

West Des Moines, IA

PROJECT: Cherokee Co, FY25 Env Comp, IA 27223105.25      DATE: 3/11/2025

SUBJECT: Cherokee County Sanitary Landfill - 18-SDP-01-75P - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report      TRANSMITTAL ID: 00001

PURPOSE: For your approval      VIA: Info Exchange

FROM

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TO

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REMARKS: Geoff -

Please find for your download the Cherokee County Sanitary Landfill 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Review, 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	3/11/2025	Cherokee County Sanitary Landfill - 18-SDP-01-75P - 2024 AWQR.LCSPER.MMR 03.11.2025.pdf	

COPIES:

# Transmittal

DATE: 3/11/2025  
TRANSMITTAL ID: 00001

Becky Jolly  
Tony Agnitsch  
Tim Buelow  
Sean Marczewski

(Cherokee County Solid Waste Commission)  
(SCS Engineers)  
(SCS Engineers)

March 11, 2025  
File No. 27223105.25

Mr. Geoff Spain  
Iowa Department of Natural Resources  
Land Quality Bureau  
Wallace State Office Building  
502 East 9<sup>th</sup> Street  
Des Moines, Iowa 50319-0034

Subject: 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report  
Cherokee County Sanitary Landfill  
Closed MSWLF Unit & Open MSWLF Unit  
Permit No. 18-SDP-01-75P

Dear Geoff:

SCS Engineers, on behalf of the Cherokee County Solid Waste Commission, has completed the required statistical analyses and reporting for the Closed municipal solid waste landfill (MSWLF) unit and Open MSWLF unit at the Cherokee County Sanitary Landfill (Landfill) for the year 2024. Services were performed in general accordance with Iowa Administrative Code (IAC) 567-113.10 and the current requirements for implementation of the Hydrologic Monitoring System Plan. Please find enclosed a copy of the 2024 Annual Water Quality Report.

Additionally, an evaluation of the leachate control system and gas monitoring results for the Landfill are included in accordance with IAC 567-113.7(5)"b"(14) and 113.9(2)"d", respectively. The 2024 Leachate Control System Performance Evaluation Report and 2024 Landfill Gas Annual Report are included as appendices to the Annual Water Quality Report.

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

Sincerely,



Sean Marczewski  
Project Professional II  
SCS Engineers



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

SAM/TCB

Copies: Mr. Tony Agnitsch, Cherokee County Sanitary Landfill



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

Open & Closed MSWLF Units  
Cherokee County Sanitary Landfill  
Cherokee, Iowa  
Solid Waste Permit No. 18-SDP-01-75P

Prepared for:

Cherokee County Solid Waste Commission

**SCS ENGINEERS**

27223105.25 | March 2025

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## CERTIFICATION

Prepared by: Sean Marczewski Date: 3/11/2025


Typed: Sean Marczewski

Reviewed by: Timothy C. Buelow Date: 3/11/2025

Typed: Timothy C. Buelow, P.E.

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

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

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.
	<u>Timothy C. Buelow</u> <span style="float: right;"><u>3/11/2025</u></span>
	Timothy C. Buelow, P.E. <span style="float: right;">(date)</span>
	Iowa License No. <u>14445</u>
	My license renewal date is: <u>12/31/2025</u>
Pages or sheets covered by this seal: All except <b>Appendix B-1</b> .	

# EXECUTIVE SUMMARY

## ES.1 PERIOD OF REPORT COVERAGE

The period of report coverage is from January – December 2024 and includes the sampling events summarized in **Table 2**, Monitoring Program Implementation Schedule.

## ES.2 REPORT PRIORITY

The following summarizes report priorities associated with groundwater compliance at the Cherokee County Sanitary Landfill (Landfill) Open and Closed municipal solid waste landfill (MSWLF) units:

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

## ES.3 SITE STATUS AND APPLICABLE RULES

- Landfill Status: Active (Open MSWLF unit) and closed (Closed MSWLF unit)
- Types of waste accepted: MSW, C&D, Special Waste
- Applicable IAC rules: 2009 567-113.10

## ES.5 COMMENTS

The following summarizes points of special emphasis:

### Closed MSWLF Unit

- There were six new and one ongoing well/detected constituents with indicated statistically significant increases (SSIs) above background for monitoring wells in the assessment monitoring program that are summarized in **Table 7**. The monitoring wells with SSIs are in the assessment monitoring program and do not require a resample; therefore, the SSIs were not confirmed.
- Site impact on groundwater found in the vicinity of monitoring wells MW-14R, MW-15R, and MW-39 is generally defined horizontally and vertically to background for the SSL parameters.
- Over 66 percent of the analyzed trends for Appendix I parameters for monitoring wells MW-14R, MW-15R, and MW-39 were stable or decreasing based on a less than or equal to zero Mann-Kendall statistic.

### Open MSWLF Unit

- An SSI was indicated for cobalt in monitoring well MW-42R during the fall 2023 sampling event. Retesting occurred in March 2024 prior to the 1<sup>st</sup> 2024 semi-annual sampling event and the SSI was not confirmed.

## ACRONYMS/ABBREVIATIONS

bgs = below ground surface

CAMP = Corrective Action Groundwater Monitoring Program

C&D = Construction and Demolition

DNR = Iowa Department of Natural Resources

GWPS = Groundwater Protection Standard

HMSP = Hydrologic Monitoring System Plan

IAC = Iowa Administrative Code

MSW = Municipal Solid Waste

MSWLF = Municipal Solid Waste Landfill

MCL = EPA Maximum Contaminant Level

QA = Quality Assurance

QC = Quality Control

SSI = Statistically Significant Increase above background

SSL = Statistically Significant Level above groundwater protection standard

TSS = Total Suspended Solids

VOC = Volatile Organic Compound

## 1.0 SITE BACKGROUND

### 1.1 SITE LOCATION

The Landfill property is depicted on **Figure 1**, Approved Monitoring Network. The Landfill is located north of Linden Street, adjacent to the southeastern city limits of the City of Cherokee, Iowa. The legal description is the W ½ of the SW ¼, Section 36, Township 92 North, Range 40 West, in Cherokee County, Iowa.

### 1.2 GEOLOGY AND HYDROGEOLOGY OF THE SITE

The Landfill is situated in the Northwest Iowa Plains, which is characterized by well-developed drainage and wide valleys due to several episodes of severe water and wind erosion. The overlying, unconsolidated soil consists of wind-deposited loess (3-6 feet thick silt with trace fine sand) and several episodes of Pleistocene glaciation including the youngest being the Wisconsinian. The Pleistocene glaciation period includes weathered till (6-18 feet thick, brown, lean clay with trace fine sand) and unweathered till (5-70 feet thick, gray to dark gray, lean clay with trace sand and gravel).

Bedrock beneath the Landfill is documented as the Cretaceous Dakota Sandstone, consisting of the Woodbury Member (interbedded shale, sandstone, and lignite) at an approximate depth of 110-200 feet below ground surface (bgs) and the Nishnabotna Member (medium to coarse sandstone with interbedded shale) at a depth of approximately 200 feet bgs. Data from the Iowa Geologic Survey indicate the bedrock surface is irregular and slopes to the west/northwest toward the Little Sioux River. Beneath the Dakota Sandstone lies generally Mississippian and Devonian-aged limestone.

Throughout the Landfill area, the glacial till is typically saturated below an approximate depth of 5 to 25 feet bgs. The shallow water table surface generally mimics the topography with groundwater flow in the northwest direction towards the Little Sioux River. Groundwater flow beneath most of the Landfill converges to the northwest, with a small component flowing towards a creek south of the Landfill.

Generally surface water in the southern portion of the site flows toward the road ditch along Linden Street which eventually flows west and south to Coonley Creek, then to the Little Sioux River. In the north portion of the Landfill surface water flows northwest to the ravines where an intermittent, seasonal creek continues to the Little Sioux River.

The 2002 Hydrogeologic Investigation Report by Fox Engineering indicated the glacial sediments are generally mostly clay and exhibit low hydraulic conductivities. Lateral movement is controlled by the predominately clay till although movement within the sand and silt seams is relatively accelerated. Low permeability of the glacial clays also controls the vertical groundwater flow which appears to have the greatest resistance to flow. The glacial till deposits in the area are considered to act as an aquitard.

Throughout the area, residential and commercial water supplies are within the Cretaceous Dakota Sandstone and the Devonian Limestone aquifers.

## 2.0 FIGURES DISCUSSION

The following figures are included in a **Figures** section following the **Tables** section of this report.

## 2.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Landfill property, hydrologic monitoring system plan (HMSP) monitoring networks, and impact delineation monitoring points are depicted on **Figure 1**. **Figure 1** indicates the respective monitoring programs of the HMSP monitoring points for each MSWLF unit.

## 2.2 FIGURE 2 – GROUNDWATER CONTOURS

A groundwater contour map based on the groundwater levels measured during the May 2024 sampling event is included as **Figure 2**. Water levels at the Landfill appear to be at the highest level northeast of the active area of the Open MSWLF unit. The groundwater appears to flow generally to the west beneath the undeveloped portions of the Open MSWLF unit, while the flow beneath the active cells is primarily to the southwest with convergence of flow toward the center of the area. Groundwater flow beneath the Closed MSWLF unit area is to the north beneath the Original Landfill Area, while the flow beneath Area A and Area B is generally northwesterly. Groundwater flow in the north central portion of the property in the vicinity of sedimentation pond generally converges and exits to the north.

## 2.3 FIGURE 3 – REPORTING PERIOD DETECTION SUMMARY

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

## 2.4 FIGURE 4 – ARSENIC CONCENTRATION MAP

The background concentration for arsenic is 0.0064 mg/L. Former arsenic SSLs at monitoring wells MW-15R and MW-39 are horizontally bracketed to the north by monitoring well MW-14R and downgradient to the southeast by APZOC monitoring well MW-15C. Arsenic is vertically bracketed by monitoring well MW-43.

## 2.5 FIGURE 5 – BARIUM CONCENTRATION MAP

The background concentration for barium is 0.1017 mg/L. The former barium SSL at monitoring well MW-39 is bracketed to the north by monitoring well MW-14R and northeast by AZPOC monitoring well MW-44. Barium measurements at vertical bracketing monitoring well MW-43 are above background. Barium concentrations at AZPOC monitoring well MW-15C were below background during both 2024 sampling events.

## 2.6 FIGURE 6 – COBALT CONCENTRATION MAP

The background concentration for cobalt is 0.0074 mg/L. Former cobalt SSL concentrations at monitoring wells MW-14R, MW-15R, and MW-39 are bracketed to the southeast by AZPOC monitoring well MW-15C, AZPOC monitoring well MW-44 to the northeast, and by monitoring well MW-43 vertically. Elevated cobalt concentrations are bracketed to the west by monitoring well MW-40. The cobalt concentrations measured during the May 2024 sampling event for monitoring wells MW-14R and MW-15R and during the October 2024 sampling event for monitoring well MW-39 were below background.



## 2.7 FIGURE 7 – VINYL CHLORIDE CONCENTRATION MAP

The former vinyl chloride SSL at monitoring well MW-39 is bracketed by non-detect and J flag (estimated) concentrations at AZPOC monitoring well MW-15C to the southeast, monitoring well monitoring well MW-14R to the north, AZPOC monitoring well MW-44 to the northeast, and monitoring well MW-40 to the southwest. These monitoring wells did not have a quantified detection of vinyl chloride during the 2020, 2021, 2022, 2023, and 2024 reporting periods. Vinyl chloride was measured in monitoring wells MW-15R and MW-43 during the May 2024 sampling event and October 2024 sampling event, respectively.

## 3.0 STANDARDS HISTORY GRAPHS

Standards history graphs for the Appendix I metals in the Closed MSWLF unit are included in **Appendix G**. The prediction limits were below the GWPSs with the following exceptions:

- For cadmium, cobalt, lead, thallium, and vanadium, the background prediction limits were higher than the MCLs or state-wide standards, so the prediction limits were used as the GWPSs.
- For beryllium there were no quantified detections in the background.

Standard history graphs were not generated for the intrawell background datasets in the Closed and Open MSWLF units in accordance with recent DNR guidance for similar sites: *“Please note that when intrawell statistics are used, DNR has allowed use of tables as an alternative to the standards history graphs in order to reduce the overall report size.”* More information on prediction limits and GWPSs can be found in **Table 5**.

## 4.0 QA/QC SUMMARY

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

## 5.0 DATA EVALUATION AND SUMMARY

Detection, assessment, and corrective action monitoring statistical evaluations in accordance with the requirements of Iowa Administrative Code (IAC) 567-113.10(5) and 113.10(6) were conducted for the groundwater analytical data collected during the 2024 reporting period. The statistical evaluations for samples collected during this reporting period are located in **Appendix D**, Statistical Method and Output, of this report.



## 5.1 DATA EVALUATION

### Open MSWLF Unit

Groundwater monitoring for the Open MSWLF unit consists of samples from monitoring wells encompassing the downgradient MSWLF unit perimeters and one groundwater underdrain discharge point. The monitoring wells in the Open MSWLF unit monitoring network are analyzed by intrawell statistics. The ranges of measured concentrations for the detected constituents during this reporting period are shown on **Figure 3**, Reporting Period Detection Summary.

During this reporting period, no volatile organic compounds (VOCs) were detected in the Open MSWLF unit monitoring network. Groundwater underdrain GWD-2 had three site-wide maximum concentrations for the Open MSWLF unit, while monitoring well MW-35 had one maximum concentration. Barium and one low total suspended solids (TSS) concentration were the only detections in monitoring well MW-27 during this reporting period and the 2023 reporting period. Groundwater underdrain GWD-2 was dry during the 2<sup>nd</sup> 2024 semi-annual sampling event.

### Closed MSWLF Unit

Groundwater monitoring for the Closed MSWLF unit consists of samples from monitoring wells encompassing the downgradient MSWLF unit perimeters. The background monitoring well for the Closed MSWLF unit monitoring network is MW-11. Historic data from monitoring wells MW-1 and MW-4 and historic and current data from monitoring well MW-11 is used to calculate background prediction limits. The ranges of measured concentrations for the detected constituents during this reporting period are shown on **Figure 3**, Reporting Period Detection Summary.

During this reporting period, trichloroethene was measured at a J flag concentration in monitoring well MW-7. Trichloroethene has been detected in this monitoring well since 2012. Monitoring wells MW-9R, MW-10R and MW-12 each had one inorganic site-wide maximum concentration. Monitoring well MW-13R had three inorganic site-wide maximum concentrations and chlorobenzene was measured during the May 2024 sampling event. Arsenic exceeded the GWPS in AZPOC monitoring well MW-44, but this was likely due to the elevated TSS concentration of 54 mg/L measured during the October 2024 sampling event.

## 5.2 CORRECTIVE ACTION

Trending of the Appendix I parameters in the source characterization monitoring wells MW-14R, MW-15R, and MW-39 was evaluated by Mann-Kendall evaluation. The evaluation indicated no statistically significant trends at 99 percent confidence ( $\alpha = 0.01$ ). As shown in **Table 11**, of 30 total trends evaluated, there were 10 increasing trends indicated by a calculated Mann-Kendall statistic greater than zero and 20 stable or decreasing trends indicated by a Mann-Kendall statistic of zero or less, which calculated to over 66 percent of the constituent-monitoring wells trends as stable or decreasing. A summary table and graphs of the Mann-Kendall trending evaluation for the source wells are included in **Appendix H**. A summary of current and historical analytical results for the source wells is included in **Appendix C-1**.

As stated in the approved CAMP, natural attenuation parameters iron, manganese, nitrate, sulfate, and total organic carbon will be analyzed biennially in the source wells. This sampling last occurred during the September 2022 sampling event. Sampling for natural attenuation parameters was inadvertently missed during the 2024 reporting period and is scheduled to be sampled during the 1<sup>st</sup> 2025 semi-annual sampling event. A discussion of natural attenuation will be included after the next natural attenuation sampling event in the 2025 Annual Water Quality Report.

## **6.0 RECOMMENDATIONS**

### **6.1 SITE IMPACT ON GROUNDWATER**

Site impact on groundwater is measured in the vicinity of monitoring wells MW-14R, MW-15R, and MW-39 between the closed Original Landfill Area of the Closed MSWLF unit and the Open MSWLF unit. The area of impact is generally defined horizontally and vertically to background for the SSL parameters except for barium to the southwest of and vertically below monitoring well MW-39 and vinyl chloride below monitoring well MW-39.

The corrective action remedy of source control via final cover and monitored natural attenuation is in place and will be monitored through routine monitoring, the concentrations measured from the AZPOC samples, and natural attenuation evaluation.

### **6.2 PROPOSED MONITORING**

Anticipated groundwater sampling for the 2025 reporting period is shown in **Table 2**.

### **6.3 PROPOSED MONITORING WELL CHANGES**

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

## Tables

**Table 1**  
**Monitoring Program Summary Table**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open & Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Monitoring Well	Formation <sup>(1)</sup>	Current Monitoring Program	Change for next sampling event	Constituents with SSIs During the 2024 Reporting Period	Constituents with SSLs	Total # of Samples in each monitoring program		
						Detection	Assessment	Corrective Action or Other
<b>HSMP Monitoring Points - Open MSWLF Unit</b>								
MW-21 <sup>(2)</sup>	Weathered Till	Background	No change	Not applicable	Not applicable	3		
MW-23 <sup>(2)</sup>	Weathered Till	Background	No change	Not applicable	Not applicable	6		
MW-16	Loess	Detection	No change	None	Not applicable	39		
MW-27	Weathered Till/Loess	Detection	No change	None	Not applicable	33		
MW-35	Weathered Till	Detection	No change	None (2024 Fall sample excluded)	Not applicable	31		
MW-42R	Unweathered Till	Detection	No change	None	Not applicable	14		
GWD-2	Not applicable	Detection	No change	None (no 2024 Fall sample)	Not applicable	6		
<b>HSMP Monitoring Wells - Closed MSWLF Unit</b>								
MW-11	Till	Background	No change	Not applicable	Not applicable	30		
MW-7	Till	Assessment	No change	None	None		30	
MW-9R	Unweathered Till	Assessment	No change	Cobalt	None		30	
MW-10R	Unweathered Till/Sand	Assessment	No change	Barium	None		30	
MW-12	Till/Sand	Assessment	No change	Arsenic, Barium, Cobalt	None		30	
MW-13R	Weathered Till	Assessment	No change	Barium, Chlorobenzene	None		30	
<b>Attenuation Zone Point of Compliance (AZPOC) Monitoring Wells</b>								
MW-15C	Not available	AZPOC (Corrective Action)	No change	None	None			18
MW-44	Unweathered Till	AZPOC (Corrective Action)	No change	None	None			9
<b>Source Characterization Monitoring Wells</b>								
MW-14R	Unweathered Till	Source Characterization	No change					34
MW-15R	Weathered/Unweathered Till	Source Characterization	No change					34
MW-39	Unweathered Till	Source Characterization	No change					34
<b>Corrective Action Bracketing Monitoring Wells</b>								
MW-40	Loess	Horizontal impact delineation for SSL constituents.						13
MW-43	Weathered/Unweathered Till	Vertical impact delineation for SSL constituents.						6
<b>Water Level Monitoring Points</b>								
GWD-1 E	Not applicable	Water Level						
GWD-1 W	Not applicable	Water Level						
MW-1	Not available	Water Level						
MW-3	Weathered Till	Water Level						
MW-4	Not available	Water Level						
MW-15A	Not available	Water Level						
MW-15B	Not available	Water Level						
MW-32	Weathered/Unweathered Till	Water Level						
MW-34	Unweathered Till	Water Level						
MW-40A	Sand, Sandy Clay	Water Level						

**Notes:**

(1) Obtained from screened interval on boring logs or cross sections.

(2) Temporary suspension of HSMP groundwater monitoring as wells are not monitoring an active cell and intrawell statistics are used.

SSI = Statistically Significant Increase above background.

SSL = Statistically Significant Level above groundwater protection standard.

Indicated SSIs during this reporting period occurred in monitoring wells in the assessment monitoring program and do not require a resample.

**Table 2**  
**Monitoring Program Implementation Schedule**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open & Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Monitoring Well	Recent Sampling Events and Constituents			Upcoming Sampling Event and Constituents		Full Appendix II Sample Dates	
	March 2024 Retest	May 2024	October 2024	1 <sup>st</sup> 2025 Semi-Annual	2 <sup>nd</sup> 2025 Semi-Annual	Previously Collected	Next Event
<b>Open MSWLF Unit</b>							
MW-16		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	3/22/2017, 5/10/2022	Not applicable
MW-27		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-35		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	9/26/2016	Not applicable
MW-42R	Cobalt, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GWD-2		Appendix I, TSS	No Sample (Dry)	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
<b>Closed MSWLF Unit</b>							
MW-11		Metals List, TSS, Sulfide			Metals List, TSS, Sulfide	Not applicable	Not applicable
MW-7		Metals List, TSS, Appendix I VOCs			Appendix II, TSS	4/15/2015, 3/12/2020	2025
MW-9R		Metals List, TSS, Sulfide			Metals List, TSS, Sulfide	9/26/2016, 3/24/2021	2026
MW-10R		Metals List, TSS, Appendix I VOCs			Appendix II, TSS	4/15/2015, 3/12/2020	2025
MW-12		Appendix II, TSS			Metals List, TSS	9/30/2014, 5/29/2019, 5/30/2024	2029
MW-13R		Appendix II, TSS			Metals List, TSS, Appendix I VOCs	9/30/2014, 5/29/2019, 5/30/2024	2029
<b>AZPOC</b>							
MW-15C		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-44		Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
<b>Source Characterization</b>							
MW-14R		Appendix I, TSS	Appendix I, TSS	Appendix I, Natural Attenuation, TSS	Appendix I, TSS	4/15/2015, 3/11/2020	Not applicable
MW-15R		Appendix I, TSS	Appendix I, TSS	Appendix I, Natural Attenuation, TSS	Appendix I, TSS	4/15/2015, 3/11/2020	Not applicable
MW-39		Appendix I, TSS	Appendix I, TSS	Appendix I, Natural Attenuation, TSS	Appendix I, TSS	8/22/2018	Not applicable
<b>Corrective Action - Bracketing</b>							
MW-40			Arsenic, Barium, Cobalt, TSS, Vinyl Chloride		Arsenic, Barium, Cobalt, TSS, Vinyl Chloride	Not applicable	Not applicable
MW-43			Arsenic, Barium, Cobalt, TSS, Vinyl Chloride		Arsenic, Barium, Cobalt, TSS, Vinyl Chloride	Not applicable	Not applicable

Comments:

"Metals List" includes arsenic, barium, cobalt, lead, and nickel.

"Natural Attenuation" includes iron, manganese, nitrate, sulfate, and total organic carbon.

TSS: Total Suspended Solids.

**Table 3**  
**Monitoring Well Maintenance and Performance Re-Evaluation Schedule**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open & Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Compliance with:	2022	2023	2024	2025	2026
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (biennial)	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(3) well depths (annual or every 5 years for wells with dedicated sampling pumps)	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	Completed		Included		Scheduled
Waste separation from ground water 113.6(2)"l"	Completed	Completed	Included	Scheduled	Scheduled

Notes:

\* Verification of waste separation from groundwater is not required for cells A-1, A-2, A-3, and A-6 (Permit Amendment #13 (Doc #89223), 2016 AWQR (Doc #88165), Permit Revision dated January 20,201 (Doc #99582)). Separation data for Cells A-4 and A-5 is included in Table 4.

**Table 4**  
**Monitoring Well Performance and Maintenance Summary**  
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Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Initial Flow Rate (L/min) Date	Recent Flow Rate (L/min) Date	% Change
					5/2024	10/2024				
<b>Open MSWLF Unit</b>										
MW-16	162.29	155.2	20.3	Groundwater Level (ft)	6.31	9.15	1.8	0.26 9/22/2016	0.18 10/23/2024	-33%
				Groundwater Elevation (Ft MSL)	155.98	153.14				
				Measured Well Depth (ft)	18.5	18.5				
				Submerged screen	Y	N				
MW-27	167.66	147.0	30.7	Groundwater Level (ft)	8.45	13.45	0.0	0.12 3/20/2017	0.18 10/24/2024	46%
				Groundwater Elevation (Ft MSL)	159.21	154.21				
				Measured Well Depth (ft)	30.7	30.8				
				Submerged screen	Y	Y				
MW-35	166.90	150.1	28.0	Groundwater Level (ft)	6.95	9.75	0.1	0.37 9/22/2016	0.17 10/24/2024	-55%
				Groundwater Elevation (Ft MSL)	159.95	157.15				
				Measured Well Depth (ft)	28.0	27.9				
				Submerged screen	Y	Y				
MW-42R	158.89	135.7	33.3	Groundwater Level (ft)	18.10	15.77	0.7	0.08 9/22/2016	0.17 10/24/2024	109%
				Groundwater Elevation (Ft MSL)	140.79	143.12				
				Measured Well Depth (ft)	32.6	32.6				
				Submerged screen	Y	Y				

Measured well depths were within one foot of the installed depths with the exception of monitoring well MW-16. The measured well depth for MW-16 has been consistent for several years. As the monitoring well produced samples, it appears siltation is not affecting the functionality of the wells.

The groundwater levels at groundwater piezometers GWPZ-A4 and GWPZ-A5 and monitoring well MW-16 were used to gauge separation in Cells A-4 and A-5. A groundwater underdrain was not required for Cell A-6 (Doc #99582).

