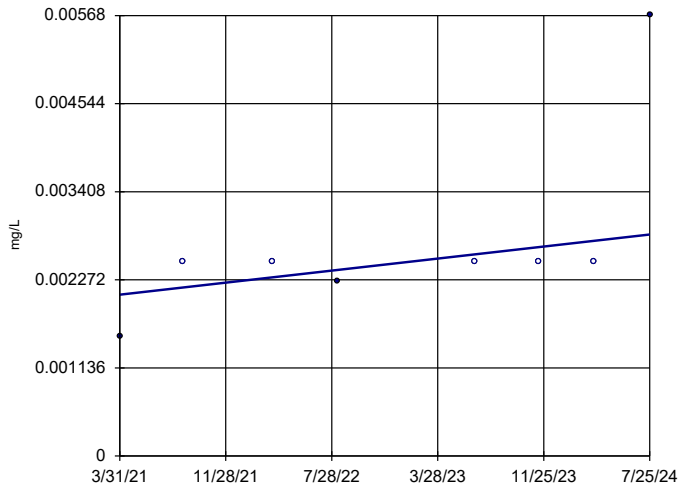


n = 8
Slope = -0.0002857
units per year.
Mann-Kendall
statistic = -4
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Cobalt Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-7

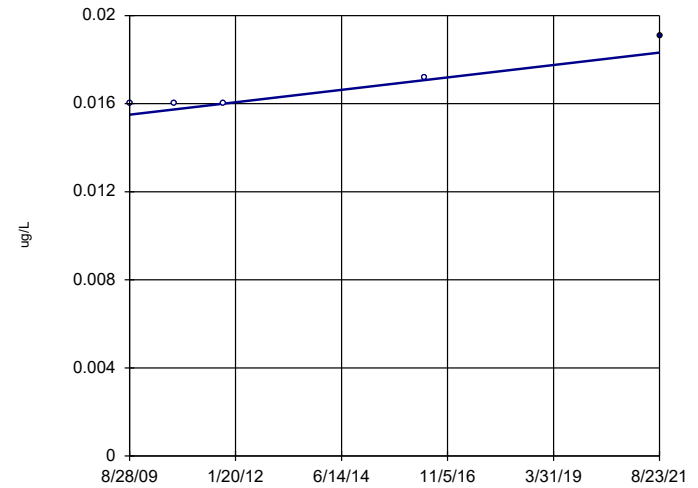


n = 8
Slope = 0.0002338
units per year.
Mann-Kendall
statistic = 14
critical = 21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Copper Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-9

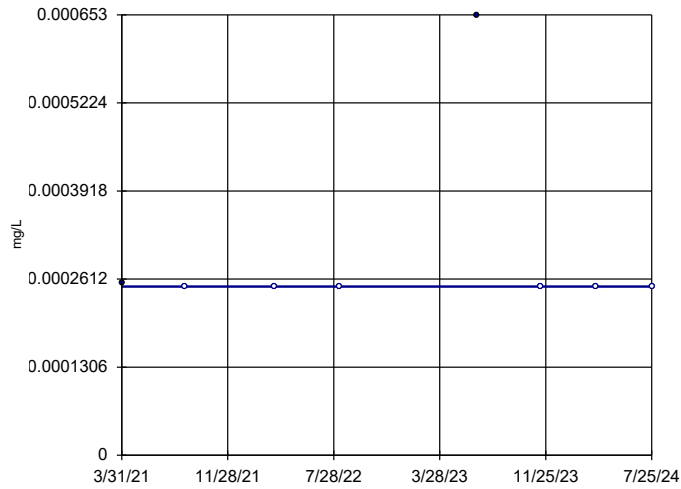


n = 5
Slope = 0.0002348
units per year.
Mann-Kendall
statistic = 7
critical = 12
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Heptachlor Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-2

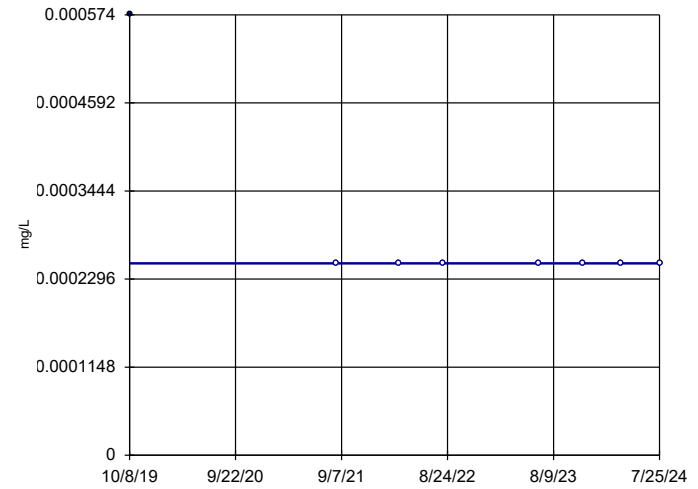


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Lead Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-3

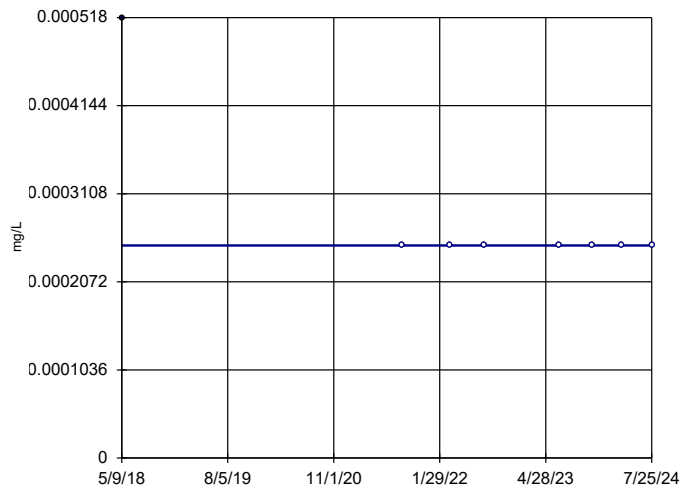


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -7
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Lead Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-7

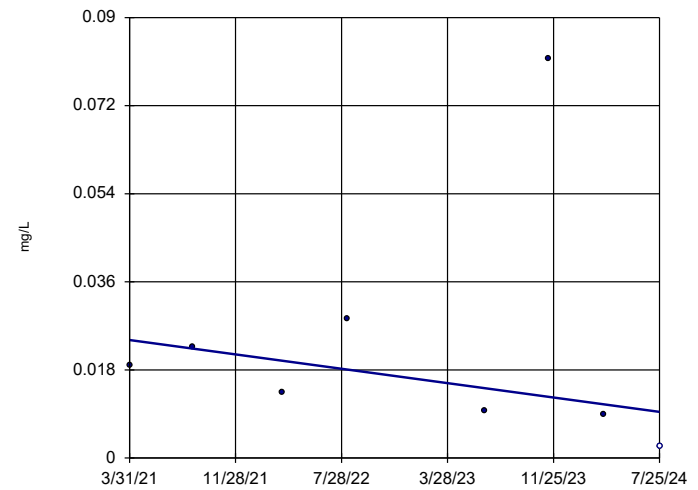


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -7
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Lead Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-2

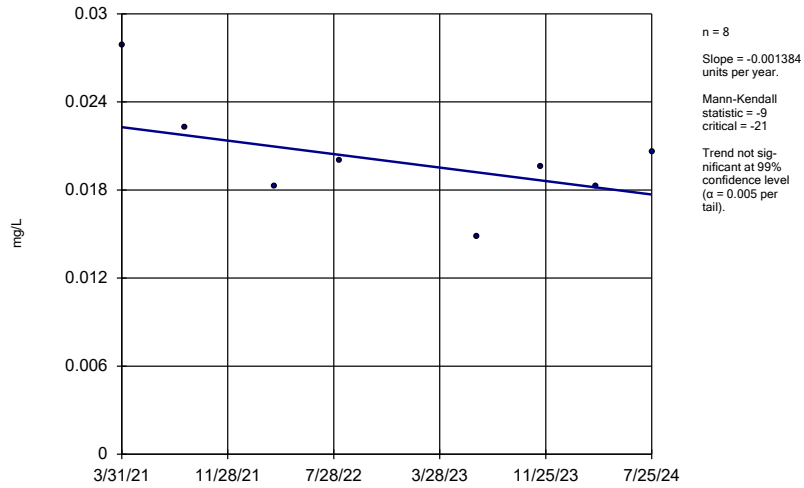


n = 8
Slope = -0.004418
units per year.
Mann-Kendall
statistic = -10
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Nickel Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

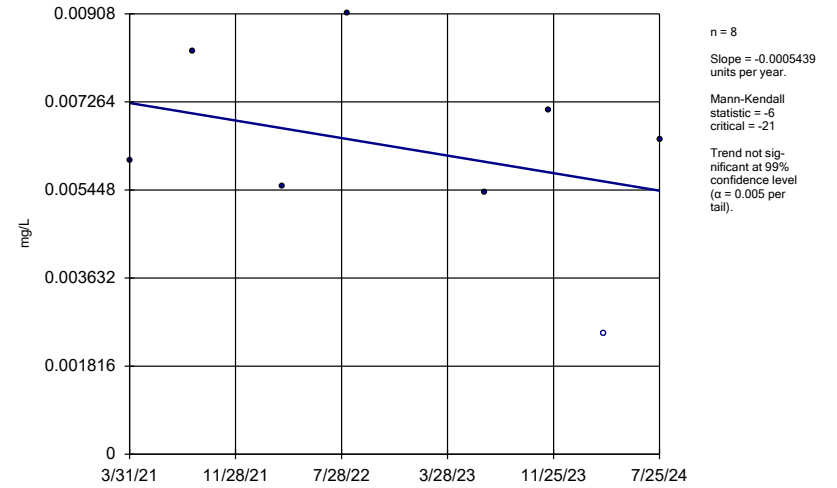
MW-7



Constituent: Nickel Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

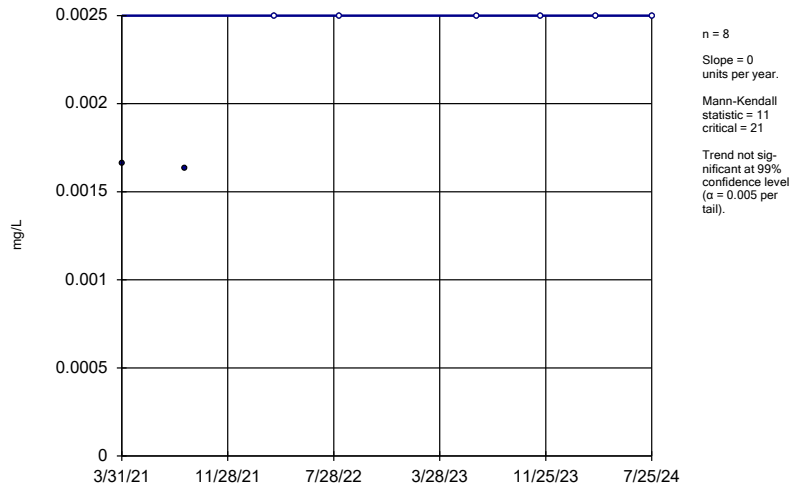
MW-9



Constituent: Nickel Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

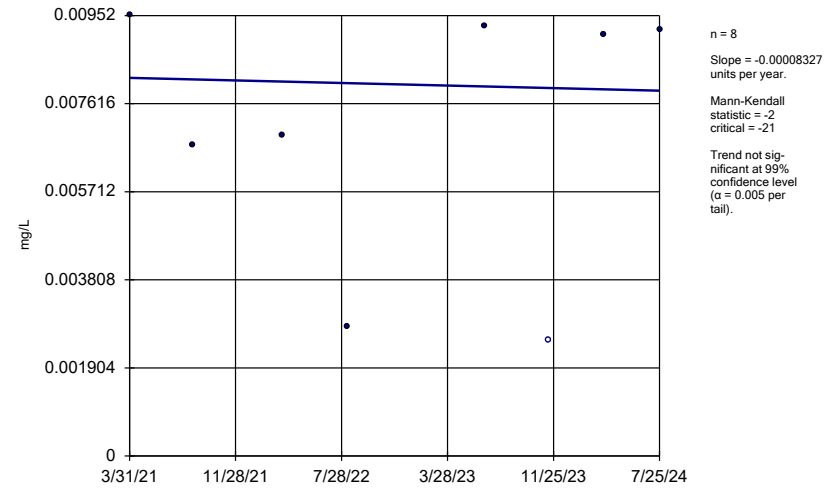
MW-3



Constituent: Selenium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

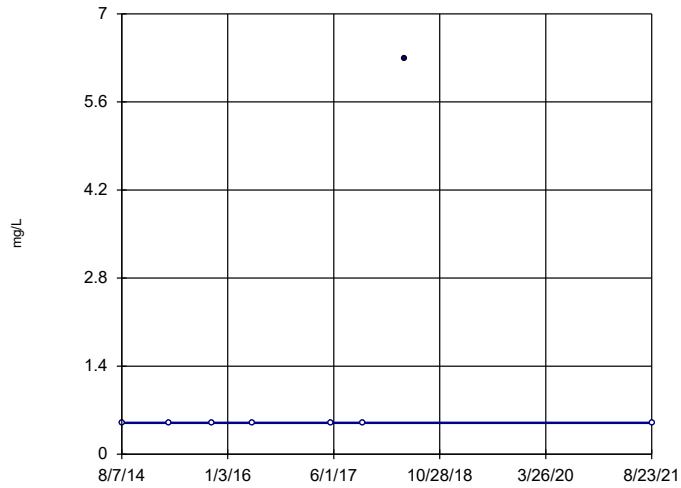
MW-6



Constituent: Selenium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-9

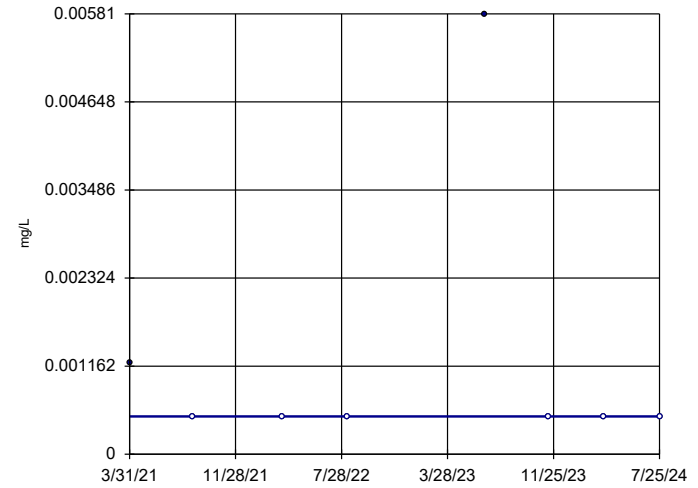


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = 5
critical = 21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Sulfide Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-2

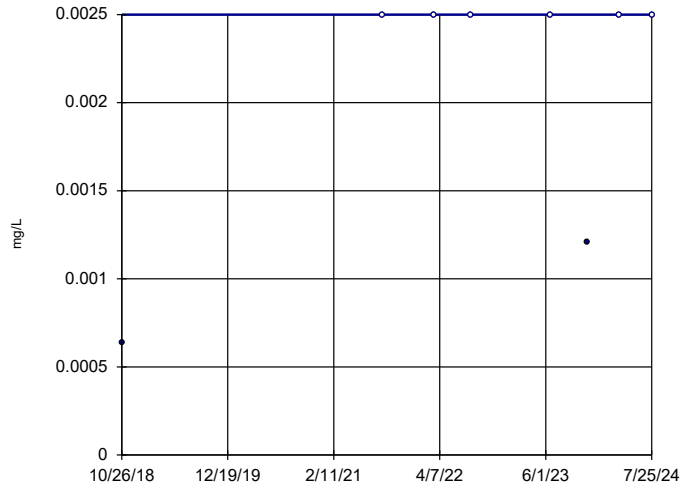


n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = -5
critical = -21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Thallium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Sen's Slope Estimator

MW-2



n = 8
Slope = 0
units per year.
Mann-Kendall
statistic = 5
critical = 21
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Vanadium Analysis Run 12/17/2024 11:00 AM View: 2024AWQR-Mann_Kendall
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Theil Sen/Trend Test

Adair County Sanitary Landfill

Client: Adair County

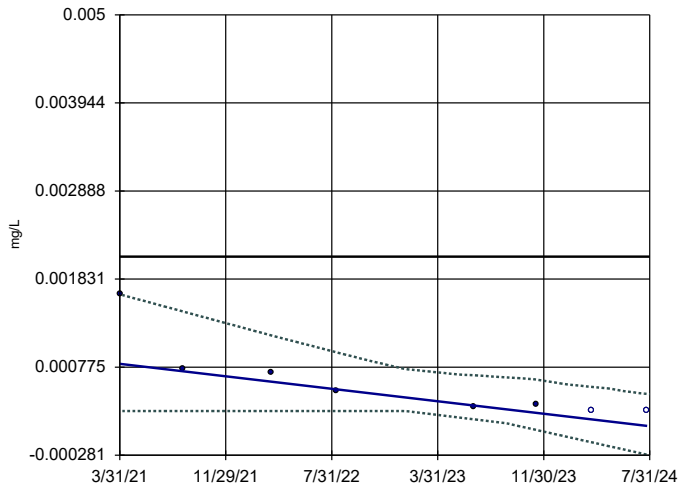
Data: Adair-2024AWQR-AM

Printed 12/17/2024, 11:18 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Cobalt (mg/L)	MW-7	-0.0002241	-25	-21	Yes	8	25	0.01	NP


Sen's Slope and 99% Confidence Band

MW-7



n = 8
Slope = -0.0002241
units per year.
Mann-Kendall
statistic = -25
critical = -21
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).
Confidence band is
below GWPS mg/L (0.0021).

Constituent: Cobalt Analysis Run 12/17/2024 11:18 AM View: 2024AWQR-Theil_Sen
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM



Attachment B.5
Confidence Interval Analysis

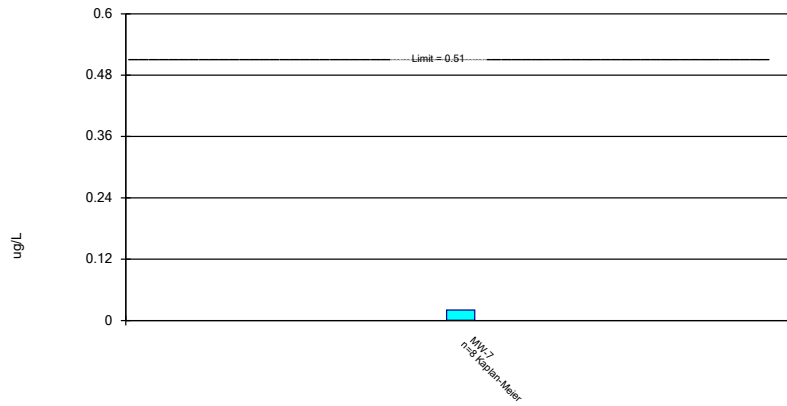
Confidence Interval

Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM Printed 12/17/2024, 11:16 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
4,4'-DDT (ug/L)	MW-7	0.02063	0.0003853	0.51	No	8	50	No	0.01	Param.
Acetone (ug/L)	MW-6	5	1.83	6300	No	8	75	No	0.004	NP (normality)
Acetone (ug/L)	MW-7	5	2.49	6300	No	8	75	No	0.004	NP (normality)
Arsenic (mg/L)	MW-2	0.005731	0.001359	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-9	0.001	0.000534	0.01	No	8	87.5	No	0.004	NP (NDs)
Barium (mg/L)	MW-2	0.3042	0.1593	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-3	0.02744	0.02465	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-6	0.0452	0.01615	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-7	0.03691	0.02839	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-9	0.07726	0.06227	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-2	1.711	0.5668	5	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-2	0.000306	0.00005	0.005	No	8	62.5	No	0.004	NP (normality)
Cadmium (mg/L)	MW-6	0.000431	0.000053	0.005	No	8	25	No	0.004	NP (normality)
Cadmium (mg/L)	MW-7	0.00109	0.0002425	0.005	No	8	0	No	0.004	NP (normality)
Cadmium (mg/L)	MW-9	0.000227	0.00005324	0.005	No	8	37.5	No	0.01	Param.
Chlorobenzene (ug/L)	MW-2	0.814	0.5	100	No	8	62.5	No	0.004	NP (normality)
cis-1,2-Dichloroethene (ug/L)	MW-2	0.4007	0.3015	70	No	8	50	No	0.01	Param.
Cobalt (mg/L)	MW-2	0.005046	0.0009887	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-3	0.0002098	0.0001315	0.0021	No	8	50	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.000691	0.000148	0.0021	No	8	37.5	No	0.004	NP (normality)
Cobalt (mg/L)	MW-9	0.003074	0.0006028	0.0021	No	8	0	No	0.01	Param.
Copper (mg/L)	MW-7	0.00568	0.00155	1.3	No	8	62.5	No	0.004	NP (normality)
Heptachlor (ug/L)	MW-9	0.0191	0.016	0.4	No	5	80	No	0.031	NP (NDs)
Lead (mg/L)	MW-2	0.000653	0.00025	0.015	No	8	75	No	0.004	NP (normality)
Lead (mg/L)	MW-3	0.000574	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-7	0.000518	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MW-2	0.0815	0.0025	0.1	No	8	12.5	No	0.004	NP (normality)
Nickel (mg/L)	MW-7	0.02424	0.01621	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-9	0.008435	0.004173	0.1	No	8	12.5	No	0.01	Param.
Selenium (mg/L)	MW-3	0.0025	0.00163	0.05	No	8	75	No	0.004	NP (normality)
Selenium (mg/L)	MW-6	0.01009	0.003941	0.05	No	8	12.5	No	0.01	Param.
Sulfide (mg/L)	MW-9	6.29	0.5	1	No	8	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	MW-2	0.00581	0.0005	0.002	No	8	75	No	0.004	NP (normality)
Vanadium (mg/L)	MW-2	0.0025	0.000634	0.035	No	8	75	No	0.004	NP (normality)