Well		Date of Measurements	
		5/2024	10/2024
GWPZ-A4	Bottom of waste (feet above site datum)	171	
	Groundwater Elevation (feet above site datum)	<165.6 (dry)	<165.6 (dry)
	Separation distance (feet)	>5.39	>5.39
GWPZ-A5	Bottom of waste (feet above site datum)	171	
	Groundwater Elevation (feet above site datum)	<167.2 (dry)	<167.2 (dry)
	Separation distance (feet)	>3.75	>3.75
MW-16	Bottom of waste (feet above site datum)	166	
	Groundwater Elevation (feet above site datum)	155.98	153.14
	Separation distance (feet)	10.02	12.86

**Table 4**  
**Monitoring Well Performance and Maintenance Summary**  
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Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Initial Flow Rate (L/min) Date	Recent Flow Rate (L/min) Date	% Change
					5/2024	10/2024				
<b>Closed MSWLF Unit</b>										
MW-11	173.93	138.9	42.1	Groundwater Level (ft)	15.63	NM	0.9	0.90 9/22/2016	0.21 5/30/2024	-77%
				Groundwater Elevation (Ft MSL)	158.30	NA				
				Measured Well Depth (ft)	41.2	NM				
				Submerged screen	Y	NA				
MW-7	101.86	86.9	50.4	Groundwater Level (ft)	11.69	NM	-0.3	0.10 3/20/2017	0.18 5/30/2024	75%
				Groundwater Elevation (Ft MSL)	90.17	NA				
				Measured Well Depth (ft)	50.7	NM				
				Submerged screen	Y	NA				
MW-9R	76.00	33.9	52.1	Groundwater Level (ft)	27.10	NM	4.3	0.15 9/22/2016	0.17 5/30/2024	15%
				Groundwater Elevation (Ft MSL)	48.90	NA				
				Measured Well Depth (ft)	47.8	NM				
				Submerged screen	Y	NA				
MW-10R	97.58	81.9	20.7	Groundwater Level (ft)	10.00	NM	1.6	0.07 9/22/2016	0.17 5/30/2024	-100%
				Groundwater Elevation (Ft MSL)	87.58	NA				
				Measured Well Depth (ft)	19.1	NM				
				Submerged screen	Y	NA				
MW-12	143.15	135.2	22.7	Groundwater Level (ft)	7.42	NM	0.4	0.06 9/22/2016	0.18 5/30/2024	205%
				Groundwater Elevation (Ft MSL)	135.73	NA				
				Measured Well Depth (ft)	22.3	NM				
				Submerged screen	Y	NA				
MW-13R	172.96	161.6	26.3	Groundwater Level (ft)	15.16	NM	-0.1	0.08 9/22/2016	0.14 5/30/2024	76%
				Groundwater Elevation (Ft MSL)	157.80	NA				
				Measured Well Depth (ft)	26.4	NM				
				Submerged screen	N	NA				
MW-14R	184.50	168.3	27.8	Groundwater Level (ft)	15.33	18.00	0.4	0.32 9/22/2016	0.23 5/29/2024	-29%
				Groundwater Elevation (Ft MSL)	169.17	166.50				
				Measured Well Depth (ft)	27.4	27.4				
				Submerged screen	Y	N				
MW-15R	180.22	171.9	23.3	Groundwater Level (ft)	7.74	12.97	0.0	0.10 9/22/2016	0.20 5/29/2024	100%
				Groundwater Elevation (Ft MSL)	172.48	167.25				
				Measured Well Depth (ft)	23.3	23.4				
				Submerged screen	Y	N				
MW-39	189.40	172.4	27.0	Groundwater Level (ft)	14.91	19.89	-0.6	0.50 9/22/2016	0.19 5/29/2024	-62%
				Groundwater Elevation (Ft MSL)	174.49	169.51				
				Measured Well Depth (ft)	27.6	27.6				
				Submerged screen	Y	N				
MW-15C	172.66	NA	27.0	Groundwater Level (ft)	5.78	9.30	0.0	0.16 9/16/2021	0.14 5/29/2024	-13%
				Groundwater Elevation (Ft MSL)	166.88	163.36				
				Measured Well Depth (ft)	27.0	27.0				
				Submerged screen	NA	NA				
MW-44	166.38	144.3	42.1	Groundwater Level (ft)	5.28	4.72	4.1	0.18 9/15/2021	0.19 5/29/2024	10%
				Groundwater Elevation (Ft MSL)	161.10	161.66				
				Measured Well Depth (ft)	38.0	38.2				
				Submerged screen	Y	Y				

Measured well depths were within 2.1 of the installed depths with the following exceptions:

Monitoring well MW-44 is a newer well, and it is unknown why the measured depth is significantly shallower than the installed depth.

Monitoring well MW-39 had a measured depth 4.3 feet shallower than the installed depth. A verification measurement will be made during the 1<sup>st</sup> 2025 semi-annual sampling event.

As the monitoring wells produced samples during the 2024 sampling events, it appears siltation is not affecting the functionality of the monitoring wells.



**Table 5**  
**Background and GWPS Summary Tables**  
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**Interwell Background/GWPS Closed MSWLF Unit (MW-1, MW-4, and MW-11)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	80	5	0.000194*	0.005 (1/2 RL)	0.00120	0.005	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	81	7	0.000337*	0.0064	0.00175	0.0064	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	82	68	0.0122	0.143	0.03684	0.1017	PL (P)	2	MCL
Beryllium (Be)	mg/L	80	0	0.0005 (1/2 RL)	0.01 (1/2 RL)	0.00139	< 0.02	DQR	< 0.02	SSS
Cadmium (Cd)	mg/L	80	39	0.000048*	0.0494	0.00173	0.0494	PL (NP)	0.0494	SSS
Chromium (Cr)	mg/L	80	9	0.000391*	0.014	0.00396	0.014	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	63	27	0.00003*	0.0074	0.00080	0.0074	PL (NP)	0.0074	SSS
Copper (Cu)	mg/L	80	21	0.000491*	0.0227	0.00376	0.0227	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	82	32	0.000111*	0.0222	0.00258	0.0222	PL (NP)	0.0222	SSS
Nickel (Ni)	mg/L	82	48	0.0005 (1/2 RL)	0.044	0.00680	0.02815	PL (P)	0.1	SWS
Selenium (Se)	mg/L	80	24	0.001*	0.0188	0.00499	0.0188	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	80	5	0.000043*	0.01 (1/2 RL)	0.00137	0.01	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	80	15	0.000026*	0.01 (1/2 RL)	0.00087	0.01	PL (NP)	0.01	SSS
Vanadium (V)	mg/L	80	15	0.000453*	0.05 (1/2 RL)	0.00890	0.05	PL (NP)	0.05	SSS
Zinc (Zn)	mg/L	80	37	0.004 (1/2 RL)	1.3	0.03498	1.3	PL (NP)	2	SWS

**Intrawell Background/GWPS Closed MSWLF Unit (MW-15C)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	8	0	0.001 (1/2 RL)	0.001 (1/2 RL)	0.00100	< 0.002	DQR	0.006	MCL
Arsenic (As)	mg/L	16	0	0.001 (1/2 RL)	0.002 (1/2 RL)	0.00119	< 0.004	DQR	0.01	MCL
Barium (Ba)	mg/L	14	14	0.0774	0.711	0.15498	0.711	PL (NP)	2	MCL
Beryllium (Be)	mg/L	8	0	0.0005 (1/2 RL)	0.002 (1/2 RL)	0.00106	< 0.004	DQR	0.004	MCL
Cadmium (Cd)	mg/L	8	6	0.00005 (1/2 RL)	0.007	0.00184	0.01272	PL (P)	0.01272	SSS
Chromium (Cr)	mg/L	8	0	0.0025 (1/2 RL)	0.004 (1/2 RL)	0.00306	< 0.008	DQR	0.1	MCL
Cobalt (Co)	mg/L	17	15	0.000056*	0.002 (1/2 RL)	0.00054	0.002712	PL (P)	0.002712	SSS
Copper (Cu)	mg/L	8	0	0.002 (1/2 RL)	0.0025 (1/2 RL)	0.00231	< 0.005	DQR	1.3	MCL
Lead (Pb)	mg/L	8	0	0.00025 (1/2 RL)	0.002 (1/2 RL)	0.00091	< 0.004	DQR	0.015	MCL
Nickel (Ni)	mg/L	11	11	0.00449*	0.0145	0.00784	0.01417	PL (P)	0.1	SWS
Selenium (Se)	mg/L	8	0	0.002 (1/2 RL)	0.0025 (1/2 RL)	0.00231	< 0.005	DQR	0.05	MCL
Silver (Ag)	mg/L	8	0	0.0005 (1/2 RL)	0.002 (1/2 RL)	0.00106	< 0.004	DQR	0.1	SWS
Thallium (Tl)	mg/L	8	0	0.0005 (1/2 RL)	0.002 (1/2 RL)	0.00106	< 0.004	DQR	0.002	MCL
Vanadium (V)	mg/L	8	0	0.0025 (1/2 RL)	0.01 (1/2 RL)	0.00531	< 0.02	DQR	0.035	SWS
Zinc (Zn)	mg/L	8	2	0.004 (1/2 RL)	0.0426	0.01343	0.0426	PL (NP)	2	SWS

**Intrawell Background/GWPS Closed MSWLF Unit (MW-44)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	5	0	0.001 (1/2 RL)	0.001 (1/2 RL)	0.00100	< 0.002	DQR	0.006	MCL
Arsenic (As)	mg/L	7	6	0.001 (1/2 RL)	0.0132	0.00704	0.02119	PL (P)	0.02119	SSS
Barium (Ba)	mg/L	7	7	0.0185	0.0393	0.02500	0.04824	PL (P)	2	MCL
Beryllium (Be)	mg/L	5	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.004	MCL
Cadmium (Cd)	mg/L	5	0	0.00005 (1/2 RL)	0.0001 (1/2 RL)	0.00006	< 2e-04	DQR	0.005	MCL
Chromium (Cr)	mg/L	5	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	0.1	MCL
Cobalt (Co)	mg/L	7	7	0.000345*	0.00442	0.00156	0.005843	PL (P)	0.005843	SSS
Copper (Cu)	mg/L	5	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	1.3	MCL
Lead (Pb)	mg/L	5	0	0.00025 (1/2 RL)	0.00025 (1/2 RL)	0.00025	< 5e-04	DQR	0.015	MCL
Nickel (Ni)	mg/L	5	1	0.00201*	0.0025 (1/2 RL)	0.00240	0.0025	PL (NP)	0.1	SWS
Selenium (Se)	mg/L	5	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	0.05	MCL
Silver (Ag)	mg/L	5	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.1	SWS
Thallium (Tl)	mg/L	5	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.002	MCL
Vanadium (V)	mg/L	5	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	0.035	SWS
Zinc (Zn)	mg/L	5	0	0.01 (1/2 RL)	0.01 (1/2 RL)	0.01000	< 0.02	DQR	2	SWS

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**Intrawell Background/GWPS Open MSWLF Unit (GWD-2)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	5	0	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00060	< 0.002	DQR	0.006	MCL
Arsenic (As)	mg/L	5	4	0.001 (1/2 RL)	0.0334	0.01097	0.07409	PL (P)	0.07409	SSS
Barium (Ba)	mg/L	5	5	0.216	2.04	0.91400	5.524	PL (P)	5.524	SSS
Beryllium (Be)	mg/L	5	1	0.000076*	0.0005 (1/2 RL)	0.00042	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	5	3	0.00005 (1/2 RL)	0.00145	0.00060	0.003115	PL (P)	0.005	MCL
Chromium (Cr)	mg/L	5	1	0.000809*	0.0025 (1/2 RL)	0.00216	0.0025	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	5	5	0.000068*	0.015	0.00581	0.03518	PL (P)	0.03518	SSS
Copper (Cu)	mg/L	5	4	0.000706*	0.00455*	0.00262	0.01047	PL (P)	1.3	MCL
Lead (Pb)	mg/L	5	3	0.00025 (1/2 RL)	0.00168	0.00074	0.003501	PL (P)	0.015	MCL
Nickel (Ni)	mg/L	5	5	0.00157*	0.0276	0.01751	0.06688	PL (P)	0.1	SWS
Selenium (Se)	mg/L	5	2	0.000661*	0.0025 (1/2 RL)	0.00187	0.0025	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	5	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.1	SWS
Thallium (Tl)	mg/L	5	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.002	MCL
Vanadium (V)	mg/L	5	4	0.000575*	0.00303*	0.00215	0.006855	PL (P)	0.035	SWS
Zinc (Zn)	mg/L	5	2	0.005 (1/2 RL)	0.0108*	0.00765	0.0108	PL (NP)	2	SWS

**Intrawell Background/GWPS Open MSWLF Unit (MW-16)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	19	0	0.0005 (1/2 RL)	0.0015 (1/2 RL)	0.00076	< 0.003	DQR	0.006	MCL
Arsenic (As)	mg/L	19	1	0.000415*	0.001 (1/2 RL)	0.00094	0.001	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	19	19	0.245	0.377	0.30826	0.3962	PL (P)	2	MCL
Beryllium (Be)	mg/L	19	1	0.0002735*	0.0005 (1/2 RL)	0.00049	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	19	7	0.00005 (1/2 RL)	0.0002835	0.00015	0.0002835	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	19	0	0.0025 (1/2 RL)	0.0025 (1/2 RL)	0.00250	< 0.005	DQR	0.1	MCL
Cobalt (Co)	mg/L	19	15	0.000099*	0.0005 (1/2 RL)	0.00025	0.0004544	PL (P)	0.0021	SWS
Copper (Cu)	mg/L	18	3	0.000517*	0.0025 (1/2 RL)	0.00213	0.0025	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	19	6	0.000135*	0.000478*	0.00027	0.000478	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	19	19	0.00348*	0.01275	0.00790	0.01394	PL (P)	0.1	SWS
Selenium (Se)	mg/L	19	0	0.00125 (1/2 RL)	0.0025 (1/2 RL)	0.00237	< 0.005	DQR	0.05	MCL
Silver (Ag)	mg/L	19	1	0.00025 (1/2 RL)	0.000752*	0.00049	0.000752	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	19	1	0.000029*	0.001 (1/2 RL)	0.00053	0.001	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	19	2	0.0002975*	0.0025 (1/2 RL)	0.00235	0.0025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	19	1	0.005 (1/2 RL)	0.01 (1/2 RL)	0.00879	0.01	PL (NP)	2	SWS

**Intrawell Background/GWPS Open MSWLF Unit (MW-27)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	14	1	0.000388*	0.0015 (1/2 RL)	0.00078	0.0015	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	14	1	0.000425*	0.001 (1/2 RL)	0.00096	0.001	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	14	14	0.0323	0.0379	0.03420	0.03802	PL (P)	2	MCL
Beryllium (Be)	mg/L	14	0	0.0005 (1/2 RL)	0.0005 (1/2 RL)	0.00050	< 0.001	DQR	0.004	MCL
Cadmium (Cd)	mg/L	14	0	0.00005 (1/2 RL)	0.00025 (1/2 RL)	0.00013	< 5e-04	DQR	0.005	MCL
Chromium (Cr)	mg/L	14	2	0.000737*	0.0025 (1/2 RL)	0.00225	0.0025	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	14	4	0.000046*	0.0005 (1/2 RL)	0.00024	0.0005	PL (NP)	0.0021	SWS
Copper (Cu)	mg/L	14	1	0.00102*	0.0025 (1/2 RL)	0.00239	0.0025	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	14	1	0.000239*	0.00025 (1/2 RL)	0.00025	0.00025	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	14	0	0.001 (1/2 RL)	0.0025 (1/2 RL)	0.00239	< 0.005	DQR	0.1	SWS
Selenium (Se)	mg/L	14	0	0.00125 (1/2 RL)	0.0025 (1/2 RL)	0.00241	< 0.005	DQR	0.05	MCL
Silver (Ag)	mg/L	14	0	0.00025 (1/2 RL)	0.0005 (1/2 RL)	0.00048	< 0.001	DQR	0.1	SWS
Thallium (Tl)	mg/L	14	0	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00054	< 0.002	DQR	0.002	MCL
Vanadium (V)	mg/L	14	6	0.000674*	0.0025 (1/2 RL)	0.00188	0.0025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	14	0	0.01 (1/2 RL)	0.01 (1/2 RL)	0.01000	< 0.02	DQR	2	SWS

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**Intrawell Background/GWPS Open MSWLF Unit (MW-35)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	25	7	0.0004655*	0.0034	0.00108	0.004	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	28	16	0.0006945*	0.0116	0.00298	0.0116	PL (NP)	0.0116	SSS
Barium (Ba)	mg/L	28	27	0.01685	0.1	0.03024	0.1	PL (NP)	2	MCL
Beryllium (Be)	mg/L	28	0	0.0005 (1/2 RL)	0.002 (1/2 RL)	0.00090	< 0.004	DQR	0.004	MCL
Cadmium (Cd)	mg/L	28	7	0.00005 (1/2 RL)	0.0004 (1/2 RL)	0.00020	0.0004	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	28	2	0.000441*	0.005 (1/2 RL)	0.00302	0.005	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	25	25	0.000683	0.0505	0.01373	0.05224	PL (P)	0.05224	SSS
Copper (Cu)	mg/L	29	4	0.00131*	0.0212	0.00342	0.0212	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	28	4	0.000126*	0.002 (1/2 RL)	0.00067	0.002	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	28	26	0.0005 (1/2 RL)	0.227	0.05247	0.1929	PL (P)	0.1929	SSS
Selenium (Se)	mg/L	28	1	0.00125 (1/2 RL)	0.00288*	0.00236	0.00288	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	28	0	0.00025 (1/2 RL)	0.004 (1/2 RL)	0.00091	< 0.008	DQR	0.1	SWS
Thallium (Tl)	mg/L	28	3	0.000045*	0.002 (1/2 RL)	0.00068	0.002	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	28	6	0.00107*	0.01 (1/2 RL)	0.00513	0.01	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	29	7	0.004 (1/2 RL)	0.147	0.01584	0.147	PL (NP)	2	SWS

**Intrawell Background/GWPS Open MSWLF Unit (MW-42R)**

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	11	5	0.001 (1/2 RL)	0.00423	0.00160	0.00423	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	11	8	0.0008455*	0.00129	0.00102	0.001429	PL (P)	0.01	MCL
Barium (Ba)	mg/L	11	11	0.01905	0.0315	0.02443	0.03738	PL (P)	2	MCL
Beryllium (Be)	mg/L	11	1	0.000474*	0.0005 (1/2 RL)	0.00050	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	11	9	0.000058*	0.000389	0.00020	0.0004256	PL (P)	0.005	MCL
Chromium (Cr)	mg/L	11	1	0.00138*	0.0025 (1/2 RL)	0.00240	0.0025	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	12	12	0.003425	0.00819	0.00474	0.0081	PL (P)	0.0081	SSS
Copper (Cu)	mg/L	11	6	0.00219*	0.00905	0.00337	0.00905	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	11	2	0.00025 (1/2 RL)	0.000635	0.00029	0.000635	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	11	11	0.0143	0.0469	0.02061	0.05051	PL (P)	0.1	SWS
Selenium (Se)	mg/L	11	8	0.00112*	0.0114	0.00393	0.01389	PL (P)	0.05	MCL
Silver (Ag)	mg/L	11	0	0.00025 (1/2 RL)	0.0005 (1/2 RL)	0.00048	< 0.001	DQR	0.1	SWS
Thallium (Tl)	mg/L	11	1	0.0005 (1/2 RL)	0.001 (1/2 RL)	0.00056	0.001	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	11	7	0.00111*	0.0025 (1/2 RL)	0.00185	0.002226	PL (P)	0.035	SWS
Zinc (Zn)	mg/L	11	5	0.00651*	0.0191*	0.01111	0.0191	PL (NP)	2	SWS

**Notes:**

Background levels are the calculated prediction limits or one-half of the reporting limit, as applicable.

\*- J flag; concentration is below the reporting limit but above the method detection limit. The concentration is estimated.

**Acronyms/Abbreviations:**

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

- 1) Water quality results and effectiveness of the statistical data evaluation criteria: Statistical evaluations consist of prediction limits, double quantification rule, and confidence intervals/confidence bands, as appropriate. Data from the background wells is not used 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 using a 1-of-2 scheme.

**Table 6**  
**Summary of Well/Detected Constituent Pairs With No Previous SSIs**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open and Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Well	Constituent	Units	Most recent result	Background Standard
<b>Open MSWLF Unit</b>				
None				
<b>Closed MSWLF Unit</b>				
MW-9R	Cobalt	mg/L	0.00741	0.0074
MW-10R	Barium	mg/L	0.121	0.1017
MW-12	Arsenic	mg/L	0.0217	0.0064
	Barium	mg/L	0.678	0.1017
	Cobalt	mg/L	0.00975	0.0074
MW-13R	Barium	mg/L	0.37795*	0.1017
	Chlorobenzene	µg/L	1.58*	<1

Comments:

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

\* - Duplicate sample monitoring well during this reporting period, the most recent result concentrations shown are an average of both samples obtained from the monitoring well.

- 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: None.
- 5) Resampling strategy: Retesting is performed on a 1-of-2 retesting scheme.

**Table 7**  
**Summary Table of Ongoing and Newly Identified SSIs**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open & Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Well	Constituent	Units	Most recent result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5 <sup>th</sup> background sample
<b>Open MSWLF Unit</b>									
MW-16	None								
MW-27	None								
MW-35	None								
MW-42R	None								
GWD-2	None								
<b>Closed MSWLF Unit</b>									
MW-7	None								
MW-9R	Cobalt	mg/L	0.00741	0.0074	0.002998	0.0074	5/29/2024	NA	3/25/2014
MW-10R	Barium	mg/L	0.121	0.1017	0.0887	2	5/29/2024	NA	10/1/2010
MW-12	Arsenic	mg/L	0.0217	0.0064	0.0008915	0.01	5/29/2024	NA	10/1/2010
	Barium	mg/L	0.678	0.1017	0.0545	2	5/29/2024	NA	10/1/2010
	Cobalt	mg/L	0.00975	0.0074	0.000247	0.0074	5/29/2024	NA	9/30/2014
MW-13R	Barium	mg/L	0.37795*	0.1017	0.06761	2	5/29/2024	NA	10/1/2024
	Chlorobenzene	µg/L	1.58*	<1	0.6498	100	5/29/2024	NA	10/1/2024
MW-15C	None								
MW-44	None								

Comments:

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

\* - Duplicate sample monitoring well during this reporting period, the most recent result concentrations shown are an average of both samples obtained from the monitoring well.

TS - Theil-Sen. Due to a statistically significant trend, Thiel-Sen confidence band analysis was performed in lieu of confidence intervals; therefore, a lower confidence limit is unavailable.

NA - Not Applicable; Monitoring well is in assessment monitoring and does not require a resample.

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



**Table 9**  
**Summary of Groundwater Chemistry**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open and Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

The Summary of Groundwater Chemistry for the Closed MSWLF unit is located in Appendix C-1.  
The Summary of Groundwater Chemistry for the Open MSWLF unit is located in Appendix C-2.

**Table 10**  
**Historical SSI and SSL**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open and Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

Key

SSI - Statistically Significant Increase above background  
 SSL - Statistically Significant Level above groundwater protection standard

Well	Constituent	S	F	S	F	S	F	S	F	S	F	S	F	S	F
		p	a	p	a	p	a	p	a	p	a	p	a	p	a
		g	l	g	l	g	l	g	l	g	l	g	l	g	l
		2018	2018	2019	2019	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
<b>Open MSWLF Unit</b>															
MW-16	None														
MW-27	None														
MW-35	None														
MW-42R	Toluene														
GWD-2	None														
<b>Closed MSWLF Unit</b>															
MW-7	Trichloroethene										NS		NS		NS
	cis-1,2-Dichloroethene										NS		NS		NS
MW-9R	Cobalt														NS
	Acrylonitrile									NS			NS		NS
	Carbon Disulfide									NS			NS		NS
	Styrene									NS			NS		NS
	Sulfide									NS			NS		NS
MW-10R	Barium														NS
	cis-1,2-Dichloroethene										NS		NS		NS
MW-12	Arsenic														NS
	Barium														NS
	Cobalt														NS
MW-13R	Barium														NS
	1,1-Dichloroethane										NS		NS		NS
	Acetone										NS		NS		NS
	Chlorobenzene										NS		NS		NS
MW-14R*	Cobalt														
MW-15R*	Arsenic														
	Cobalt														
MW-39*	Arsenic														
	Barium														
	Cobalt														
	Nickel														
	Vinyl Chloride														
MW-15C	None														
MW-44	None														

Comments:

Indicated SSIs during this reporting period occurred in monitoring wells in the assessment monitoring program and do not require a resample.

NS - Not Sampled. The monitoring well is sampled on an annual frequency beginning with the 2022 reporting period.

A detection of a VOC is considered an SSI for the purposes of this table.

\* - Monitoring well was converted to a source characterization monitoring well on May 16, 2022 (Doc #103224).



**Table 11**  
**Corrective Action Trend Analysis**  
**2024 Annual Water Quality Report**  
**Cherokee County Landfill - Open and Closed MSWLF Units**  
**Permit No. 18-SDP-01-75P**

<b>Statistically Significant Trends in Source Wells</b>
None

**Overall Trends of Detected Appendix I Constituents in Source Wells**

	<b>MW-14R</b>	<b>MW-15R</b>	<b>MW-39</b>	<b>Total</b>
Increasing ( $S = >0$ ):	3	4	3	10
Decreasing ( $S = \leq 0$ ):	5	6	9	20

Over two-thirds of the trends are stable or decreasing.  
A summary table and graphs are included in Appendix H.