Parametric Confidence Interval

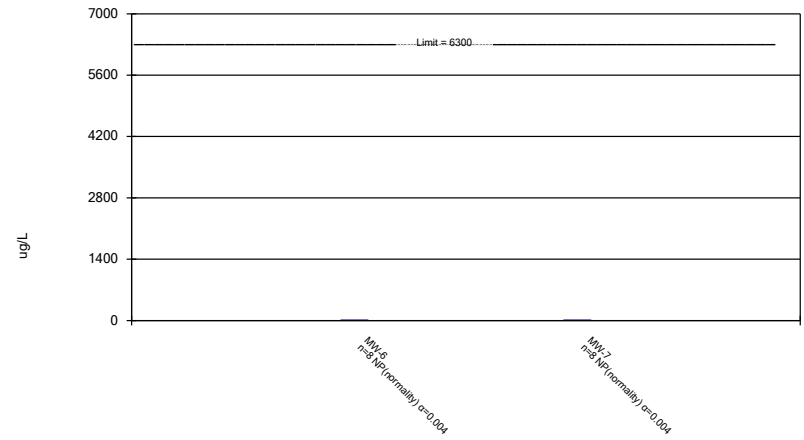
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Constituent: 4,4'-DDT Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

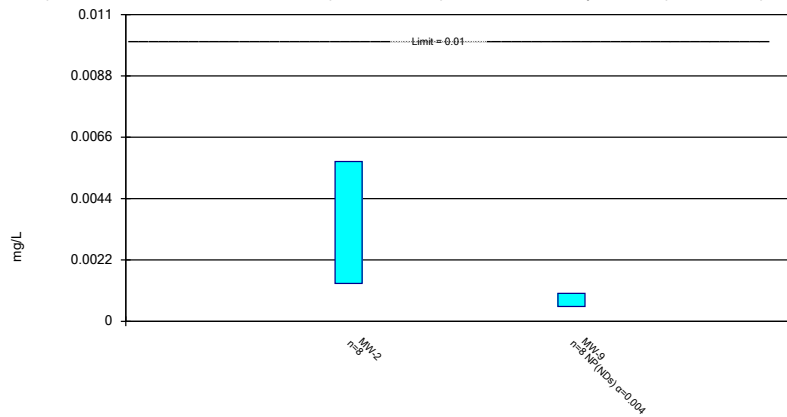
Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

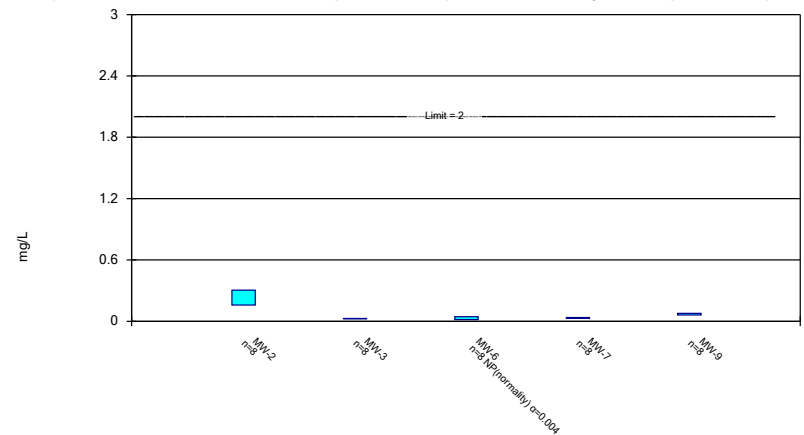
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

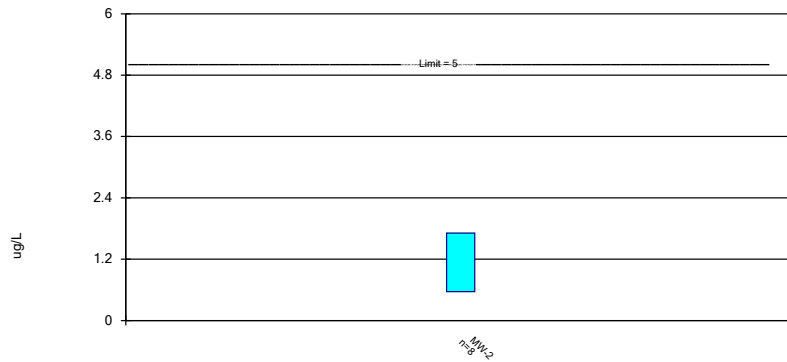
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Barium Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
 Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric Confidence Interval

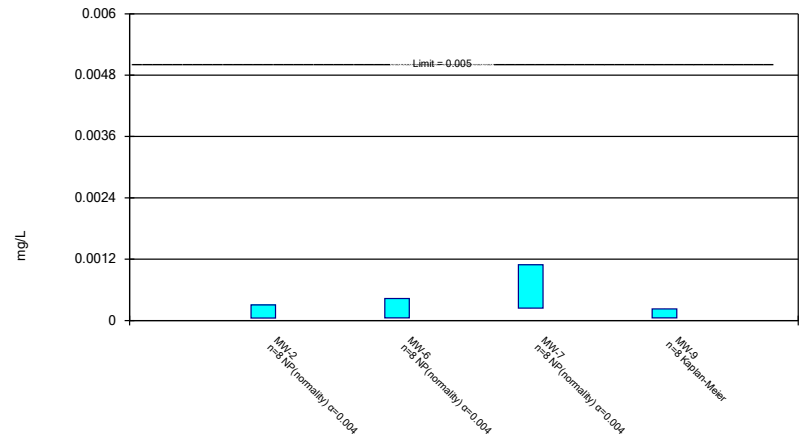
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Benzene Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

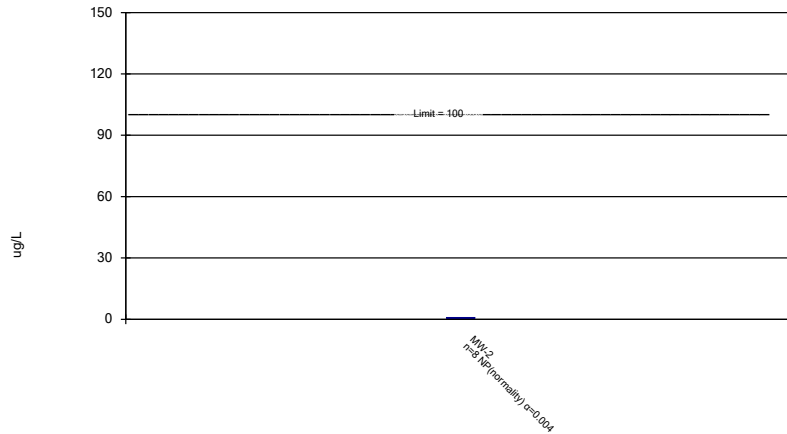
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

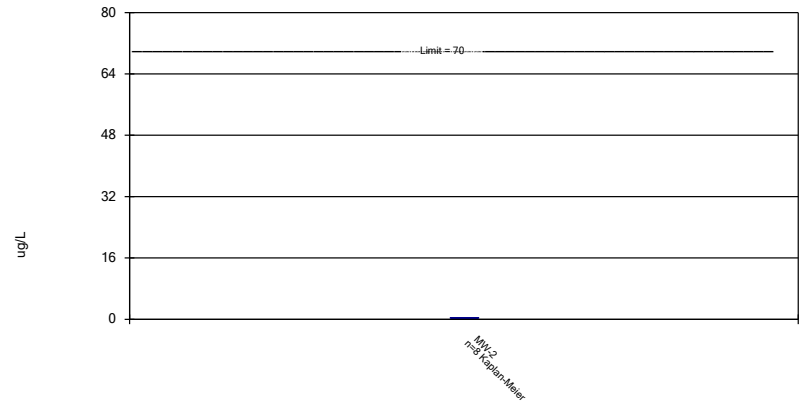
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Constituent: Chlorobenzene Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric Confidence Interval

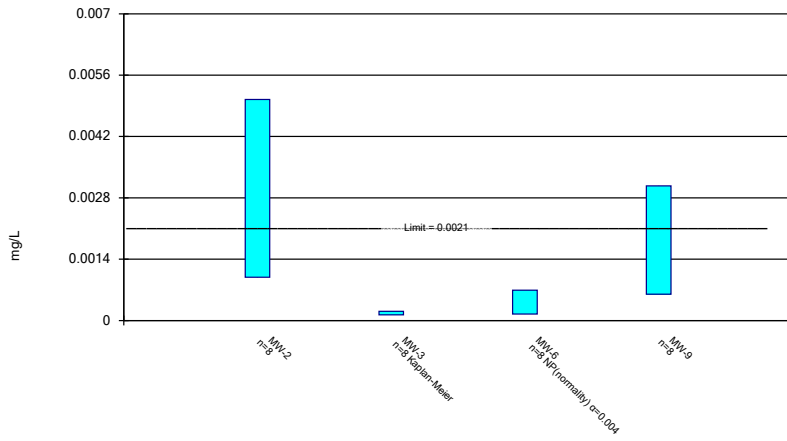
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Constituent: cis-1,2-Dichloroethene Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Int
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

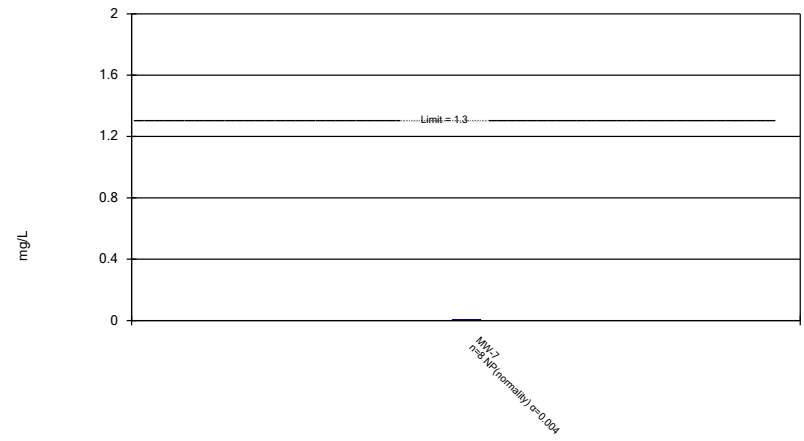
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

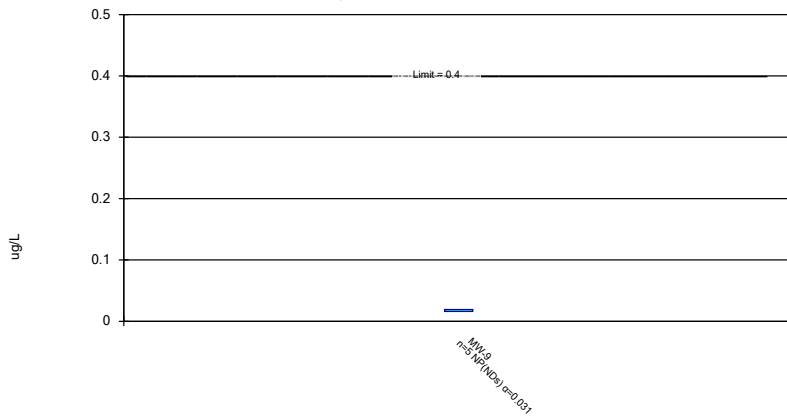
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

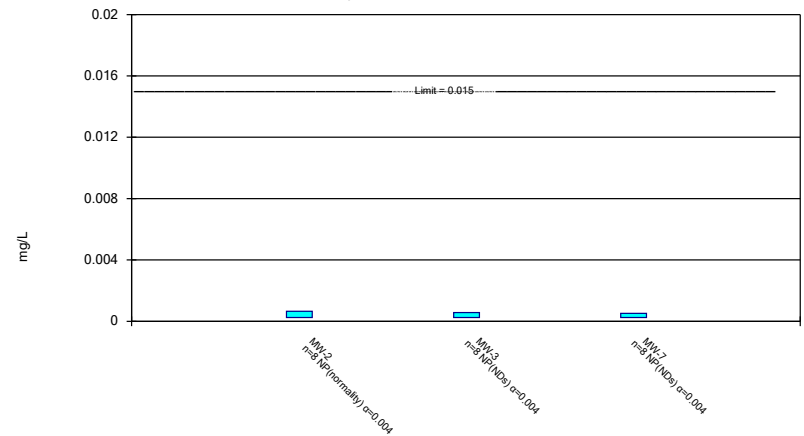
Compliance Limit is not exceeded.



Constituent: Heptachlor Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

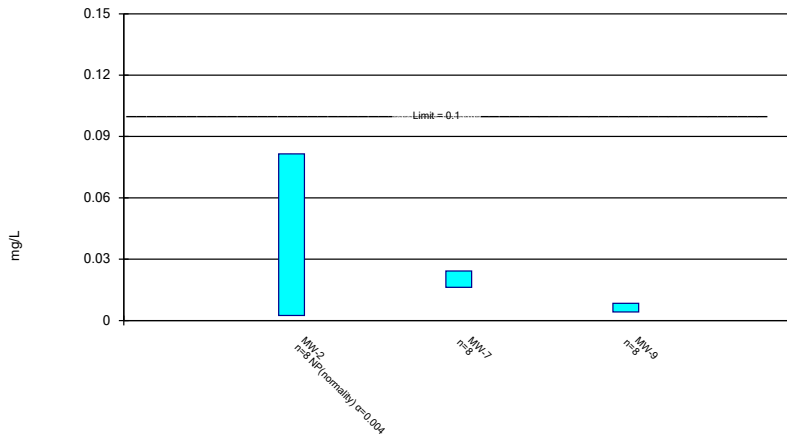
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

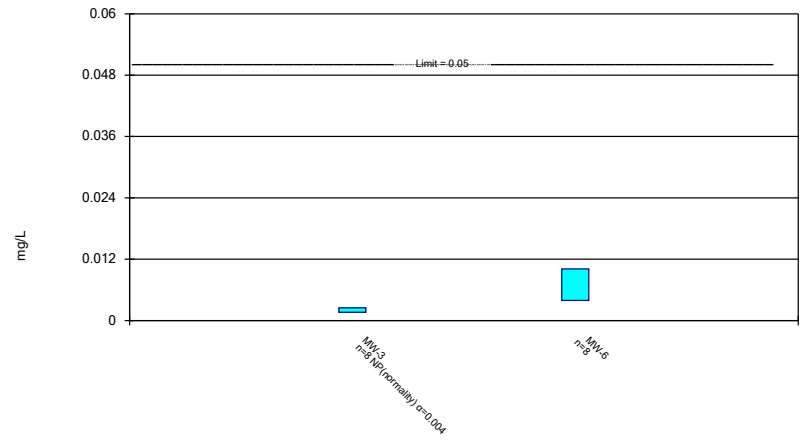
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Parametric and Non-Parametric (NP) Confidence Interval

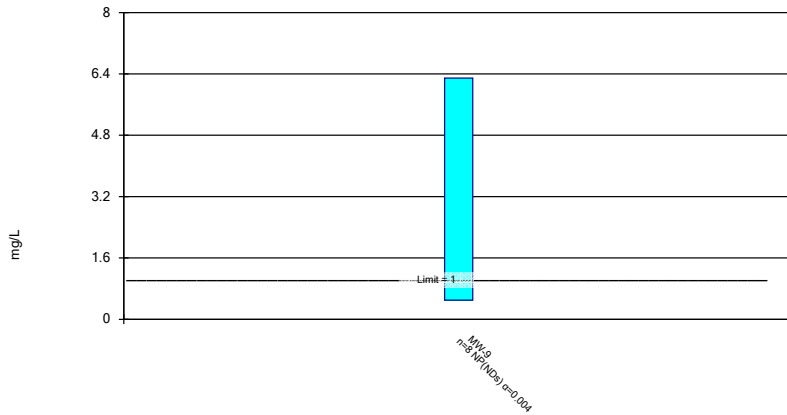
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Selenium Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

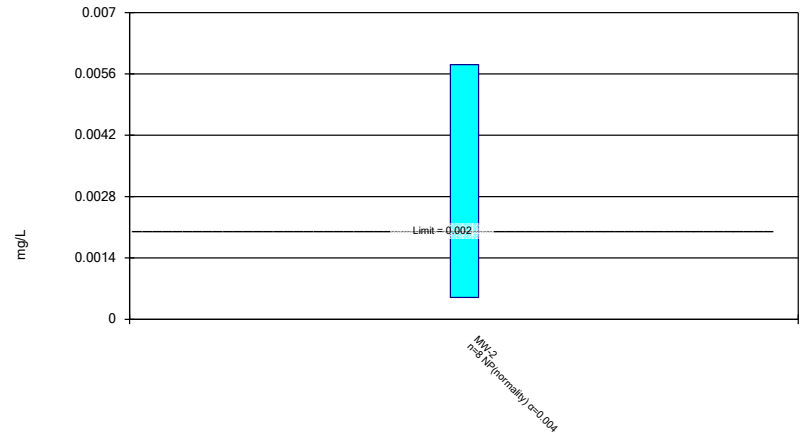
Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

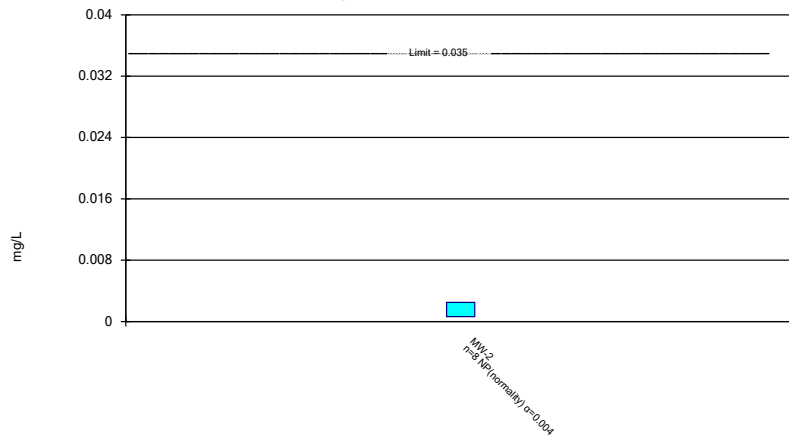
Compliance Limit is not exceeded.




Constituent: Thallium Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Vanadium Analysis Run 12/17/2024 11:15 AM View: 2024AWQR-Confidence_Interval
Adair County Sanitary Landfill Client: Adair County Data: Adair-2024AWQR-AM



Appendix E

2024 Leachate Control System Performance Evaluation Report

Adair County Sanitary Landfill - 2024 Leachate Control System Performance Evaluation Report

Adair County Landfill and Recycling Center Commission
1645 State Highway #25
Menlo, IA 50164

SCS ENGINEERS

Project No. 27224370.25 | January 2025

1690 All-State Court, Suite 100
West Des Moines, IA 50265
515-631-6160

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Figure 1 Leachate Control System

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Table 12 Leachate Management Summary

Appendices

Appendix A Historical Leachate Head Levels Table and Chart
Appendix B 2024 Annual Leachate Analytical Report

1.0 DESCRIPTION OF SYSTEM

The Adair County Sanitary Landfill and Recycling Center Commission owns and maintains the closed Adair County Sanitary Landfill (Site) in addition to the recycling center and transfer station located on site. This report was prepared to meet the requirements of Iowa Administrative Code (IAC) 567-113.7(5)b.(14) and covers the period of January 1, 2024 through December 31, 2024.

The Site consists of both a lined area (Phase 1 Cell) and an unlined area. According to the Development and Operational Plans and Specifications by Fox Engineering and Turkle-Clark Environmental Consulting dated December 2006 and approved in the Permit Renewal Application dated December 13, 2006 (Doc #37656), the leachate collection system for the Phase 1 Cell includes a Subtitle D-compliant alternative liner design consisting of a 4-foot thick layer of clay compacted to achieve a maximum hydraulic conductivity of 1×10^{-7} cm/sec, overlain by a 1-foot-thick layer of drainage media consisting of sand with a minimum permeability of 1×10^{-3} cm/sec. A perforated collection pipe collects leachate and conveys it to a solid pipe, which discharges the leachate to the leachate lagoon. A leachate piezometer is located at the downgradient boundary of the Phase 1 Cell and is called out as LPZ, with no number designation (see **Figure 1** Site Monitoring Network in the Annual Water Quality Report). The Phase 1 Cell was closed in 2012.