Notes:

S - Mann-Kendall Statistic

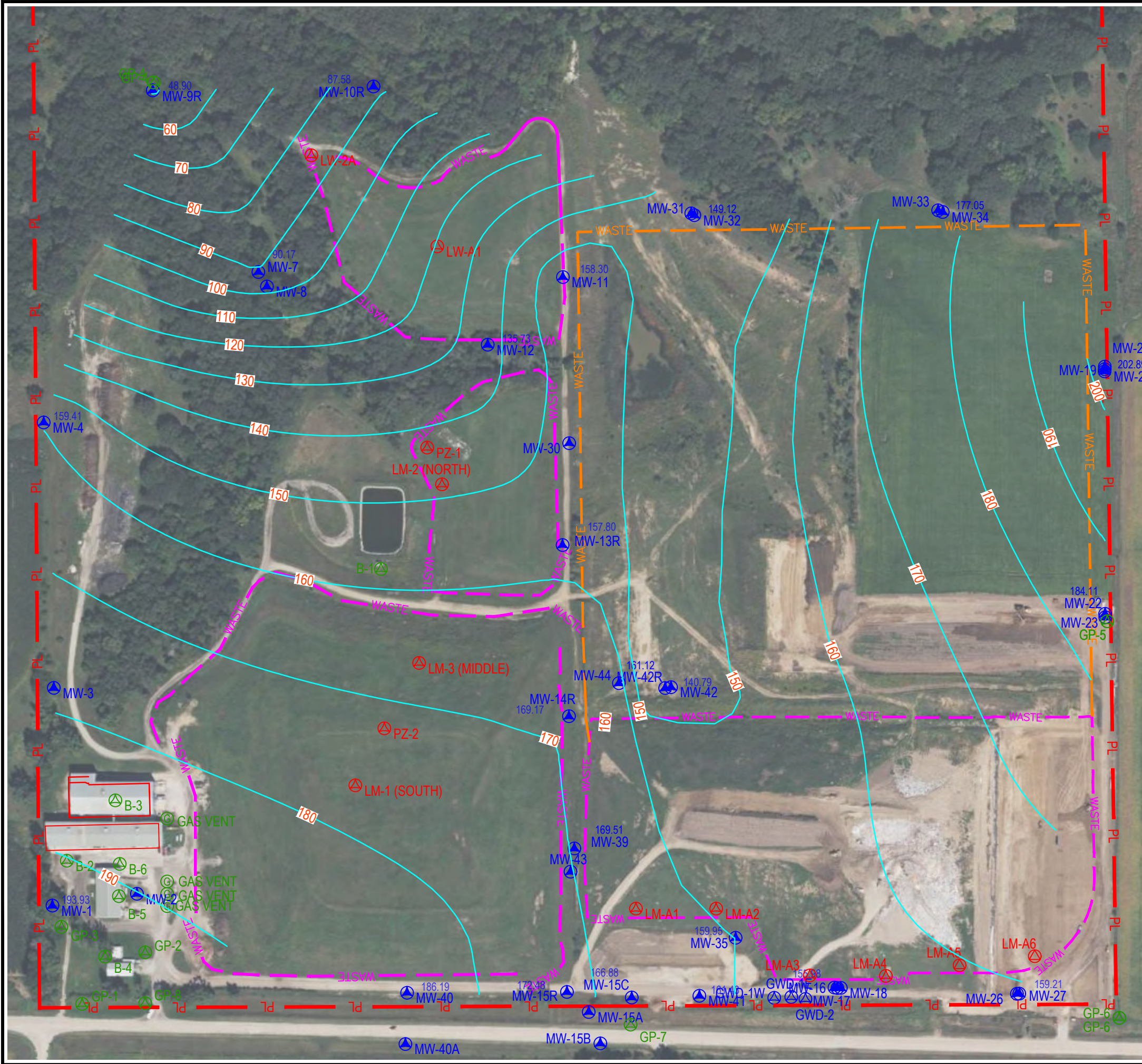
## Figures





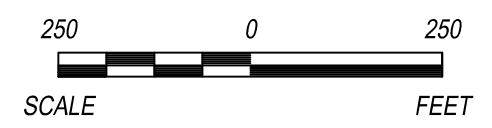


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LEGEND

- APPROXIMATE GROUNDWATER CONTOURS BASED ON FIELD MEASUREMENTS TAKEN MAY 2024
- MW-4C MONITORING WELL
- LFGW-1 LANDFILL GAS WELL
- LPZ-1 LEACHATE PIEZOMETER
- GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY



REV.	DATE	BY	CHK
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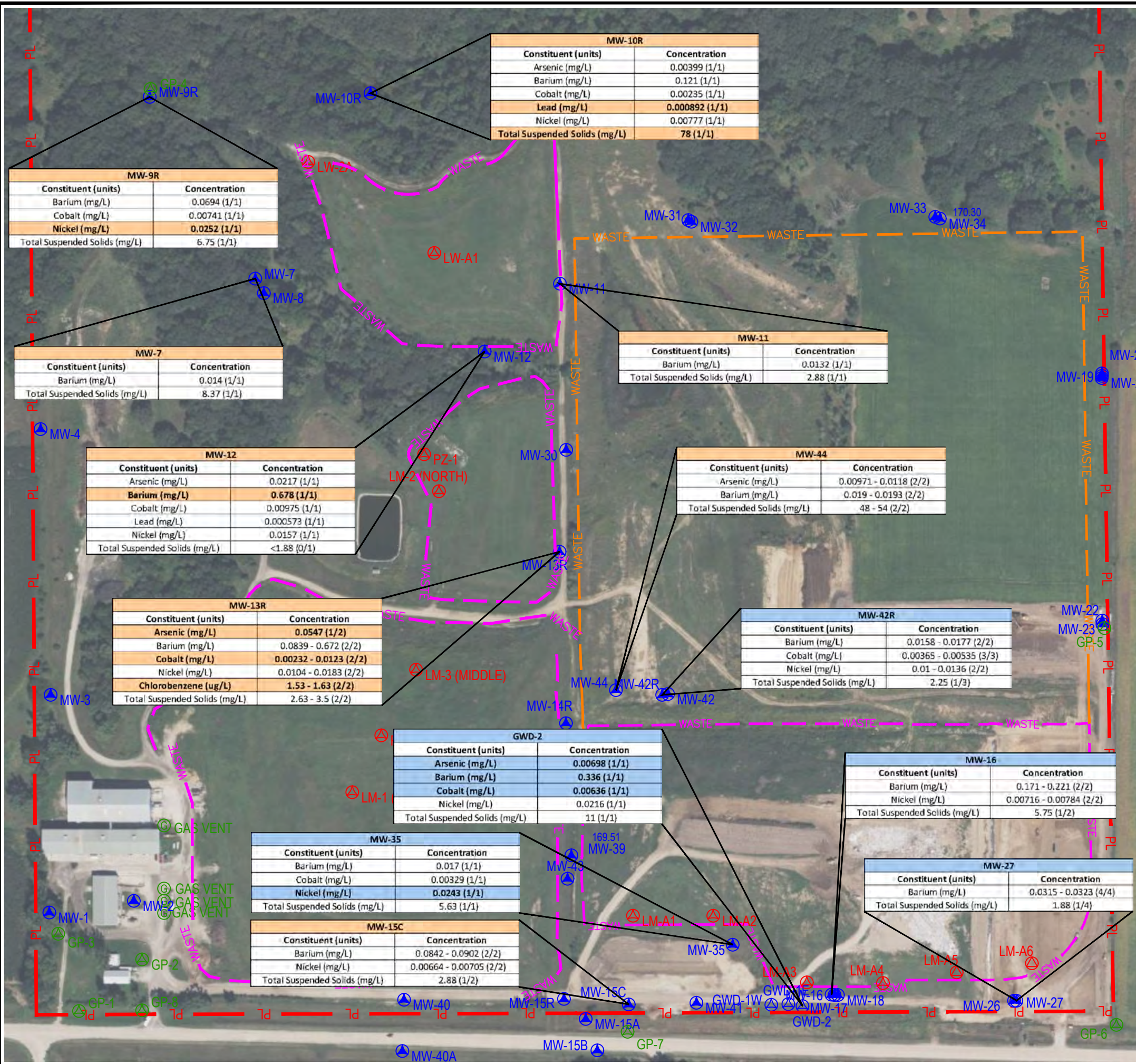
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PROJECT TITLE	<b>CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT</b>

CLIENT	<b>CHEROKEE COUNTY SOLID WASTE COMMISSION</b>
	<b>1805 LINDEN ST</b>
	<b>CHEROKEE, IOWA</b>

<b>SCS ENGINEERS</b>			
1680 ALL STATE COURT, SUITE 100			
WEST DES MOINES, IOWA 50265			
(515) 631-6160			
PROJ. NO.	DWG. NO.	CHK. BY	PROJ. MGR.
223105_25	CJD	SAM	NO

CADD FILE:	223105_25
DATE:	3/7/25
FIGURE NO.	<b>2</b>





MW-10R	
Constituent (units)	Concentration
Arsenic (mg/L)	0.00399 (1/1)
Barium (mg/L)	0.121 (1/1)
Cobalt (mg/L)	0.00235 (1/1)
Lead (mg/L)	0.000892 (1/1)
Nickel (mg/L)	0.00777 (1/1)
Total Suspended Solids (mg/L)	78 (1/1)

MW-9R	
Constituent (units)	Concentration
Barium (mg/L)	0.0694 (1/1)
Cobalt (mg/L)	0.00741 (1/1)
Nickel (mg/L)	0.0252 (1/1)
Total Suspended Solids (mg/L)	6.75 (1/1)

MW-7	
Constituent (units)	Concentration
Barium (mg/L)	0.014 (1/1)
Total Suspended Solids (mg/L)	8.37 (1/1)

MW-12	
Constituent (units)	Concentration
Arsenic (mg/L)	0.0217 (1/1)
Barium (mg/L)	0.678 (1/1)
Cobalt (mg/L)	0.00975 (1/1)
Lead (mg/L)	0.000573 (1/1)
Nickel (mg/L)	0.0157 (1/1)
Total Suspended Solids (mg/L)	<1.88 (0/1)

MW-13R	
Constituent (units)	Concentration
Arsenic (mg/L)	0.0547 (1/2)
Barium (mg/L)	0.0839 - 0.672 (2/2)
Cobalt (mg/L)	0.00232 - 0.0123 (2/2)
Nickel (mg/L)	0.0104 - 0.0183 (2/2)
Chlorobenzene (ug/L)	1.53 - 1.63 (2/2)
Total Suspended Solids (mg/L)	2.63 - 3.5 (2/2)

GWD-2	
Constituent (units)	Concentration
Arsenic (mg/L)	0.00698 (1/1)
Barium (mg/L)	0.336 (1/1)
Cobalt (mg/L)	0.00636 (1/1)
Nickel (mg/L)	0.0216 (1/1)
Total Suspended Solids (mg/L)	11 (1/1)

MW-35	
Constituent (units)	Concentration
Barium (mg/L)	0.017 (1/1)
Cobalt (mg/L)	0.00329 (1/1)
Nickel (mg/L)	0.0243 (1/1)
Total Suspended Solids (mg/L)	5.63 (1/1)

MW-15C	
Constituent (units)	Concentration
Barium (mg/L)	0.0842 - 0.0902 (2/2)
Nickel (mg/L)	0.00664 - 0.00705 (2/2)
Total Suspended Solids (mg/L)	2.88 (1/2)

MW-11	
Constituent (units)	Concentration
Barium (mg/L)	0.0132 (1/1)
Total Suspended Solids (mg/L)	2.88 (1/1)

MW-44	
Constituent (units)	Concentration
Arsenic (mg/L)	0.00971 - 0.0118 (2/2)
Barium (mg/L)	0.019 - 0.0193 (2/2)
Total Suspended Solids (mg/L)	48 - 54 (2/2)

MW-42R	
Constituent (units)	Concentration
Barium (mg/L)	0.0158 - 0.0177 (2/2)
Cobalt (mg/L)	0.00365 - 0.00535 (3/3)
Nickel (mg/L)	0.01 - 0.0136 (2/2)
Total Suspended Solids (mg/L)	2.25 (1/3)

MW-16	
Constituent (units)	Concentration
Barium (mg/L)	0.171 - 0.221 (2/2)
Nickel (mg/L)	0.00716 - 0.00784 (2/2)
Total Suspended Solids (mg/L)	5.75 (1/2)

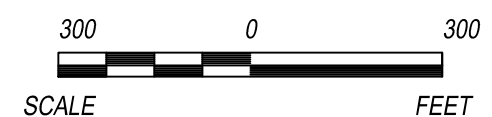
MW-27	
Constituent (units)	Concentration
Barium (mg/L)	0.0315 - 0.0323 (4/4)
Total Suspended Solids (mg/L)	1.88 (1/4)

LEGEND

- MW-4C MONITORING WELL
- ⊕ LFGW-1 LANDFILL GAS WELL
- ⊕ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY

Maximum Concentration Summary		
Constituent	Monitoring Point	Maximum Concentration
Arsenic (mg/L)	MW-13R	0.0547
Barium (mg/L)	MW-12	0.678
Cobalt (mg/L)	MW-13R	0.0123
Lead (mg/L)	MW-10R	0.000892
Nickel (mg/L)	MW-9R	0.0252
Chlorobenzene (ug/L)	MW-13R	1.63

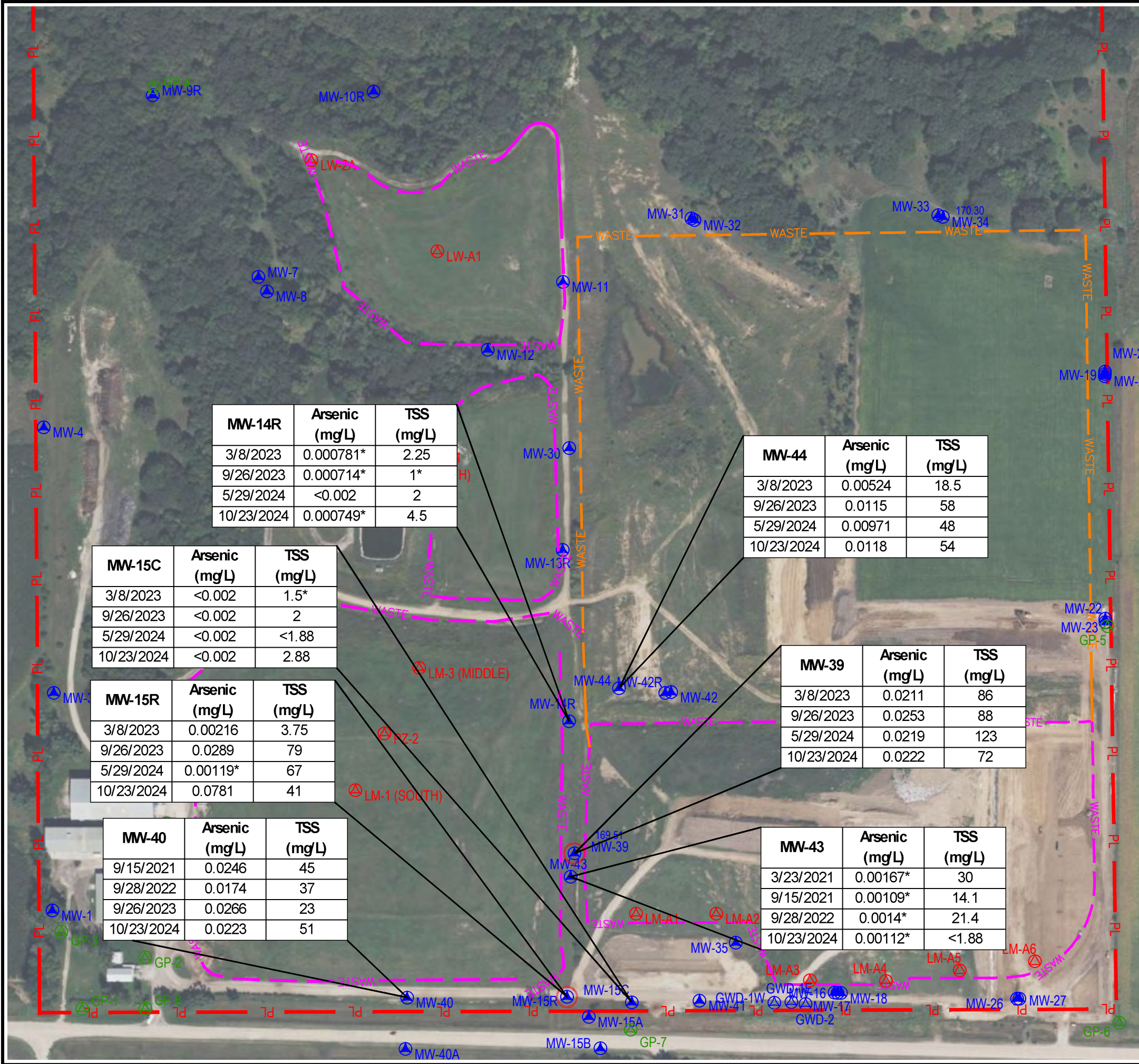
Maximum Concentration Summary		
Constituent	Monitoring Point	Maximum Concentration
Arsenic (mg/L)	GWD-2	0.00698
Barium (mg/L)	GWD-2	0.336
Cobalt (mg/L)	GWD-2	0.00636
Nickel (mg/L)	MW-35	0.0243



CK BY REV. DATE SHEET TITLE	<b>REPORTING PERIOD DETECTION SUMMARY</b>	PROJECT TITLE <b>CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT</b>
CLIENT <b>CHEROKEE COUNTY SOLID WASTE COMMISSION</b> 1805 LINDEN ST CHEROKEE, IOWA	<b>SCS ENGINEERS</b> 1680 ALL STATE COURT, SUITE 100 WEST DES MOINES, IOWA 50265 (515) 631-6160	
CADD FILE: 2025 CONCENTRATION MAPS.DWG	DATE: 3/7/25	FIGURE NO. <div style="font-size: 2em; font-weight: bold; text-align: center;">3</div>



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MW-14R	Arsenic (mg/L)	TSS (mg/L)
3/8/2023	0.000781*	2.25
9/26/2023	0.000714*	1*
5/29/2024	<0.002	2
10/23/2024	0.000749*	4.5

MW-44	Arsenic (mg/L)	TSS (mg/L)
3/8/2023	0.00524	18.5
9/26/2023	0.0115	58
5/29/2024	0.00971	48
10/23/2024	0.0118	54

MW-15C	Arsenic (mg/L)	TSS (mg/L)
3/8/2023	<0.002	1.5*
9/26/2023	<0.002	2
5/29/2024	<0.002	<1.88
10/23/2024	<0.002	2.88

MW-15R	Arsenic (mg/L)	TSS (mg/L)
3/8/2023	0.00216	3.75
9/26/2023	0.0289	79
5/29/2024	0.00119*	67
10/23/2024	0.0781	41

MW-40	Arsenic (mg/L)	TSS (mg/L)
9/15/2021	0.0246	45
9/28/2022	0.0174	37
9/26/2023	0.0266	23
10/23/2024	0.0223	51

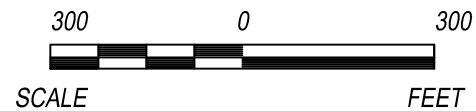
MW-39	Arsenic (mg/L)	TSS (mg/L)
3/8/2023	0.0211	86
9/26/2023	0.0253	88
5/29/2024	0.0219	123
10/23/2024	0.0222	72

MW-43	Arsenic (mg/L)	TSS (mg/L)
3/23/2021	0.00167*	30
9/15/2021	0.00109*	14.1
9/28/2022	0.0014*	21.4
10/23/2024	0.00112*	<1.88

LEGEND

- ▲ MW-4C MONITORING WELL
- ⊕ LFGW-1 LANDFILL GAS WELL
- ⊕ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- SSL WELL

ARSENIC PREDICTION LIMIT = 0.0064 mg/L



REV.	DATE	CK BY
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SHEET TITLE  
**ARSENIC CONCENTRATION MAP**

PROJECT TITLE  
**CHEROKEE COUNTY SANITARY LANDFILL  
2024 ANNUAL WATER QUALITY REPORT**

CLIENT  
**CHEROKEE COUNTY SOLID WASTE  
COMMISSION  
1805 LINDEN ST  
CHEROKEE, IOWA**

**SCS ENGINEERS**  
1680 ALL STATE COURT, SUITE 100  
WEST DES MOINES, IOWA 50265  
(515) 631-6160

PROJ. NO. 27223.05.25  
DWG. BY: CJD  
CHK. BY: SAM  
PROJ. MGR. NO

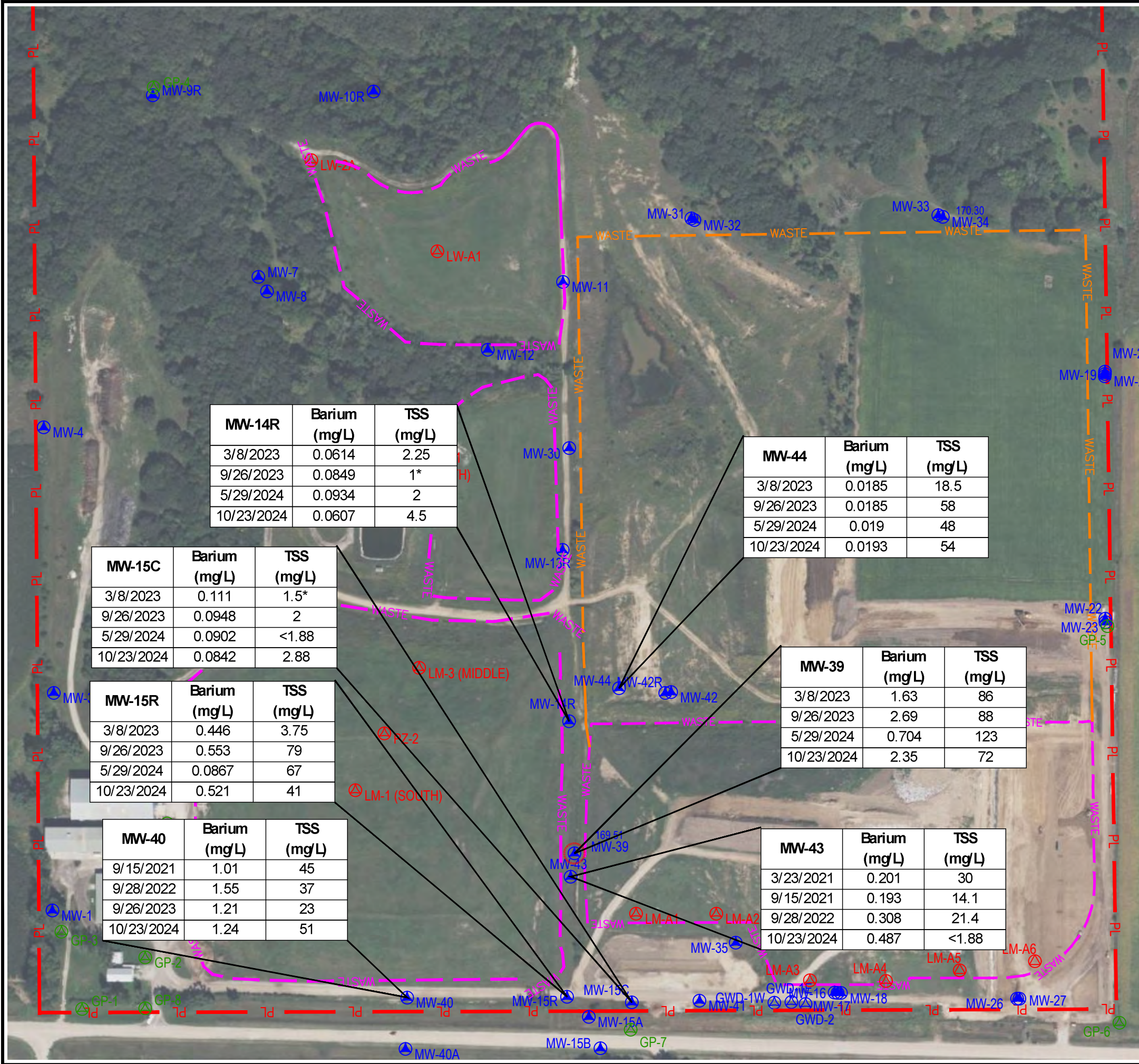
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2025 CONCENTRATION MAPS.DWG

DATE: 3/7/25

FIGURE NO.  
**4**



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MW-14R	Barium (mg/L)	TSS (mg/L)
3/8/2023	0.0614	2.25
9/26/2023	0.0849	1*
5/29/2024	0.0934	2
10/23/2024	0.0607	4.5

MW-44	Barium (mg/L)	TSS (mg/L)
3/8/2023	0.0185	18.5
9/26/2023	0.0185	58
5/29/2024	0.019	48
10/23/2024	0.0193	54

MW-15C	Barium (mg/L)	TSS (mg/L)
3/8/2023	0.111	1.5*
9/26/2023	0.0948	2
5/29/2024	0.0902	<1.88
10/23/2024	0.0842	2.88

MW-15R	Barium (mg/L)	TSS (mg/L)
3/8/2023	0.446	3.75
9/26/2023	0.553	79
5/29/2024	0.0867	67
10/23/2024	0.521	41

MW-39	Barium (mg/L)	TSS (mg/L)
3/8/2023	1.63	86
9/26/2023	2.69	88
5/29/2024	0.704	123
10/23/2024	2.35	72

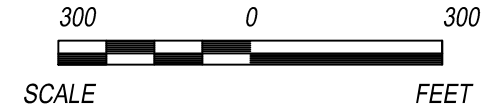
MW-40	Barium (mg/L)	TSS (mg/L)
9/15/2021	1.01	45
9/28/2022	1.55	37
9/26/2023	1.21	23
10/23/2024	1.24	51

MW-43	Barium (mg/L)	TSS (mg/L)
3/23/2021	0.201	30
9/15/2021	0.193	14.1
9/28/2022	0.308	21.4
10/23/2024	0.487	<1.88

LEGEND

- ▲ MW-4C MONITORING WELL
- ▲ LFGW-1 LANDFILL GAS WELL
- ⊕ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- SSL WELL

BARIUM PREDICTION LIMIT = 0.1017 mg/L



REV.	DATE	CK BY
1		
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3		
4		
5		

SHEET TITLE	<b>BARIUM CONCENTRATION MAP</b>
PROJECT TITLE	<b>CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT</b>

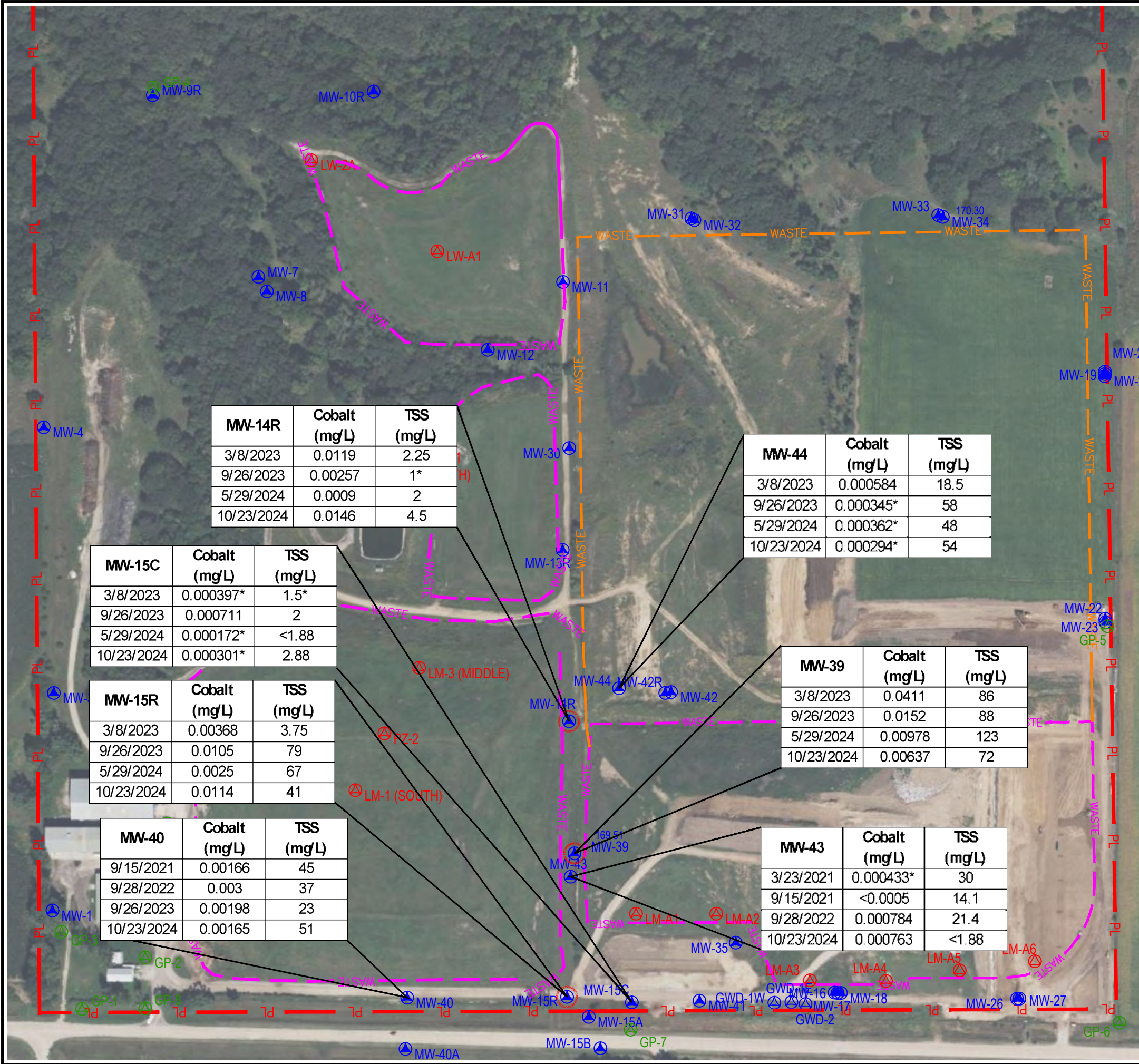
CLIENT	<b>CHEROKEE COUNTY SOLID WASTE COMMISSION</b>
	<b>1805 LINDEN ST</b>
	<b>CHEROKEE, IOWA</b>