The unlined area of the Adair County Sanitary Landfill is located to the south of the Phase 1 Cell. Construction of the final cover, toe drain, and leachate storage lagoon was completed in the last half of 2009. Leachate wells LW-1, LW-6, LW-7, and extraction well EW-1 are the piezometers associated with this area.

2.0 MAINTENANCE OF LEACHATE CONTROL SYSTEM

The leachate lateral and main lines to the leachate lagoon were cleaned and inspected in April 2024. No issues were noted during this reporting period. The next cleaning is currently scheduled to take place during the 2027 reporting period. No other maintenance was required or performed on the leachate control system during this reporting period.

3.0 COMPLIANCE AND TRENDS OF LEACHATE HEAD LEVELS

Table 12 provides an overall site summary for leachate management during this reporting period, including head levels, volume of leachate treated, and precipitation for the City of Greenfield (nearest historical data available). A summary table and graphs showing historical leachate head levels in the monitoring points are also included in **Attachment A**. A review of these graphs with data available back to 2010 shows that the 2024 reporting period liquid levels were within the historical range for each measurement point.

Liquid levels in LW-1, LW-6, LW-7, and EW-1 are over the unlined area, where the requirement is to achieve the lowest possible leachate head above the landfill liner. Leachate piezometer LPZ (Phase 1 Cell) is over the lined cell with the requirement of remaining below 12 inches of head. Levels in LPZ were elevated above 12 inches during this reporting period. It is unknown why the leachate head levels were elevated. It was noted that a sudden change in fluid levels in all the measurement points occurred abruptly beginning in January 2021. This coincides directly with a change in responsibility for the measurement of leachate levels at the Landfill. On April 10, 2024, SCS performed a joint measurement event with Landfill staff to ensure accurate measurement techniques were being performed. Following the joint measurement event, leachate lines were jetted on April 15, 2024. The

leachate head levels were unchanged following leachate line jetting. SCS proposes using a bailer to confirm the liquid column thickness in the piezometer, purge the liquid in the piezometer, and determine if there is any liquid recharge in the piezometer following purging. Further evaluation will occur if the leachate head levels continue to be elevated.

Based on the semi-annual inspection reports, Site staff have continued to maintain stormwater controls and perform cap maintenance and seeding as required. These efforts assist in the performance of the landfill cover to keep storm water moving off the closed landfill areas.

3.1 IMPACT OF RAINFALL QUANTITY

No effect was observed on leachate head levels due to the listed precipitation quantity included in **Table 12**. Please note that the precipitation levels were obtained from NOAA weather station USC00133438 in Greenfield, Iowa. Actual amounts at the Site could vary but there is not an indication in the information presented that further investigation is warranted at this time.

4.0 ADEQUACY OF LEACHATE STORAGE VOLUME

The leachate lagoon on site has an approximate operating capacity of 500,000 gallons. Based on observations and quantities of leachate hauled, the operating capacity of the leachate lagoon provides adequate storage capacity on site.

5.0 LEACHATE RECIRCULATION AREA

Leachate recirculation does not occur at this site, as it is a closed facility.

6.0 APPROVED POTW UTILIZATION

The Adair County Sanitary Landfill and Recycling Center Commission has established a leachate treatment agreement with the City of Greenfield Publicly Owned Treatment Works (POTW). Site staff haul leachate to the Greenfield POTW on an as-needed basis. As seen in **Table 12**, approximately 52,483 gallons of leachate were hauled during this reporting period. The required annual leachate sample was collected in October 2024 by SCS Engineers and analytical data is included in **Appendix B**.

7.0 RECOMMENDED CHANGES TO THE LEACHATE COLLECTION SYSTEM

There are no recommended changes to the leachate collection system at this time.



Approximate Location of Leachate Line Cleaning

Legend Cleanout Manhole Seep Repair Pipe Solid Leachate Pipe Perforated Leachate Pipe Leachate Storage Tank Landfill Gas Monitoring Well Goundwater Underdrain Monitoring Point Approximate Waste Boundary Approximate Property Boundary Monitoring Well		Adair County Sanitary Landfill Adair, IA Project No: 27224370.25 Drawing Date: January 2025
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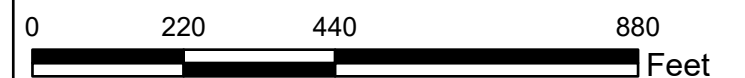
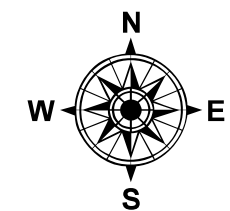


Figure 1

Data Source: 11/2/2025 1:57 PM
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Table 12
Leachate Management Summary
2024 Leachate Control System Performance Evaluation Report
Adair County Sanitary Landfill (Closed)
Permit No. 01-SDP-01-74C


Month	Maximum Head on Liner ⁽¹⁾ (ft)					Discharged to City of Greenfield POTW ⁽¹⁾ (gal)	Precipitation ⁽²⁾ (in)
	LW-1	LW-6	LW-7	EW-1	LPZ (Lined Cell)		
January 2024	17.2	0.6	22.2	15.6	1.2	0	1.78
February 2024	18.0	0.7	22.5	16.4	1.2	0	0.23
March 2024	17.7	0.8	22.5	15.8	1.2	0	3.57
April 2024	17.7	0.7	22.6	16.0	1.2	0	2.58
May 2024 ⁽³⁾	18.4	0.7	22.9	16.7	1.2	30,904	8.78
June 2024	18.3	0.7	23.2	16.6	1.2	0	3.26
July 2024	18.6	0.7	23.4	17.0	1.2	0	3.97
August 2024 ⁽³⁾	18.1	0.6	23.1	16.6	1.2	0	4.31
September 2024	18.0	0.6	23.2	16.3	1.2	0	0.81
October 2024	17.4	0.7	22.9	15.9	1.2	0	1.71
November 2024 ⁽³⁾	18.0	0.7	23.0	16.2	1.2	21,579	3.26
December 2024	17.7	0.8	22.5	15.8	1.2	0	0.54
January 2024 - December 2024 Totals						52,483	34.80

Table Notes

⁽¹⁾ Gallons of leachate discharged and monthly leachate level measurements provided by Adair County Landfill staff.

⁽²⁾ Precipitation data for January 2024 - December 2024 obtained from NOAA weather station USC00133438 in Greenfield, Iowa (<https://www.ncdc.noaa.gov/cdo-web/>).

⁽³⁾ Monthly leachate measurement collected in the first week of the following month.



Appendix A

Historical Leachate Head Levels Table and Chart

**Historical Leachate Head Levels
Adair County Sanitary Landfill**

Piezometer Depth	Leachate Piezometer				
	LW-1	LW-6	LW-7	EW-1	LPZ (New Cell)
	39.95	52.40	37.70	31.75	23.20
Date					
1/12/2006	17.6	NI	NI	15.9	NA
6/10/2008	20.0	NI	NI	NA	7.2
9/5/2008	18.6	NI	NI	NA	3.5
4/13/2009	18.9	NI	NI	16.8	NA
8/31/2009	19.4	NI	NI	17.9	NA
1/10/2010	20.1	NI	NI	12.7	3.0
2/5/2010	20.3	NI	NI	24.1	2.0
3/15/2010	20.8	NI	NI	23.7	1.0
4/21/2010	20.3	NI	NI	20.4	1.0
5/18/2010	20.8	NI	NI	20.4	1.0
6/17/2010	20.1	NI	NI	20.7	1.0
7/21/2010	20.0	NI	NI	20.7	1.0
8/21/2010	19.9	NI	NI	20.7	1.0
9/13/2010	20.3	NI	NI	20.7	1.2
10/18/2010	20.3	NI	NI	20.8	1.2
11/19/2010	20.1	NI	NI	20.7	1.0
12/21/2010	20.3	NI	NI	20.3	2.8
1/22/2011	15.7	NI	NI	20.1	3.0
2/16/2011	15.3	NI	NI	20.7	2.8
3/16/2011	15.6	NI	NI	20.7	2.8
4/21/2011	14.6	NI	NI	19.6	2.2
5/18/2011	14.3	NI	NI	19.5	2.0
6/14/2011	14.3	NI	NI	19.7	1.9
7/21/2011	14.7	NI	NI	20.7	2.8
8/18/2011	14.8	NI	NI	20.8	3.0
9/22/2011	14.7	NI	NI	20.9	3.1
10/21/2011	14.6	NI	NI	20.7	3.0
11/17/2011	14.8	NI	NI	20.5	3.4
12/5/2011	14.6	NI	NI	20.7	3.4
1/7/2012	14.7	NI	NI	NA	2.8
2/29/2012	14.7	NI	NI	19.7	5.0
3/14/2012	14.8	NI	NI	19.5	4.8
4/17/2012	14.8	NI	NI	19.7	4.5
5/22/2012	14.5	NI	NI	19.4	0.0
6/18/2012	14.8	NI	NI	19.9	0.0
7/10/2012	15.0	NI	NI	12.0	2.0
8/5/2012	14.8	NI	NI	20.5	2.0
9/11/2012	15.0	NI	NI	20.7	1.5
10/4/2012	16.8	NI	NI	21.7	1.0
11/21/2012	18.8	NI	NI	21.7	2.8
12/15/2012	18.6	NI	NI	21.5	2.2
1/16/2013	18.8	NI	NI	21.7	2.0
2/19/2013	19.2	NI	NI	21.5	1.9
3/15/2013	19.6	NI	NI	21.7	0.1
4/30/2013	19.0	NI	NI	20.8	3.0
6/21/2013	14.8	7.2	22.8	19.0	0.1
7/19/2013	14.8	7.3	22.4	18.8	0.2
8/26/2013	15.6	8.2	23.0	19.7	0.1
9/17/2013	14.3	5.9	22.7	18.7	0.2
10/17/2013	14.4	5.8	22.0	18.7	0.2
11/21/2013	14.1	5.6	21.9	18.7	0.1
12/20/2013	14.4	5.8	22.0	18.7	0.1

**Historical Leachate Head Levels
Adair County Sanitary Landfill**

Piezometer Depth	Leachate Piezometer				
	LW-1	LW-6	LW-7	EW-1	LPZ (New Cell)
Date					
1/15/2014	14.0	5.0	21.8	18.5	0.1
2/18/2014	13.8	5.2	22.0	18.3	0.0
3/20/2014	13.7	5.4	22.6	18.7	0.2
4/15/2014	13.0	5.2	22.2	18.1	0.4
5/15/2014	12.8	4.2	21.8	17.7	0.3
6/5/2014	12.7	4.0	21.6	17.3	0.5
7/16/2014	12.8	4.2	21.8	17.5	0.6
8/20/2014	12.4	3.6	21.6	17.7	0.6
9/16/2014	12.2	3.4	21.4	17.5	0.6
10/1/2014	11.8	3.2	21.2	17.3	0.5
11/9/2014	15.5	5.2	23.6	19.7	0.2
12/15/2014	15.6	5.2	23.8	19.7	0.2
1/15/2015	15.6	4.9	23.6	19.7	0.2
2/12/2015	15.6	4.8	23.6	19.5	0.2
3/17/2015	15.5	4.2	22.8	19.3	0.2
4/28/2015	14.1	Dry	21.6	18.3	0.2
5/15/2015	14.1	Dry	22.8	17.7	0.2
6/16/2015	14.2	Dry	22.8	17.7	0.2
7/15/2015	14.2	Dry	22.7	17.7	0.2
8/4/2015	14.1	1.2	1.8	0.8	0.1
9/17/2015	1.0	1.1	1.1	1.2	0.2
10/22/2015	1.0	1.1	1.1	1.2	0.2
11/5/2015	1.0	1.1	0.9	1.1	0.4
12/18/2015	15.1	5.2	22.8	19.0	0.2
1/20/2016	14.8	4.9	22.8	0.7	0.4
2/16/2016	14.8	5.1	22.5	0.7	0.3
3/17/2016	14.6	5.2	22.6	0.0	0.4
4/22/2016	14.6	5.2	22.3	0.7	0.4
5/11/2016	14.4	5.0	22.4	12.7	0.6
6/13/2016	14.0	5.2	23.0	17.7	0.4
7/20/2016	13.9	4.9	23.2	16.7	0.5
8/19/2016	14.0	4.8	23.0	18.7	0.3
9/20/2016	14.8	5.2	23.5	19.1	0.2
10/19/2016	14.7	5.2	23.5	18.9	0.3
11/17/2016	14.5	5.2	23.5	18.8	0.4
12/14/2016	14.8	5.2	23.6	18.7	0.2
1/11/2017	14.4	4.2	23.3	18.9	0.4
2/14/2017	14.3	3.8	22.8	18.8	0.2
3/14/2017	13.8	3.7	22.7	18.8	0.3
4/12/2017	13.4	3.4	22.0	19.1	0.2
5/17/2017	13.2	4.1	22.7	18.9	0.1
6/22/2017	13.3	4.0	21.9	18.8	0.3
7/20/2017	13.2	3.3	22.2	19.0	0.4
8/24/2017	13.4	3.6	22.3	18.7	0.3
9/2/2017	13.8	4.2	22.0	18.5	0.4
10/23/2017	13.6	4.1	21.8	18.3	0.3
11/17/2017	14.5	5.2	23.5	18.8	0.4
12/14/2017	14.8	5.2	23.6	18.7	0.2
1/10/2018	13.3	4.0	22.0	18.8	0.2
2/13/2018	10.4	4.2	21.8	18.7	0.1
3/14/2018	13.5	4.0	22.0	18.8	0.2
4/11/2018	13.4	4.1	22.0	18.9	0.3
5/8/2018	13.3	3.9	22.2	19.1	0.1
6/5/2018	13.2	4.1	22.0	19.0	0.4
7/17/2018	13.1	4.0	22.2	19.0	0.3
8/16/2018	12.9	3.8	22.2	19.0	0.4
9/4/2018	12.8	3.5	22.0	18.8	0.2
10/11/2018	12.7	3.2	22.2	18.9	0.4
11/20/2018	12.6	3.0	22.2	19.0	0.6
12/3/2018	12.5	3.2	22.4	19.0	0.7

**Historical Leachate Head Levels
Adair County Sanitary Landfill**

Piezometer Depth	Leachate Piezometer				
	LW-1	LW-6	LW-7	EW-1	LPZ (New Cell)
	39.95	52.40	37.70	31.75	23.20
Date					
1/10/2019	13.2	4.0	22.2	19.1	0.4
2/15/2019	13.2	4.0	22.2	19.1	0.4
3/13/2019	12.9	3.7	22.0	18.9	0.5
4/10/2019	13.3	3.9	22.3	19.0	0.4
5/15/2019	13.3	3.9	22.4	19.2	0.6
6/20/2019	13.2	4.0	22.2	19.1	0.4
7/18/2019	12.9	3.7	22.0	18.9	0.5
8/14/2019	13.0	3.8	22.2	19.0	0.6
9/12/2019	13.0	3.9	22.1	18.9	0.7
10/17/2019	13.0	3.8	22.0	18.9	0.5
11/4/2019	13.2	4.0	22.2	19.1	0.4
12/3/2019	13.8	3.9	21.9	19.2	0.4
1/9/2020	13.0	3.9	22.4	19.2	0.6
2/18/2020	12.9	3.7	22.7	19.5	0.4
3/12/2020	13.6	3.9	22.7	0.6	0.7
4/15/2020	13.4	3.8	22.6	19.3	0.5
5/13/2020	13.2	4.2	22.3	19.3	0.6
6/9/2020	12.9	4.0	22.7	19.1	0.5
7/7/2020	13.0	3.9	22.4	19.2	0.4
8/11/2020	13.6	4.1	22.8	19.0	0.3
9/10/2020	13.8	4.3	22.6	19.2	0.4
10/28/2020	13.97	5.4	NI	18.5	NA
11/23/2020	12.6	5.2	22.5	18.1	Dry
12/10/2020	12.1	4.6	2.1	16.9	Dry
1/28/2021	17.9	0.4	16.7	16.1	1.9
2/12/2021	18.0	0.5	17.0	14.4	2.0
3/18/2021	18.9	0.8	18.0	16.0	2.1
4/14/2021	18.9	0.8	17.9	16.0	2.1
5/25/2021	18.3	0.8	17.9	15.9	2.1
6/3/2021	18.2	0.7	17.9	15.8	2.1
7/14/2021	18.3	0.8	17.8	15.8	2.2
8/11/2021	18.3	0.8	17.8	15.8	2.2
9/27/2021	18.0	0.8	17.7	17.2	2.1
10/12/2021	18.1	0.8	17.7	17.2	2.1
11/23/2021	18.2	0.8	17.7	17.3	1.6
12/3/2021	18.2	0.8	17.7	17.3	1.6
1/31/2022	17.9	0.8	16.9	15.8	2.7
2/17/2022	18.0	0.8	16.8	15.8	2.7
3/22/2022	18.0	0.8	16.8	15.8	2.7
4/25/2022	18.0	0.8	16.8	15.8	2.7
5/12/2022	18.4	0.8	16.9	16.9	2.6
6/21/2022	18.5	0.7	17.8	16.9	2.6
7/18/2022	18.4	0.8	17.9	16.9	2.6
8/29/2022	18.3	0.9	18.0	17.0	2.7
9/13/2022	18.3	0.9	18.0	17.0	2.7
10/28/2022	17.6	0.6	17.8	16.7	2.3
11/11/2022	17.6	0.6	18.3	16.8	2.4
12/5/2022	17.6	0.6	17.8	16.8	2.4
1/20/2023	17.7	0.6	17.9	16.7	2.4
2/23/2023	17.6	0.7	17.8	16.7	2.4
3/21/2023	17.8	0.8	17.7	16.7	2.5
4/27/2023	18.3	0.9	17.5	16.5	2.6
5/24/2023	18.3	0.9	17.5	16.5	2.6
6/15/2023	18.0	0.7	15.2	15.9	2.6
7/26/2023	18.0	0.8	17.6	16.5	2.6
8/30/2023	18.1	0.7	17.8	16.6	3.1
9/25/2023	18.1	0.8	17.8	16.4	2.7
10/30/2023	17.6	1.2	17.4	16.1	2.5
11/29/2023	17.5	0.7	17.3	16.0	2.6
12/21/2023	17.3	1.0	17.1	15.6	2.7
1/30/2024	17.2	0.6	22.2	15.6	1.2
2/27/2024	18.0	0.7	22.5	16.4	1.2
3/28/2024	17.7	0.8	22.5	15.8	1.2
4/29/2024	17.7	0.7	22.6	16.0	1.2
6/4/2024	18.4	0.7	22.9	16.7	1.2
6/27/2024	18.3	0.7	23.2	16.6	1.2
7/31/2024	18.6	0.7	23.4	17.0	1.2
9/3/2024	18.1	0.6	23.1	16.6	1.2
9/25/2024	18.0	0.6	23.2	16.3	1.2
10/30/2024	17.4	0.7	22.9	15.9	1.2
12/2/2024	18.0	0.7	23.0	16.2	1.2
12/16/2024	17.7	0.8	22.5	15.8	1.2

General Notes:

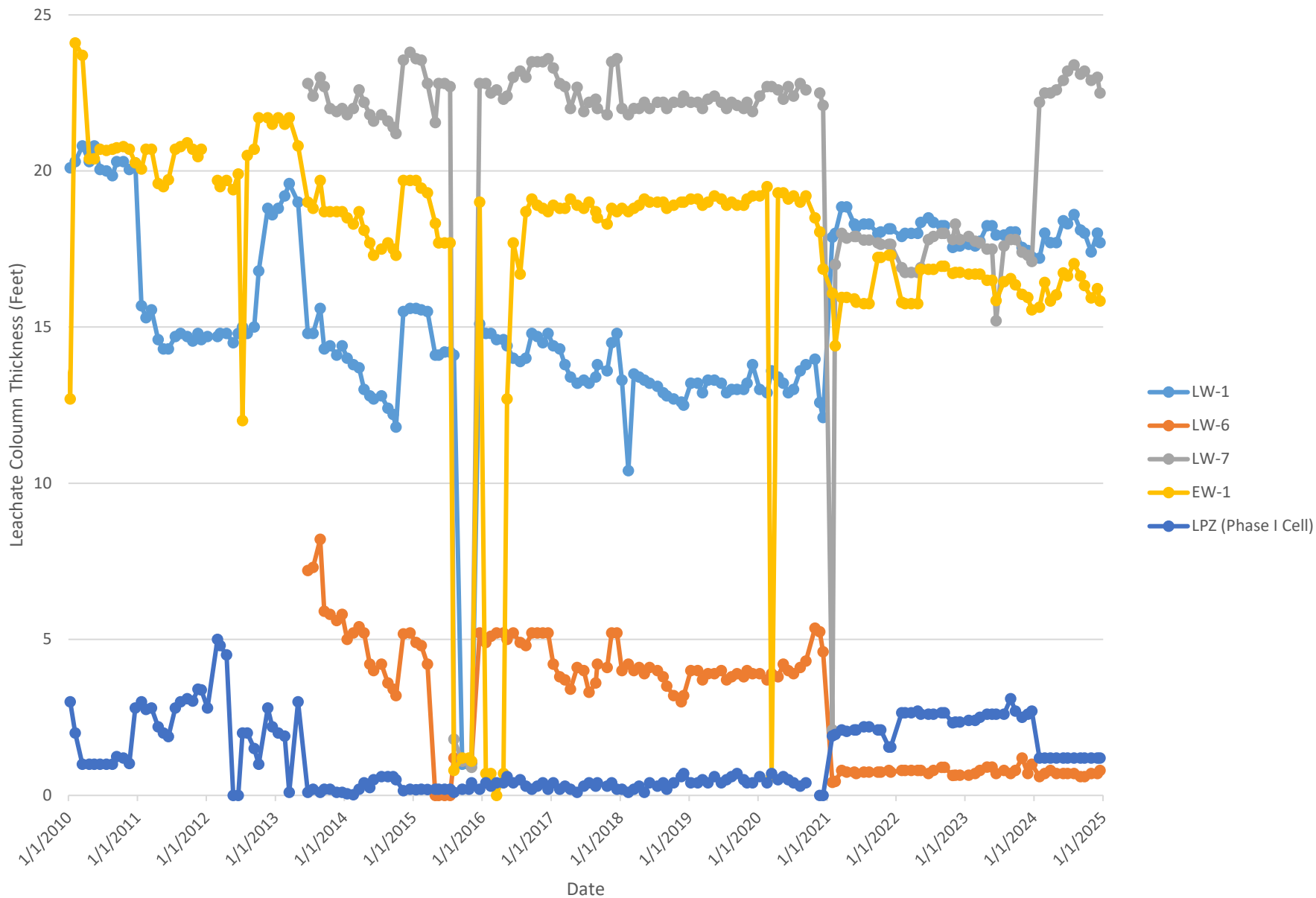
NM = Not Measured.