<b>SCS ENGINEERS</b>	1690 ALL STATE COURT, SUITE 100 WEST DES MOINES, IOWA 50265 (515) 631-6160
PROJ. NO.	2223105.25
DWG. BY	CJD
CHK. BY	SAM
PROJ. MGR.	NO

CADD FILE:	2025 CONCENTRATION MAPS.DWG
DATE:	3/7/25
FIGURE NO.	<b>5</b>



\\DES-FS01\DES\MOINES\PROJECT\27223\105.25\AUTOCAD\2025 CONCENTRATION MAPS.DWG



MW-14R	Cobalt (mg/L)	TSS (mg/L)
3/8/2023	0.0119	2.25
9/26/2023	0.00257	1*
5/29/2024	0.0009	2
10/23/2024	0.0146	4.5

MW-44	Cobalt (mg/L)	TSS (mg/L)
3/8/2023	0.000584	18.5
9/26/2023	0.000345*	58
5/29/2024	0.000362*	48
10/23/2024	0.000294*	54

MW-15C	Cobalt (mg/L)	TSS (mg/L)
3/8/2023	0.000397*	1.5*
9/26/2023	0.000711	2
5/29/2024	0.000172*	<1.88
10/23/2024	0.000301*	2.88

MW-15R	Cobalt (mg/L)	TSS (mg/L)
3/8/2023	0.00368	3.75
9/26/2023	0.0105	79
5/29/2024	0.0025	67
10/23/2024	0.0114	41

MW-40	Cobalt (mg/L)	TSS (mg/L)
9/15/2021	0.00166	45
9/28/2022	0.003	37
9/26/2023	0.00198	23
10/23/2024	0.00165	51

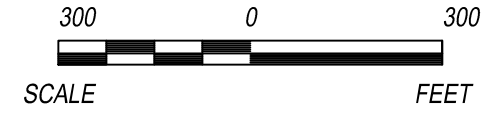
MW-39	Cobalt (mg/L)	TSS (mg/L)
3/8/2023	0.0411	86
9/26/2023	0.0152	88
5/29/2024	0.00978	123
10/23/2024	0.00637	72

MW-43	Cobalt (mg/L)	TSS (mg/L)
3/23/2021	0.000433*	30
9/15/2021	<0.0005	14.1
9/28/2022	0.000784	21.4
10/23/2024	0.000763	<1.88

LEGEND

- ▲ MW-4C MONITORING WELL
- ⊕ LFGW-1 LANDFILL GAS WELL
- ⊕ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- SSL WELL

COBALT PREDICTION LIMIT = 0.0074 mg/L



REV.	DATE	CK BY
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SHEET TITLE  
**COBALT CONCENTRATION MAP**

PROJECT TITLE  
**CHEROKEE COUNTY SANITARY LANDFILL  
2024 ANNUAL WATER QUALITY REPORT**

CLIENT  
**CHEROKEE COUNTY SOLID WASTE  
COMMISSION  
1805 LINDEN ST  
CHEROKEE, IOWA**

**SCS ENGINEERS**  
1680 ALL STATE COURT, SUITE 100  
WEST DES MOINES, IOWA 50265  
(515) 631-6160

PROJ. NO. 27223.05.25  
DWG. BY: CJD  
CHK. BY: SAM  
PROJ. MGR. NO

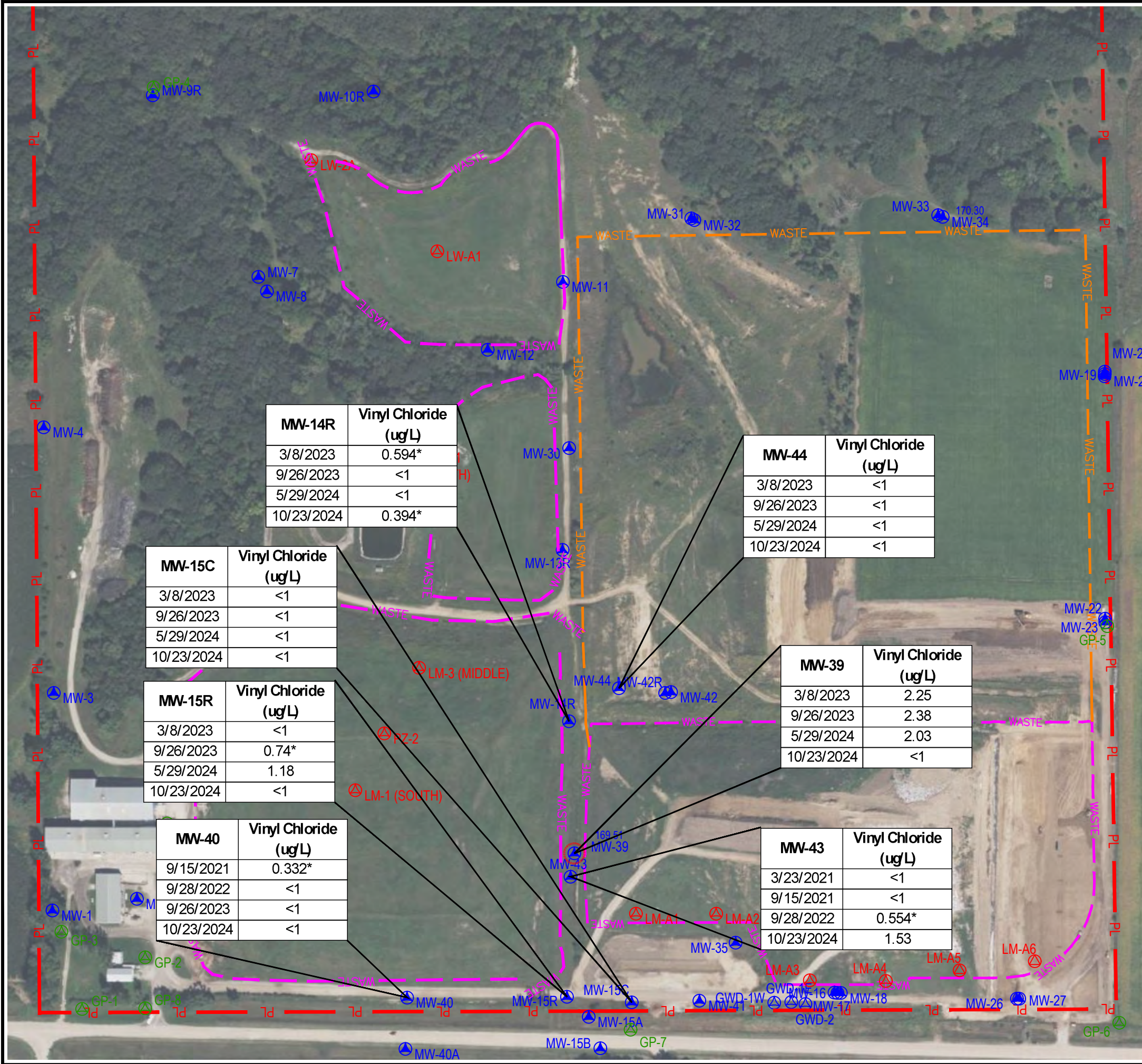
CADD FILE:  
2025 CONCENTRATION MAPS.DWG

DATE: 3/7/25

FIGURE NO.  
**6**



\\DES-FS01\DES MOINES\PROJECT\27223\105.25\AUTOCAD\2025 CONCENTRATION MAPS.DWG



MW-14R	Vinyl Chloride (ug/L)
3/8/2023	0.594*
9/26/2023	<1
5/29/2024	<1
10/23/2024	0.394*

MW-44	Vinyl Chloride (ug/L)
3/8/2023	<1
9/26/2023	<1
5/29/2024	<1
10/23/2024	<1

MW-15C	Vinyl Chloride (ug/L)
3/8/2023	<1
9/26/2023	<1
5/29/2024	<1
10/23/2024	<1

MW-39	Vinyl Chloride (ug/L)
3/8/2023	2.25
9/26/2023	2.38
5/29/2024	2.03
10/23/2024	<1

MW-15R	Vinyl Chloride (ug/L)
3/8/2023	<1
9/26/2023	0.74*
5/29/2024	1.18
10/23/2024	<1

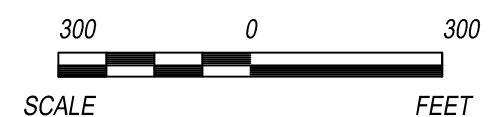
MW-43	Vinyl Chloride (ug/L)
3/23/2021	<1
9/15/2021	<1
9/28/2022	0.554*
10/23/2024	1.53

MW-40	Vinyl Chloride (ug/L)
9/15/2021	0.332*
9/28/2022	<1
9/26/2023	<1
10/23/2024	<1

LEGEND

- MW-4C MONITORING WELL
- ⊗ LFGW-1 LANDFILL GAS WELL
- ⊗ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY
- SSL WELL

VINYL CHLORIDE PREDICTION LIMIT = <1 µg/L



REV.	DATE	CK BY
1		
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SHEET TITLE  
**VINYL CHLORIDE CONCENTRATION MAP**

PROJECT TITLE  
**CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT**

CLIENT  
**CHEROKEE COUNTY SOLID WASTE COMMISSION**  
1805 LINDEN ST  
CHEROKEE, IOWA

**SCS ENGINEERS**  
1690 ALL STATE COURT, SUITE 100  
WEST DES MOINES, IOWA 50265  
(515) 631-6160

DATE: 3/7/25

FIGURE NO.  
**7**



Appendix A  
Field Sampling Forms

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-42R</b>	Date: <b>3/5/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Konner Roth</b>

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):	32.6
Initial Static Water Level (feet):	16.61
Initial Groundwater Elevation (ft-amsl):	142.28
Equipment Used:	Dedicated Tubing – Peristaltic Pump

### C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:01 PM	Purging start time.						
2:04 PM	11.1	0.8	3362.1	6.28	232.4	NM	
2:07 PM	11.0	0.2	3386.5	6.43	218.8	NM	
2:10 PM	10.9	<0.1	3393.5	6.48	212.9	NM	
2:13 PM	11.0	<0.1	3391.5	6.49	209.0	NM	
Parameters stabilized, sample collected.							

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

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

Additional Comments:	Retest Event Color-Clear Odor-None Equipment malfunction - turbidity not measured.
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### FORM FOR GROUNDWATER SAMPLING

Project:	<b>Cherokee County Sanitary Landfill</b>		
Monitoring Well/Piezometer ID:	<b>MW-16</b>	Date:	<b>5/29/2024</b>
Gradient:	Down	Sampler:	Michael Morgan

**A. MW/PIEZOMETER CONDITIONS**

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

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

Measured Well Total Depth (feet):	18.5
Initial Static Water Level (feet):	6.31
Initial Groundwater Elevation (ft-amsl):	148.78
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)
11:25 AM	Purging start time.					
11:28 AM	12.6	13.1	1431.8	NM	NM	12.4
11:31 AM	12.4	11.5	1431.8	NM	NM	2.8
11:34 AM	12.7	11.2	1427.7	NM	NM	1.0
11:37 AM	12.8	11.1	1440.8	NM	NM	0.4
Parameters stabilized, sample collected.						

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

**D. WELL MAINTENANCE**

Does the well require any future maintenance?	Yes
If yes, explain:	New lock.
Additional Comments:	Color-Clear Odor-None Equipment malfunction - pH and ORP not measured.

### FORM FOR GROUNDWATER SAMPLING

<b>Project:</b> Cherokee County Sanitary Landfill			
<b>Monitoring Well/Piezometer ID:</b>		<b>MW-27</b>	<b>Date:</b> 5/29/2024
<b>Gradient:</b> Down		<b>Sampler:</b> Michael Morgan	

**A. MW/PIEZOMETER CONDITIONS**

Well/Piezometer Capped?	Yes	
Litter/Standing Water?	Yes	Litter

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

Measured Well Total Depth (feet):	30.7
Initial Static Water Level (feet):	8.45
Initial Groundwater Elevation (ft-amsl):	146.64
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)	
12:48 PM	Purging start time.						
12:51 PM	12.8	3.2	1015.1	7.17	57.0	4.4	
12:54 PM	12.4	3.1	1007.5	7.16	61.8	5.3	
12:57 PM	12.7	3.0	1008.5	7.14	64.2	7.0	
1:00 PM	12.9	3.0	1008.7	7.13	66.0	6.3	
Parameters stabilized, sample collected.							

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

**D. WELL MAINTENANCE**

Does the well require any future maintenance?		Yes
If yes, explain:	Lock needed.	
Additional Comments:	Color-Clear Odor-None	

### FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-35</b>	Date: <b>5/29/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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):	28.0
Initial Static Water Level (feet):	6.95
Initial Groundwater Elevation (ft-amsl):	143.15
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)	
5:51 PM	Purging start time.						
5:54 PM	17.0	6.8	2938.7	6.75	-12.5	17.6	
5:57 PM	16.0	7.3	2954.9	6.79	-11.6	10.5	
6:00 PM	15.3	7.5	2940.1	6.81	-11.5	9.0	
6:03 PM	14.6	7.4	2912.5	6.80	-8.8	7.9	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.7
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	141.67

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-42R</b>	Date: <b>5/29/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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):	32.6
Initial Static Water Level (feet):	18.10
Initial Groundwater Elevation (ft-amsl):	140.79
Equipment Used:	Dedicated Tubing – Peristaltic Pump

### C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
4:33 PM	Purging start time.						
4:36 PM	13.6	0.8	3057.5	6.60	21.5	11.1	
4:39 PM	12.8	0.1	3019.4	6.62	44.6	16.2	
4:42 PM	13.1	<0.1	3020.5	6.62	56.6	16.9	
4:45 PM	12.8	<0.1	3036.5	6.62	64.7	40.2	
Parameters stabilized, sample collected.							

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

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

## FORM FOR SURFACE WATER SAMPLING

Project: Underdrain/Surface Water ID: GW D-2 | Date: 5/29/24  
 Gradient (circle one): Up / Down | Sampler: Michael Morgan

**A. TYPE OF MONITORING POINT (circle one)**

- Drainage Ditch     Road Ditch     Stream     Open Tile     Tile with Riser     Other: Underdrain

**B. PURPOSE OF MONITORING POINT (circle one)**

- Upstream     Downstream     Within Landfill     Other: \_\_\_\_\_

**C. MONITORING POINT CONDITIONS**

Approximate location:  
 Was monitoring point dry? Yes (No)    Too little water to sample? Yes (No)  
 Was water flowing? Yes / No  
 If yes, estimate quantity (gpm, depth x width x flow rate) and depth (inches): 1.5 = 2.5 ft    D = 20 cm  
16 sec ~~to~~ fill 1 L  
 Was water discolored? Yes / No  
 Does water have odor? Yes / No  
 Was ground discolored? Yes / No  
 Litter present? Yes / No  
 Comments: Red algae - pic tubes    iron particles present

**D. FIELD MEASUREMENTS**

Weather Conditions: 21°C sunny  
 Equipment Used: YSI - Pro DSS

Time	Temperature (°C)	pH (S.U.)	Conductivity (µS/cm)
<u>12:23</u>	<u>17.7</u>	<u>6.80</u>	<u>1446</u>

Comments: \_\_\_\_\_



### FORM FOR GROUNDWATER SAMPLING

<b>Project:</b> Cherokee County Sanitary Landfill	
<b>Monitoring Well/Piezometer ID:</b> MW-7	<b>Date:</b> 5/30/2024
<b>Gradient:</b> Down	<b>Sampler:</b> Michael Morgan

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	50.7
Initial Static Water Level (feet):	11.69
Initial Groundwater Elevation (ft-amsl):	49.29
Equipment Used:	Dedicated Tubing – Peristaltic Pump

<b>C. WELL PURGING</b>							
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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)	
1:09 PM	Purging start time.						
1:12 PM	11.8	1.0	1919.2	6.99	-186.5	18.3	
1:15 PM	12.3	0.3	1932.6	6.93	-178.2	48.2	
1:18 PM	12.7	0.1	1943.2	6.90	-172.4	10.7	
1:21 PM	13.1	<0.1	1943.6	6.87	-165.1	10.7	
Parameters stabilized, sample collected.							

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

<b>D. WELL MAINTENANCE</b>	
Does the well require any future maintenance?	Yes
If yes, explain:	Lock needed.

<b>Additional Comments:</b>	Color-Clear with black particulate Odor-Sulfur
-----------------------------	--

## FORM FOR GROUNDWATER SAMPLING

<b>Project:</b>	<b>Cherokee County Sanitary Landfill</b>		
<b>Monitoring Well/Piezometer ID:</b>	<b>MW-9R</b>	<b>Date:</b>	<b>5/30/2024</b>
<b>Gradient:</b>	Down	<b>Sampler:</b>	Michael Morgan

**A. MW/PIEZOMETER CONDITIONS**

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

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

Measured Well Total Depth (feet):	47.8
Initial Static Water Level (feet):	27.10
Initial Groundwater Elevation (ft-amsl):	7.30
Equipment Used:	Dedicated Submersible

**C. WELL PURGING**

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
11:24 AM	Purging start time.						
11:27 AM	12.9	1.3	2272.9	7.28	-207.8	31.1	
11:30 AM	11.9	0.3	2346.9	7.23	-206.0	19.9	
11:33 AM	11.2	0.1	2300.9	7.18	-194.3	41.8	
11:36 AM	12.2	<0.1	2291.5	7.15	-183.8	46.8	
11:39 AM	12.3	<0.1	2316.9	7.13	-178.5	66.2	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	2.6
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	173.33

**D. WELL MAINTENANCE**

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

Additional Comments:	Color-Gray Odor-Sulfur
----------------------	------------------------

### FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-10R</b>	Date: <b>5/30/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	19.1
Initial Static Water Level (feet):	10.00
Initial Groundwater Elevation (ft-amsl):	71.90
Equipment Used:	Dedicated Tubing – Peristaltic Pump

<b>C. WELL PURGING</b>	
<b>FIELD PARAMETERS</b> [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)	
12:10 PM	Purging start time.						
12:13 PM	10.6	0.7	1615.9	6.77	-95.7	117.8	
12:16 PM	11.2	0.2	1612.2	6.77	-99.9	83.5	
12:19 PM	11.2	0.1	1612.4	6.77	-101.8	79.4	
12:22 PM	11.0	<0.1	1596.7	6.78	-102.8	88.9	
Parameters stabilized, sample collected.							

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

<b>D. WELL MAINTENANCE</b>	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Light orange tint Odor-Slight sulfur

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-11</b>	Date: <b>5/30/2024</b>
Gradient: <b>Up</b>	Sampler: <b>Michael Morgan</b>

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):	41.2
Initial Static Water Level (feet):	15.63
Initial Groundwater Elevation (ft-amsl):	126.17
Equipment Used:	Dedicated Tubing – Peristaltic Pump

### C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
8:50 AM	Purging start time.						
8:56 AM	15.5	8.7	18.9	7.06	127.4	15.9	
8:59 AM	11.0	0.6	2306.4	6.51	129.3	5.3	
9:02 AM	11.1	0.2	2361.8	6.54	126.3	6.6	
9:05 AM	11.1	0.1	2386.6	6.56	124.8	6.8	
9:08 AM	11.1	<0.1	2400.6	6.56	123.8	6.3	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	2.5
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	208.33

D. WELL MAINTENANCE	
Does the well require any future maintenance? <span style="float: right;">No</span>	
If yes, explain:	
Additional Comments:	Color-Clear Odor-None Some particulates.

### FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-12</b>	Date: <b>5/30/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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):	22.3
Initial Static Water Level (feet):	7.42
Initial Groundwater Elevation (ft-amsl):	127.68
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)	
10:15 AM	Purging start time.						
10:18 AM	10.6	0.9	2014.1	6.72	126.5	5.2	
10:21 AM	11.0	0.7	2009.9	6.72	121.2	5.3	
10:24 AM	11.1	0.5	2011.6	6.72	113.9	5.9	
10:27 AM	11.0	0.5	2006.5	6.71	106.6	6.9	
Parameters stabilized, sample collected.							

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

#### D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-None
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### FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-13R</b>	Date: <b>5/30/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	26.4
Initial Static Water Level (feet):	15.16
Initial Groundwater Elevation (ft-amsl):	146.44
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING	
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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)	
7:36 AM	Purging start time.						
7:39 AM	11.8	0.5	1049.3	6.20	31.0	7.8	
7:42 AM	12.3	0.1	1059.3	6.24	41.5	7.7	
7:45 AM	12.3	0.1	1066.3	6.28	45.3	7.7	
7:48 AM	12.3	<0.1	1066.2	6.31	46.9	7.5	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.7
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	141.67

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

Additional Comments:	Color-Clear    Odor-None
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### FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-14R</b>	Date: <b>5/29/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	27.4
Initial Static Water Level (feet):	15.33
Initial Groundwater Elevation (ft-amsl):	152.97
Equipment Used:	Dedicated Tubing – Peristaltic Pump

<b>C. WELL PURGING</b>
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FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:48 PM	Purging start time.						
2:51 PM	12.2	0.3	1849.0	6.35	4.6	26.6	
2:54 PM	12.3	<0.1	1772.6	6.33	17.8	12.6	
2:57 PM	12.1	<0.1	1675.2	6.33	9.8	11.8	
3:00 PM	12.3	<0.1	1584.3	6.35	22.2	9.9	
3:03 PM	12.4	<0.1	1521.3	6.40	34.8	19.3	
3:06 PM	12.8	<0.1	1464.2	6.45	40.2	36.7	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	4.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	18:00
Average Purge Rate (mL/min):	227.78

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

Additional Comments:	Color-Clear Odor-None
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## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-15C</b>	Date: <b>5/29/2024</b>
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):	27.0
Initial Static Water Level (feet):	5.78
Initial Groundwater Elevation (ft-amsl):	166.88
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)
9:24 AM	Purging start time.					
9:27 AM	11.2	0.7	1825.3	6.64	21.2	16.8
9:30 AM	11.8	0.2	1696.4	6.68	30.5	52.4
9:33 AM	11.6	0.2	1499.2	6.70	34.1	10.1
9:36 AM	11.3	0.5	1394.3	6.70	39.2	17.5
9:39 AM	11.8	0.7	1411.3	6.67	44.3	8.7
Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.1
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	140.00

### D. WELL MAINTENANCE

Does the well require any future maintenance? No	
If yes, explain:	
Additional Comments:	Color-Clear Odor-None



## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-15R</b>	Date: <b>5/29/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	23.3
Initial Static Water Level (feet):	7.74
Initial Groundwater Elevation (ft-amsl):	164.16
Equipment Used:	Dedicated Tubing – Peristaltic Pump

<b>C. WELL PURGING</b>
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FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
8:38 AM	Purging start time.						
8:41 AM	10.6	1.3	959.4	6.20	-54.0	14.2	
8:44 AM	10.7	0.9	997.8	6.23	-65.0	13.6	
8:47 AM	10.6	0.8	1014.8	6.26	-69.1	13.9	
8:50 AM	10.7	0.8	1021.9	6.28	-71.5	12.0	
Parameters stabilized, sample collected.							

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

<b>D. WELL MAINTENANCE</b>	
Does the well require any future maintenance? <b>No</b>	
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

**FORM FOR GROUNDWATER SAMPLING**

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-39</b>	Date: <b>5/29/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	27.6
Initial Static Water Level (feet):	14.91
Initial Groundwater Elevation (ft-amsl):	157.49
Equipment Used:	Dedicated Tubing – Peristaltic Pump

<b>C. WELL PURGING</b>							
FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
6:43 PM	Purging start time.						
6:46 PM	12.7	0.4	2152.1	6.35	-83.4	8.8	
6:49 PM	12.8	0.1	2147.2	6.36	-89.0	14.6	
6:52 PM	13.1	<0.1	2145.3	6.37	-93.0	24.4	
6:55 PM	12.9	<0.1	2146.8	6.37	-95.1	14.3	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.3
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	191.67

<b>D. WELL MAINTENANCE</b>	
Does the well require any future maintenance?	No

If yes, explain:	
Additional Comments:	Color-Clear Odor-None

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>			
Monitoring Well/Piezometer ID: <b>MW-44</b>		Date: <b>5/29/2024</b>	
Gradient: <b>Down</b>	Sampler: <b>Michael Morgan</b>		

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	38.0
Initial Static Water Level (feet):	5.28
Initial Groundwater Elevation (ft-amsl):	161.12
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING							
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FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
3:47 PM	Purging start time.						
3:50 PM	12.9	0.5	2800.4	6.76	-78.8	113.2	
3:53 PM	13.1	0.1	2808.0	6.78	-80.2	133.4	
3:56 PM	14.2	<0.1	2850.8	6.78	-82.7	156.9	
3:59 PM	14.5	<0.1	2892.1	6.78	-84.2	174.9	
4:02 PM	14.4	<0.1	2895.2	6.78	-85.1	131.0	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	2.9
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	193.33

D. WELL MAINTENANCE	
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Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Light orange tint    Odor-None Fine orange particulates.

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>			
Monitoring Well/Piezometer ID:	<b>MW-16</b>	Date:	<b>10/24/2024</b>
Gradient:	Down	Sampler:	Cole Tesar

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	18.5
Initial Static Water Level (feet):	9.15
Initial Groundwater Elevation (ft-amsl):	145.94
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING							
FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (μS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
10:59 AM	Purging start time.						
11:02 AM	14.2	1.3	1585.6	6.55	11.4	2.2	
11:05 AM	14.3	0.7	1591.7	6.54	12.0	1.8	
11:08 AM	14.3	0.5	1593.1	6.54	13.6	2.1	
11:11 AM	14.3	0.4	1594.4	6.54	15.0	1.9	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

**FORM FOR GROUNDWATER SAMPLING**

Project:	<b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID:	<b>MW-27</b>	Date: <b>10/24/2024</b>
Gradient:	Down	Sampler: Cole Tesar

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

<b>B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)</b>	
Measured Well Total Depth (feet):	30.8
Initial Static Water Level (feet):	13.45
Initial Groundwater Elevation (ft-amsl):	141.64
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)	
9:52 AM	Purging start time.						
9:55 AM	11.7	2.2	1167.6	7.16	-76.6	2.1	
9:58 AM	11.7	1.5	1142.9	7.12	-64.9	2.7	
10:01 AM	11.6	1.3	1132.6	7.10	-57.5	3.1	
10:04 AM	11.6	1.2	1121.1	7.10	-51.7	3.9	
Parameters stabilized, sample collected.							

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

<b>D. WELL MAINTENANCE</b>	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

## FORM FOR GROUNDWATER SAMPLING

Project:	<b>Cherokee County Sanitary Landfill</b>		
Monitoring Well/Piezometer ID:	<b>MW-35</b>	Date:	<b>10/24/2024</b>
Gradient:	Down	Sampler:	Cole Tesar

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):	27.9
Initial Static Water Level (feet):	9.75
Initial Groundwater Elevation (ft-amsl):	140.35
Equipment Used:	Non-Dedicated Submersible

C. WELL PURGING	
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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)	
12:29 PM	Purging start time.						
12:32 PM	15.2	1.1	3246.5	6.56	-54.6	265.2	
12:35 PM	15.0	0.7	3247.2	6.55	-45.6	249.2	
12:38 PM	14.9	0.5	3215.0	6.56	-42.1	207.7	
12:41 PM	15.4	0.4	3168.5	6.56	-37.3	183.3	
Parameters stabilized, sample collected.							