NI = Not Installed or Not Included.

NA = Not Available.

- January 12, 2006 measurements conducted by Fox Engineering.
- June 6, 2008 through August 31, 2009 measurements were conducted by Barker Lemar Engineering Consultants.
- January 10, 2010 through September 2020 measurements were conducted by Adair County Sanitary Landfill staff.
- October through December 2020 measurements were conducted by SCS Engineers.
- January 2021 through December 2024 measurements were conducted by Adair County Sanitary Landfill staff.
- LW-2, LW-3, and LW-4 were kinked or damaged sometime in 2010 resulting in inaccurate measurements and subsequently abandoned on 5/16/2013. These points are no longer shown in this summary table.
- LW-6 and LW-7 were installed on May 16, 2013.

Historical Leachate Columns





Appendix B
2024 Leachate Analytical Report



ANALYTICAL REPORT

PREPARED FOR

Attn: DJ Luhrs
Adair County Sanitary Landfill
1645 State Hwy 25
Menlo, Iowa 50164

Generated 10/14/2024 4:38:40 PM

JOB DESCRIPTION

Adair Co. Sanitary Landfill Leachate

JOB NUMBER

310-291363-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



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10/14/2024 4:38:40 PM

Authorized for release by
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Case Narrative

Client: Adair County Sanitary Landfill
Project: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Job ID: 310-291363-1

Eurofins Cedar Falls

Job Narrative 310-291363-1

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 9/25/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

GC/MS VOA

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

GC/MS Semi VOA

Method 625.1_PREC: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-434383 and analytical batch 310-435276 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol.

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

PCBs

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

Pesticides

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: Adair County Sanitary Landfill
Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-291363-1	Leachate	Water	09/25/24 12:15	09/25/24 16:40
310-291363-2	Field Blank LLHg	Water	09/25/24 12:00	09/25/24 16:40

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Detection Summary

Client: Adair County Sanitary Landfill
Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Mercury	0.000773		0.000500	0.000200	ug/L		1		1631E	Total/NA
Arsenic	0.00173	J	0.00200	0.000530	mg/L		1		200.8	Total/NA
Barium	0.0603		0.00200	0.000660	mg/L		1		200.8	Total/NA
Iron	0.914		0.100	0.0360	mg/L		1		200.8	Total/NA
Nickel	0.00536		0.00500	0.00210	mg/L		1		200.8	Total/NA
Silver	0.000966	J	0.00100	0.000500	mg/L		1		200.8	Total/NA
Ammonia	0.879		0.500	0.210	mg/L		1		350.1	Total/NA
Nitrogen, Kjeldahl	3.45		1.00	0.570	mg/L		1		351.2	Total/NA
Total Suspended Solids	8.67		5.00	3.70	mg/L		1		I-3765-85	Total/NA
Total Dissolved Solids	890		250	210	mg/L		1		SM 2540C	Total/NA
pH	7.9	HF	1.0	1.0	SU		1		SM 4500 H+ B	Total/NA
Biochemical Oxygen Demand	4.61		3.00	3.00	mg/L		1		SM 5210B	Total/NA
Total Organic Carbon	32.7		4.00	2.00	mg/L		4		SM 5310C	Total/NA

Client Sample ID: Field Blank LLHg

Lab Sample ID: 310-291363-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Date Collected: 09/25/24 12:15

Matrix: Water

Date Received: 09/25/24 16:40

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			09/30/24 14:07	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			09/30/24 14:07	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			09/30/24 14:07	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			09/30/24 14:07	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			09/30/24 14:07	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			09/30/24 14:07	1
1,2-Dichloroethene, Total	<1.00		1.00	0.270	ug/L			09/30/24 14:07	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			09/30/24 14:07	1
1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			09/30/24 14:07	1
2-Chloroethyl vinyl ether	<2.00		2.00	1.70	ug/L			09/30/24 14:07	1
Benzene	<0.500		0.500	0.220	ug/L			09/30/24 14:07	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			09/30/24 14:07	1
Bromoform	<5.00		5.00	0.780	ug/L			09/30/24 14:07	1
Bromomethane	<4.00		4.00	1.10	ug/L			09/30/24 14:07	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			09/30/24 14:07	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			09/30/24 14:07	1
Dibromochloromethane	<5.00		5.00	0.750	ug/L			09/30/24 14:07	1
Chloroethane	<4.00		4.00	0.790	ug/L			09/30/24 14:07	1
Chloroform	<3.00		3.00	1.30	ug/L			09/30/24 14:07	1
Chloromethane	<3.00		3.00	0.610	ug/L			09/30/24 14:07	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			09/30/24 14:07	1
Methylene chloride	<5.00		5.00	1.70	ug/L			09/30/24 14:07	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			09/30/24 14:07	1
Toluene	<1.00		1.00	0.430	ug/L			09/30/24 14:07	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			09/30/24 14:07	1
Trichloroethylene	<1.00		1.00	0.430	ug/L			09/30/24 14:07	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			09/30/24 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		70 - 130		09/30/24 14:07	1
Toluene-d8 (Surr)	98		70 - 130		09/30/24 14:07	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/30/24 14:07	1

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<10.0		10.0	0.560	ug/L		09/26/24 10:27	10/04/24 18:37	1
1,2-Dichlorobenzene	<10.0		10.0	0.620	ug/L		09/26/24 10:27	10/04/24 18:37	1
1,3-Dichlorobenzene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 18:37	1
1,4-Dichlorobenzene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4-Dinitrophenol	<20.0	*1	20.0	13.0	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		09/26/24 10:27	10/04/24 18:37	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		09/26/24 10:27	10/04/24 18:37	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 18:37	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		09/26/24 10:27	10/04/24 18:37	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		09/26/24 10:27	10/04/24 18:37	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		09/26/24 10:27	10/04/24 18:37	1

Eurofins Cedar Falls

Client Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Date Collected: 09/25/24 12:15

Matrix: Water

Date Received: 09/25/24 16:40

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	<10.0	*1	10.0	6.90	ug/L		09/26/24 10:27	10/04/24 18:37	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		09/26/24 10:27	10/04/24 18:37	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		09/26/24 10:27	10/04/24 18:37	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		09/26/24 10:27	10/04/24 18:37	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		09/26/24 10:27	10/04/24 18:37	1
Acenaphthene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 18:37	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		09/26/24 10:27	10/04/24 18:37	1
Anthracene	<10.0		10.0	0.870	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzo[b]fluoranthene	<10.0		10.0	4.90	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzoic acid	<100		100	17.0	ug/L		09/26/24 10:27	10/04/24 18:37	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		09/26/24 10:27	10/04/24 18:37	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		09/26/24 10:27	10/04/24 18:37	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		09/26/24 10:27	10/04/24 18:37	1
bis(2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		09/26/24 10:27	10/04/24 18:37	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		09/26/24 10:27	10/04/24 18:37	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		09/26/24 10:27	10/04/24 18:37	1
Chrysene	<10.0		10.0	0.870	ug/L		09/26/24 10:27	10/04/24 18:37	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		09/26/24 10:27	10/04/24 18:37	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		09/26/24 10:27	10/04/24 18:37	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		09/26/24 10:27	10/04/24 18:37	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		09/26/24 10:27	10/04/24 18:37	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		09/26/24 10:27	10/04/24 18:37	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		09/26/24 10:27	10/04/24 18:37	1
Fluoranthene	<10.0		10.0	1.70	ug/L		09/26/24 10:27	10/04/24 18:37	1
Fluorene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 18:37	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		09/26/24 10:27	10/04/24 18:37	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		09/26/24 10:27	10/04/24 18:37	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		09/26/24 10:27	10/04/24 18:37	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		09/26/24 10:27	10/04/24 18:37	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		09/26/24 10:27	10/04/24 18:37	1
Isophorone	<10.0		10.0	0.930	ug/L		09/26/24 10:27	10/04/24 18:37	1
Naphthalene	<10.0		10.0	6.10	ug/L		09/26/24 10:27	10/04/24 18:37	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		09/26/24 10:27	10/04/24 18:37	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		09/26/24 10:27	10/04/24 18:37	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		09/26/24 10:27	10/04/24 18:37	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		09/26/24 10:27	10/04/24 18:37	1
Phenanthrene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 18:37	1
Pyrene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	36		25 - 110	09/26/24 10:27	10/04/24 18:37	1
Phenol-d5 (Surr)	54		21 - 110	09/26/24 10:27	10/04/24 18:37	1
Nitrobenzene-d5 (Surr)	100		45 - 129	09/26/24 10:27	10/04/24 18:37	1
2-Fluorobiphenyl (Surr)	83		39 - 118	09/26/24 10:27	10/04/24 18:37	1
2,4,6-Tribromophenol (Surr)	40		27 - 136	09/26/24 10:27	10/04/24 18:37	1
Terphenyl-d14 (Surr)	101		12 - 144	09/26/24 10:27	10/04/24 18:37	1

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Client Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Date Collected: 09/25/24 12:15

Matrix: Water

Date Received: 09/25/24 16:40

Method: EPA 608.3 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 21:40	1
4,4'-DDE	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 21:40	1
4,4'-DDT	<0.0640		0.0640	0.0420	ug/L		09/26/24 14:09	10/04/24 21:40	1
Aldrin	<0.0640		0.0640	0.0320	ug/L		09/26/24 14:09	10/04/24 21:40	1
beta-BHC	<0.0640		0.0640	0.0370	ug/L		09/26/24 14:09	10/04/24 21:40	1
Chlordane (technical)	<2.00		2.00	0.810	ug/L		09/26/24 14:09	10/04/24 21:40	1
delta-BHC	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 21:40	1
Dieldrin	<0.0640		0.0640	0.0260	ug/L		09/26/24 14:09	10/04/24 21:40	1
Endosulfan I	<0.0640		0.0640	0.0330	ug/L		09/26/24 14:09	10/04/24 21:40	1
Endosulfan II	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 21:40	1
Endosulfan sulfate	<0.0640		0.0640	0.0300	ug/L		09/26/24 14:09	10/04/24 21:40	1
Endrin	<0.0640		0.0640	0.0260	ug/L		09/26/24 14:09	10/04/24 21:40	1
Endrin aldehyde	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 21:40	1
gamma-BHC (Lindane)	<0.0640		0.0640	0.0360	ug/L		09/26/24 14:09	10/04/24 21:40	1
Heptachlor	<0.0640		0.0640	0.0330	ug/L		09/26/24 14:09	10/04/24 21:40	1
Heptachlor epoxide	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 21:40	1
Toxaphene	<2.00		2.00	0.690	ug/L		09/26/24 14:09	10/04/24 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	60		10 - 124				09/26/24 14:09	10/04/24 21:40	1
Tetrachloro-m-xylene	47		10 - 124				09/26/24 14:09	10/04/24 21:40	1

Method: EPA 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.833		0.833	0.177	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1221	<0.833		0.833	0.177	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1232	<0.833		0.833	0.177	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1242	<0.833		0.833	0.177	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1248	<0.833		0.833	0.115	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1254	<0.833		0.833	0.115	ug/L		10/10/24 15:06	10/11/24 15:01	1
PCB-1260	<0.833		0.833	0.115	ug/L		10/10/24 15:06	10/11/24 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	46		10 - 124				10/10/24 15:06	10/11/24 15:01	1
Tetrachloro-m-xylene (Surr)	54		10 - 124				10/10/24 15:06	10/11/24 15:01	1

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000773		0.000500	0.000200	ug/L		09/30/24 14:54	10/02/24 14:29	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00173	J	0.00200	0.000530	mg/L		09/27/24 09:00	10/01/24 17:30	1
Barium	0.0603		0.00200	0.000660	mg/L		09/27/24 09:00	10/01/24 17:30	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		09/27/24 09:00	10/01/24 17:30	1
Chromium	<0.00500		0.00500	0.00120	mg/L		09/27/24 09:00	10/01/24 17:30	1
Copper	<0.00500		0.00500	0.00180	mg/L		09/27/24 09:00	10/01/24 17:30	1
Iron	0.914		0.100	0.0360	mg/L		09/27/24 09:00	10/01/24 17:30	1
Lead	<0.000500		0.000500	0.000260	mg/L		09/27/24 09:00	10/01/24 17:30	1
Nickel	0.00536		0.00500	0.00210	mg/L		09/27/24 09:00	10/01/24 17:30	1
Selenium	<0.00500		0.00500	0.00140	mg/L		09/27/24 09:00	10/01/24 17:30	1

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Client Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Date Collected: 09/25/24 12:15

Matrix: Water

Date Received: 09/25/24 16:40

Method: EPA 200.8 - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.000966	J	0.00100	0.000500	mg/L		09/27/24 09:00	10/02/24 17:29	1
Zinc	<0.0200		0.0200	0.00970	mg/L		09/27/24 09:00	10/02/24 17:29	1

Method: EPA 245.2 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		10/07/24 14:55	10/08/24 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.879		0.500	0.210	mg/L		09/26/24 11:49	09/27/24 01:33	1
Nitrogen, Kjeldahl (EPA 351.2)	3.45		1.00	0.570	mg/L		09/26/24 05:57	09/26/24 18:23	1
Total Suspended Solids (USGS I-3765-85)	8.67		5.00	3.70	mg/L			09/26/24 12:16	1
Total Dissolved Solids (SM 2540C)	890		250	210	mg/L			09/30/24 16:53	1
Biochemical Oxygen Demand (SM 5210B)	4.61		3.00	3.00	mg/L			09/26/24 07:31	1
Total Organic Carbon (SM 5310C)	32.7		4.00	2.00	mg/L			10/02/24 06:05	4
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	7.9	HF	1.0	1.0	SU			09/26/24 07:08	1

Client Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Field Blank LLHg

Lab Sample ID: 310-291363-2

Date Collected: 09/25/24 12:00

Matrix: Water

Date Received: 09/25/24 16:40

Method: EPA 1631E - Mercury, Low Level (CVAFS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000500		0.000500	0.000200	ug/L		09/30/24 14:54	10/02/24 13:04	1

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

Definitions/Glossary

Client: Adair County Sanitary Landfill
Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Surrogate Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (70-130)	TOL (70-130)	BFB (70-130)
310-291363-1	Leachate	101	98	99
LCS 310-434679/6	Lab Control Sample	101	99	98
LCS 310-434679/7	Lab Control Sample	100	98	99
MB 310-434679/5	Method Blank	100	98	98

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (25-110)	PHL (21-110)	NBZ (45-129)	FBP (39-118)	TBP (27-136)	TPHL (12-144)
310-291363-1	Leachate	36	54	100	83	40	101
LCS 310-434383/2-A	Lab Control Sample	64	53	82	70	84	94
LCSD 310-434383/3-A	Lab Control Sample Dup	76	63	92	78	95	106
MB 310-434383/1-A	Method Blank	69	58	92	76	87	105

Surrogate Legend

2FP = 2-Fluorophenol (Surr)

PHL = Phenol-d5 (Surr)

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

TPHL = Terphenyl-d14 (Surr)

Method: 608.3 - Organochlorine Pesticides in Water

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-124)	TCX1 (10-124)
310-291363-1	Leachate	60	47
LCS 310-434423/2-A	Lab Control Sample	75	53
LCSD 310-434423/3-A	Lab Control Sample Dup	84	57
MB 310-434423/1-A	Method Blank	85	69

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (10-124)	TCX2 (10-124)
310-291363-1	Leachate	46	54
LCS 310-435868/2-A	Lab Control Sample	29	59

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Surrogate Summary

Client: Adair County Sanitary Landfill
Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB2 (10-124)	TCX2 (10-124)
LCS D 310-435868/3-A	Lab Control Sample Dup	20	30
MB 310-435868/1-A	Method Blank	19	30

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene (Surr)

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

QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-434679/5
Matrix: Water
Analysis Batch: 434679

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			09/30/24 10:20	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			09/30/24 10:20	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			09/30/24 10:20	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			09/30/24 10:20	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			09/30/24 10:20	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			09/30/24 10:20	1
1,2-Dichloroethene, Total	<1.00		1.00	0.270	ug/L			09/30/24 10:20	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			09/30/24 10:20	1
1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			09/30/24 10:20	1
2-Chloroethyl vinyl ether	<2.00		2.00	1.70	ug/L			09/30/24 10:20	1
Benzene	<0.500		0.500	0.220	ug/L			09/30/24 10:20	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			09/30/24 10:20	1
Bromoform	<5.00		5.00	0.780	ug/L			09/30/24 10:20	1
Bromomethane	<4.00		4.00	1.10	ug/L			09/30/24 10:20	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			09/30/24 10:20	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			09/30/24 10:20	1
Dibromochloromethane	<5.00		5.00	0.750	ug/L			09/30/24 10:20	1
Chloroethane	<4.00		4.00	0.790	ug/L			09/30/24 10:20	1
Chloroform	<3.00		3.00	1.30	ug/L			09/30/24 10:20	1
Chloromethane	<3.00		3.00	0.610	ug/L			09/30/24 10:20	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			09/30/24 10:20	1
Methylene chloride	<5.00		5.00	1.70	ug/L			09/30/24 10:20	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			09/30/24 10:20	1
Toluene	<1.00		1.00	0.430	ug/L			09/30/24 10:20	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			09/30/24 10:20	1
Trichloroethylene	<1.00		1.00	0.430	ug/L			09/30/24 10:20	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			09/30/24 10:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	100		70 - 130		09/30/24 10:20	1
Toluene-d8 (Surr)	98		70 - 130		09/30/24 10:20	1
4-Bromofluorobenzene (Surr)	98		70 - 130		09/30/24 10:20	1

Lab Sample ID: LCS 310-434679/6
Matrix: Water
Analysis Batch: 434679

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1,1-Trichloroethane	20.0	21.44		ug/L		107	70 - 130
1,1,1,2-Tetrachloroethane	20.0	20.59		ug/L		103	68 - 130
1,1,2-Trichloroethane	20.0	20.80		ug/L		104	70 - 130
1,1-Dichloroethane	20.0	20.87		ug/L		104	70 - 130
1,1-Dichloroethene	20.0	21.51		ug/L		108	63 - 132
1,2-Dichloroethane	20.0	20.73		ug/L		104	70 - 130
1,2-Dichloropropane	20.0	21.15		ug/L		106	70 - 130
1,3-Dichloropropene	40.0	41.86		ug/L		105	70 - 130
2-Chloroethyl vinyl ether	20.0	22.11		ug/L		111	48 - 150
Benzene	20.0	20.92		ug/L		105	70 - 130

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-434679/6

Matrix: Water

Analysis Batch: 434679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromodichloromethane	20.0	19.83		ug/L		99	70 - 130
Bromoform	20.0	19.99		ug/L		100	70 - 130
Carbon tetrachloride	20.0	21.46		ug/L		107	70 - 130
Chlorobenzene	20.0	20.57		ug/L		103	70 - 130
Dibromochloromethane	20.0	20.97		ug/L		105	70 - 130
Chloroform	20.0	20.88		ug/L		104	70 - 130
cis-1,2-Dichloroethene	20.0	20.97		ug/L		105	70 - 130
cis-1,3-Dichloropropene	20.0	21.19		ug/L		106	70 - 130
Methylene chloride	20.0	21.30		ug/L		107	60 - 140
Tetrachloroethene	20.0	21.69		ug/L		108	70 - 130
Toluene	20.0	21.02		ug/L		105	70 - 130
trans-1,2-Dichloroethene	20.0	21.32		ug/L		107	70 - 130
trans-1,3-Dichloropropene	20.0	20.67		ug/L		103	69 - 130
Trichloroethylene	20.0	21.28		ug/L		106	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCS 310-434679/7