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

D. WELL MAINTENANCE	
Does the well require any future maintenance?	Yes
If yes, explain:	Well needs dug out.
Additional Comments:	Color-Cloudy/gray Odor-Sulfur Inconsistent flow during sampling.

## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-42R</b>	Date: <b>10/23/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Cole Tesar</b>

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	32.6
Initial Static Water Level (feet):	15.77
Initial Groundwater Elevation (ft-amsl):	143.12
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING
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FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
6:00 PM	Purging start time.						
6:03 PM	11.9	1.3	3414.5	6.69	-41.9	2.2	
6:06 PM	11.9	0.6	3418.0	6.66	-21.6	2.1	
6:09 PM	11.9	0.4	3419.2	6.65	-8.6	2.0	
6:12 PM	11.9	0.4	3418.8	6.64	-0.2	2.4	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.7
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	141.67

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

Additional Comments:	Color-Clear Odor-None
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FORM FOR SURFACE WATER SAMPLING

Site Name Cherokee County Sanitary Landfill Permit No. 18-SDP-01-75P
Surface Monitoring Point No. GWD-2 Date 10/24/24

Name of Person Sampling Cole Tesar

A. TYPE OF MONITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream, Within Landfill, Downstream, Other

C. MONITORING POINT CONDITIONS/LOCATION

Located east of GWD-1E

Was monitoring point dry? Yes
Was water flowing? No
Standing Water? No
Was water discolored? no
Does water have odor? no
Was ground discolored? no
Litter present? no

D. FIELD MEASUREMENTS

Weather Conditions:

Time:

Field Measurements:

Temperature, Equipment Used, Units, Celsius

pH, Equipment Used, Units, Standard units

Spec. Conductance, Equipment Used, Units, uS/cm

COMMENTS No sample taken. Point was dry.



## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-14R</b>	Date: <b>10/23/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Cole Tesar</b>

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):	27.4
Initial Static Water Level (feet):	18.00
Initial Groundwater Elevation (ft-amsl):	150.30
Equipment Used:	Dedicated Tubing – Peristaltic Pump

### C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:16 PM	Purging start time.						
2:19 PM	14.4	1.4	2132.8	6.38	22.3	7.6	
2:22 PM	14.3	0.6	2127.9	6.38	-7.7	4.9	
2:25 PM	14.3	0.5	2085.9	6.38	-12.2	5.2	
2:28 PM	14.4	0.4	2028.6	6.39	-11.3	4.6	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.5
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	125.00

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-None



## FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-15R</b>	Date: <b>10/23/2024</b>
Gradient: Down	Sampler: Cole Tesar

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.4
Initial Static Water Level (feet):	12.97
Initial Groundwater Elevation (ft-amsl):	158.93
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING	
FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES	

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
4:01 PM	Purging start time.						
4:04 PM	14.2	1.0	1316.9	6.54	-125.4	2.3	
4:07 PM	14.6	0.6	1314.8	6.52	-127.6	1.6	
4:10 PM	14.7	0.4	1318.0	6.50	-129.4	1.3	
4:13 PM	14.7	0.3	1318.6	6.49	-131.2	1.3	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.6
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	133.33

D. WELL MAINTENANCE	
Does the well require any future maintenance? No	
If yes, explain:	
Additional Comments:	Color-Clear Odor-None

# FORM FOR GROUNDWATER SAMPLING

Project: <b>Cherokee County Sanitary Landfill</b>			
Monitoring Well/Piezometer ID: <b>MW-39</b>	Date: <b>10/23/2024</b>		
Gradient: <b>Down</b>	Sampler: <b>Cole Tesar</b>		

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	27.6
Initial Static Water Level (feet):	19.89
Initial Groundwater Elevation (ft-amsl):	152.51
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING							
FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
2:53 PM	Purging start time.						
2:56 PM	14.5	0.9	2317.8	6.41	-144.6	4.3	
2:59 PM	14.4	0.5	2290.2	6.43	-152.0	3.2	
3:02 PM	14.5	0.4	2239.1	6.43	-157.7	3.4	
3:05 PM	14.5	0.4	2211.0	6.43	-160.7	3.8	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.6
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	133.33

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear Odor-Sulfur

**FORM FOR GROUNDWATER SAMPLING**

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-40</b>	Date: <b>10/24/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Cole Tesar</b>

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	24.9
Initial Static Water Level (feet):	15.78
Initial Groundwater Elevation (ft-amsl):	180.99
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING	
-----------------	--

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
8:32 AM	Purging start time.						
8:35 AM	13.5	1.2	1256.0	6.48	-137.4	6.5	
8:38 AM	13.4	0.6	1235.2	6.46	-138.6	10.1	
8:41 AM	13.3	0.5	1236.4	6.45	-138.8	10.5	
8:44 AM	13.4	0.6	1237.9	6.45	-138.0	13.0	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	1.3
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	108.33

D. WELL MAINTENANCE	
Does the well require any future maintenance?	No
If yes, explain:	
Additional Comments:	Color-Clear with black particulate Odor-Sulfur

**FORM FOR GROUNDWATER SAMPLING**

<b>Project: Cherokee County Sanitary Landfill</b>			
Monitoring Well/Piezometer ID:	<b>MW-43</b>	Date:	<b>10/23/2024</b>
Gradient:	Down	Sampler:	Cole Tesar

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):	46.5
Initial Static Water Level (feet):	22.28
Initial Groundwater Elevation (ft-amsl):	168.45
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING
<b>FIELD PARAMETERS</b> [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	
3:26 PM	Purging start time.						
3:29 PM	14.5	1.5	2611.3	6.45	-68.6	3.0	
3:32 PM	14.6	0.7	2641.5	6.44	-69.9	2.2	
3:35 PM	14.5	0.5	2640.3	6.45	-73.1	2.1	
3:38 PM	14.5	0.5	2492.3	6.49	-77.7	2.4	
Parameters stabilized, sample collected.							

Quantity of Water Removed from Well (liters):	1.5
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	125.00

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

Additional Comments:	Color-Clear Odor-Sulfur
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**FORM FOR GROUNDWATER SAMPLING**

Project: <b>Cherokee County Sanitary Landfill</b>	
Monitoring Well/Piezometer ID: <b>MW-44</b>	Date: <b>10/23/2024</b>
Gradient: <b>Down</b>	Sampler: <b>Cole Tesar</b>

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	38.2
Initial Static Water Level (feet):	4.72
Initial Groundwater Elevation (ft-amsl):	161.68
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)	
5:31 PM	Purging start time.						
5:34 PM	13.6	1.1	3246.3	6.88	-146.4	110.1	
5:37 PM	13.4	0.5	3260.1	6.87	-146.8	80.7	
5:40 PM	13.3	0.4	3259.6	6.86	-147.8	59.2	
5:43 PM	13.1	0.3	3258.2	6.87	-148.9	59.4	
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-Orange tint Odor-None
----------------------	-----------------------------

Appendix B-1  
Laboratory Analytical Data Sheets





# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 3/15/2024 2:33:26 PM

## JOB DESCRIPTION

Cherokee Landfill - Winter 2024 Retest

## JOB NUMBER

310-276347-1

# Eurofins Cedar Falls

## Job Notes

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

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

## Authorization



Generated  
3/15/2024 2:33:26 PM

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



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# Case Narrative

Client: SCS Engineers  
Project: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

**Job ID: 310-276347-1**

**Eurofins Cedar Falls**

## Job Narrative 310-276347-1

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 3/8/2024 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C.

### Metals

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

### General Chemistry

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

Eurofins Cedar Falls

# Sample Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-276347-1	MW-42R	Ground Water	03/04/24 14:22	03/08/24 16:45

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

# Detection Summary

Client: SCS Engineers

Job ID: 310-276347-1

Project/Site: Cherokee Landfill - Winter 2024 Retest

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-276347-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00535		0.000500		mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

- 1
- 2
- 3
- 4
- 5
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- 7
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- 10
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- 14

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-276347-1**

Date Collected: 03/04/24 14:22

Matrix: Ground Water

Date Received: 03/08/24 16:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00535		0.000500		mg/L		03/12/24 08:45	03/14/24 15:55	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			03/08/24 13:08	1

- 1
- 2
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- 13
- 14

## Definitions/Glossary

Client: SCS Engineers

Job ID: 310-276347-1

Project/Site: Cherokee Landfill - Winter 2024 Retest

### Glossary

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



# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

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

Lab Sample ID: MB 310-415576/1

Matrix: Water

Analysis Batch: 415576

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			03/08/24 13:08	1

Lab Sample ID: LCS 310-415576/2

Matrix: Water

Analysis Batch: 415576

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	109.0		mg/L		109	75 - 116



# QC Association Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

## Metals

### Prep Batch: 415698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276347-1	MW-42R	Total/NA	Ground Water	3005A	

### Analysis Batch: 416036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276347-1	MW-42R	Total/NA	Ground Water	6020B	415698

## General Chemistry

### Analysis Batch: 415576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-276347-1	MW-42R	Total/NA	Ground Water	I-3765-85	
MB 310-415576/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-415576/2	Lab Control Sample	Total/NA	Water	I-3765-85	

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-276347-1**

**Date Collected: 03/04/24 14:22**

**Matrix: Ground Water**

**Date Received: 03/08/24 16:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			415698	QTZ5	EET CF	03/12/24 08:45
Total/NA	Analysis	6020B		1	416036	A6US	EET CF	03/14/24 15:55
Total/NA	Analysis	I-3765-85		1	415576	ENB7	EET CF	03/08/24 13:08

**Laboratory References:**

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

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- 13
- 14

# Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-276347-1

Project/Site: Cherokee Landfill - Winter 2024 Retest

## 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
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- 10
- 11
- 12
- 13
- 14

# Method Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill - Winter 2024 Retest

Job ID: 310-276347-1

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF

**Protocol References:**

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

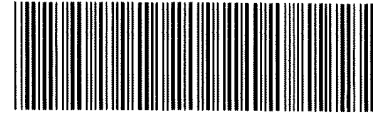
**Laboratory References:**

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





Environment Testing  
America



310-276347 Chain of Custody

**Cooler/Sample Receipt and Temperature Log Form**

<b>Client Information</b>			
Client: <u>SCS Engineers</u>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE <u>3/7/24</u>	TIME <u>1645</u>	Received By: <u>AM</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: _____			
<b>Condition of Cooler/Containers</b>			
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? ↓	
<b>Temperature Record</b>			
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>
• <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>1.8</u>	Corrected Temp (°C):	<u>1.8</u>
• <b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			





Cedar Falls IA 50613-6907  
phone 319 277 2401 fax 319 277 2425

TestAmerica Laboratories Inc d/b/a Eurofins TestAmerica

Regulatory Program  DW  NPDES  RCRA  Other

Project Manager: Nathan Ohrt

Client Contact		Site Contact: Brent Kach		Date		COC No 1 of 1 COCs	
Nathan Ohrt		Lab Contact		Carrier		Sampler	
SCS Engineers		Email nohrt@scsengineers.com				For Lab Use Only	
Cell 319-331-9613		Analysis Turnaround Time				Walk-in Client	
		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS				Lab Sampling	
		Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day				Job / SDG No	
Project Name Winter 2024 Retest		Sample Date		Sample Time		Sample Type	
Site Cherokee County Sanitary Landfill		3-4-24		14:22		G GW	
PO #		Sample Matrix		# of Cont.		Sample Specific Notes	
		MW-42R		2			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp G=Grab)	Sample Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Cobalt	Total Suspended Solids	Other
MW-42R	3-4-24	14:22	G	GW	2	X		X	X	

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-Hazardous  Flammable  Skin Irritant  Unknown

Poison B  Return to Client  Disposal by Lab  Archive for Months

Special Instructions/QC Requirements & Comments

re-test

Custody Seal No

Relinquished by	Company	Date/Time	Received by	Company	Date/Time	Therm ID No
Relinquished by	Company	3-7-24/1400	Received by	Company		
Relinquished by	Company		Received in Laboratory by	Company	Date/Time	
			<i>Nathan Ohrt</i>	<i>SCS</i>	<i>3/7/24 1400</i>	
			<i>Konner Reuth</i>	<i>SCS</i>	<i>3/7/24 1400</i>	
			<i>re-test</i>	<i>re-test</i>	<i>re-test</i>	



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-276347-1

SDG Number:

**Login Number: 276347**

**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	







# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/17/2024 8:54:34 AM

## JOB DESCRIPTION

Cherokee Landfill Closed 1st 2024 HMSP  
1st 2024 HMSP

## JOB NUMBER

310-282518-1

# Eurofins Cedar Falls

## Job Notes

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

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

## Authorization



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Authorized for release by  
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# Case Narrative

Client: SCS Engineers  
Project: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

Job ID: 310-282518-1

Eurofins Cedar Falls

## Job Narrative 310-282518-1

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

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

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

### Receipt

The samples were received on 5/31/2024 4:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2°C and 2.6°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 8270E: The continuing calibration verification (CCV) associated with batch 310-423965 recovered above the upper control limit for 1,4-Naphthoquinone (22.6%D), Di-n-butyl phthalate (20.7%D), Dimethyl phthalate (25.5%D), 3-Nitroaniline (24.7%D), Safrole (23.4%D), 1,3-Dinitrobenzene (31.0%D), o,o',o"-Triethylphosphorothioate (23.7%D), Hexachloropropene (122.8%D) and Dinoseb (33.9%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analytes: Famphur and Kepone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analyte(s): p-Phenylene diamine. p-Phenylene diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analytes: Methapyrilene.

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

### GC Semi VOA

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

### Herbicides

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

### PCBs

Method 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

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# Case Narrative

Client: SCS Engineers  
Project: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Job ID: 310-282518-1 (Continued)**

**Eurofins Cedar Falls**

## Pesticides

Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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.

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# Sample Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-282518-1	MW-11	Groundwater	05/30/24 09:20	05/31/24 16:00
310-282518-2	MW-7	Groundwater	05/30/24 13:34	05/31/24 16:00
310-282518-3	MW-9R	Groundwater	05/30/24 11:46	05/31/24 16:00
310-282518-4	MW-10R	Groundwater	05/30/24 12:34	05/31/24 16:00
310-282518-5	MW-12	Groundwater	05/30/24 10:57	05/31/24 16:00
310-282518-6	MW-13R	Groundwater	05/30/24 08:40	05/31/24 16:00
310-282518-7	MW-14R	Groundwater	05/29/24 15:27	05/31/24 16:00
310-282518-8	MW-15R	Groundwater	05/29/24 09:06	05/31/24 16:00
310-282518-9	MW-39	Groundwater	05/29/24 19:08	05/31/24 16:00
310-282518-10	MW-15C	Groundwater	05/29/24 09:58	05/31/24 16:00
310-282518-11	MW-44	Groundwater	05/29/24 16:13	05/31/24 16:00
310-282518-12	MW-DC	Groundwater	05/30/24 08:40	05/31/24 16:00
310-282518-13	Trip Blank	Groundwater	05/30/24 00:00	05/31/24 16:00



# Detection Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Client Sample ID: MW-11

Lab Sample ID: 310-282518-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0132		0.00200	0.000660	mg/L	1		6020B	Total/NA
Nickel	0.00331	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.88		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-7

Lab Sample ID: 310-282518-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.551	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.313	J	1.00	0.220	ug/L	1		8260D	Total/NA
Trichloroethene	0.946	J	1.00	0.430	ug/L	1		8260D	Total/NA
Barium	0.0140		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000294	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.37		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-9R

Lab Sample ID: 310-282518-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000805	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0694		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00741		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0252		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	6.75		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-10R

Lab Sample ID: 310-282518-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.479	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.00399		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.121		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00235		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000892		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00777		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	78.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-12

Lab Sample ID: 310-282518-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0217		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.678		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00975		0.00200	0.000680	mg/L	4		6020B	Total/NA
Copper	0.00185	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000573		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0157		0.00500	0.00210	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-13R

Lab Sample ID: 310-282518-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.93	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	0.237	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.53		1.00	0.400	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.378	J	1.00	0.230	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.545	J	1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.0547		0.00200	0.000530	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Client Sample ID: MW-13R (Continued)

Lab Sample ID: 310-282518-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.672		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0123		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0183		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.50		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-14R

Lab Sample ID: 310-282518-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.227	J	1.00	0.220	ug/L	1		8260D	Total/NA
Barium	0.0934		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000110	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000900		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00189	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0126		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.00		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-15R

Lab Sample ID: 310-282518-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.08		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.96		1.00	0.400	ug/L	1		8260D	Total/NA
Chloroethane	1.47	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.360	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.424	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	2.01		1.00	0.230	ug/L	1		8260D	Total/NA
Vinyl chloride	1.18		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00119	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0867		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000164	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00250		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0107		0.00500	0.00210	mg/L	1		6020B	Total/NA
Zinc	0.0106	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	67.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-39

Lab Sample ID: 310-282518-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.61	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	1.63		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	10.4		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.472	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	10.7		1.00	0.230	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.319	J	1.00	0.220	ug/L	1		8260D	Total/NA
Toluene	0.635	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	2.03		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0219		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.704		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00978		0.00200	0.000680	mg/L	4		6020B	Total/NA
Copper	0.00187	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000583		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0157		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	123		15.0	11.1	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls



# Detection Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Client Sample ID: MW-15C

Lab Sample ID: 310-282518-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0902		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000172	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00664		0.00500	0.00210	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-44

Lab Sample ID: 310-282518-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00971		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0190		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000362	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	48.0		7.50	5.55	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-DC

Lab Sample ID: 310-282518-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.30	J	10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	0.238	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	1.63		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.223	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.363	J	1.00	0.230	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.410	J	1.00	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.00110	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0839		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000164	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00232		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0104		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.63		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: Trip Blank

Lab Sample ID: 310-282518-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-11**

**Lab Sample ID: 310-282518-1**

Date Collected: 05/30/24 09:20

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:06	1
<b>Barium</b>	<b>0.0132</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:06	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 15:55	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:06	1
<b>Nickel</b>	<b>0.00331</b>	<b>J</b>	0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		06/04/24 18:10	06/04/24 22:05	1
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>2.88</b>		1.88	1.39	mg/L			06/04/24 07:45	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-7**

**Lab Sample ID: 310-282518-2**

Date Collected: 05/30/24 13:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/03/24 19:53	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/03/24 19:53	1
Benzene	<0.500		0.500	0.220	ug/L			06/03/24 19:53	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/03/24 19:53	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/03/24 19:53	1
Bromoform	<5.00		5.00	0.780	ug/L			06/03/24 19:53	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/03/24 19:53	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/03/24 19:53	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/03/24 19:53	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/03/24 19:53	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/03/24 19:53	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/03/24 19:53	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/03/24 19:53	1
Chloroform	<3.00		3.00	1.30	ug/L			06/03/24 19:53	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/03/24 19:53	1
<b>cis-1,2-Dichloroethene</b>	<b>0.551</b>	<b>J</b>	1.00	0.210	ug/L			06/03/24 19:53	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/03/24 19:53	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/03/24 19:53	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/03/24 19:53	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/03/24 19:53	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/03/24 19:53	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/03/24 19:53	1
<b>1,1-Dichloroethane</b>	<b>0.313</b>	<b>J</b>	1.00	0.220	ug/L			06/03/24 19:53	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/03/24 19:53	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/03/24 19:53	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/03/24 19:53	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/03/24 19:53	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/03/24 19:53	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/03/24 19:53	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/03/24 19:53	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/03/24 19:53	1
Styrene	<1.00		1.00	0.370	ug/L			06/03/24 19:53	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/03/24 19:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/03/24 19:53	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/03/24 19:53	1
Toluene	<1.00		1.00	0.430	ug/L			06/03/24 19:53	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/03/24 19:53	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/03/24 19:53	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/03/24 19:53	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/03/24 19:53	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/03/24 19:53	1
<b>Trichloroethene</b>	<b>0.946</b>	<b>J</b>	1.00	0.430	ug/L			06/03/24 19:53	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/03/24 19:53	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/03/24 19:53	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/03/24 19:53	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/03/24 19:53	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/03/24 19:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		06/03/24 19:53	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-7**

**Lab Sample ID: 310-282518-2**

Date Collected: 05/30/24 13:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	106		73 - 130		06/03/24 19:53	1
Toluene-d8 (Surr)	99		80 - 120		06/03/24 19:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:08	1
<b>Barium</b>	<b>0.0140</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:08	1
<b>Cobalt</b>	<b>0.000294</b>	<b>J</b>	0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 15:59	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:08	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>8.37</b>		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-9R**

**Lab Sample ID: 310-282518-3**

Date Collected: 05/30/24 11:46

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000805	J	0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:19	1
Barium	0.0694		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:19	1
Cobalt	0.00741		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:02	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:19	1
Nickel	0.0252		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		06/04/24 18:17	06/04/24 22:23	1
Total Suspended Solids (USGS I-3765-85)	6.75		1.88	1.39	mg/L			06/04/24 07:45	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-10R**

**Lab Sample ID: 310-282518-4**

Date Collected: 05/30/24 12:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/03/24 20:15	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/03/24 20:15	1
Benzene	<0.500		0.500	0.220	ug/L			06/03/24 20:15	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/03/24 20:15	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/03/24 20:15	1
Bromoform	<5.00		5.00	0.780	ug/L			06/03/24 20:15	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/03/24 20:15	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/03/24 20:15	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/03/24 20:15	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/03/24 20:15	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/03/24 20:15	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/03/24 20:15	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/03/24 20:15	1
Chloroform	<3.00		3.00	1.30	ug/L			06/03/24 20:15	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/03/24 20:15	1
<b>cis-1,2-Dichloroethene</b>	<b>0.479</b>	<b>J</b>	1.00	0.210	ug/L			06/03/24 20:15	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/03/24 20:15	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/03/24 20:15	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/03/24 20:15	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/03/24 20:15	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/03/24 20:15	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/03/24 20:15	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/03/24 20:15	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/03/24 20:15	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/03/24 20:15	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/03/24 20:15	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/03/24 20:15	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/03/24 20:15	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/03/24 20:15	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/03/24 20:15	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/03/24 20:15	1
Styrene	<1.00		1.00	0.370	ug/L			06/03/24 20:15	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/03/24 20:15	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/03/24 20:15	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/03/24 20:15	1
Toluene	<1.00		1.00	0.430	ug/L			06/03/24 20:15	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/03/24 20:15	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/03/24 20:15	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/03/24 20:15	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/03/24 20:15	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/03/24 20:15	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/03/24 20:15	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/03/24 20:15	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/03/24 20:15	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/03/24 20:15	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/03/24 20:15	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/03/24 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		06/03/24 20:15	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-10R**

**Lab Sample ID: 310-282518-4**

Date Collected: 05/30/24 12:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		73 - 130		06/03/24 20:15	1
Toluene-d8 (Surr)	98		80 - 120		06/03/24 20:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00399		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:21	1
Barium	0.121		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:21	1
Cobalt	0.00235		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:06	1
Lead	0.000892		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:21	1
Nickel	0.00777		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	78.0		15.0	11.1	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

Date Collected: 05/30/24 10:57

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/03/24 20:38	1
Acrolein	<10.0		10.0	3.60	ug/L			06/03/24 20:38	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/03/24 20:38	1
Allyl chloride	<2.00		2.00	0.700	ug/L			06/03/24 20:38	1
Benzene	<0.500		0.500	0.220	ug/L			06/03/24 20:38	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/03/24 20:38	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/03/24 20:38	1
Bromoform	<5.00		5.00	0.780	ug/L			06/03/24 20:38	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/03/24 20:38	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/03/24 20:38	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/03/24 20:38	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/03/24 20:38	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/03/24 20:38	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/03/24 20:38	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/03/24 20:38	1
Chloroform	<3.00		3.00	1.30	ug/L			06/03/24 20:38	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/03/24 20:38	1
Chloroprene	<1.00		1.00	0.230	ug/L			06/03/24 20:38	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/03/24 20:38	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/03/24 20:38	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/03/24 20:38	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/03/24 20:38	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/03/24 20:38	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/03/24 20:38	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			06/03/24 20:38	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/03/24 20:38	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			06/03/24 20:38	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/03/24 20:38	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/03/24 20:38	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/03/24 20:38	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/03/24 20:38	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			06/03/24 20:38	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			06/03/24 20:38	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			06/03/24 20:38	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/03/24 20:38	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			06/03/24 20:38	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/03/24 20:38	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/03/24 20:38	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			06/03/24 20:38	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/03/24 20:38	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			06/03/24 20:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/03/24 20:38	1
Naphthalene	<5.00		5.00	3.00	ug/L			06/03/24 20:38	1
Propionitrile	<10.0		10.0	3.40	ug/L			06/03/24 20:38	1
Styrene	<1.00		1.00	0.370	ug/L			06/03/24 20:38	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/03/24 20:38	1
1,1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/03/24 20:38	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/03/24 20:38	1
Toluene	<1.00		1.00	0.430	ug/L			06/03/24 20:38	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

**Date Collected: 05/30/24 10:57**

**Matrix: Groundwater**

**Date Received: 05/31/24 16:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/03/24 20:38	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/03/24 20:38	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/03/24 20:38	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			06/03/24 20:38	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/03/24 20:38	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/03/24 20:38	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/03/24 20:38	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/03/24 20:38	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/03/24 20:38	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/03/24 20:38	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/03/24 20:38	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/03/24 20:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					06/03/24 20:38	1
Dibromofluoromethane (Surr)	104		73 - 130					06/03/24 20:38	1
Toluene-d8 (Surr)	99		80 - 120					06/03/24 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:01	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
1,4-Phenylenediamine	<10.0	*	10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:01	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		06/04/24 13:08	06/07/24 18:01	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		06/04/24 13:08	06/07/24 18:01	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:01	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

**Date Collected: 05/30/24 10:57**

**Matrix: Groundwater**

**Date Received: 05/31/24 16:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
Acenaphthene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 18:01	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 18:01	1
Acetophenone	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:01	1
Anthracene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzo(a)anthracene	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzo(a)pyrene	<10.0		10.0	8.10	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzo(g,h,i)perylene	<10.0		10.0	6.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzo(k)fluoranthene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		06/04/24 13:08	06/07/24 18:01	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		06/04/24 13:08	06/07/24 18:01	1
bis(2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:01	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		06/04/24 13:08	06/07/24 18:01	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Chrysene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 18:01	1
Diallate	<10.0		10.0	4.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		06/04/24 13:08	06/07/24 18:01	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
Dimethoate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
Dinoseb	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
Diphenylamine	<10.0		10.0	6.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
Disulfoton	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Ethyl parathion	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
Famphur	<10.0	*+	10.0	3.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
Fluoranthene	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
Fluorene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:01	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:01	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		06/04/24 13:08	06/07/24 18:01	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		06/04/24 13:08	06/07/24 18:01	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		06/04/24 13:08	06/07/24 18:01	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Indeno(1,2,3-cd)pyrene	<10.0		10.0	4.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
Isodrin	<10.0		10.0	4.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
Isophorone	<10.0		10.0	0.930	ug/L		06/04/24 13:08	06/07/24 18:01	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