Matrix: Water

Analysis Batch: 434679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	18.91		ug/L		95	23 - 150
Chloroethane	20.0	18.97		ug/L		95	54 - 136
Chloromethane	20.0	19.50		ug/L		98	38 - 150
Vinyl chloride	20.0	18.91		ug/L		95	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	100		70 - 130
Toluene-d8 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 310-434383/1-A

Matrix: Water

Analysis Batch: 435276

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434383

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	<10.0		10.0	0.560	ug/L		09/26/24 10:27	10/04/24 15:03	1
1,2-Dichlorobenzene	<10.0		10.0	0.620	ug/L		09/26/24 10:27	10/04/24 15:03	1
1,3-Dichlorobenzene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 15:03	1
1,4-Dichlorobenzene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		09/26/24 10:27	10/04/24 15:03	1

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-434383/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 435276

Prep Batch: 434383

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		09/26/24 10:27	10/04/24 15:03	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		09/26/24 10:27	10/04/24 15:03	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 15:03	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		09/26/24 10:27	10/04/24 15:03	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		09/26/24 10:27	10/04/24 15:03	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		09/26/24 10:27	10/04/24 15:03	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		09/26/24 10:27	10/04/24 15:03	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		09/26/24 10:27	10/04/24 15:03	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		09/26/24 10:27	10/04/24 15:03	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		09/26/24 10:27	10/04/24 15:03	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		09/26/24 10:27	10/04/24 15:03	1
Acenaphthene	<10.0		10.0	0.640	ug/L		09/26/24 10:27	10/04/24 15:03	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		09/26/24 10:27	10/04/24 15:03	1
Anthracene	<10.0		10.0	0.870	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzo[b]fluoranthene	<10.0		10.0	4.90	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzoic acid	<100		100	17.0	ug/L		09/26/24 10:27	10/04/24 15:03	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		09/26/24 10:27	10/04/24 15:03	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		09/26/24 10:27	10/04/24 15:03	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		09/26/24 10:27	10/04/24 15:03	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		09/26/24 10:27	10/04/24 15:03	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		09/26/24 10:27	10/04/24 15:03	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		09/26/24 10:27	10/04/24 15:03	1
Chrysene	<10.0		10.0	0.870	ug/L		09/26/24 10:27	10/04/24 15:03	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		09/26/24 10:27	10/04/24 15:03	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		09/26/24 10:27	10/04/24 15:03	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		09/26/24 10:27	10/04/24 15:03	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		09/26/24 10:27	10/04/24 15:03	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		09/26/24 10:27	10/04/24 15:03	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		09/26/24 10:27	10/04/24 15:03	1
Fluoranthene	<10.0		10.0	1.70	ug/L		09/26/24 10:27	10/04/24 15:03	1
Fluorene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 15:03	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		09/26/24 10:27	10/04/24 15:03	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		09/26/24 10:27	10/04/24 15:03	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		09/26/24 10:27	10/04/24 15:03	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		09/26/24 10:27	10/04/24 15:03	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		09/26/24 10:27	10/04/24 15:03	1
Isophorone	<10.0		10.0	0.930	ug/L		09/26/24 10:27	10/04/24 15:03	1
Naphthalene	<10.0		10.0	6.10	ug/L		09/26/24 10:27	10/04/24 15:03	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		09/26/24 10:27	10/04/24 15:03	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		09/26/24 10:27	10/04/24 15:03	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		09/26/24 10:27	10/04/24 15:03	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		09/26/24 10:27	10/04/24 15:03	1

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 310-434383/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 435276

Prep Batch: 434383

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Phenanthrene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 15:03	1
Pyrene	<10.0		10.0	0.790	ug/L		09/26/24 10:27	10/04/24 15:03	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol (Surr)	69		25 - 110	09/26/24 10:27	10/04/24 15:03	1
Phenol-d5 (Surr)	58		21 - 110	09/26/24 10:27	10/04/24 15:03	1
Nitrobenzene-d5 (Surr)	92		45 - 129	09/26/24 10:27	10/04/24 15:03	1
2-Fluorobiphenyl (Surr)	76		39 - 118	09/26/24 10:27	10/04/24 15:03	1
2,4,6-Tribromophenol (Surr)	87		27 - 136	09/26/24 10:27	10/04/24 15:03	1
Terphenyl-d14 (Surr)	105		12 - 144	09/26/24 10:27	10/04/24 15:03	1

Lab Sample ID: LCS 310-434383/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 435276

Prep Batch: 434383

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2,4-Trichlorobenzene	100	74.09		ug/L		74	44 - 110
1,2-Dichlorobenzene	100	72.87		ug/L		73	31 - 110
1,3-Dichlorobenzene	100	68.70		ug/L		69	28 - 110
1,4-Dichlorobenzene	100	70.42		ug/L		70	28 - 110
2,4,5-Trichlorophenol	100	95.98		ug/L		96	35 - 133
2,4,6-Trichlorophenol	100	99.54		ug/L		100	37 - 139
2,4-Dichlorophenol	100	98.33		ug/L		98	41 - 124
2,4-Dimethylphenol	100	60.35		ug/L		60	32 - 120
2,4-Dinitrophenol	200	168.9		ug/L		84	10 - 138
2,4-Dinitrotoluene	100	91.78		ug/L		92	47 - 137
2,6-Dinitrotoluene	100	94.06		ug/L		94	51 - 130
2-Chloronaphthalene	100	86.75		ug/L		87	60 - 110
2-Chlorophenol	100	97.51		ug/L		98	44 - 117
2-Nitrophenol	100	100.5		ug/L		100	41 - 129
4,6-Dinitro-2-methylphenol	200	213.2		ug/L		107	22 - 143
4-Bromophenyl phenyl ether	100	94.99		ug/L		95	53 - 119
4-Chloro-3-methylphenol	100	102.7		ug/L		103	49 - 130
4-Chlorophenyl phenyl ether	100	93.55		ug/L		94	44 - 116
4-Nitrophenol	200	120.6		ug/L		60	18 - 110
Acenaphthene	100	78.25		ug/L		78	47 - 110
Acenaphthylene	100	77.54		ug/L		78	40 - 110
Anthracene	100	92.93		ug/L		93	51 - 120
Benzo[a]anthracene	100	95.21		ug/L		95	51 - 123
Benzo[a]pyrene	100	95.42		ug/L		95	48 - 125
Benzo[b]fluoranthene	100	97.73		ug/L		98	49 - 129
Benzo[g,h,i]perylene	100	93.54		ug/L		94	43 - 139
Benzo[k]fluoranthene	100	98.33		ug/L		98	47 - 130
Benzyl alcohol	100	95.09		ug/L		95	39 - 128
Bis(2-chloroethoxy)methane	100	88.68		ug/L		89	48 - 121
Bis(2-chloroethyl)ether	100	85.06		ug/L		85	43 - 123
bis (2-chloroisopropyl) ether	100	76.41		ug/L		76	36 - 123
Bis(2-ethylhexyl) phthalate	100	99.08		ug/L		99	43 - 143

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 310-434383/2-A

Matrix: Water

Analysis Batch: 435276

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Butyl benzyl phthalate	100	98.23		ug/L		98	46 - 135	
Chrysene	100	94.70		ug/L		95	51 - 125	
Dibenz(a,h)anthracene	100	114.8		ug/L		115	38 - 149	
Dibenzofuran	100	92.39		ug/L		92	45 - 112	
Diethyl phthalate	100	83.09		ug/L		83	43 - 120	
Dimethyl phthalate	100	89.97		ug/L		90	43 - 120	
Di-n-butyl phthalate	100	93.69		ug/L		94	50 - 120	
Di-n-octyl phthalate	100	98.90		ug/L		99	34 - 146	
Fluoranthene	100	88.11		ug/L		88	47 - 128	
Fluorene	100	92.61		ug/L		93	59 - 119	
Hexachlorobenzene	100	98.45		ug/L		98	48 - 119	
Hexachlorobutadiene	100	65.64		ug/L		66	32 - 110	
Hexachlorocyclopentadiene	100	14.68		ug/L		15	10 - 110	
Hexachloroethane	100	61.11		ug/L		61	40 - 110	
Indeno[1,2,3-cd]pyrene	100	115.4		ug/L		115	37 - 150	
Isophorone	100	89.56		ug/L		90	50 - 125	
Naphthalene	100	79.71		ug/L		80	38 - 110	
Nitrobenzene	100	90.64		ug/L		91	47 - 116	
N-Nitrosodi-n-propylamine	100	96.62		ug/L		97	45 - 130	
N-Nitrosodiphenylamine	100	98.69		ug/L		99	49 - 121	
Pentachlorophenol	200	198.8		ug/L		99	26 - 133	
Phenanthrene	100	91.53		ug/L		92	54 - 117	
Pyrene	100	103.4		ug/L		103	52 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	64		25 - 110
Phenol-d5 (Surr)	53		21 - 110
Nitrobenzene-d5 (Surr)	82		45 - 129
2-Fluorobiphenyl (Surr)	70		39 - 118
2,4,6-Tribromophenol (Surr)	84		27 - 136
Terphenyl-d14 (Surr)	94		12 - 144

Lab Sample ID: LCSD 310-434383/3-A

Matrix: Water

Analysis Batch: 435276

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits			
1,2,4-Trichlorobenzene	100	71.42		ug/L		71	44 - 110	4	35	
1,2-Dichlorobenzene	100	69.86		ug/L		70	31 - 110	4	35	
1,3-Dichlorobenzene	100	65.84		ug/L		66	28 - 110	4	35	
1,4-Dichlorobenzene	100	66.44		ug/L		66	28 - 110	6	35	
2,4,5-Trichlorophenol	100	83.45		ug/L		83	35 - 133	14	35	
2,4,6-Trichlorophenol	100	88.39		ug/L		88	37 - 139	12	35	
2,4-Dichlorophenol	100	88.72		ug/L		89	41 - 124	10	35	
2,4-Dimethylphenol	100	52.90		ug/L		53	32 - 120	13	35	
2,4-Dinitrophenol	200	91.15	*1	ug/L		46	10 - 138	60	35	
2,4-Dinitrotoluene	100	81.53		ug/L		82	47 - 137	12	35	
2,6-Dinitrotoluene	100	84.67		ug/L		85	51 - 130	11	35	

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-434383/3-A

Matrix: Water

Analysis Batch: 435276

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
2-Chloronaphthalene	100	80.36		ug/L		80	60 - 110	8	24	
2-Chlorophenol	100	85.20		ug/L		85	44 - 117	13	35	
2-Nitrophenol	100	89.27		ug/L		89	41 - 129	12	35	
4,6-Dinitro-2-methylphenol	200	142.3	*1	ug/L		71	22 - 143	40	35	
4-Bromophenyl phenyl ether	100	84.45		ug/L		84	53 - 119	12	35	
4-Chloro-3-methylphenol	100	93.66		ug/L		94	49 - 130	9	35	
4-Chlorophenyl phenyl ether	100	84.41		ug/L		84	44 - 116	10	35	
4-Nitrophenol	200	104.6		ug/L		52	18 - 110	14	35	
Acenaphthene	100	73.05		ug/L		73	47 - 110	7	35	
Acenaphthylene	100	70.82		ug/L		71	40 - 110	9	35	
Anthracene	100	83.36		ug/L		83	51 - 120	11	35	
Benzo[a]anthracene	100	85.23		ug/L		85	51 - 123	11	35	
Benzo[a]pyrene	100	83.79		ug/L		84	48 - 125	13	35	
Benzo[b]fluoranthene	100	89.72		ug/L		90	49 - 129	9	35	
Benzo[g,h,i]perylene	100	82.08		ug/L		82	43 - 139	13	35	
Benzo[k]fluoranthene	100	84.29		ug/L		84	47 - 130	15	35	
Benzyl alcohol	100	82.35		ug/L		82	39 - 128	14	35	
Bis(2-chloroethoxy)methane	100	78.10		ug/L		78	48 - 121	13	35	
Bis(2-chloroethyl)ether	100	75.30		ug/L		75	43 - 123	12	35	
bis (2-chloroisopropyl) ether	100	66.51		ug/L		67	36 - 123	14	35	
Bis(2-ethylhexyl) phthalate	100	88.07		ug/L		88	43 - 143	12	35	
Butyl benzyl phthalate	100	86.63		ug/L		87	46 - 135	13	35	
Chrysene	100	85.21		ug/L		85	51 - 125	11	35	
Dibenz(a,h)anthracene	100	102.7		ug/L		103	38 - 149	11	35	
Dibenzofuran	100	83.77		ug/L		84	45 - 112	10	35	
Diethyl phthalate	100	75.31		ug/L		75	43 - 120	10	35	
Dimethyl phthalate	100	81.61		ug/L		82	43 - 120	10	35	
Di-n-butyl phthalate	100	83.70		ug/L		84	50 - 120	11	35	
Di-n-octyl phthalate	100	86.18		ug/L		86	34 - 146	14	35	
Fluoranthene	100	77.24		ug/L		77	47 - 128	13	35	
Fluorene	100	83.79		ug/L		84	59 - 119	10	35	
Hexachlorobenzene	100	86.45		ug/L		86	48 - 119	13	35	
Hexachlorobutadiene	100	66.41		ug/L		66	32 - 110	1	35	
Hexachlorocyclopentadiene	100	13.42		ug/L		13	10 - 110	9	35	
Hexachloroethane	100	61.02		ug/L		61	40 - 110	0	35	
Indeno[1,2,3-cd]pyrene	100	100.0		ug/L		100	37 - 150	14	35	
Isophorone	100	79.68		ug/L		80	50 - 125	12	35	
Naphthalene	100	73.33		ug/L		73	38 - 110	8	35	
Nitrobenzene	100	80.22		ug/L		80	47 - 116	12	35	
N-Nitrosodi-n-propylamine	100	84.51		ug/L		85	45 - 130	13	35	
N-Nitrosodiphenylamine	100	89.75		ug/L		90	49 - 121	9	35	
Pentachlorophenol	200	154.1		ug/L		77	26 - 133	25	35	
Phenanthrene	100	82.31		ug/L		82	54 - 117	11	35	
Pyrene	100	91.89		ug/L		92	52 - 120	12	35	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	76		25 - 110
Phenol-d5 (Surr)	63		21 - 110

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 310-434383/3-A
Matrix: Water
Analysis Batch: 435276

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 434383

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	92		45 - 129
2-Fluorobiphenyl (Surr)	78		39 - 118
2,4,6-Tribromophenol (Surr)	95		27 - 136
Terphenyl-d14 (Surr)	106		12 - 144

Method: 608.3 - Organochlorine Pesticides in Water

Lab Sample ID: MB 310-434423/1-A
Matrix: Water
Analysis Batch: 435303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434423

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4,4'-DDD	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 18:21	1
4,4'-DDE	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 18:21	1
4,4'-DDT	<0.0640		0.0640	0.0420	ug/L		09/26/24 14:09	10/04/24 18:21	1
Aldrin	<0.0640		0.0640	0.0320	ug/L		09/26/24 14:09	10/04/24 18:21	1
beta-BHC	<0.0640		0.0640	0.0370	ug/L		09/26/24 14:09	10/04/24 18:21	1
Chlordane (technical)	<2.00		2.00	0.810	ug/L		09/26/24 14:09	10/04/24 18:21	1
delta-BHC	<0.0640		0.0640	0.0270	ug/L		09/26/24 14:09	10/04/24 18:21	1
Dieldrin	<0.0640		0.0640	0.0260	ug/L		09/26/24 14:09	10/04/24 18:21	1
Endosulfan I	<0.0640		0.0640	0.0330	ug/L		09/26/24 14:09	10/04/24 18:21	1
Endosulfan II	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 18:21	1
Endosulfan sulfate	<0.0640		0.0640	0.0300	ug/L		09/26/24 14:09	10/04/24 18:21	1
Endrin	<0.0640		0.0640	0.0260	ug/L		09/26/24 14:09	10/04/24 18:21	1
Endrin aldehyde	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 18:21	1
gamma-BHC (Lindane)	<0.0640		0.0640	0.0360	ug/L		09/26/24 14:09	10/04/24 18:21	1
Heptachlor	<0.0640		0.0640	0.0330	ug/L		09/26/24 14:09	10/04/24 18:21	1
Heptachlor epoxide	<0.0640		0.0640	0.0290	ug/L		09/26/24 14:09	10/04/24 18:21	1
Toxaphene	<2.00		2.00	0.690	ug/L		09/26/24 14:09	10/04/24 18:21	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	85		10 - 124	09/26/24 14:09	10/04/24 18:21	1
Tetrachloro-m-xylene	69		10 - 124	09/26/24 14:09	10/04/24 18:21	1

Lab Sample ID: LCS 310-434423/2-A
Matrix: Water
Analysis Batch: 435303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 434423

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
4,4'-DDD	1.00	0.6987		ug/L		70	35 - 128
4,4'-DDE	1.00	0.6606		ug/L		66	35 - 111
4,4'-DDT	1.00	0.7019		ug/L		70	25 - 132
Aldrin	1.00	0.5532		ug/L		55	42 - 110
beta-BHC	1.00	0.6835		ug/L		68	40 - 112
delta-BHC	1.00	0.6979		ug/L		70	36 - 111
Dieldrin	1.00	0.6927		ug/L		69	39 - 112
Endosulfan I	1.00	0.6832		ug/L		68	45 - 110
Endosulfan II	1.00	0.6698		ug/L		67	14 - 110

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 608.3 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 310-434423/2-A
 Matrix: Water
 Analysis Batch: 435303

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 434423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Endosulfan sulfate	1.00	0.7017		ug/L		70	34 - 128	
Endrin	1.00	0.7505		ug/L		75	36 - 121	
Endrin aldehyde	1.00	0.6629		ug/L		66	38 - 110	
gamma-BHC (Lindane)	1.00	0.6890		ug/L		69	37 - 110	
Heptachlor	1.00	0.6232		ug/L		62	34 - 110	
Heptachlor epoxide	1.00	0.6997		ug/L		70	39 - 112	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	75		10 - 124
Tetrachloro-m-xylene	53		10 - 124

Lab Sample ID: LCSD 310-434423/3-A
 Matrix: Water
 Analysis Batch: 435303

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 434423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD	Limit	
4,4'-DDD	1.00	0.6392		ug/L		64	35 - 128	9	35	
4,4'-DDE	1.00	0.6132		ug/L		61	35 - 111	7	35	
4,4'-DDT	1.00	0.6517		ug/L		65	25 - 132	7	35	
Aldrin	1.00	0.5141		ug/L		51	42 - 110	7	35	
beta-BHC	1.00	0.6240		ug/L		62	40 - 112	9	34	
delta-BHC	1.00	0.6373		ug/L		64	36 - 111	7	35	
Dieldrin	1.00	0.6388		ug/L		64	39 - 112	7	35	
Endosulfan I	1.00	0.6309		ug/L		63	45 - 110	8	28	
Endosulfan II	1.00	0.6141		ug/L		61	14 - 110	9	35	
Endosulfan sulfate	1.00	0.6448		ug/L		64	34 - 128	8	35	
Endrin	1.00	0.6892		ug/L		69	36 - 121	9	35	
Endrin aldehyde	1.00	0.6111		ug/L		61	38 - 110	8	35	
gamma-BHC (Lindane)	1.00	0.6291		ug/L		63	37 - 110	9	35	
Heptachlor	1.00	0.5832		ug/L		58	34 - 110	7	35	
Heptachlor epoxide	1.00	0.6410		ug/L		64	39 - 112	9	26	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	84		10 - 124
Tetrachloro-m-xylene	57		10 - 124

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 310-435868/1-A
 Matrix: Water
 Analysis Batch: 435980

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 435868

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.800		0.800	0.170	ug/L		10/10/24 15:06	10/11/24 13:04	1
PCB-1221	<0.800		0.800	0.170	ug/L		10/10/24 15:06	10/11/24 13:04	1
PCB-1232	<0.800		0.800	0.170	ug/L		10/10/24 15:06	10/11/24 13:04	1
PCB-1242	<0.800		0.800	0.170	ug/L		10/10/24 15:06	10/11/24 13:04	1
PCB-1248	<0.800		0.800	0.110	ug/L		10/10/24 15:06	10/11/24 13:04	1

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 608.3 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: MB 310-435868/1-A
Matrix: Water
Analysis Batch: 435980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 435868

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1254	<0.800		0.800	0.110	ug/L		10/10/24 15:06	10/11/24 13:04	1
PCB-1260	<0.800		0.800	0.110	ug/L		10/10/24 15:06	10/11/24 13:04	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	19		10 - 124	10/10/24 15:06	10/11/24 13:04	1
Tetrachloro-m-xylene (Surr)	30		10 - 124	10/10/24 15:06	10/11/24 13:04	1

Lab Sample ID: LCS 310-435868/2-A
Matrix: Water
Analysis Batch: 435980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 435868