Date Collected: 05/30/24 10:57

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isosafrole	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
Kepone	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 18:01	1
Methapyrilene	<10.0	*1	10.0	0.760	ug/L		06/04/24 13:08	06/07/24 18:01	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
Methyl parathion	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:01	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
o,o',o"-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
o-Toluidine	<10.0		10.0	2.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		06/04/24 13:08	06/07/24 18:01	1
Phenacetin	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:01	1
Phenanthrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:01	1
Phenol	<10.0		10.0	1.10	ug/L		06/04/24 13:08	06/07/24 18:01	1
Phorate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:01	1
Pronamide	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:01	1
Pyrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:01	1
Safrole	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:01	1
Thionazin	<10.0		10.0	3.50	ug/L		06/04/24 13:08	06/07/24 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	74		25 - 110	06/04/24 13:08	06/07/24 18:01	1
Phenol-d5 (Surr)	73		21 - 110	06/04/24 13:08	06/07/24 18:01	1
Nitrobenzene-d5 (Surr)	108		45 - 129	06/04/24 13:08	06/07/24 18:01	1
2-Fluorobiphenyl (Surr)	97		39 - 118	06/04/24 13:08	06/07/24 18:01	1
2,4,6-Tribromophenol (Surr)	100		27 - 136	06/04/24 13:08	06/07/24 18:01	1
Terphenyl-d14 (Surr)	120		12 - 144	06/04/24 13:08	06/07/24 18:01	1

**Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	2.60	mg/L			06/05/24 15:23	1
Isobutanol	<10.0		10.0	2.40	mg/L			06/05/24 15:23	1

**Method: SW846 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 21:40	1
4,4'-DDE	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 21:40	1
4,4'-DDT	<0.0640		0.0640	0.0420	ug/L		06/03/24 09:59	06/10/24 21:40	1
Aldrin	<0.0640		0.0640	0.0320	ug/L		06/03/24 09:59	06/10/24 21:40	1
alpha-BHC	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 21:40	1
beta-BHC	<0.0640		0.0640	0.0370	ug/L		06/03/24 09:59	06/10/24 21:40	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

Date Collected: 05/30/24 10:57

Matrix: Groundwater

Date Received: 05/31/24 16:00

**Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<2.00		2.00	0.810	ug/L		06/03/24 09:59	06/10/24 21:40	1
delta-BHC	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 21:40	1
Dieldrin	<0.0640		0.0640	0.0260	ug/L		06/03/24 09:59	06/10/24 21:40	1
Endosulfan I	<0.0640		0.0640	0.0330	ug/L		06/03/24 09:59	06/10/24 21:40	1
Endosulfan II	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 21:40	1
Endosulfan sulfate	<0.0640		0.0640	0.0300	ug/L		06/03/24 09:59	06/10/24 21:40	1
Endrin	<0.0640		0.0640	0.0260	ug/L		06/03/24 09:59	06/10/24 21:40	1
Endrin aldehyde	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 21:40	1
gamma-BHC (Lindane)	<0.0640		0.0640	0.0360	ug/L		06/03/24 09:59	06/10/24 21:40	1
Heptachlor	<0.0640		0.0640	0.0330	ug/L		06/03/24 09:59	06/10/24 21:40	1
Heptachlor epoxide	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 21:40	1
Methoxychlor	<0.0640		0.0640	0.0410	ug/L		06/03/24 09:59	06/10/24 21:40	1
Toxaphene	<2.00		2.00	0.690	ug/L		06/03/24 09:59	06/10/24 21:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl (Surr)	78		10 - 136				06/03/24 09:59	06/10/24 21:40	1
Tetrachloro-m-xylene	74		10 - 130				06/03/24 09:59	06/10/24 21:40	1

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1221	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1232	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1242	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1248	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1254	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 21:40	1
PCB-1260	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 21:40	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl (Surr)	78		10 - 136				06/03/24 09:59	06/10/24 21:40	1
Tetrachloro-m-xylene	74		10 - 130				06/03/24 09:59	06/10/24 21:40	1

**Method: SW846 8151A - Herbicides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.156		0.156	0.0678	ug/L		06/05/24 15:12	06/06/24 09:45	1
Silvex (2,4,5-TP)	<0.0522		0.0522	0.0229	ug/L		06/05/24 15:12	06/06/24 09:45	1
2,4-D	<0.626		0.626	0.261	ug/L		06/05/24 15:12	06/06/24 09:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4-Dichlorophenylacetic acid (Surr)	51		34 - 142				06/05/24 15:12	06/06/24 09:45	1
2,4-Dichlorophenylacetic acid (Surr)	51		34 - 142				06/05/24 15:12	06/06/24 09:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:23	1
<b>Arsenic</b>	<b>0.0217</b>		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:23	1
<b>Barium</b>	<b>0.678</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/14/24 15:07	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:23	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:23	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:23	1
<b>Cobalt</b>	<b>0.00975</b>		0.00200	0.000680	mg/L		06/04/24 09:15	06/14/24 16:09	4

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

Date Collected: 05/30/24 10:57

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.00185	J	0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:23	1
Lead	0.000573		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:23	1
Nickel	0.0157		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:23	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:23	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:07	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:23	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:23	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:23	1
Tin	<20.0		20.0	9.20	ug/L		06/04/24 09:15	06/14/24 16:09	4

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		06/04/24 10:22	06/06/24 11:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00350	mg/L		06/05/24 12:26	06/06/24 17:15	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		06/04/24 18:19	06/04/24 22:29	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>8.93</b>	<b>J</b>	10.0	3.10	ug/L			06/04/24 03:28	1
Acrolein	<10.0		10.0	3.60	ug/L			06/04/24 03:28	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 03:28	1
Allyl chloride	<2.00		2.00	0.700	ug/L			06/04/24 03:28	1
<b>Benzene</b>	<b>0.237</b>	<b>J</b>	0.500	0.220	ug/L			06/04/24 03:28	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 03:28	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 03:28	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 03:28	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 03:28	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 03:28	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 03:28	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 03:28	1
<b>Chlorobenzene</b>	<b>1.53</b>		1.00	0.400	ug/L			06/04/24 03:28	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 03:28	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 03:28	1
Chloroform	<3.00	F2	3.00	1.30	ug/L			06/04/24 03:28	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 03:28	1
Chloroprene	<1.00		1.00	0.230	ug/L			06/04/24 03:28	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 03:28	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 03:28	1
1,2-Dibromo-3-chloropropane	<5.00	F2	5.00	1.20	ug/L			06/04/24 03:28	1
1,2-Dibromoethane (EDB)	<1.00	F2	1.00	0.340	ug/L			06/04/24 03:28	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 03:28	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 03:28	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			06/04/24 03:28	1
<b>1,4-Dichlorobenzene</b>	<b>0.378</b>	<b>J</b>	1.00	0.230	ug/L			06/04/24 03:28	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			06/04/24 03:28	1
<b>1,1-Dichloroethane</b>	<b>0.545</b>	<b>J</b>	1.00	0.220	ug/L			06/04/24 03:28	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 03:28	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 03:28	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 03:28	1
1,3-Dichloropropane	<1.00	F2	1.00	0.400	ug/L			06/04/24 03:28	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			06/04/24 03:28	1
1,1-Dichloropropene	<1.00	F2	1.00	0.430	ug/L			06/04/24 03:28	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 03:28	1
Ethyl methacrylate	<2.00	F2	2.00	0.680	ug/L			06/04/24 03:28	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 03:28	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 03:28	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			06/04/24 03:28	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 03:28	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			06/04/24 03:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 03:28	1
Naphthalene	<5.00		5.00	3.00	ug/L			06/04/24 03:28	1
Propionitrile	<10.0		10.0	3.40	ug/L			06/04/24 03:28	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 03:28	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 03:28	1
1,1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 03:28	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 03:28	1
Toluene	<1.00	F2	1.00	0.430	ug/L			06/04/24 03:28	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 03:28	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 03:28	1
trans-1,3-Dichloropropene	<5.00	F2	5.00	0.560	ug/L			06/04/24 03:28	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			06/04/24 03:28	1
1,1,1-Trichloroethane	<1.00	F2	1.00	0.190	ug/L			06/04/24 03:28	1
1,1,2-Trichloroethane	<1.00	F2	1.00	0.450	ug/L			06/04/24 03:28	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 03:28	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 03:28	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 03:28	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 03:28	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 03:28	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 03:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109		80 - 120					06/04/24 03:28	1
Dibromofluoromethane (Surr)	104		73 - 130					06/04/24 03:28	1
Toluene-d8 (Surr)	97		80 - 120					06/04/24 03:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:26	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
1,4-Phenylenediamine	<10.0	*	10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:26	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		06/04/24 13:08	06/07/24 18:26	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		06/04/24 13:08	06/07/24 18:26	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:26	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
Acenaphthene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 18:26	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 18:26	1
Acetophenone	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 18:26	1
Anthracene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzo(a)anthracene	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzo(a)pyrene	<10.0		10.0	8.10	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzo(g,h,i)perylene	<10.0		10.0	6.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzo(k)fluoranthene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		06/04/24 13:08	06/07/24 18:26	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		06/04/24 13:08	06/07/24 18:26	1
bis(2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 18:26	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		06/04/24 13:08	06/07/24 18:26	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Chrysene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 18:26	1
Diallate	<10.0		10.0	4.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		06/04/24 13:08	06/07/24 18:26	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
Dimethoate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
Dinoseb	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
Diphenylamine	<10.0		10.0	6.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
Disulfoton	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Ethyl parathion	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
Famphur	<10.0	*+	10.0	3.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
Fluoranthene	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
Fluorene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:26	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 18:26	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		06/04/24 13:08	06/07/24 18:26	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		06/04/24 13:08	06/07/24 18:26	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		06/04/24 13:08	06/07/24 18:26	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Indeno(1,2,3-cd)pyrene	<10.0		10.0	4.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
Isodrin	<10.0		10.0	4.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
Isophorone	<10.0		10.0	0.930	ug/L		06/04/24 13:08	06/07/24 18:26	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isosafrole	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
Kepone	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 18:26	1
Methapyrilene	<10.0	*1	10.0	0.760	ug/L		06/04/24 13:08	06/07/24 18:26	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
Methyl parathion	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 18:26	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
o,o',o"-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
o-Toluidine	<10.0		10.0	2.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		06/04/24 13:08	06/07/24 18:26	1
Phenacetin	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 18:26	1
Phenanthrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:26	1
Phenol	<10.0		10.0	1.10	ug/L		06/04/24 13:08	06/07/24 18:26	1
Phorate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 18:26	1
Pronamide	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 18:26	1
Pyrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 18:26	1
Safrole	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 18:26	1
Thionazin	<10.0		10.0	3.50	ug/L		06/04/24 13:08	06/07/24 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	68		25 - 110	06/04/24 13:08	06/07/24 18:26	1
Phenol-d5 (Surr)	67		21 - 110	06/04/24 13:08	06/07/24 18:26	1
Nitrobenzene-d5 (Surr)	101		45 - 129	06/04/24 13:08	06/07/24 18:26	1
2-Fluorobiphenyl (Surr)	93		39 - 118	06/04/24 13:08	06/07/24 18:26	1
2,4,6-Tribromophenol (Surr)	92		27 - 136	06/04/24 13:08	06/07/24 18:26	1
Terphenyl-d14 (Surr)	115		12 - 144	06/04/24 13:08	06/07/24 18:26	1

**Method: SW846 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	2.60	mg/L			06/05/24 15:41	1
Isobutanol	<10.0		10.0	2.40	mg/L			06/05/24 15:41	1

**Method: SW846 8081B - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0627		0.0627	0.0265	ug/L		06/03/24 09:59	06/10/24 22:00	1
4,4'-DDE	<0.0627		0.0627	0.0265	ug/L		06/03/24 09:59	06/10/24 22:00	1
4,4'-DDT	<0.0627		0.0627	0.0412	ug/L		06/03/24 09:59	06/10/24 22:00	1
Aldrin	<0.0627		0.0627	0.0314	ug/L		06/03/24 09:59	06/10/24 22:00	1
alpha-BHC	<0.0627		0.0627	0.0284	ug/L		06/03/24 09:59	06/10/24 22:00	1
beta-BHC	<0.0627		0.0627	0.0363	ug/L		06/03/24 09:59	06/10/24 22:00	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

**Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<1.96		1.96	0.794	ug/L		06/03/24 09:59	06/10/24 22:00	1
delta-BHC	<0.0627		0.0627	0.0265	ug/L		06/03/24 09:59	06/10/24 22:00	1
Dieldrin	<0.0627		0.0627	0.0255	ug/L		06/03/24 09:59	06/10/24 22:00	1
Endosulfan I	<0.0627		0.0627	0.0324	ug/L		06/03/24 09:59	06/10/24 22:00	1
Endosulfan II	<0.0627		0.0627	0.0284	ug/L		06/03/24 09:59	06/10/24 22:00	1
Endosulfan sulfate	<0.0627		0.0627	0.0294	ug/L		06/03/24 09:59	06/10/24 22:00	1
Endrin	<0.0627		0.0627	0.0255	ug/L		06/03/24 09:59	06/10/24 22:00	1
Endrin aldehyde	<0.0627		0.0627	0.0284	ug/L		06/03/24 09:59	06/10/24 22:00	1
gamma-BHC (Lindane)	<0.0627		0.0627	0.0353	ug/L		06/03/24 09:59	06/10/24 22:00	1
Heptachlor	<0.0627		0.0627	0.0324	ug/L		06/03/24 09:59	06/10/24 22:00	1
Heptachlor epoxide	<0.0627		0.0627	0.0284	ug/L		06/03/24 09:59	06/10/24 22:00	1
Methoxychlor	<0.0627		0.0627	0.0402	ug/L		06/03/24 09:59	06/10/24 22:00	1
Toxaphene	<1.96		1.96	0.676	ug/L		06/03/24 09:59	06/10/24 22:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl (Surr)	68		10 - 136				06/03/24 09:59	06/10/24 22:00	1
Tetrachloro-m-xylene	68		10 - 130				06/03/24 09:59	06/10/24 22:00	1

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.784		0.784	0.167	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1221	<0.784		0.784	0.167	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1232	<0.784		0.784	0.167	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1242	<0.784		0.784	0.167	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1248	<0.784		0.784	0.108	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1254	<0.784		0.784	0.108	ug/L		06/03/24 09:59	06/10/24 22:00	1
PCB-1260	<0.784		0.784	0.108	ug/L		06/03/24 09:59	06/10/24 22:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl (Surr)	68		10 - 136				06/03/24 09:59	06/10/24 22:00	1
Tetrachloro-m-xylene	68		10 - 130				06/03/24 09:59	06/10/24 22:00	1

**Method: SW846 8151A - Herbicides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	<0.159		0.159	0.0688	ug/L		06/05/24 15:12	06/06/24 11:10	1
Silvex (2,4,5-TP)	<0.0529		0.0529	0.0233	ug/L		06/05/24 15:12	06/06/24 11:10	1
2,4-D	<0.635		0.635	0.265	ug/L		06/05/24 15:12	06/06/24 11:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4-Dichlorophenylacetic acid (Surr)	57		34 - 142				06/05/24 15:12	06/06/24 11:10	1
2,4-Dichlorophenylacetic acid (Surr)	53		34 - 142				06/05/24 15:12	06/06/24 11:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:25	1
<b>Arsenic</b>	<b>0.0547</b>		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:25	1
<b>Barium</b>	<b>0.672</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:25	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:25	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:25	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:25	1
<b>Cobalt</b>	<b>0.0123</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:13	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:25	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:25	1
<b>Nickel</b>	<b>0.0183</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:25	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:25	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:09	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:25	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:25	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:25	1
Tin	<5.00		5.00	2.30	ug/L		06/04/24 09:15	06/14/24 16:13	1

**Method: SW846 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		06/04/24 10:22	06/06/24 11:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00350	mg/L		06/05/24 12:26	06/06/24 17:17	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		06/04/24 18:21	06/04/24 22:34	1
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>3.50</b>		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-14R**

**Lab Sample ID: 310-282518-7**

Date Collected: 05/29/24 15:27

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 03:50	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 03:50	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 03:50	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 03:50	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 03:50	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 03:50	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 03:50	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 03:50	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 03:50	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 03:50	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 03:50	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 03:50	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 03:50	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 03:50	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 03:50	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 03:50	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 03:50	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 03:50	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 03:50	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 03:50	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 03:50	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 03:50	1
<b>1,1-Dichloroethane</b>	<b>0.227</b>	<b>J</b>	1.00	0.220	ug/L			06/04/24 03:50	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 03:50	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 03:50	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 03:50	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 03:50	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 03:50	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 03:50	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 03:50	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 03:50	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 03:50	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 03:50	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 03:50	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 03:50	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 03:50	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 03:50	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 03:50	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 03:50	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 03:50	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 03:50	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 03:50	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 03:50	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 03:50	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 03:50	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 03:50	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 03:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		06/04/24 03:50	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-14R**

**Lab Sample ID: 310-282518-7**

Date Collected: 05/29/24 15:27

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		73 - 130		06/04/24 03:50	1
Toluene-d8 (Surr)	81		80 - 120		06/04/24 03:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:27	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:27	1
<b>Barium</b>	<b>0.0934</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:27	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:27	1
<b>Cadmium</b>	<b>0.000110</b>	<b>J</b>	0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:27	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:27	1
<b>Cobalt</b>	<b>0.000900</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:31	1
<b>Copper</b>	<b>0.00189</b>	<b>J</b>	0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:27	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:27	1
<b>Nickel</b>	<b>0.0126</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:27	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:27	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:11	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:27	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:27	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>2.00</b>		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-15R**

**Lab Sample ID: 310-282518-8**

Date Collected: 05/29/24 09:06

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 04:12	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 04:12	1
<b>Benzene</b>	<b>1.08</b>		0.500	0.220	ug/L			06/04/24 04:12	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 04:12	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 04:12	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 04:12	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 04:12	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 04:12	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 04:12	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 04:12	1
<b>Chlorobenzene</b>	<b>1.96</b>		1.00	0.400	ug/L			06/04/24 04:12	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 04:12	1
<b>Chloroethane</b>	<b>1.47</b>	<b>J</b>	4.00	0.790	ug/L			06/04/24 04:12	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 04:12	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 04:12	1
<b>cis-1,2-Dichloroethene</b>	<b>0.360</b>	<b>J</b>	1.00	0.210	ug/L			06/04/24 04:12	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 04:12	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 04:12	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 04:12	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 04:12	1
<b>1,2-Dichlorobenzene</b>	<b>0.424</b>	<b>J</b>	1.00	0.370	ug/L			06/04/24 04:12	1
<b>1,4-Dichlorobenzene</b>	<b>2.01</b>		1.00	0.230	ug/L			06/04/24 04:12	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 04:12	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 04:12	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 04:12	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 04:12	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 04:12	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 04:12	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 04:12	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 04:12	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 04:12	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 04:12	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 04:12	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 04:12	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 04:12	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 04:12	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 04:12	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 04:12	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 04:12	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 04:12	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 04:12	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 04:12	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 04:12	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 04:12	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 04:12	1
<b>Vinyl chloride</b>	<b>1.18</b>		1.00	0.180	ug/L			06/04/24 04:12	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		06/04/24 04:12	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-15R**

**Lab Sample ID: 310-282518-8**

Date Collected: 05/29/24 09:06

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		73 - 130		06/04/24 04:12	1
Toluene-d8 (Surr)	111		80 - 120		06/04/24 04:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Arsenic</b>	<b>0.00119</b>	<b>J</b>	0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Barium</b>	<b>0.0867</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:29	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Cadmium</b>	<b>0.000164</b>	<b>J</b>	0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:29	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Cobalt</b>	<b>0.00250</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:35	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:29	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Nickel</b>	<b>0.0107</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:29	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:29	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:13	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:29	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:29	1
<b>Zinc</b>	<b>0.0106</b>	<b>J</b>	0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>67.0</b>		15.0	11.1	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-39**

**Lab Sample ID: 310-282518-9**

Date Collected: 05/29/24 19:08

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>4.61</b>	<b>J</b>	10.0	3.10	ug/L			06/04/24 04:34	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 04:34	1
<b>Benzene</b>	<b>1.63</b>		0.500	0.220	ug/L			06/04/24 04:34	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 04:34	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 04:34	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 04:34	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 04:34	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 04:34	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 04:34	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 04:34	1
<b>Chlorobenzene</b>	<b>10.4</b>		1.00	0.400	ug/L			06/04/24 04:34	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 04:34	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 04:34	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 04:34	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 04:34	1
<b>cis-1,2-Dichloroethene</b>	<b>0.472</b>	<b>J</b>	1.00	0.210	ug/L			06/04/24 04:34	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 04:34	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 04:34	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 04:34	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 04:34	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 04:34	1
<b>1,4-Dichlorobenzene</b>	<b>10.7</b>		1.00	0.230	ug/L			06/04/24 04:34	1
<b>1,1-Dichloroethane</b>	<b>0.319</b>	<b>J</b>	1.00	0.220	ug/L			06/04/24 04:34	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 04:34	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 04:34	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 04:34	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 04:34	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 04:34	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 04:34	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 04:34	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 04:34	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 04:34	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 04:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 04:34	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 04:34	1
<b>Toluene</b>	<b>0.635</b>	<b>J</b>	1.00	0.430	ug/L			06/04/24 04:34	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 04:34	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 04:34	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 04:34	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 04:34	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 04:34	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 04:34	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 04:34	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 04:34	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 04:34	1
<b>Vinyl chloride</b>	<b>2.03</b>		1.00	0.180	ug/L			06/04/24 04:34	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/04/24 04:34	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-39**

**Lab Sample ID: 310-282518-9**

Date Collected: 05/29/24 19:08

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		73 - 130		06/04/24 04:34	1
Toluene-d8 (Surr)	101		80 - 120		06/04/24 04:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:32	1
<b>Arsenic</b>	<b>0.0219</b>		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:32	1
<b>Barium</b>	<b>0.704</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/14/24 15:15	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:32	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:32	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:32	1
<b>Cobalt</b>	<b>0.00978</b>		0.00200	0.000680	mg/L		06/04/24 09:15	06/14/24 16:38	4
<b>Copper</b>	<b>0.00187 J</b>		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:32	1
<b>Lead</b>	<b>0.000583</b>		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:32	1
<b>Nickel</b>	<b>0.0157</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:32	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:32	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:15	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:32	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:32	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>123</b>		15.0	11.1	mg/L			06/04/24 07:45	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-282518-10**

Date Collected: 05/29/24 09:58

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 04:55	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 04:55	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 04:55	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 04:55	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 04:55	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 04:55	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 04:55	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 04:55	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 04:55	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 04:55	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 04:55	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 04:55	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 04:55	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 04:55	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 04:55	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 04:55	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 04:55	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 04:55	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 04:55	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 04:55	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 04:55	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 04:55	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 04:55	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 04:55	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 04:55	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 04:55	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 04:55	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 04:55	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 04:55	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 04:55	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 04:55	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 04:55	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 04:55	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 04:55	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 04:55	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 04:55	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 04:55	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 04:55	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 04:55	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 04:55	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 04:55	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 04:55	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 04:55	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 04:55	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 04:55	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 04:55	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 04:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		06/04/24 04:55	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-282518-10**

Date Collected: 05/29/24 09:58

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		73 - 130		06/04/24 04:55	1
Toluene-d8 (Surr)	99		80 - 120		06/04/24 04:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:34	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:34	1
<b>Barium</b>	<b>0.0902</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:34	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:34	1
<b>Cobalt</b>	<b>0.000172 J</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:42	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:34	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:34	1
<b>Nickel</b>	<b>0.00664</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:17	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:34	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:34	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-44**

**Lab Sample ID: 310-282518-11**

Date Collected: 05/29/24 16:13

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 05:17	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 05:17	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 05:17	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 05:17	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 05:17	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 05:17	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 05:17	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 05:17	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 05:17	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 05:17	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 05:17	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 05:17	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 05:17	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 05:17	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 05:17	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 05:17	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 05:17	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 05:17	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 05:17	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 05:17	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 05:17	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 05:17	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 05:17	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 05:17	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 05:17	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 05:17	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 05:17	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 05:17	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 05:17	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 05:17	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 05:17	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 05:17	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 05:17	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 05:17	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 05:17	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 05:17	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 05:17	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 05:17	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 05:17	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 05:17	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 05:17	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 05:17	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 05:17	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 05:17	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 05:17	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 05:17	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 05:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		06/04/24 05:17	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-44**

**Lab Sample ID: 310-282518-11**

Date Collected: 05/29/24 16:13

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		73 - 130		06/04/24 05:17	1
Toluene-d8 (Surr)	97		80 - 120		06/04/24 05:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:38	1
<b>Arsenic</b>	<b>0.00971</b>		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:38	1
<b>Barium</b>	<b>0.0190</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:38	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:38	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:38	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:38	1
<b>Cobalt</b>	<b>0.000362</b>	<b>J</b>	0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:49	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:38	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:38	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:38	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:38	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:30	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:38	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:38	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>48.0</b>		7.50	5.55	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-DC**

**Lab Sample ID: 310-282518-12**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	6.30	J	10.0	3.10	ug/L			06/04/24 05:39	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 05:39	1
Benzene	0.238	J	0.500	0.220	ug/L			06/04/24 05:39	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 05:39	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 05:39	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 05:39	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 05:39	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 05:39	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 05:39	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 05:39	1
Chlorobenzene	1.63		1.00	0.400	ug/L			06/04/24 05:39	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 05:39	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 05:39	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 05:39	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 05:39	1
cis-1,2-Dichloroethene	0.223	J	1.00	0.210	ug/L			06/04/24 05:39	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 05:39	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 05:39	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 05:39	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 05:39	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 05:39	1
1,4-Dichlorobenzene	0.363	J	1.00	0.230	ug/L			06/04/24 05:39	1
1,1-Dichloroethane	0.410	J	1.00	0.220	ug/L			06/04/24 05:39	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 05:39	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 05:39	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 05:39	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 05:39	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 05:39	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 05:39	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 05:39	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 05:39	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 05:39	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 05:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 05:39	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 05:39	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 05:39	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 05:39	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 05:39	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 05:39	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 05:39	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 05:39	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 05:39	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 05:39	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 05:39	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 05:39	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 05:39	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 05:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		06/04/24 05:39	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-DC**

**Lab Sample ID: 310-282518-12**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130		06/04/24 05:39	1
Toluene-d8 (Surr)	98		80 - 120		06/04/24 05:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 15:49	1
<b>Arsenic</b>	<b>0.00110</b>	<b>J</b>	0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 15:49	1
<b>Barium</b>	<b>0.0839</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 15:49	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 15:49	1
<b>Cadmium</b>	<b>0.000164</b>	<b>J</b>	0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 15:49	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 15:49	1
<b>Cobalt</b>	<b>0.00232</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 16:53	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 15:49	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 15:49	1
<b>Nickel</b>	<b>0.0104</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 15:49	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 15:49	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:33	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 15:49	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 15:49	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 15:49	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>2.63</b>		1.88	1.39	mg/L			06/04/24 07:45	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282518-13**

**Date Collected: 05/30/24 00:00**

**Matrix: Groundwater**

**Date Received: 05/31/24 16:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 02:01	1
Acrolein	<10.0		10.0	3.60	ug/L			06/04/24 02:01	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 02:01	1
Allyl chloride	<2.00		2.00	0.700	ug/L			06/04/24 02:01	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 02:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 02:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 02:01	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 02:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 02:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 02:01	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 02:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 02:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 02:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 02:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 02:01	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 02:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 02:01	1
Chloroprene	<1.00		1.00	0.230	ug/L			06/04/24 02:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 02:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 02:01	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 02:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 02:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 02:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 02:01	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			06/04/24 02:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 02:01	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			06/04/24 02:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 02:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 02:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 02:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 02:01	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			06/04/24 02:01	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			06/04/24 02:01	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			06/04/24 02:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 02:01	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			06/04/24 02:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 02:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 02:01	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			06/04/24 02:01	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 02:01	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			06/04/24 02:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 02:01	1
Naphthalene	<5.00		5.00	3.00	ug/L			06/04/24 02:01	1
Propionitrile	<10.0		10.0	3.40	ug/L			06/04/24 02:01	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 02:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 02:01	1
1,1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 02:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 02:01	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 02:01	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282518-13**

Date Collected: 05/30/24 00:00

Matrix: Groundwater

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 02:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 02:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 02:01	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			06/04/24 02:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 02:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 02:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 02:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 02:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 02:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 02:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 02:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 02:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	108		80 - 120					06/04/24 02:01	1
Dibromofluoromethane (Surr)	99		73 - 130					06/04/24 02:01	1
Toluene-d8 (Surr)	85		80 - 120					06/04/24 02:01	1

# Definitions/Glossary

Client: SCS Engineers

Job ID: 310-282518-1

Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Matrix: Groundwater

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB	DBFM	TOL
		(80-120)	(73-130)	(80-120)
310-282518-2	MW-7	101	106	99
310-282518-4	MW-10R	98	105	98
310-282518-5	MW-12	100	104	99
310-282518-6	MW-13R	109	104	97
310-282518-6 MS	MW-13R	103	113	120
310-282518-6 MSD	MW-13R	102	99	101
310-282518-7	MW-14R	106	100	81
310-282518-8	MW-15R	107	100	111
310-282518-9	MW-39	103	100	101
310-282518-10	MW-15C	106	98	99
310-282518-11	MW-44	107	103	97
310-282518-12	MW-DC	107	101	98
310-282518-13	Trip Blank	108	99	85

#### Surrogate Legend

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

## 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	BFB	DBFM	TOL
		(80-120)	(73-130)	(80-120)
LCS 310-423352/6	Lab Control Sample	102	96	105
LCS 310-423352/7	Lab Control Sample	108	100	84
LCS 310-423354/6	Lab Control Sample	103	99	101
LCS 310-423354/7	Lab Control Sample	99	103	101
MB 310-423352/5	Method Blank	108	99	112
MB 310-423354/5	Method Blank	97	103	100

#### Surrogate Legend

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

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

Matrix: Groundwater

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2FP	PHL	NBZ	FBP	TBP	TPHL
		(25-110)	(21-110)	(45-129)	(39-118)	(27-136)	(12-144)
310-282518-5	MW-12	74	73	108	97	100	120
310-282518-6	MW-13R	68	67	101	93	92	115

#### Surrogate Legend

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

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# Surrogate Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP  
 TPHL = Terphenyl-d14 (Surr)

Job ID: 310-282518-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		2FP (25-110)	PHL (21-110)	NBZ (45-129)	FBP (39-118)	TBP (27-136)	TPHL (12-144)
LCS 310-423508/2-A	Lab Control Sample	64	60	89	78	93	105
LCS 310-423508/3-A	Lab Control Sample Dup	70	65	97	92	97	114
MB 310-423508/1-A	Method Blank	64	61	100	87	90	106

### 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: 8081B - Organochlorine Pesticides (GC)

Matrix: Groundwater

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-136)	TCX1 (10-130)
310-282518-5	MW-12	78	74
310-282518-6	MW-13R	68	68

### Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-136)	TCX1 (10-130)
LCS 310-423348/2-A	Lab Control Sample	82	59
LCS 310-423348/3-A	Lab Control Sample Dup	77	53
MB 310-423348/1-A	Method Blank	83	68

### Surrogate Legend

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

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Groundwater

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (10-136)	TCX1 (10-130)
310-282518-5	MW-12	78	74
310-282518-6	MW-13R	68	68

### Surrogate Legend

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

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# Surrogate Summary

Client: SCS Engineers

Job ID: 310-282518-1

Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (10-136)	TCX1 (10-130)
LCS 310-423348/4-A	Lab Control Sample	84	63
LCS 310-423348/5-A	Lab Control Sample Dup	76	49
MB 310-423348/1-A	Method Blank	83	68

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

Matrix: Groundwater

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA1 (34-142)	DCPAA2 (34-142)
310-282518-5	MW-12	51	51
310-282518-6	MW-13R	57	53

#### Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

## Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCPAA1 (34-142)	DCPAA2 (34-142)
LCS 410-514063/2-A	Lab Control Sample	70	71
LCS 410-514063/3-A	Lab Control Sample Dup	73	76
MB 410-514063/1-A	Method Blank	58	56

#### Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid (Surr)

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: MB 310-423352/5

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 00:56	1
Acrolein	<10.0		10.0	3.60	ug/L			06/04/24 00:56	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 00:56	1
Allyl chloride	<2.00		2.00	0.700	ug/L			06/04/24 00:56	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 00:56	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 00:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 00:56	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 00:56	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 00:56	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 00:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 00:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 00:56	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 00:56	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 00:56	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 00:56	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 00:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 00:56	1
Chloroprene	<1.00		1.00	0.230	ug/L			06/04/24 00:56	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 00:56	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 00:56	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 00:56	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 00:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 00:56	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 00:56	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			06/04/24 00:56	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 00:56	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			06/04/24 00:56	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 00:56	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 00:56	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 00:56	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 00:56	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			06/04/24 00:56	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			06/04/24 00:56	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			06/04/24 00:56	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 00:56	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			06/04/24 00:56	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 00:56	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 00:56	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			06/04/24 00:56	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 00:56	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			06/04/24 00:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 00:56	1
Naphthalene	<5.00		5.00	3.00	ug/L			06/04/24 00:56	1
Propionitrile	<10.0		10.0	3.40	ug/L			06/04/24 00:56	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 00:56	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 00:56	1
1,1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 00:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 00:56	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: MB 310-423352/5

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423352

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 00:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 00:56	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 00:56	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 00:56	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			06/04/24 00:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 00:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 00:56	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 00:56	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 00:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 00:56	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 00:56	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 00:56	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 00:56	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		80 - 120		06/04/24 00:56	1
Dibromofluoromethane (Surr)	99		73 - 130		06/04/24 00:56	1
Toluene-d8 (Surr)	112		80 - 120		06/04/24 00:56	1

Lab Sample ID: LCS 310-423352/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423352

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acetone	40.0	36.63		ug/L		92	50 - 150
Acrolein	94.8	102.0		ug/L		108	49 - 150
Acrylonitrile	200	193.3		ug/L		97	50 - 150
Allyl chloride	20.0	20.68		ug/L		103	49 - 150
Benzene	20.0	20.30		ug/L		102	72 - 124
Bromochloromethane	20.0	19.65		ug/L		98	73 - 130
Bromodichloromethane	20.0	22.27		ug/L		111	74 - 122
Bromoform	20.0	15.92		ug/L		80	61 - 122
2-Butanone (MEK)	40.0	40.10		ug/L		100	50 - 150
Carbon disulfide	20.0	20.55		ug/L		103	59 - 135
Carbon tetrachloride	20.0	20.07		ug/L		100	67 - 132
Chlorobenzene	20.0	20.10		ug/L		101	76 - 120
Chlorodibromomethane	20.0	21.98		ug/L		110	71 - 121
Chloroform	20.0	19.54		ug/L		98	72 - 125
Chloroprene	20.0	21.20		ug/L		106	69 - 133
cis-1,2-Dichloroethene	20.0	19.81		ug/L		99	74 - 123
cis-1,3-Dichloropropene	20.0	23.34		ug/L		117	71 - 125
1,2-Dibromo-3-chloropropane	20.0	18.96		ug/L		95	50 - 150
1,2-Dibromoethane (EDB)	20.0	22.63		ug/L		113	75 - 125
Dibromomethane	20.0	19.49		ug/L		97	74 - 125
1,2-Dichlorobenzene	20.0	20.19		ug/L		101	74 - 120
1,3-Dichlorobenzene	20.0	17.13		ug/L		86	72 - 120
1,4-Dichlorobenzene	20.0	19.28		ug/L		96	72 - 120
1,1-Dichloroethane	20.0	19.94		ug/L		100	70 - 127

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423352/6

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	20.0	18.64		ug/L		93	71 - 125
1,1-Dichloroethane	20.0	19.48		ug/L		97	63 - 132
1,2-Dichloropropane	20.0	20.56		ug/L		103	73 - 124
1,3-Dichloropropane	20.0	23.19		ug/L		116	72 - 125
2,2-Dichloropropane	20.0	16.75		ug/L		84	50 - 150
1,1-Dichloropropene	20.0	20.81		ug/L		104	69 - 132
Ethylbenzene	20.0	21.49		ug/L		107	74 - 122
Ethyl methacrylate	20.0	22.54		ug/L		113	70 - 129
2-Hexanone	40.0	45.51		ug/L		114	60 - 140
Iodomethane	20.0	8.705	J	ug/L		44	10 - 150
Methacrylonitrile	200	194.0		ug/L		97	69 - 129
Methylene chloride	20.0	21.73		ug/L		109	50 - 150
Methyl methacrylate	40.0	39.31		ug/L		98	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	46.68		ug/L		117	60 - 139
Naphthalene	20.0	18.47		ug/L		92	50 - 150
Propionitrile	200	195.1		ug/L		98	63 - 135
Styrene	20.0	17.78		ug/L		89	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.68		ug/L		98	71 - 120
1,1,2,2-Tetrachloroethane	20.0	17.10		ug/L		85	68 - 124
Tetrachloroethene	20.0	22.55		ug/L		113	71 - 130
Toluene	20.0	23.34		ug/L		117	74 - 123
trans-1,4-Dichloro-2-butene	20.0	14.07		ug/L		70	50 - 150
trans-1,2-Dichloroethene	20.0	19.76		ug/L		99	70 - 126
trans-1,3-Dichloropropene	20.0	22.31		ug/L		112	69 - 123
1,2,4-Trichlorobenzene	20.0	18.52		ug/L		93	68 - 124
1,1,1-Trichloroethane	20.0	19.42		ug/L		97	73 - 129
1,1,2-Trichloroethane	20.0	23.75		ug/L		119	73 - 123
Trichloroethene	20.0	20.51		ug/L		103	72 - 126
1,2,3-Trichloropropane	20.0	16.45		ug/L		82	65 - 127
Vinyl acetate	40.0	36.62		ug/L		92	50 - 150
Xylenes, Total	40.0	38.88		ug/L		97	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	96		73 - 130
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCS 310-423352/7

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	14.40		ug/L		72	23 - 150
Chloroethane	20.0	21.34		ug/L		107	54 - 136
Chloromethane	20.0	21.88		ug/L		109	38 - 150
Dichlorodifluoromethane	20.0	21.00		ug/L		105	39 - 150
Trichlorofluoromethane	20.0	23.12		ug/L		116	54 - 149
Vinyl chloride	20.0	22.69		ug/L		113	56 - 140

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423352/7

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	100		73 - 130
Toluene-d8 (Surr)	84		80 - 120

Lab Sample ID: 310-282518-6 MS

Matrix: Groundwater

Analysis Batch: 423352

Client Sample ID: MW-13R

Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Acetone	8.93	J	50.0	46.90		ug/L		76	31 - 150
Acrolein	<10.0		119	109.0		ug/L		92	25 - 150
Acrylonitrile	<5.00		250	227.8		ug/L		91	40 - 150
Allyl chloride	<2.00		25.0	22.28		ug/L		89	28 - 150
Benzene	0.237	J	25.0	22.70		ug/L		90	46 - 130
Bromochloromethane	<5.00		25.0	25.09		ug/L		100	57 - 130
Bromodichloromethane	<1.00		25.0	21.39		ug/L		86	57 - 130
Bromoform	<5.00		25.0	22.07		ug/L		88	44 - 130
2-Butanone (MEK)	<10.0		50.0	45.62		ug/L		91	38 - 150
Carbon disulfide	<1.00		25.0	22.58		ug/L		90	38 - 135
Carbon tetrachloride	<2.00		25.0	23.15		ug/L		93	45 - 132
Chlorobenzene	1.53		25.0	23.95		ug/L		90	59 - 130
Chlorodibromomethane	<5.00		25.0	25.74		ug/L		103	54 - 130
Chloroform	<3.00	F2	25.0	25.58		ug/L		102	51 - 130
Chloroprene	<1.00		25.0	21.36		ug/L		85	43 - 133
cis-1,2-Dichloroethene	<1.00		25.0	21.81		ug/L		87	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	21.61		ug/L		86	53 - 130
1,2-Dibromo-3-chloropropane	<5.00	F2	25.0	23.16		ug/L		93	38 - 150
1,2-Dibromoethane (EDB)	<1.00	F2	25.0	26.20		ug/L		105	60 - 130
Dibromomethane	<1.00		25.0	22.16		ug/L		89	59 - 130
1,2-Dichlorobenzene	<1.00		25.0	24.28		ug/L		97	59 - 130
1,3-Dichlorobenzene	<1.00		25.0	22.60		ug/L		90	57 - 130
1,4-Dichlorobenzene	0.378	J	25.0	23.38		ug/L		92	57 - 130
1,1-Dichloroethane	0.545	J	25.0	21.51		ug/L		84	49 - 130
1,2-Dichloroethane	<1.00		25.0	20.58		ug/L		82	51 - 130
1,1-Dichloroethene	<2.00		25.0	20.90		ug/L		84	37 - 132
1,2-Dichloropropane	<1.00		25.0	22.85		ug/L		91	57 - 130
1,3-Dichloropropane	<1.00	F2	25.0	26.69		ug/L		107	56 - 130
2,2-Dichloropropane	<4.00		25.0	16.11		ug/L		64	25 - 150
1,1-Dichloropropene	<1.00	F2	25.0	25.39		ug/L		102	50 - 132
Ethylbenzene	<1.00		25.0	22.89		ug/L		92	45 - 130
Ethyl methacrylate	<2.00	F2	25.0	27.09		ug/L		108	54 - 130
2-Hexanone	<10.0		50.0	56.65		ug/L		113	46 - 140
Iodomethane	<10.0		25.0	8.469	J	ug/L		34	10 - 150
Methacrylonitrile	<10.0		250	264.1		ug/L		106	55 - 130
Methylene chloride	<5.00		25.0	23.67		ug/L		95	37 - 150
Methyl methacrylate	<2.00		50.0	46.30		ug/L		93	44 - 139
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	55.26		ug/L		111	47 - 139
Naphthalene	<5.00		25.0	22.51		ug/L		90	40 - 150

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: 310-282518-6 MS**  
**Matrix: Groundwater**  
**Analysis Batch: 423352**

**Client Sample ID: MW-13R**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Propionitrile	<10.0		250	237.2		ug/L		95	49 - 135	
Styrene	<1.00		25.0	23.16		ug/L		93	47 - 130	
1,1,1,2-Tetrachloroethane	<1.00		25.0	23.02		ug/L		92	55 - 130	
1,1,2,2-Tetrachloroethane	<1.00		25.0	24.11		ug/L		96	54 - 130	
Tetrachloroethene	<1.00		25.0	24.84		ug/L		99	47 - 130	
Toluene	<1.00	F2	25.0	25.46		ug/L		102	51 - 130	
trans-1,4-Dichloro-2-butene	<10.0		25.0	20.96		ug/L		84	26 - 150	
trans-1,2-Dichloroethene	<1.00		25.0	21.04		ug/L		84	48 - 130	
trans-1,3-Dichloropropene	<5.00	F2	25.0	25.58		ug/L		102	50 - 130	
1,2,4-Trichlorobenzene	<5.00		25.0	22.94		ug/L		92	55 - 130	
1,1,1-Trichloroethane	<1.00	F2	25.0	23.88		ug/L		96	52 - 130	
1,1,2-Trichloroethane	<1.00	F2	25.0	28.15		ug/L		113	58 - 130	
Trichloroethene	<1.00		25.0	22.20		ug/L		89	51 - 130	
1,2,3-Trichloropropane	<1.00		25.0	24.22		ug/L		97	49 - 130	
Vinyl acetate	<10.0		50.0	38.02		ug/L		76	29 - 150	
Xylenes, Total	<3.00		50.0	45.99		ug/L		92	43 - 130	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	113		73 - 130
Toluene-d8 (Surr)	120		80 - 120

**Lab Sample ID: 310-282518-6 MSD**  
**Matrix: Groundwater**  
**Analysis Batch: 423352**

**Client Sample ID: MW-13R**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Acetone	8.93	J	50.0	45.77		ug/L		74	31 - 150	2	29	
Acrolein	<10.0		119	103.9		ug/L		88	25 - 150	5	31	
Acrylonitrile	<5.00		250	216.1		ug/L		86	40 - 150	5	20	
Allyl chloride	<2.00		25.0	19.44		ug/L		78	28 - 150	14	35	
Benzene	0.237	J	25.0	22.83		ug/L		90	46 - 130	1	20	
Bromochloromethane	<5.00		25.0	20.48		ug/L		82	57 - 130	20	20	
Bromodichloromethane	<1.00		25.0	23.04		ug/L		92	57 - 130	7	20	
Bromoform	<5.00		25.0	20.64		ug/L		83	44 - 130	7	20	
2-Butanone (MEK)	<10.0		50.0	43.07		ug/L		86	38 - 150	6	20	
Carbon disulfide	<1.00		25.0	20.61		ug/L		82	38 - 135	9	30	
Carbon tetrachloride	<2.00		25.0	19.51		ug/L		78	45 - 132	17	20	
Chlorobenzene	1.53		25.0	22.63		ug/L		84	59 - 130	6	20	
Chlorodibromomethane	<5.00		25.0	21.20		ug/L		85	54 - 130	19	20	
Chloroform	<3.00	F2	25.0	19.79	F2	ug/L		79	51 - 130	26	20	
Chloroprene	<1.00		25.0	20.13		ug/L		81	43 - 133	6	20	
cis-1,2-Dichloroethene	<1.00		25.0	20.15		ug/L		81	45 - 130	8	20	
cis-1,3-Dichloropropene	<5.00		25.0	24.18		ug/L		97	53 - 130	11	20	
1,2-Dibromo-3-chloropropane	<5.00	F2	25.0	28.61	F2	ug/L		114	38 - 150	21	20	
1,2-Dibromoethane (EDB)	<1.00	F2	25.0	21.07	F2	ug/L		84	60 - 130	22	20	
Dibromomethane	<1.00		25.0	24.54		ug/L		98	59 - 130	10	20	
1,2-Dichlorobenzene	<1.00		25.0	23.73		ug/L		95	59 - 130	2	20	

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: 310-282518-6 MSD**  
**Matrix: Groundwater**  
**Analysis Batch: 423352**

**Client Sample ID: MW-13R**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,3-Dichlorobenzene	<1.00		25.0	22.08		ug/L		88	57 - 130	2	20
1,4-Dichlorobenzene	0.378	J	25.0	22.96		ug/L		90	57 - 130	2	20
1,1-Dichloroethane	0.545	J	25.0	20.42		ug/L		79	49 - 130	5	20
1,2-Dichloroethane	<1.00		25.0	20.38		ug/L		82	51 - 130	1	20
1,1-Dichloroethene	<2.00		25.0	19.48		ug/L		78	37 - 132	7	26
1,2-Dichloropropane	<1.00		25.0	24.24		ug/L		97	57 - 130	6	20
1,3-Dichloropropane	<1.00	F2	25.0	21.45	F2	ug/L		86	56 - 130	22	20
2,2-Dichloropropane	<4.00		25.0	15.37		ug/L		61	25 - 150	5	25
1,1-Dichloropropene	<1.00	F2	25.0	20.20	F2	ug/L		81	50 - 132	23	20
Ethylbenzene	<1.00		25.0	21.80		ug/L		87	45 - 130	5	20
Ethyl methacrylate	<2.00	F2	25.0	21.82	F2	ug/L		87	54 - 130	22	20
2-Hexanone	<10.0		50.0	46.95		ug/L		94	46 - 140	19	20
Iodomethane	<10.0		25.0	10.45		ug/L		42	10 - 150	21	35
Methacrylonitrile	<10.0		25.0	217.0		ug/L		87	55 - 130	20	20
Methylene chloride	<5.00		25.0	22.53		ug/L		90	37 - 150	5	24
Methyl methacrylate	<2.00		50.0	53.00		ug/L		106	44 - 139	13	20
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	46.40		ug/L		93	47 - 139	17	20
Naphthalene	<5.00		25.0	25.84		ug/L		103	40 - 150	14	30
Propionitrile	<10.0		25.0	219.3		ug/L		88	49 - 135	8	20
Styrene	<1.00		25.0	22.07		ug/L		88	47 - 130	5	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.22		ug/L		85	55 - 130	8	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	23.09		ug/L		92	54 - 130	4	20
Tetrachloroethene	<1.00		25.0	20.44		ug/L		82	47 - 130	19	20
Toluene	<1.00	F2	25.0	20.26	F2	ug/L		81	51 - 130	23	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	19.18		ug/L		77	26 - 150	9	23
trans-1,2-Dichloroethene	<1.00		25.0	19.98		ug/L		80	48 - 130	5	22
trans-1,3-Dichloropropene	<5.00	F2	25.0	20.00	F2	ug/L		80	50 - 130	24	20
1,2,4-Trichlorobenzene	<5.00		25.0	26.46		ug/L		106	55 - 130	14	20
1,1,1-Trichloroethane	<1.00	F2	25.0	19.04	F2	ug/L		76	52 - 130	23	20
1,1,2-Trichloroethane	<1.00	F2	25.0	22.30	F2	ug/L		89	58 - 130	23	20
Trichloroethene	<1.00		25.0	20.57		ug/L		82	51 - 130	8	20
1,2,3-Trichloropropane	<1.00		25.0	22.43		ug/L		90	49 - 130	8	26
Vinyl acetate	<10.0		50.0	37.14		ug/L		74	29 - 150	2	23
Xylenes, Total	<3.00		50.0	43.41		ug/L		87	43 - 130	6	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	99		73 - 130
Toluene-d8 (Surr)	101		80 - 120

**Lab Sample ID: MB 310-423354/5**  
**Matrix: Water**  
**Analysis Batch: 423354**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0	3.10	ug/L			06/03/24 14:36	1
Acrolein	<10.0		10.0	3.60	ug/L			06/03/24 14:36	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/03/24 14:36	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: MB 310-423354/5**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 423354**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Allyl chloride	<2.00		2.00	0.700	ug/L			06/03/24 14:36	1
Benzene	<0.500		0.500	0.220	ug/L			06/03/24 14:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/03/24 14:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/03/24 14:36	1
Bromoform	<5.00		5.00	0.780	ug/L			06/03/24 14:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/03/24 14:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/03/24 14:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/03/24 14:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/03/24 14:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/03/24 14:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/03/24 14:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/03/24 14:36	1
Chloroform	<3.00		3.00	1.30	ug/L			06/03/24 14:36	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/03/24 14:36	1
Chloroprene	<1.00		1.00	0.230	ug/L			06/03/24 14:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/03/24 14:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/03/24 14:36	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/03/24 14:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/03/24 14:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/03/24 14:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/03/24 14:36	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			06/03/24 14:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/03/24 14:36	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			06/03/24 14:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/03/24 14:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/03/24 14:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/03/24 14:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/03/24 14:36	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			06/03/24 14:36	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			06/03/24 14:36	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			06/03/24 14:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/03/24 14:36	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			06/03/24 14:36	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/03/24 14:36	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/03/24 14:36	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			06/03/24 14:36	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/03/24 14:36	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			06/03/24 14:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/03/24 14:36	1
Naphthalene	<5.00		5.00	3.00	ug/L			06/03/24 14:36	1
Propionitrile	<10.0		10.0	3.40	ug/L			06/03/24 14:36	1
Styrene	<1.00		1.00	0.370	ug/L			06/03/24 14:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/03/24 14:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/03/24 14:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/03/24 14:36	1
Toluene	<1.00		1.00	0.430	ug/L			06/03/24 14:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/03/24 14:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/03/24 14:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/03/24 14:36	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: MB 310-423354/5

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423354

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			06/03/24 14:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/03/24 14:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/03/24 14:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/03/24 14:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/03/24 14:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/03/24 14:36	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/03/24 14:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/03/24 14:36	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/03/24 14:36	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	97		80 - 120		06/03/24 14:36	1
Dibromofluoromethane (Surr)	103		73 - 130		06/03/24 14:36	1
Toluene-d8 (Surr)	100		80 - 120		06/03/24 14:36	1

Lab Sample ID: LCS 310-423354/6

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423354

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acetone	40.0	34.55		ug/L		86	50 - 150
Acrolein	94.8	95.64		ug/L		101	49 - 150
Acrylonitrile	200	205.9		ug/L		103	50 - 150
Allyl chloride	20.0	19.06		ug/L		95	49 - 150
Benzene	20.0	20.53		ug/L		103	72 - 124
Bromochloromethane	20.0	19.59		ug/L		98	73 - 130
Bromodichloromethane	20.0	19.57		ug/L		98	74 - 122
Bromoform	20.0	19.88		ug/L		99	61 - 122
2-Butanone (MEK)	40.0	39.72		ug/L		99	50 - 150
Carbon disulfide	20.0	21.88		ug/L		109	59 - 135
Carbon tetrachloride	20.0	20.87		ug/L		104	67 - 132
Chlorobenzene	20.0	21.13		ug/L		106	76 - 120
Chlorodibromomethane	20.0	20.25		ug/L		101	71 - 121
Chloroform	20.0	19.73		ug/L		99	72 - 125
Chloroprene	20.0	20.66		ug/L		103	69 - 133
cis-1,2-Dichloroethene	20.0	19.87		ug/L		99	74 - 123
cis-1,3-Dichloropropene	20.0	21.47		ug/L		107	71 - 125
1,2-Dibromo-3-chloropropane	20.0	21.24		ug/L		106	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.22		ug/L		101	75 - 125
Dibromomethane	20.0	20.78		ug/L		104	74 - 125
1,2-Dichlorobenzene	20.0	21.62		ug/L		108	74 - 120
1,3-Dichlorobenzene	20.0	21.59		ug/L		108	72 - 120
1,4-Dichlorobenzene	20.0	19.58		ug/L		98	72 - 120
1,1-Dichloroethane	20.0	21.16		ug/L		106	70 - 127
1,2-Dichloroethane	20.0	19.93		ug/L		100	71 - 125
1,1-Dichloroethene	20.0	21.93		ug/L		110	63 - 132
1,2-Dichloropropane	20.0	21.43		ug/L		107	73 - 124
1,3-Dichloropropane	20.0	20.99		ug/L		105	72 - 125