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	10.0	6.952		ug/L		70	50 - 134
PCB-1260	10.0	6.631		ug/L		66	34 - 124

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	29		10 - 124
Tetrachloro-m-xylene (Surr)	59		10 - 124

Lab Sample ID: LCSD 310-435868/3-A
Matrix: Water
Analysis Batch: 435980

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 435868

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
PCB-1016	10.0	5.298		ug/L		53	50 - 134	27	35
PCB-1260	10.0	5.543		ug/L		55	34 - 124	18	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	20		10 - 124
Tetrachloro-m-xylene (Surr)	30		10 - 124

Method: 1631E - Mercury, Low Level (CVAFS)

Lab Sample ID: MB 400-686457/3-A
Matrix: Water
Analysis Batch: 686552

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 686457

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000500		0.000500	0.000200	ug/L		10/01/24 16:00	10/02/24 09:45	1

Lab Sample ID: LCS 400-686457/4-A
Matrix: Water
Analysis Batch: 686552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 686457

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Mercury	0.00500	0.004359		ug/L		87	79 - 121

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 1631E - Mercury, Low Level (CVAFS) (Continued)

Lab Sample ID: LCSD 400-686457/5-A
 Matrix: Water
 Analysis Batch: 686552

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 686457

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00500	0.004390		ug/L		88	79 - 121	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 310-434434/1-A
 Matrix: Water
 Analysis Batch: 434926

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 434434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		09/27/24 09:00	10/01/24 17:00	1
Barium	<0.00200		0.00200	0.000660	mg/L		09/27/24 09:00	10/01/24 17:00	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		09/27/24 09:00	10/01/24 17:00	1
Chromium	<0.00500		0.00500	0.00120	mg/L		09/27/24 09:00	10/01/24 17:00	1
Copper	<0.00500		0.00500	0.00180	mg/L		09/27/24 09:00	10/01/24 17:00	1
Iron	<0.100		0.100	0.0360	mg/L		09/27/24 09:00	10/01/24 17:00	1
Lead	<0.000500		0.000500	0.000260	mg/L		09/27/24 09:00	10/01/24 17:00	1
Nickel	<0.00500		0.00500	0.00210	mg/L		09/27/24 09:00	10/01/24 17:00	1
Selenium	<0.00500		0.00500	0.00140	mg/L		09/27/24 09:00	10/01/24 17:00	1

Lab Sample ID: MB 310-434434/1-A
 Matrix: Water
 Analysis Batch: 435069

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 434434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00100		0.00100	0.000500	mg/L		09/27/24 09:00	10/02/24 17:12	1
Zinc	<0.0200		0.0200	0.00970	mg/L		09/27/24 09:00	10/02/24 17:12	1

Lab Sample ID: LCS 310-434434/2-A
 Matrix: Water
 Analysis Batch: 434926

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 434434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2154		mg/L		108	85 - 115
Barium	0.100	0.1050		mg/L		105	85 - 115
Cadmium	0.100	0.1043		mg/L		104	85 - 115
Chromium	0.100	0.09586		mg/L		96	85 - 115
Copper	0.200	0.2185		mg/L		109	85 - 115
Iron	0.200	0.2168		mg/L		108	85 - 115
Lead	0.200	0.2283		mg/L		114	85 - 115
Nickel	0.200	0.2091		mg/L		105	85 - 115
Selenium	0.400	0.4140		mg/L		104	85 - 115

Lab Sample ID: LCS 310-434434/2-A
 Matrix: Water
 Analysis Batch: 435069

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 434434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.1036		mg/L		104	85 - 115
Zinc	0.200	0.1926		mg/L		96	85 - 115

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: 245.2 - Mercury (CVAA)

Lab Sample ID: MB 310-435419/1-A
 Matrix: Water
 Analysis Batch: 435592

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 435419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		10/07/24 14:55	10/08/24 15:25	1

Lab Sample ID: LCS 310-435419/2-A
 Matrix: Water
 Analysis Batch: 435592

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 435419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001539		mg/L		92	85 - 115

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-434401/1-A
 Matrix: Water
 Analysis Batch: 434470

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 434401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.500		0.500	0.210	mg/L		09/26/24 11:49	09/27/24 01:14	1

Lab Sample ID: LCS 310-434401/2-A
 Matrix: Water
 Analysis Batch: 434470

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 434401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	4.00	4.140		mg/L		103	90 - 110

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 310-434328/1-A
 Matrix: Water
 Analysis Batch: 434463

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 434328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<1.00		1.00	0.570	mg/L		09/26/24 05:57	09/26/24 18:18	1

Lab Sample ID: LCS 310-434328/2-A
 Matrix: Water
 Analysis Batch: 434463

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 434328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	4.01	3.827		mg/L		96	90 - 110

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

Lab Sample ID: MB 310-434408/1
 Matrix: Water
 Analysis Batch: 434408

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			09/26/24 12:16	1

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QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

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

Lab Sample ID: LCS 310-434408/2
 Matrix: Water
 Analysis Batch: 434408

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	98.00		mg/L		98	81 - 116

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

Lab Sample ID: MB 310-434758/1
 Matrix: Water
 Analysis Batch: 434758

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<50.0		50.0	42.0	mg/L			09/30/24 16:53	1

Lab Sample ID: LCS 310-434758/2
 Matrix: Water
 Analysis Batch: 434758

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1030		mg/L		103	88 - 110

Lab Sample ID: 310-291363-1 DU
 Matrix: Water
 Analysis Batch: 434758

Client Sample ID: Leachate
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	890		830.0		mg/L		7	16

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-434331/1
 Matrix: Water
 Analysis Batch: 434331

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		SU		101	98 - 102

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 310-434330/1
 Matrix: Water
 Analysis Batch: 434330

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			09/26/24 07:04	1

Lab Sample ID: LCS 310-434330/2
 Matrix: Water
 Analysis Batch: 434330

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	224.8		mg/L		114	85 - 115

Eurofins Cedar Falls

QC Sample Results

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method: SM 5310C - TOC

Lab Sample ID: MB 310-434924/11
Matrix: Water
Analysis Batch: 434924

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	<1.00		1.00	0.500	mg/L			10/01/24 12:33	1

Lab Sample ID: LCS 310-434924/12
Matrix: Water
Analysis Batch: 434924

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	9.99	10.54		mg/L		105	85 - 115

Lab Sample ID: 310-291363-1 DU
Matrix: Water
Analysis Batch: 434924

Client Sample ID: Leachate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	32.7		33.64	J	mg/L		3	15

QC Association Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

GC/MS VOA

Analysis Batch: 434679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	624.1	
MB 310-434679/5	Method Blank	Total/NA	Water	624.1	
LCS 310-434679/6	Lab Control Sample	Total/NA	Water	624.1	
LCS 310-434679/7	Lab Control Sample	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 434383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	625	
MB 310-434383/1-A	Method Blank	Total/NA	Water	625	
LCS 310-434383/2-A	Lab Control Sample	Total/NA	Water	625	
LCSD 310-434383/3-A	Lab Control Sample Dup	Total/NA	Water	625	

Analysis Batch: 435276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	625.1	434383
MB 310-434383/1-A	Method Blank	Total/NA	Water	625.1	434383
LCS 310-434383/2-A	Lab Control Sample	Total/NA	Water	625.1	434383
LCSD 310-434383/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	434383

GC Semi VOA

Prep Batch: 434423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	608	
MB 310-434423/1-A	Method Blank	Total/NA	Water	608	
LCS 310-434423/2-A	Lab Control Sample	Total/NA	Water	608	
LCSD 310-434423/3-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 435303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	608.3	434423
MB 310-434423/1-A	Method Blank	Total/NA	Water	608.3	434423
LCS 310-434423/2-A	Lab Control Sample	Total/NA	Water	608.3	434423
LCSD 310-434423/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	434423

Prep Batch: 435868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	608	
MB 310-435868/1-A	Method Blank	Total/NA	Water	608	
LCS 310-435868/2-A	Lab Control Sample	Total/NA	Water	608	
LCSD 310-435868/3-A	Lab Control Sample Dup	Total/NA	Water	608	

Analysis Batch: 435980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	608.3	435868
MB 310-435868/1-A	Method Blank	Total/NA	Water	608.3	435868
LCS 310-435868/2-A	Lab Control Sample	Total/NA	Water	608.3	435868
LCSD 310-435868/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	435868

QC Association Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Metals

Prep Batch: 434434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	200.8	
MB 310-434434/1-A	Method Blank	Total/NA	Water	200.8	
LCS 310-434434/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 434926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	200.8	434434
MB 310-434434/1-A	Method Blank	Total/NA	Water	200.8	434434
LCS 310-434434/2-A	Lab Control Sample	Total/NA	Water	200.8	434434

Analysis Batch: 435069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	200.8	434434
MB 310-434434/1-A	Method Blank	Total/NA	Water	200.8	434434
LCS 310-434434/2-A	Lab Control Sample	Total/NA	Water	200.8	434434

Prep Batch: 435419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	245.1	
MB 310-435419/1-A	Method Blank	Total/NA	Water	245.1	
LCS 310-435419/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 435592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	245.2	435419
MB 310-435419/1-A	Method Blank	Total/NA	Water	245.2	435419
LCS 310-435419/2-A	Lab Control Sample	Total/NA	Water	245.2	435419

Prep Batch: 686457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	1631E	
310-291363-2	Field Blank LLHg	Total/NA	Water	1631E	
MB 400-686457/3-A	Method Blank	Total/NA	Water	1631E	
LCS 400-686457/4-A	Lab Control Sample	Total/NA	Water	1631E	
LCSD 400-686457/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	

Analysis Batch: 686552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	1631E	686457
310-291363-2	Field Blank LLHg	Total/NA	Water	1631E	686457
MB 400-686457/3-A	Method Blank	Total/NA	Water	1631E	686457
LCS 400-686457/4-A	Lab Control Sample	Total/NA	Water	1631E	686457
LCSD 400-686457/5-A	Lab Control Sample Dup	Total/NA	Water	1631E	686457

General Chemistry

Prep Batch: 434328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	351.2	
MB 310-434328/1-A	Method Blank	Total/NA	Water	351.2	
LCS 310-434328/2-A	Lab Control Sample	Total/NA	Water	351.2	

Eurofins Cedar Falls

QC Association Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

General Chemistry

Analysis Batch: 434330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	SM 5210B	
USB 310-434330/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 310-434330/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 434331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	SM 4500 H+ B	
LCS 310-434331/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Prep Batch: 434401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	Distill/Ammonia	
MB 310-434401/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-434401/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 434408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	I-3765-85	
MB 310-434408/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-434408/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 434463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	351.2	434328
MB 310-434328/1-A	Method Blank	Total/NA	Water	351.2	434328
LCS 310-434328/2-A	Lab Control Sample	Total/NA	Water	351.2	434328

Analysis Batch: 434470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	350.1	434401
MB 310-434401/1-A	Method Blank	Total/NA	Water	350.1	434401
LCS 310-434401/2-A	Lab Control Sample	Total/NA	Water	350.1	434401

Analysis Batch: 434758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	SM 2540C	
MB 310-434758/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-434758/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-291363-1 DU	Leachate	Total/NA	Water	SM 2540C	

Analysis Batch: 434924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-291363-1	Leachate	Total/NA	Water	SM 5310C	
MB 310-434924/11	Method Blank	Total/NA	Water	SM 5310C	
LCS 310-434924/12	Lab Control Sample	Total/NA	Water	SM 5310C	
310-291363-1 DU	Leachate	Total/NA	Water	SM 5310C	

Lab Chronicle

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Client Sample ID: Leachate

Lab Sample ID: 310-291363-1

Date Collected: 09/25/24 12:15

Matrix: Water

Date Received: 09/25/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	434679	FE5V	EET CF	09/30/24 14:07
Total/NA	Prep	625			434383	AYK7	EET CF	09/26/24 10:27
Total/NA	Analysis	625.1		1	435276	L0FS	EET CF	10/04/24 18:37
Total/NA	Prep	608			434423	AYK7	EET CF	09/26/24 14:09
Total/NA	Analysis	608.3		1	435303	BW2O	EET CF	10/04/24 21:40
Total/NA	Prep	608			435868	AYK7	EET CF	10/10/24 15:06
Total/NA	Analysis	608.3		1	435980	BW2O	EET CF	10/11/24 15:01
Total/NA	Prep	1631E			686457	VLC	EET PEN	09/30/24 14:54 - 10/01/24 09:00 ¹
Total/NA	Analysis	1631E		1	686552	VLC	EET PEN	10/02/24 14:29
Total/NA	Prep	200.8			434434	F5MW	EET CF	09/27/24 09:00
Total/NA	Analysis	200.8		1	435069	NFT2	EET CF	10/02/24 17:29
Total/NA	Prep	200.8			434434	F5MW	EET CF	09/27/24 09:00
Total/NA	Analysis	200.8		1	434926	NFT2	EET CF	10/01/24 17:30
Total/NA	Prep	245.1			435419	QTZ5	EET CF	10/07/24 14:55
Total/NA	Analysis	245.2		1	435592	QTZ5	EET CF	10/08/24 15:45
Total/NA	Prep	Distill/Ammonia			434401	MQ8M	EET CF	09/26/24 11:49
Total/NA	Analysis	350.1		1	434470	ZJX4	EET CF	09/27/24 01:33
Total/NA	Prep	351.2			434328	W9YR	EET CF	09/26/24 05:57
Total/NA	Analysis	351.2		1	434463	ZJX4	EET CF	09/26/24 18:23
Total/NA	Analysis	I-3765-85		1	434408	DGU1	EET CF	09/26/24 12:16
Total/NA	Analysis	SM 2540C		1	434758	MDU9	EET CF	09/30/24 16:53
Total/NA	Analysis	SM 4500 H+ B		1	434331	W9YR	EET CF	09/26/24 07:08
Total/NA	Analysis	SM 5210B		1	434330	W9YR	EET CF	09/26/24 07:31
Total/NA	Analysis	SM 5310C		4	434924	DGU1	EET CF	10/02/24 06:05

Client Sample ID: Field Blank LLHg

Lab Sample ID: 310-291363-2

Date Collected: 09/25/24 12:00

Matrix: Water

Date Received: 09/25/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1631E			686457	VLC	EET PEN	09/30/24 14:54 - 10/01/24 09:00 ¹
Total/NA	Analysis	1631E		1	686552	VLC	EET PEN	10/02/24 13:04

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

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

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Laboratory: Eurofins Cedar Falls

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

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8	200.8	Water	Arsenic
200.8	200.8	Water	Barium
200.8	200.8	Water	Cadmium
200.8	200.8	Water	Chromium
200.8	200.8	Water	Copper
200.8	200.8	Water	Iron
200.8	200.8	Water	Lead
200.8	200.8	Water	Nickel
200.8	200.8	Water	Selenium
200.8	200.8	Water	Silver
200.8	200.8	Water	Zinc
245.2	245.1	Water	Mercury
350.1	Distill/Ammonia	Water	Ammonia
351.2	351.2	Water	Nitrogen, Kjeldahl
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	1,3-Dichloropropene
625.1	625	Water	1,2-Dichlorobenzene
625.1	625	Water	1,3-Dichlorobenzene
625.1	625	Water	1,4-Dichlorobenzene
625.1	625	Water	Dibenzofuran
I-3765-85		Water	Total Suspended Solids
SM 2540C		Water	Total Dissolved Solids
SM 4500 H+ B		Water	pH
SM 5310C		Water	Total Organic Carbon

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	10-09-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25

Accreditation/Certification Summary

Client: Adair County Sanitary Landfill
Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Laboratory: Eurofins Pensacola (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	01-09-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

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- 14
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Method Summary

Client: Adair County Sanitary Landfill
 Project/Site: Adair Co. Sanitary Landfill Leachate

Job ID: 310-291363-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET CF
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET CF
608.3	Organochlorine Pesticides in Water	EPA	EET CF
608.3	Polychlorinated Biphenyls (PCBs) (GC)	EPA	EET CF
1631E	Mercury, Low Level (CVAFS)	EPA	EET PEN
200.8	Metals (ICP/MS)	EPA	EET CF
245.2	Mercury (CVAA)	EPA	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET CF
SM 4500 H+ B	pH	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
SM 5310C	TOC	SM	EET CF
1631E	Preparation, Mercury, Low Level	EPA	EET PEN
200.8	Preparation, Total Metals	EPA	EET CF
245.1	Preparation, Mercury	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
608	Liquid-Liquid Extraction (Separatory Funnel)	EPA	EET CF
625	Liquid-Liquid Extraction	EPA	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF

Protocol References:

- EPA = US Environmental Protection Agency
- None = None
- SM = "Standard Methods For The Examination Of Water And Wastewater"
- USGS = "Methods For Analysis Of Water And Fluvial Sediments", USGS, 1989

Laboratory References:

- EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
- EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001





Environment Testing
America



310-291363 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY	STATE	Project
Receipt Information			
Date/Time Received:	DATE	TIME	Received By: <u>AB</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # ____ of ____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID	<u>Z</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C)	<u>4.5</u>	Corrected Temp (°C):	<u>4.5</u>
• Sample Container Temperature			
Container(s) used	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding If no, proceed with login			
Additional Comments			



Client Information		Sampler: SEAN MARCZEWSKI		Lab PM: Yang, Mary E		Carrier Tracking No(s): 310-95435-26286 1	
Client Contact: Sean Marczewski		Phone: 712-661-9682		E-Mail: Mary Yang@ET EurofinsUS.com		State of Origin:	
Company: SCS Engineers		PWSID:		Analysis Requested		Job #: Page 1 of 1	
Address: 1690 All State Court Suite 100		Due Date Requested:		Total Number of Containers		Preservation Codes: N - None S - H2SO4 D - HNO3 A - HCL	
City: West Des Moines		TAT Requested (days):		TSS 1.3766.88		Other:	
State Zip: IA, 50265		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		TDS 2540C_Calcd, BOD SM6210B_Calcd			
Phone:		PO #: Purchase Order not required		626.1_PREC			
Email: SMarczewski@scsengineers.com		WO #:		TTO Pesticide List 608.3_Pest_PREC			
Project Name: Adair Co. Sanitary Landfill Leachate		Project #: 31008083		TTO PCB List 608.3_PCB_PREC			
Site:		SSOW#:		624.1_PREC - (MOD) TTO Volatile List			
				6310C - TOC			
				PH SM4500_H+			
				624.1_PREC - (MOD) TTO Volatile List			
				Metals 200.8_CWA, Mercury 246.2			
				TKN 361.2			
				Ammonia 350.1			
				Low Level Mercury 1631E - Local Method			
				Perform MS/MSD (Yes or No)			
				Field Filtered Sample (Yes or No)			
				Special Instructions/Note:			
				Leachate		Sub LLHg to Canton	
				Field Blank LLHg		SHORT HOLD 48HR-BOD	

Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Solid, On-water/Oil)		Preservation Code	
		9/25/24		12:15				Water			
		9/25/24		12:00				Water			

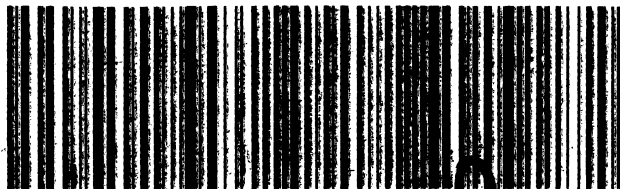
Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested I, II, III, IV, Other (specify)

Empty Kit Relinquished by _____ Date: _____
Relinquished by Gale Tesar Date: 9/25/24 13:30 Company: SCS
Relinquished by _____ Date/Time: _____ Company: _____
Relinquished by _____ Date/Time: _____ Company: _____
 Custody Seals Intact: Yes No No No
 Custody Seal No _____
 Cooler Temperature(s) °C and Other Remarks: _____

Special Instructions/QC Requirements: _____
 Return To Client Disposal By Lab Archive For _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)



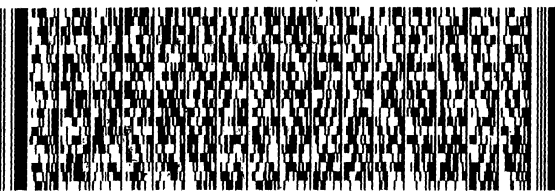
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



XH PUSA 32514 FL-US BFM

TRKH 0201 4085 8612 4387
 FRI - 27 SEP 10:30A
 PRIORITY OVERNIGHT

24102112201



REF: S310-98373 (850) 474-1001

PENSACOLA FL 32514

3355 MCLEMORE DRIVE

EUROFINS ENVIRONMENT TESTING SOLUTIONS

SHIPPING/RECEIVING

UNITED STATES US

ORIGIN ID: AL08 (319) 277-2401
 SAMPLE RECEIVING
 EUROFINS TESTAMERICA
 3019 VENTURE WAY
 CEDAR FALLS, IA 52619
 SHIP DATE: 26SEP24
 ACTWGT: 12.49 LB MINN
 QPD: 08/0970/CAFEE3808
 BILL SENDER

TAL-00990(13:6)

**IF THIS SHIPMENT IS DELAYED IN TRANSIT,
 STORE REFRIGERATED (2° TO 8° C / 36° TO 47° F)**

Temperature Controlled

eurofins | Environment Testing

Login Sample Receipt Checklist

Client: Adair County Sanitary Landfill

Job Number: 310-291363-1

Login Number: 291363

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Bunker, Xavier M

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Adair County Sanitary Landfill

Job Number: 310-291363-1

Login Number: 291363

List Number: 2


Creator: Roberts, Darrien

List Source: Eurofins Pensacola

List Creation: 09/27/24 01:46 PM

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	2.1°C IR10
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Appendix F
2024 Landfill Gas Report

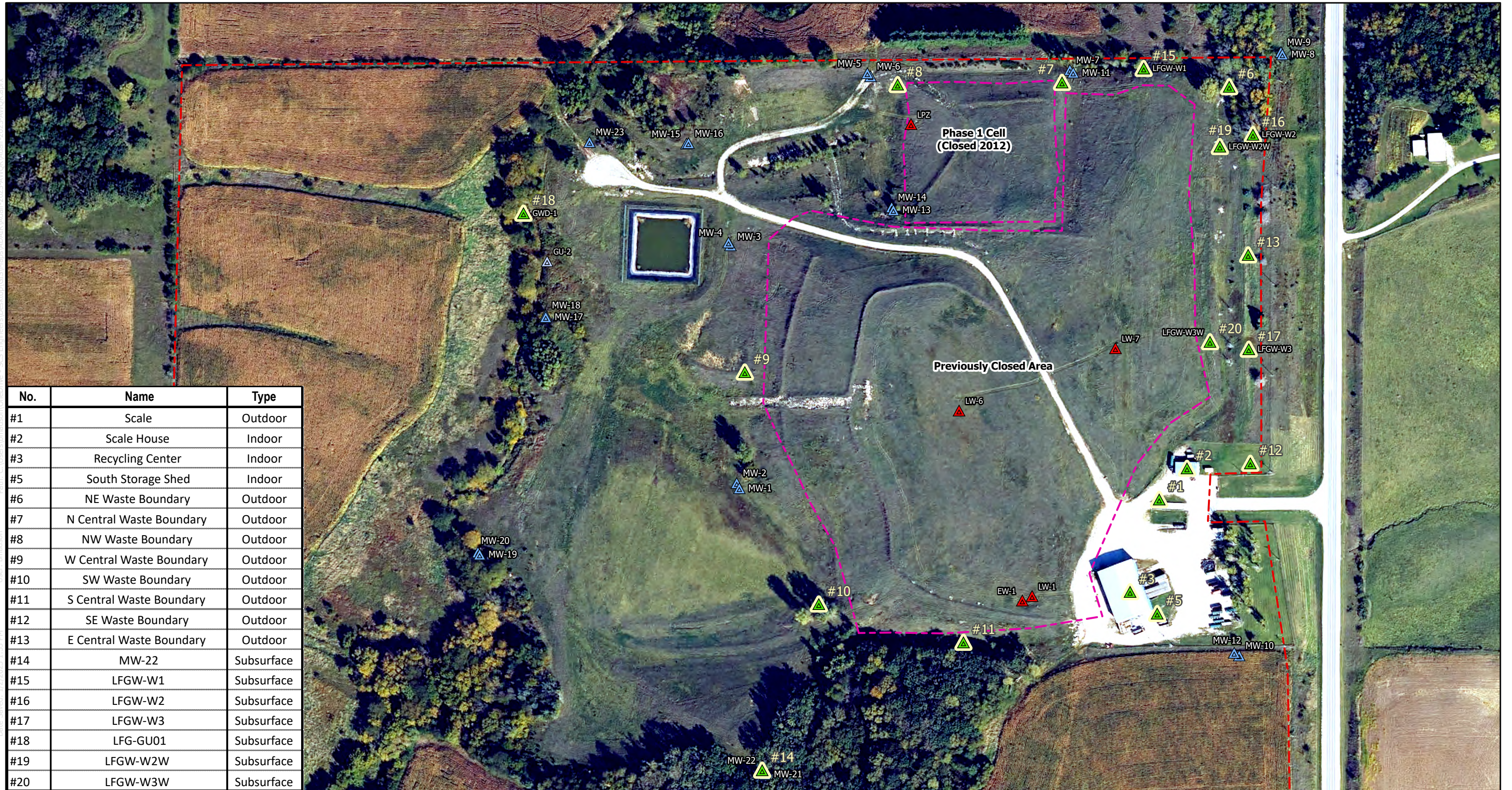
Table 13
Gas Monitoring Summary
2024 Gas Monitoring Report
Adair County Sanitary Landfill (Closed)
Permit No. 01-SDP-01-74C

Monitoring Points		Methane Results (% LEL)							
Point #		3/28/2024		7/1/2024		9/25/2024		12/24/2024	
1	Scale	0		0		0		0	
2	Scale House	0		0		0		0	
3	Recycling Center	0		0		0		0	
6	NE Waste Boundary	0		0		0		0	
7	N Central Waste Boundary	0		0		0		0	
8	NW Waste Boundary	0		0		0		0	
9	W Central Waste Boundary	0		0		0		0	
10	SW Waste Boundary	0		0		0		0	
11	S Central Waste Boundary	0		0		0		0	
12	SE Waste Boundary	0		0		0		0	
13	E Central Waste Boundary	0		0		0		0	
14	MW-22	0	U	0	N	0	N	0	N
15	LFGW-W1	0	U	0	Y	0	Y	0	Y
16	LFGW-W2	0	U	0	N	0	N	0	N
17	LFGW-W3	0	U	0	N	0	N	0	N
18	LFG-GU01	0		0		0		0	
19	LFGW-W2W	0	U	0	N	0	N	0	N
20	LFGW-W3W	54	U	92	N	44	N	23	N

S(Y/N/U) - Was screen submerged, yes or no, blank is non-applicable, and U is unknown.

Notes

- 1) **Figure 1** Methane Monitoring Network shows the location of the methane monitoring system points.
- 2) Quarterly methane monitoring is completed by Adair County Landfill and Recycling Center staff and provided to SCS Engineers for reporting.
- 3) LFGW-W3W is a subsurface methane monitoring well located between the waste boundary and landfill gas monitoring well LFGW-W3. In accordance with IAC 567-113.9(2)"a", the methane gas concentration shall not exceed 100% of the LEL at the facility property boundary. As there was no detection in LFGW-W3, which is located east of LFGW-W3W at the property boundary, there is no evidence of offsite migration or a threat to human health and/or the environment.
- 4) Static water levels in subsurface methane monitoring points were inadvertently missed during the Q1 monitoring event.
- 5) The screen in LFGW-W1 was submerged during the Q2, Q3, and Q4 monitoring events. The maximum water column height above the top of the screen was 1.68' during the reporting period.



Methane Monitoring Network



Legend

- ▲ Methane Monitoring Point
- ▲ Monitoring Well
- ▲ Landfill Gas Monitoring Well
- ▲ Leachate Monitoring Point
- Approximate Waste Boundary
- Approximate Property Boundary

Adair County Sanitary Landfill
 Adair, IA
 Project No: 27224370.25
 Drawing Date: January 2025

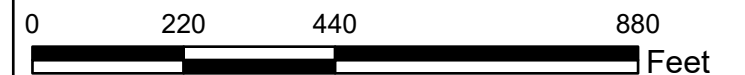
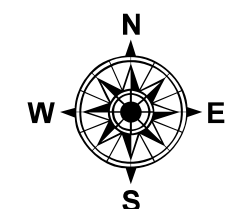



Figure 1

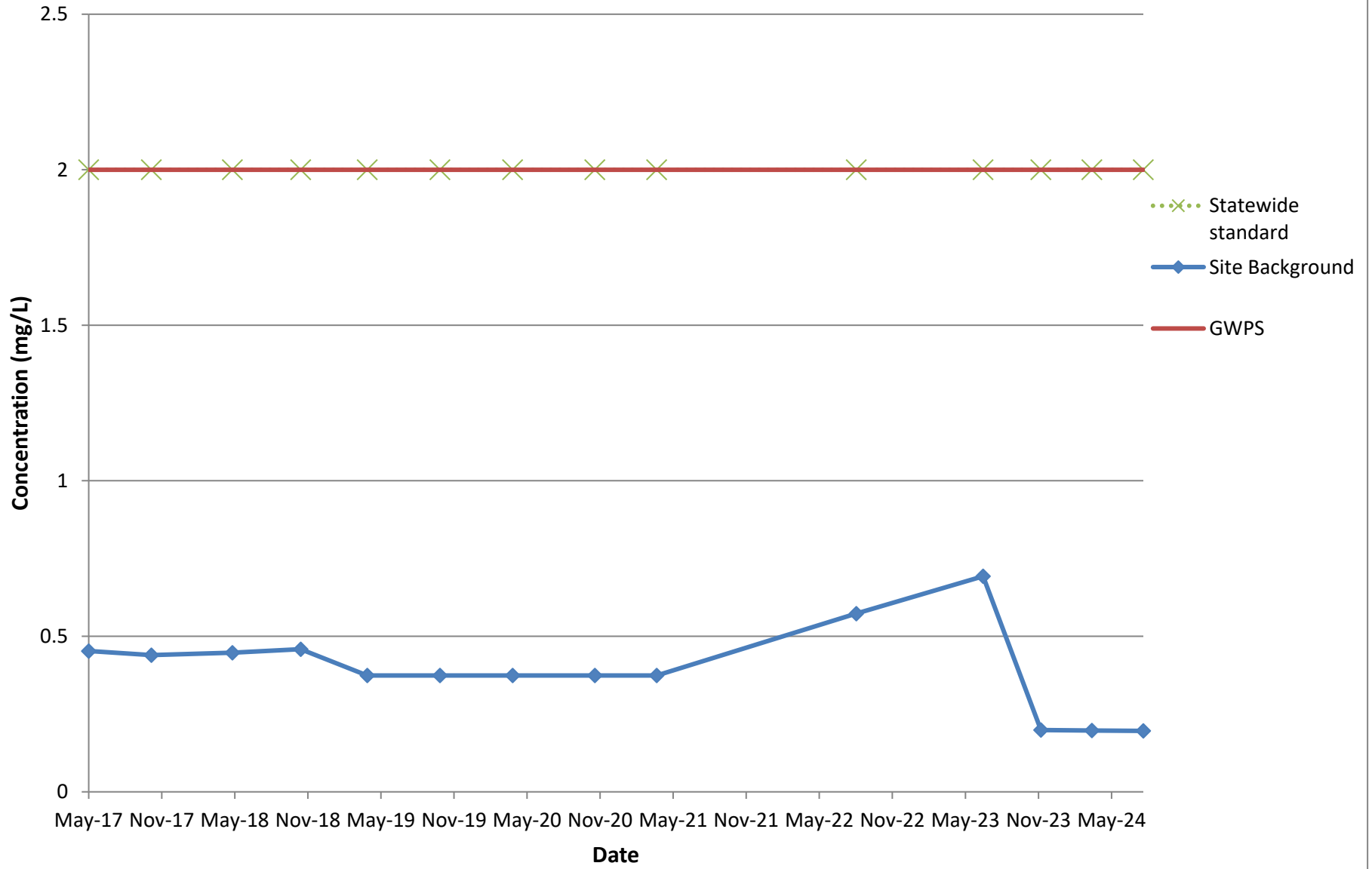


Appendix G

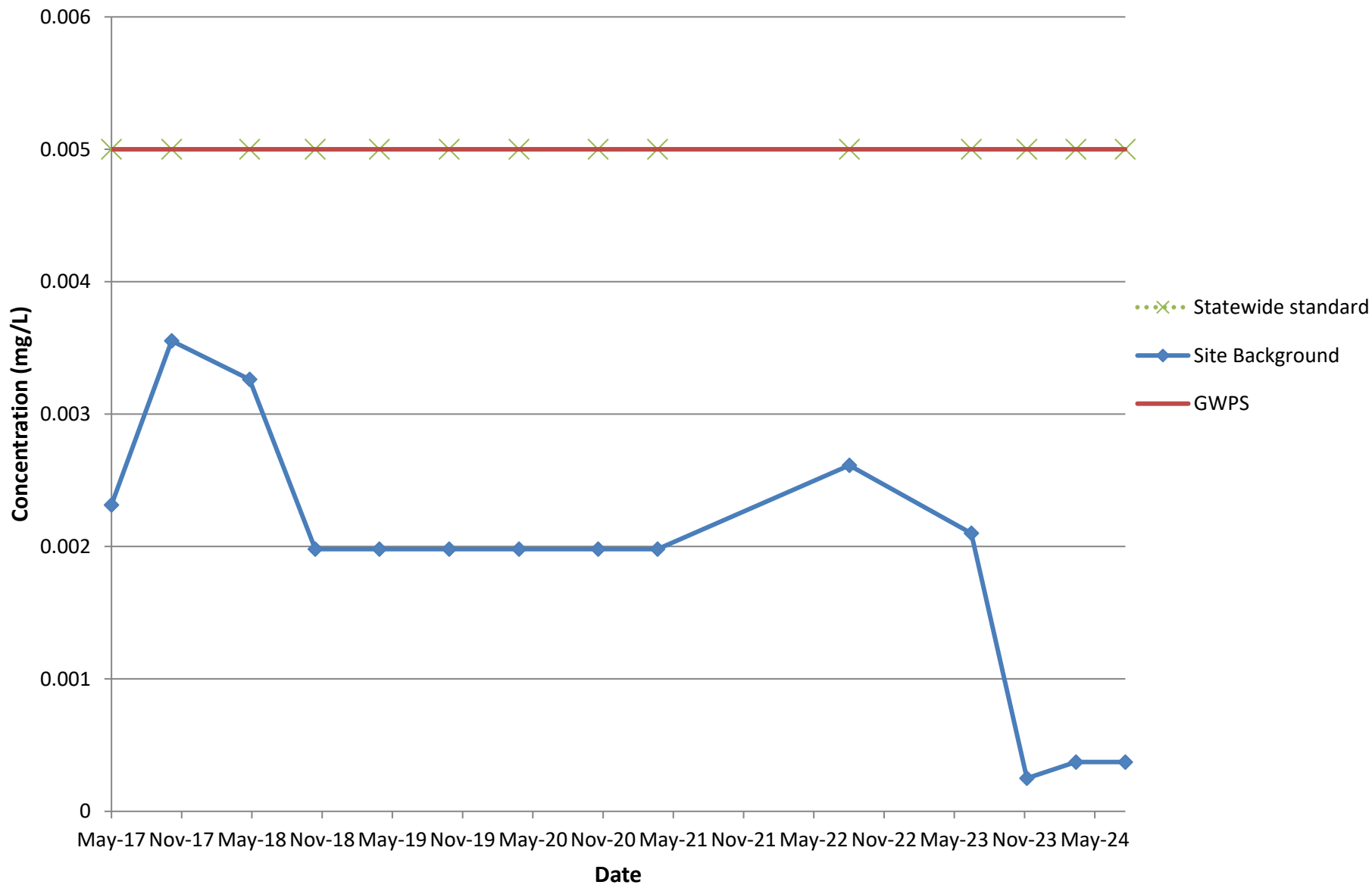
Standards History Graphs

Barium

Prediction Limits and GWPS vs. Time

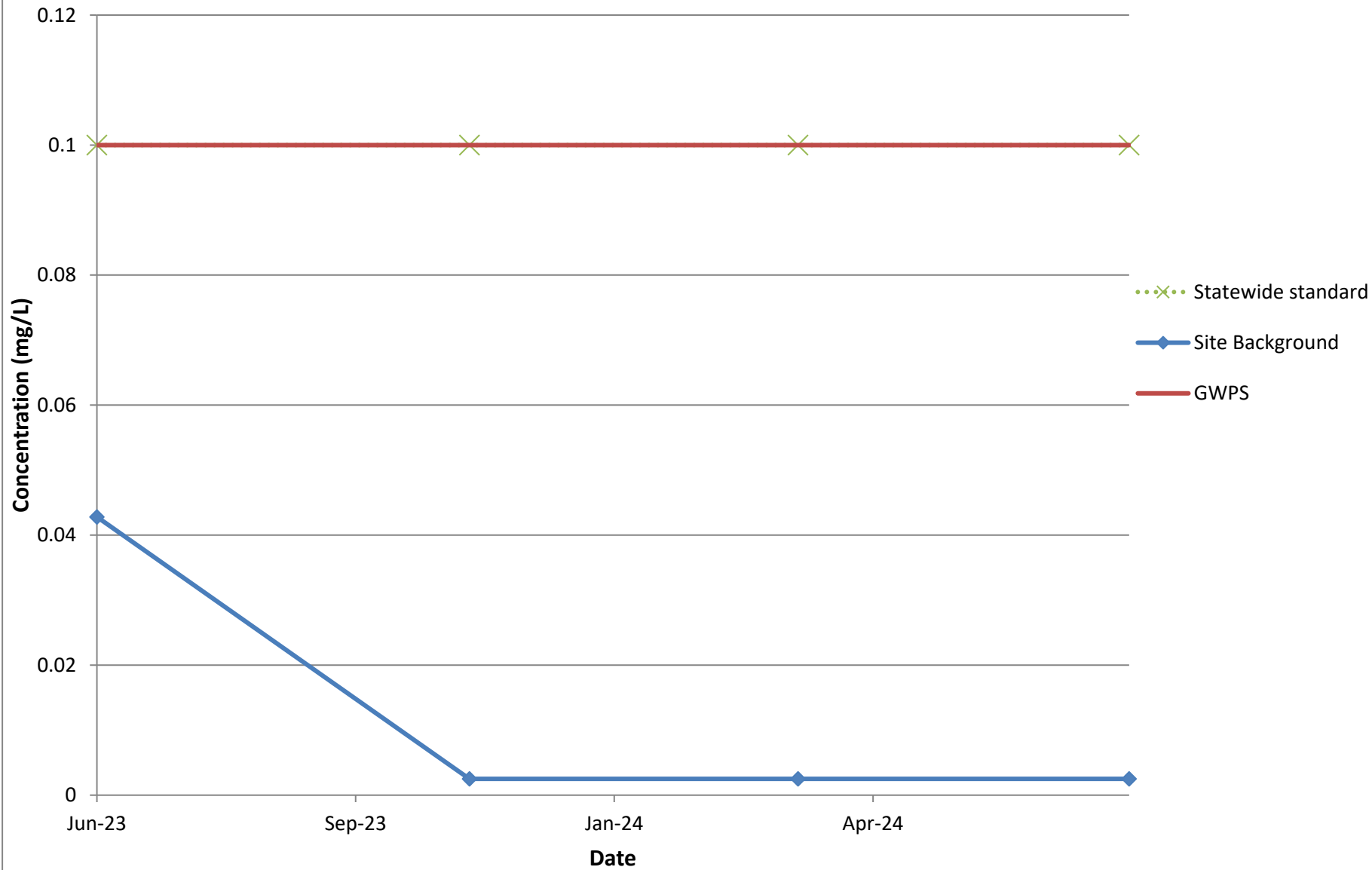


Cadmium Prediction Limits and GWPS vs. Time



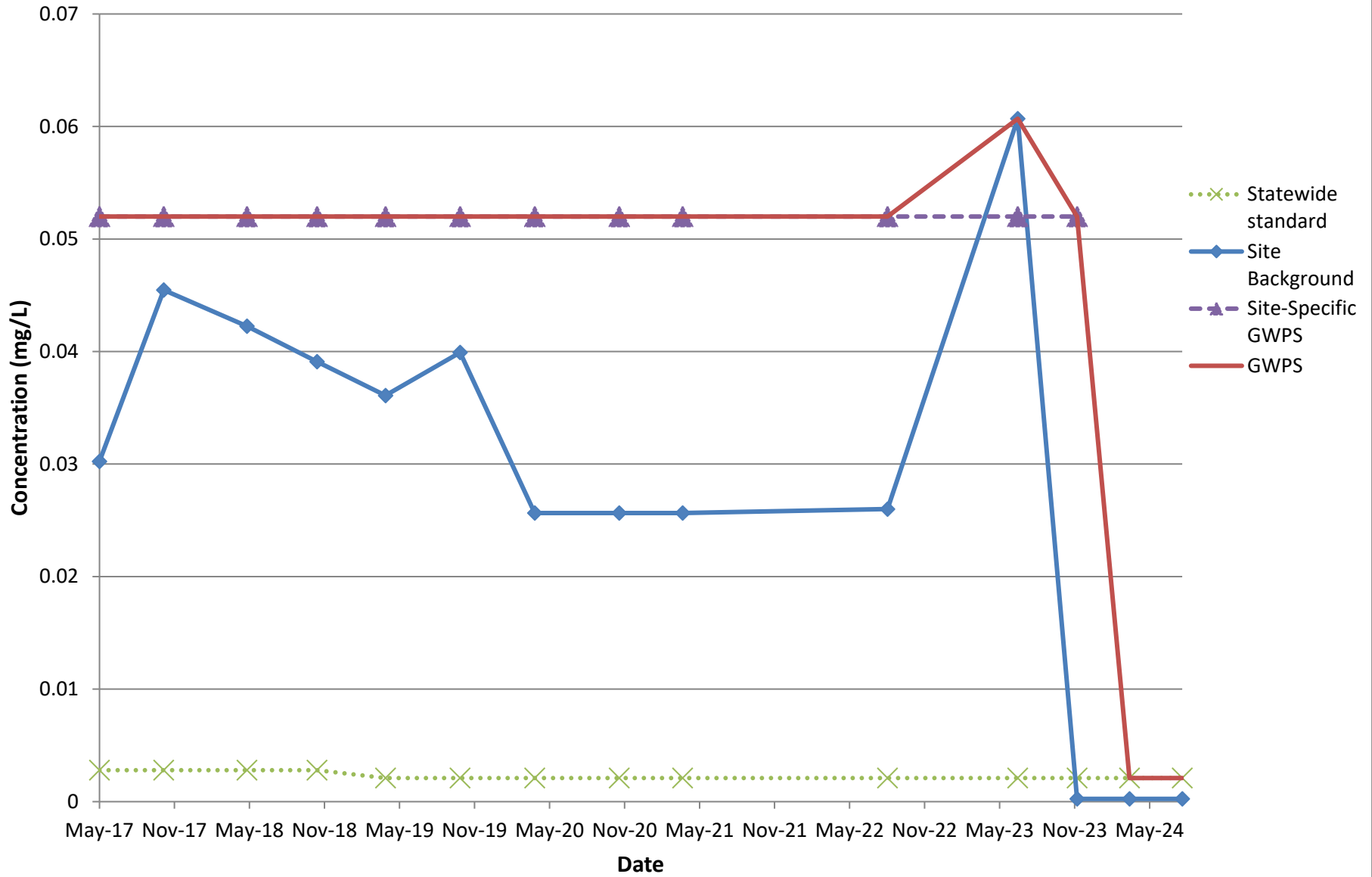
Chromium

Prediction Limits and GWPS vs. Time



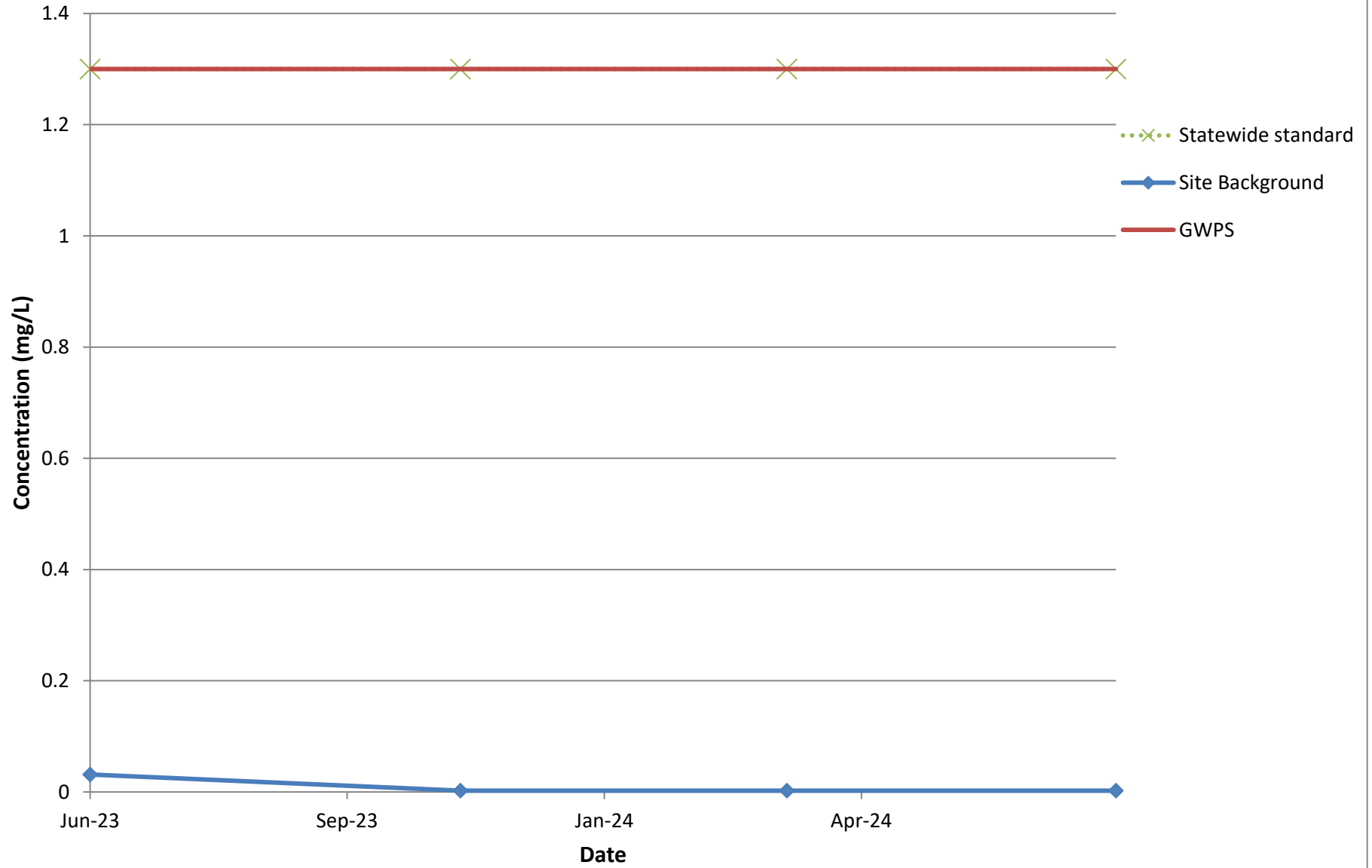
Cobalt

Prediction Limits and GWPS vs. Time

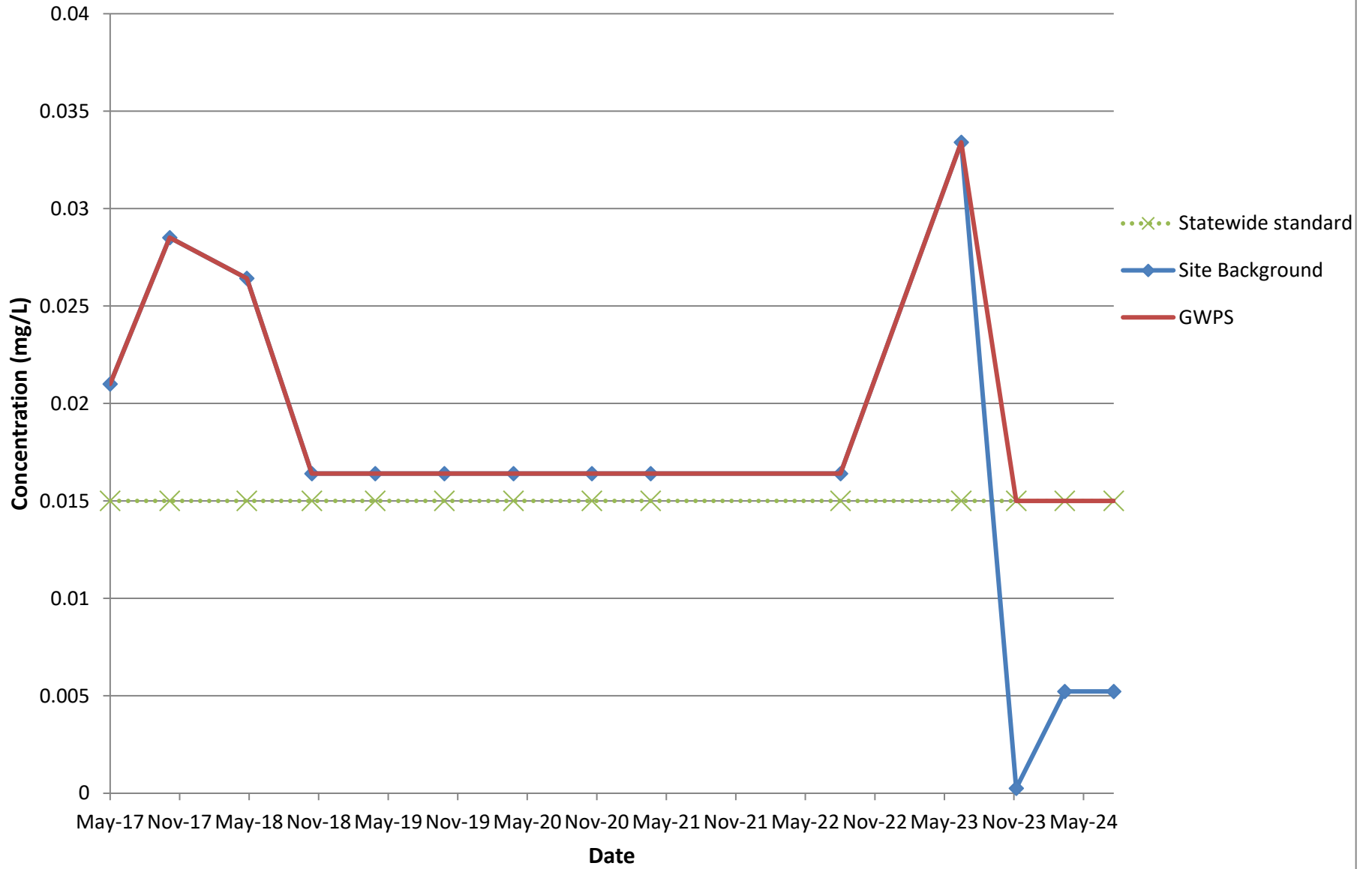


Copper

Prediction Limits and GWPS vs. Time

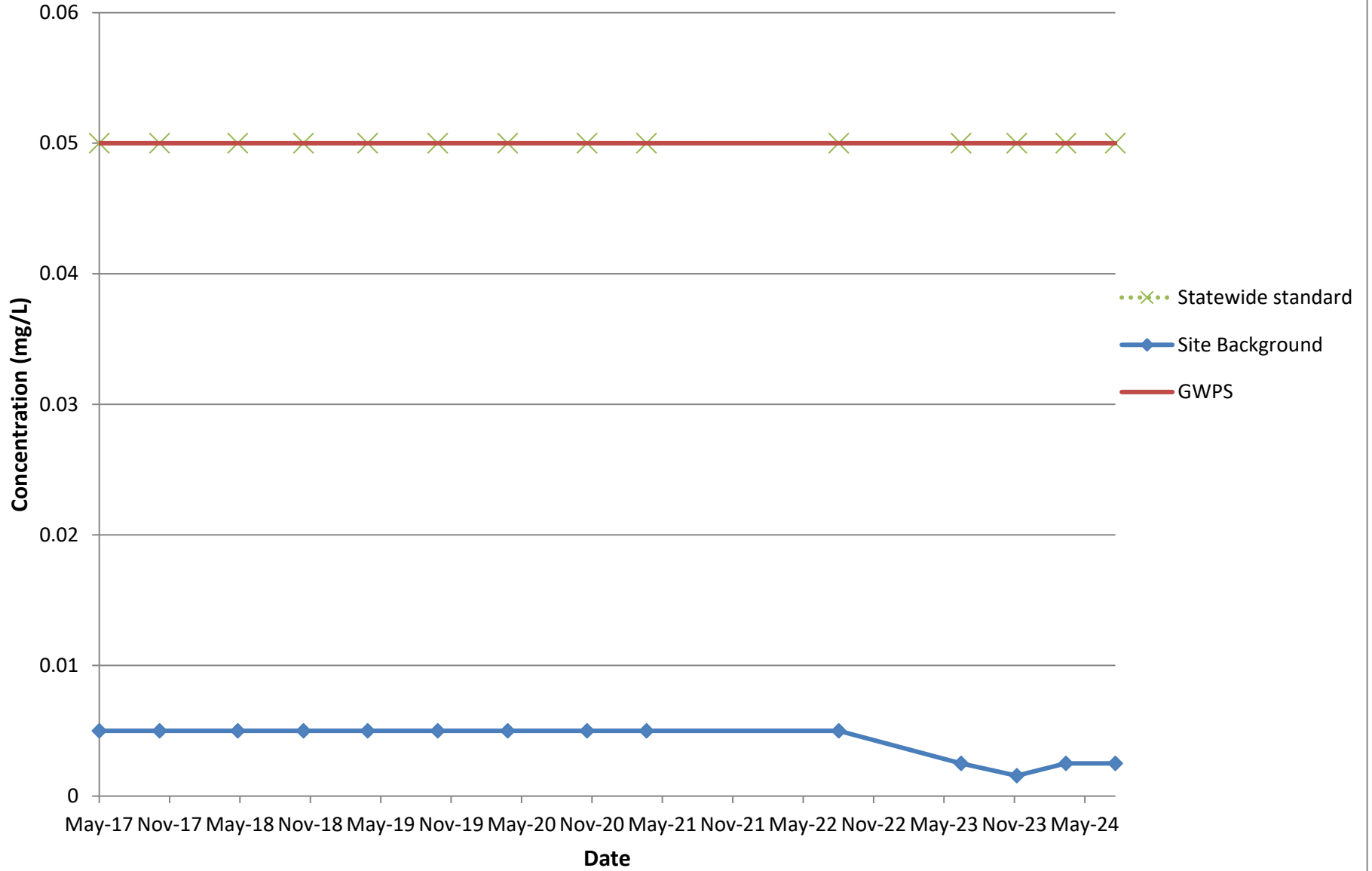


Lead Prediction Limits and GWPS vs. Time



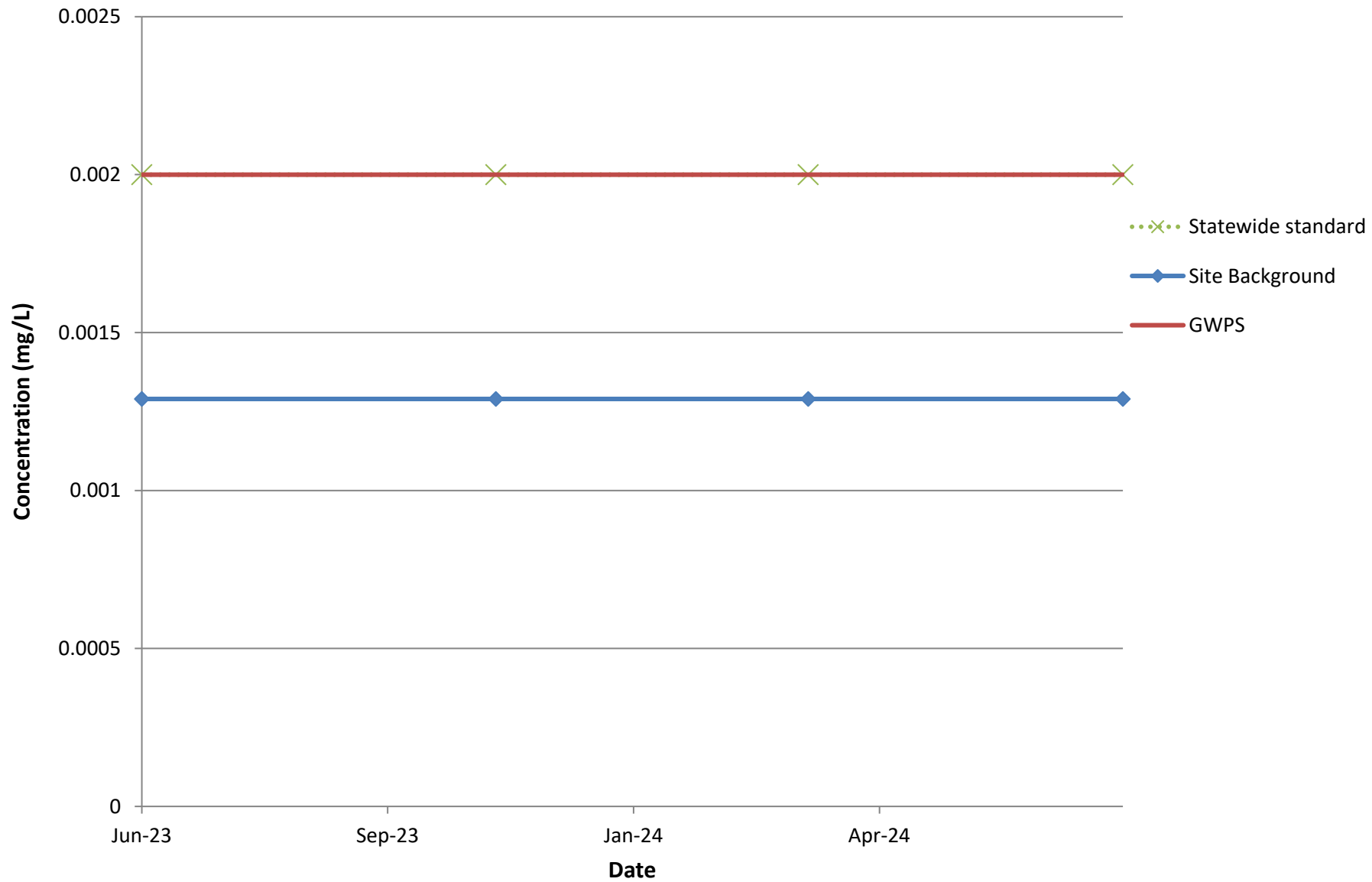
Selenium

Prediction Limits and GWPS vs. Time

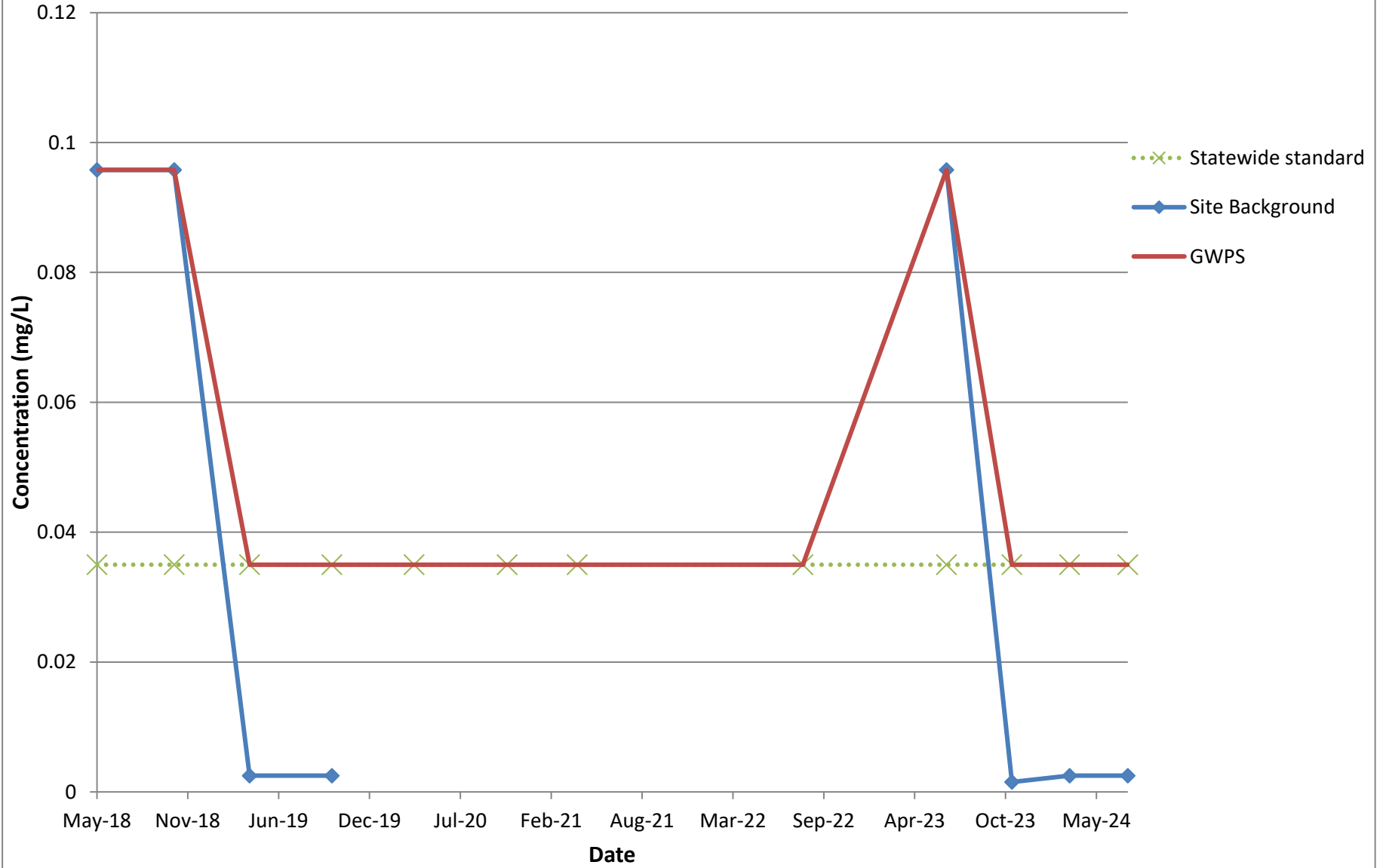


Thallium

Prediction Limits and GWPS vs. Time



Vanadium Prediction Limits and GWPS vs. Time



Zinc

Prediction Limits and GWPS vs. Time