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423354/6

Matrix: Water

Analysis Batch: 423354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,2-Dichloropropane	20.0	22.89		ug/L		114	50 - 150
1,1-Dichloropropene	20.0	20.94		ug/L		105	69 - 132
Ethylbenzene	20.0	20.08		ug/L		100	74 - 122
Ethyl methacrylate	20.0	22.63		ug/L		113	70 - 129
2-Hexanone	40.0	46.64		ug/L		117	60 - 140
Iodomethane	20.0	18.57		ug/L		93	10 - 150
Methacrylonitrile	200	202.8		ug/L		101	69 - 129
Methylene chloride	20.0	21.89		ug/L		109	50 - 150
Methyl methacrylate	40.0	44.14		ug/L		110	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	45.03		ug/L		113	60 - 139
Naphthalene	20.0	20.73		ug/L		104	50 - 150
Propionitrile	200	207.9		ug/L		104	63 - 135
Styrene	20.0	20.41		ug/L		102	74 - 121
1,1,1,2-Tetrachloroethane	20.0	20.72		ug/L		104	71 - 120
1,1,2,2-Tetrachloroethane	20.0	20.87		ug/L		104	68 - 124
Tetrachloroethene	20.0	21.00		ug/L		105	71 - 130
Toluene	20.0	22.18		ug/L		111	74 - 123
trans-1,4-Dichloro-2-butene	20.0	19.82		ug/L		99	50 - 150
trans-1,2-Dichloroethene	20.0	19.35		ug/L		97	70 - 126
trans-1,3-Dichloropropene	20.0	21.00		ug/L		105	69 - 123
1,2,4-Trichlorobenzene	20.0	19.63		ug/L		98	68 - 124
1,1,1-Trichloroethane	20.0	21.14		ug/L		106	73 - 129
1,1,2-Trichloroethane	20.0	21.04		ug/L		105	73 - 123
Trichloroethene	20.0	21.51		ug/L		108	72 - 126
1,2,3-Trichloropropane	20.0	21.40		ug/L		107	65 - 127
Vinyl acetate	40.0	44.38		ug/L		111	50 - 150
Xylenes, Total	40.0	40.62		ug/L		102	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	99		73 - 130
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: LCS 310-423354/7

Matrix: Water

Analysis Batch: 423354

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	20.41		ug/L		102	23 - 150
Chloroethane	20.0	23.92		ug/L		120	54 - 136
Chloromethane	20.0	24.56		ug/L		123	38 - 150
Dichlorodifluoromethane	20.0	26.35		ug/L		132	39 - 150
Trichlorofluoromethane	20.0	24.51		ug/L		123	54 - 149
Vinyl chloride	20.0	23.56		ug/L		118	56 - 140

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

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423354/7  
 Matrix: Water  
 Analysis Batch: 423354

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	101		80 - 120

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

Lab Sample ID: MB 310-423508/1-A  
 Matrix: Water  
 Analysis Batch: 423965

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 423508

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 15:30	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
1,4-Phenylenediamine	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 15:30	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		06/04/24 13:08	06/07/24 15:30	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		06/04/24 13:08	06/07/24 15:30	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
Acenaphthene	<10.0		10.0	0.640	ug/L		06/04/24 13:08	06/07/24 15:30	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: MB 310-423508/1-A**

**Matrix: Water**

**Analysis Batch: 423965**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 423508**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthylene	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 15:30	1
Acetophenone	<10.0		10.0	0.690	ug/L		06/04/24 13:08	06/07/24 15:30	1
Anthracene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzo(a)anthracene	<10.0		10.0	0.850	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzo(a)pyrene	<10.0		10.0	8.10	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzo(g,h,i)perylene	<10.0		10.0	6.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzo(k)fluoranthene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		06/04/24 13:08	06/07/24 15:30	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		06/04/24 13:08	06/07/24 15:30	1
bis(2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		06/04/24 13:08	06/07/24 15:30	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		06/04/24 13:08	06/07/24 15:30	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Chrysene	<10.0		10.0	0.870	ug/L		06/04/24 13:08	06/07/24 15:30	1
Diallylate	<10.0		10.0	4.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		06/04/24 13:08	06/07/24 15:30	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
Dimethoate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
Dinoseb	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
Diphenylamine	<10.0		10.0	6.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
Disulfoton	<10.0		10.0	2.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Ethyl parathion	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
Famphur	<10.0		10.0	3.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
Fluoranthene	<10.0		10.0	1.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
Fluorene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 15:30	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		06/04/24 13:08	06/07/24 15:30	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		06/04/24 13:08	06/07/24 15:30	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		06/04/24 13:08	06/07/24 15:30	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		06/04/24 13:08	06/07/24 15:30	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Indeno(1,2,3-cd)pyrene	<10.0		10.0	4.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
Isodrin	<10.0		10.0	4.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
Isophorone	<10.0		10.0	0.930	ug/L		06/04/24 13:08	06/07/24 15:30	1
Isosafrole	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
Kepone	<10.0		10.0	1.00	ug/L		06/04/24 13:08	06/07/24 15:30	1
Methapyrilene	<10.0		10.0	0.760	ug/L		06/04/24 13:08	06/07/24 15:30	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
Methyl parathion	<10.0		10.0	2.30	ug/L		06/04/24 13:08	06/07/24 15:30	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		06/04/24 13:08	06/07/24 15:30	1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: MB 310-423508/1-A**  
**Matrix: Water**  
**Analysis Batch: 423965**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423508**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
o,o',o"-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
o-Toluidine	<10.0		10.0	2.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		06/04/24 13:08	06/07/24 15:30	1
Phenacetin	<10.0		10.0	1.90	ug/L		06/04/24 13:08	06/07/24 15:30	1
Phenanthrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 15:30	1
Phenol	<10.0		10.0	1.10	ug/L		06/04/24 13:08	06/07/24 15:30	1
Phorate	<10.0		10.0	3.20	ug/L		06/04/24 13:08	06/07/24 15:30	1
Pronamide	<10.0		10.0	2.70	ug/L		06/04/24 13:08	06/07/24 15:30	1
Pyrene	<10.0		10.0	0.790	ug/L		06/04/24 13:08	06/07/24 15:30	1
Safrole	<10.0		10.0	2.80	ug/L		06/04/24 13:08	06/07/24 15:30	1
Thionazin	<10.0		10.0	3.50	ug/L		06/04/24 13:08	06/07/24 15:30	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol (Surr)	64		25 - 110	06/04/24 13:08	06/07/24 15:30	1
Phenol-d5 (Surr)	61		21 - 110	06/04/24 13:08	06/07/24 15:30	1
Nitrobenzene-d5 (Surr)	100		45 - 129	06/04/24 13:08	06/07/24 15:30	1
2-Fluorobiphenyl (Surr)	87		39 - 118	06/04/24 13:08	06/07/24 15:30	1
2,4,6-Tribromophenol (Surr)	90		27 - 136	06/04/24 13:08	06/07/24 15:30	1
Terphenyl-d14 (Surr)	106		12 - 144	06/04/24 13:08	06/07/24 15:30	1

**Lab Sample ID: LCS 310-423508/2-A**  
**Matrix: Water**  
**Analysis Batch: 423965**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423508**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2,4,5-Tetrachlorobenzene	100	87.72		ug/L		88	36 - 110
1,3,5-Trinitrobenzene	64.0	57.10		ug/L		89	39 - 144
1,3-Dinitrobenzene	100	119.6		ug/L		120	45 - 138
1,4-Naphthoquinone	64.0	66.47		ug/L		104	37 - 149
1,4-Phenylenediamine	64.0	<10.0	*	ug/L		-1	20 - 120
1-Naphthylamine	64.0	33.45		ug/L		52	19 - 110
2,3,4,6-Tetrachlorophenol	100	102.5		ug/L		103	33 - 134
2,4,5-Trichlorophenol	100	92.56		ug/L		93	35 - 133
2,4,6-Trichlorophenol	100	101.7		ug/L		102	28 - 139
2,4-Dichlorophenol	100	96.12		ug/L		96	41 - 124
2,4-Dimethylphenol	100	80.20		ug/L		80	31 - 142
2,4-Dinitrophenol	200	184.8		ug/L		92	10 - 138
2,4-Dinitrotoluene	100	106.8		ug/L		107	47 - 137
2,6-Dichlorophenol	100	96.80		ug/L		97	30 - 130
2,6-Dinitrotoluene	100	101.8		ug/L		102	51 - 130

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: LCS 310-423508/2-A**

**Matrix: Water**

**Analysis Batch: 423965**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 423508**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
2-Acetylaminofluorene	64.0	60.68		ug/L		95	35 - 150
2-Chloronaphthalene	100	94.88		ug/L		95	37 - 110
2-Chlorophenol	100	86.51		ug/L		87	44 - 117
2-Methylnaphthalene	100	95.74		ug/L		96	33 - 110
2-Methylphenol	100	88.01		ug/L		88	47 - 118
2-Naphthylamine	64.0	40.66		ug/L		64	18 - 127
2-Nitroaniline	100	99.80		ug/L		100	50 - 135
2-Nitrophenol	100	90.21		ug/L		90	41 - 129
3,3'-Dimethylbenzidine	64.0	21.26		ug/L		33	10 - 150
3-Methylcholanthrene	64.0	51.69		ug/L		81	43 - 150
3-Nitroaniline	100	112.4		ug/L		112	42 - 139
4,6-Dinitro-2-methylphenol	200	218.5		ug/L		109	22 - 143
4-Aminobiphenyl	64.0	48.08		ug/L		75	24 - 138
4-Bromophenyl phenyl ether	100	90.40		ug/L		90	45 - 119
4-Chloro-3-methylphenol	100	91.32		ug/L		91	49 - 130
4-Chloroaniline	100	80.58		ug/L		81	21 - 139
4-Chlorophenyl phenyl ether	100	93.08		ug/L		93	44 - 116
4-Methylphenol (and/or 3-Methylphenol)	100	77.04		ug/L		77	46 - 117
4-Nitroaniline	100	91.89		ug/L		92	31 - 145
4-Nitrophenol	200	105.0		ug/L		53	18 - 110
5-Nitro-o-toluidine	64.0	65.85		ug/L		103	47 - 145
7,12-Dimethylbenz(a)anthracene	64.0	57.67		ug/L		90	51 - 129
Acenaphthene	100	98.42		ug/L		98	43 - 110
Acenaphthylene	100	94.76		ug/L		95	40 - 110
Acetophenone	100	92.50		ug/L		92	48 - 119
Anthracene	100	95.87		ug/L		96	51 - 120
Benzo(a)anthracene	100	89.94		ug/L		90	51 - 123
Benzo(a)pyrene	100	95.19		ug/L		95	48 - 125
Benzo(b)fluoranthene	100	90.10		ug/L		90	49 - 129
Benzo(g,h,i)perylene	100	95.55		ug/L		96	43 - 139
Benzo(k)fluoranthene	100	97.48		ug/L		97	47 - 130
Benzyl alcohol	100	88.34		ug/L		88	39 - 128
Bis(2-chloroethoxy)methane	100	90.89		ug/L		91	48 - 121
Bis(2-chloroethyl)ether	100	94.72		ug/L		95	43 - 123
bis(2-chloroisopropyl) ether	100	88.31		ug/L		88	34 - 123
Bis(2-ethylhexyl) phthalate	100	103.9		ug/L		104	43 - 143
Butyl benzyl phthalate	100	97.57		ug/L		98	46 - 135
Chlorobenzilate	64.0	61.02		ug/L		95	52 - 138
Chrysene	100	93.32		ug/L		93	51 - 125
Diallate	64.0	58.13		ug/L		91	42 - 141
Dibenz(a,h)anthracene	100	94.99		ug/L		95	38 - 149
Dibenzofuran	100	96.25		ug/L		96	45 - 112
Diethyl phthalate	100	107.6		ug/L		108	43 - 135
Dimethoate	64.0	75.34		ug/L		118	51 - 150
Dimethyl phthalate	100	112.0		ug/L		112	43 - 129
Di-n-butyl phthalate	100	105.7		ug/L		106	50 - 133
Di-n-octyl phthalate	100	95.93		ug/L		96	34 - 150
Dinoseb	64.0	77.07		ug/L		120	25 - 146

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423508/2-A

Matrix: Water

Analysis Batch: 423965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423508

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Diphenylamine	85.0	85.11		ug/L		100	48 - 122
Disulfoton	64.0	51.44		ug/L		80	54 - 131
Ethyl methanesulfonate	64.0	56.09		ug/L		88	48 - 120
Ethyl parathion	64.0	66.37		ug/L		104	52 - 149
Famphur	64.0	137.3	E *+	ug/L		215	44 - 150
Fluoranthene	100	92.37		ug/L		92	47 - 128
Fluorene	100	96.51		ug/L		97	45 - 119
Hexachlorobenzene	100	92.15		ug/L		92	48 - 119
Hexachlorobutadiene	100	92.01		ug/L		92	32 - 110
Hexachlorocyclopentadiene	100	54.70		ug/L		55	10 - 110
Hexachloroethane	100	74.19		ug/L		74	31 - 110
Hexachloropropene	64.0	45.09		ug/L		70	10 - 110
Indeno(1,2,3-cd)pyrene	100	99.55		ug/L		100	37 - 150
Isodrin	64.0	63.22		ug/L		99	52 - 125
Isophorone	100	88.40		ug/L		88	50 - 125
Isosafrole	64.0	59.96		ug/L		94	31 - 123
Kepone	64.0	NQ	E	ug/L		NaN	10 - 150
Methapyrilene	64.0	12.18		ug/L		19	10 - 110
Methyl methanesulfonate	64.0	37.02		ug/L		58	36 - 110
Methyl parathion	64.0	78.13		ug/L		122	50 - 150
Nitrobenzene	100	85.11		ug/L		85	47 - 116
N-Nitrosodiethylamine	64.0	59.01		ug/L		92	47 - 138
N-Nitrosodimethylamine	100	68.97		ug/L		69	37 - 110
N-Nitrosodi-n-butylamine	64.0	62.54		ug/L		98	52 - 142
N-Nitrosodi-n-propylamine	100	87.14		ug/L		87	45 - 130
N-Nitrosodiphenylamine	100	99.98		ug/L		100	49 - 121
N-Nitrosomethylethylamine	64.0	59.24		ug/L		93	54 - 123
N-Nitrosopiperidine	64.0	61.19		ug/L		96	60 - 127
N-Nitrosopyrrolidine	64.0	57.99		ug/L		91	56 - 143
o,o',o"-Triethylphosphorothioate	64.0	67.41		ug/L		105	45 - 113
o-Toluidine	64.0	55.73		ug/L		87	24 - 142
p-Dimethylamino azobenzene	64.0	66.05		ug/L		103	42 - 138
Pentachlorobenzene	64.0	61.43		ug/L		96	33 - 110
Pentachloronitrobenzene	64.0	60.36		ug/L		94	65 - 127
Pentachlorophenol	200	163.9		ug/L		82	26 - 133
Phenacetin	64.0	60.92		ug/L		95	56 - 146
Phenanthrene	100	93.62		ug/L		94	51 - 117
Phenol	100	56.08		ug/L		56	29 - 110
Phorate	64.0	52.72		ug/L		82	57 - 135
Pronamide	64.0	63.76		ug/L		100	61 - 144
Pyrene	100	97.43		ug/L		97	48 - 127
Safrole	64.0	66.21		ug/L		103	34 - 110
Thionazin	64.0	64.27		ug/L		100	52 - 147

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	64		25 - 110
Phenol-d5 (Surr)	60		21 - 110
Nitrobenzene-d5 (Surr)	89		45 - 129

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCS 310-423508/2-A

Matrix: Water

Analysis Batch: 423965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 423508

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	78		39 - 118
2,4,6-Tribromophenol (Surr)	93		27 - 136
Terphenyl-d14 (Surr)	105		12 - 144

Lab Sample ID: LCSD 310-423508/3-A

Matrix: Water

Analysis Batch: 423965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423508

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD	Limit	
1,2,4,5-Tetrachlorobenzene	100	88.14		ug/L		88	36 - 110	0	35	
1,3,5-Trinitrobenzene	64.0	59.64		ug/L		93	39 - 144	4	35	
1,3-Dinitrobenzene	100	120.2		ug/L		120	45 - 138	1	35	
1,4-Naphthoquinone	64.0	65.56		ug/L		102	37 - 149	1	29	
1,4-Phenylenediamine	64.0	<10.0	*-	ug/L		-1	20 - 120	21	35	
1-Naphthylamine	64.0	40.29		ug/L		63	19 - 110	19	35	
2,3,4,6-Tetrachlorophenol	100	106.4		ug/L		106	33 - 134	4	35	
2,4,5-Trichlorophenol	100	94.53		ug/L		95	35 - 133	2	35	
2,4,6-Trichlorophenol	100	104.1		ug/L		104	28 - 139	2	35	
2,4-Dichlorophenol	100	98.80		ug/L		99	41 - 124	3	35	
2,4-Dimethylphenol	100	84.35		ug/L		84	31 - 142	5	35	
2,4-Dinitrophenol	200	185.4		ug/L		93	10 - 138	0	35	
2,4-Dinitrotoluene	100	103.8		ug/L		104	47 - 137	3	35	
2,6-Dichlorophenol	100	98.26		ug/L		98	30 - 130	1	35	
2,6-Dinitrotoluene	100	103.8		ug/L		104	51 - 130	2	35	
2-Acetylaminofluorene	64.0	62.67		ug/L		98	35 - 150	3	28	
2-Chloronaphthalene	100	92.91		ug/L		93	37 - 110	2	35	
2-Chlorophenol	100	89.23		ug/L		89	44 - 117	3	35	
2-Methylnaphthalene	100	97.79		ug/L		98	33 - 110	2	35	
2-Methylphenol	100	89.52		ug/L		90	47 - 118	2	35	
2-Naphthylamine	64.0	45.84		ug/L		72	18 - 127	12	35	
2-Nitroaniline	100	103.2		ug/L		103	50 - 135	3	35	
2-Nitrophenol	100	92.95		ug/L		93	41 - 129	3	35	
3,3'-Dimethylbenzidine	64.0	27.80		ug/L		43	10 - 150	27	35	
3-Methylcholanthrene	64.0	59.44		ug/L		93	43 - 150	14	32	
3-Nitroaniline	100	114.2		ug/L		114	42 - 139	2	35	
4,6-Dinitro-2-methylphenol	200	221.2		ug/L		111	22 - 143	1	35	
4-Aminobiphenyl	64.0	53.46		ug/L		84	24 - 138	11	35	
4-Bromophenyl phenyl ether	100	94.25		ug/L		94	45 - 119	4	35	
4-Chloro-3-methylphenol	100	92.52		ug/L		93	49 - 130	1	35	
4-Chloroaniline	100	87.21		ug/L		87	21 - 139	8	35	
4-Chlorophenyl phenyl ether	100	93.11		ug/L		93	44 - 116	0	35	
4-Methylphenol (and/or 3-Methylphenol)	100	78.06		ug/L		78	46 - 117	1	35	
4-Nitroaniline	100	94.18		ug/L		94	31 - 145	2	35	
4-Nitrophenol	200	103.3		ug/L		52	18 - 110	2	35	
5-Nitro-o-toluidine	64.0	70.58		ug/L		110	47 - 145	7	31	
7,12-Dimethylbenz(a)anthracene	64.0	62.98		ug/L		98	51 - 129	9	28	
Acenaphthene	100	101.8		ug/L		102	43 - 110	3	35	
Acenaphthylene	100	95.32		ug/L		95	40 - 110	1	35	

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: LCSD 310-423508/3-A

Matrix: Water

Analysis Batch: 423965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 423508

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Acetophenone	100	93.77		ug/L		94	48 - 119	1	35	
Anthracene	100	97.64		ug/L		98	51 - 120	2	35	
Benzo(a)anthracene	100	93.26		ug/L		93	51 - 123	4	35	
Benzo(a)pyrene	100	99.36		ug/L		99	48 - 125	4	35	
Benzo(b)fluoranthene	100	94.44		ug/L		94	49 - 129	5	35	
Benzo(g,h,i)perylene	100	99.61		ug/L		100	43 - 139	4	35	
Benzo(k)fluoranthene	100	101.4		ug/L		101	47 - 130	4	35	
Benzyl alcohol	100	89.90		ug/L		90	39 - 128	2	35	
Bis(2-chloroethoxy)methane	100	91.70		ug/L		92	48 - 121	1	35	
Bis(2-chloroethyl)ether	100	96.67		ug/L		97	43 - 123	2	35	
bis(2-chloroisopropyl) ether	100	89.47		ug/L		89	34 - 123	1	35	
Bis(2-ethylhexyl) phthalate	100	107.7		ug/L		108	43 - 143	4	35	
Butyl benzyl phthalate	100	99.22		ug/L		99	46 - 135	2	35	
Chlorobenzilate	64.0	64.97		ug/L		102	52 - 138	6	28	
Chrysene	100	95.80		ug/L		96	51 - 125	3	35	
Diallylate	64.0	59.95		ug/L		94	42 - 141	3	35	
Dibenz(a,h)anthracene	100	95.83		ug/L		96	38 - 149	1	35	
Dibenzofuran	100	97.57		ug/L		98	45 - 112	1	35	
Diethyl phthalate	100	106.4		ug/L		106	43 - 135	1	35	
Dimethoate	64.0	81.08		ug/L		127	51 - 150	7	26	
Dimethyl phthalate	100	113.5		ug/L		113	43 - 129	1	35	
Di-n-butyl phthalate	100	109.7		ug/L		110	50 - 133	4	35	
Di-n-octyl phthalate	100	101.8		ug/L		102	34 - 150	6	35	
Dinoseb	64.0	80.18		ug/L		125	25 - 146	4	35	
Diphenylamine	85.0	86.78		ug/L		102	48 - 122	2	35	
Disulfoton	64.0	53.82		ug/L		84	54 - 131	5	24	
Ethyl methanesulfonate	64.0	56.16		ug/L		88	48 - 120	0	27	
Ethyl parathion	64.0	68.43		ug/L		107	52 - 149	3	26	
Famphur	64.0	142.6	E **	ug/L		223	44 - 150	4	35	
Fluoranthene	100	94.74		ug/L		95	47 - 128	3	35	
Fluorene	100	95.72		ug/L		96	45 - 119	1	35	
Hexachlorobenzene	100	91.35		ug/L		91	48 - 119	1	35	
Hexachlorobutadiene	100	92.28		ug/L		92	32 - 110	0	35	
Hexachlorocyclopentadiene	100	55.73		ug/L		56	10 - 110	2	35	
Hexachloroethane	100	76.47		ug/L		76	31 - 110	3	35	
Hexachloropropene	64.0	46.53		ug/L		73	10 - 110	3	35	
Indeno(1,2,3-cd)pyrene	100	101.8		ug/L		102	37 - 150	2	35	
Isodrin	64.0	67.15		ug/L		105	52 - 125	6	26	
Isophorone	100	89.84		ug/L		90	50 - 125	2	35	
Isosafrole	64.0	62.18		ug/L		97	31 - 123	4	35	
Kepone	64.0	NQ	E	ug/L		NaN	10 - 150	NaN	35	
Methapyrilene	64.0	18.09	*1	ug/L		28	10 - 110	39	35	
Methyl methanesulfonate	64.0	37.83		ug/L		59	36 - 110	2	26	
Methyl parathion	64.0	80.38		ug/L		126	50 - 150	3	25	
Nitrobenzene	100	85.78		ug/L		86	47 - 116	1	35	
N-Nitrosodiethylamine	64.0	61.59		ug/L		96	47 - 138	4	26	
N-Nitrosodimethylamine	100	69.63		ug/L		70	37 - 110	1	35	
N-Nitrosodi-n-butylamine	64.0	64.05		ug/L		100	52 - 142	2	27	
N-Nitrosodi-n-propylamine	100	88.99		ug/L		89	45 - 130	2	35	

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: LCSD 310-423508/3-A**  
**Matrix: Water**  
**Analysis Batch: 423965**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423508**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
N-Nitrosodiphenylamine	100	101.4		ug/L		101	49 - 121	1	35	
N-Nitrosomethylethylamine	64.0	60.52		ug/L		95	54 - 123	2	26	
N-Nitrosopiperidine	64.0	62.42		ug/L		98	60 - 127	2	26	
N-Nitrosopyrrolidine	64.0	61.04		ug/L		95	56 - 143	5	25	
o,o',o"-Triethylphosphorothioate	64.0	70.30		ug/L		110	45 - 113	4	33	
o-Toluidine	64.0	59.33		ug/L		93	24 - 142	6	35	
p-Dimethylamino azobenzene	64.0	68.85		ug/L		108	42 - 138	4	29	
Pentachlorobenzene	64.0	63.25		ug/L		99	33 - 110	3	35	
Pentachloronitrobenzene	64.0	61.32		ug/L		96	65 - 127	2	29	
Pentachlorophenol	200	172.2		ug/L		86	26 - 133	5	35	
Phenacetin	64.0	64.59		ug/L		101	56 - 146	6	25	
Phenanthrene	100	95.48		ug/L		95	51 - 117	2	35	
Phenol	100	57.78		ug/L		58	29 - 110	3	35	
Phorate	64.0	55.53		ug/L		87	57 - 135	5	26	
Pronamide	64.0	67.14		ug/L		105	61 - 144	5	27	
Pyrene	100	98.57		ug/L		99	48 - 127	1	35	
Safrole	64.0	67.86		ug/L		106	34 - 110	2	35	
Thionazin	64.0	67.03		ug/L		105	52 - 147	4	28	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2-Fluorophenol (Surr)	70		25 - 110
Phenol-d5 (Surr)	65		21 - 110
Nitrobenzene-d5 (Surr)	97		45 - 129
2-Fluorobiphenyl (Surr)	92		39 - 118
2,4,6-Tribromophenol (Surr)	97		27 - 136
Terphenyl-d14 (Surr)	114		12 - 144

## Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

**Lab Sample ID: MB 310-423520/10**  
**Matrix: Water**  
**Analysis Batch: 423520**

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetonitrile	<10.0		10.0	2.60	mg/L			06/05/24 10:39	1
Isobutanol	<10.0		10.0	2.40	mg/L			06/05/24 10:39	1

**Lab Sample ID: LCS 310-423520/11**  
**Matrix: Water**  
**Analysis Batch: 423520**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
Acetonitrile	113	131.7		mg/L		116	67 - 132	
Isobutanol	104	110.2		mg/L		106	80 - 121	

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: MB 310-423348/1-A**  
**Matrix: Water**  
**Analysis Batch: 424040**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423348**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4,4'-DDD	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 19:55	1
4,4'-DDE	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 19:55	1
4,4'-DDT	<0.0640		0.0640	0.0420	ug/L		06/03/24 09:59	06/10/24 19:55	1
Aldrin	<0.0640		0.0640	0.0320	ug/L		06/03/24 09:59	06/10/24 19:55	1
alpha-BHC	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 19:55	1
beta-BHC	<0.0640		0.0640	0.0370	ug/L		06/03/24 09:59	06/10/24 19:55	1
Chlordane (technical)	<2.00		2.00	0.810	ug/L		06/03/24 09:59	06/10/24 19:55	1
delta-BHC	<0.0640		0.0640	0.0270	ug/L		06/03/24 09:59	06/10/24 19:55	1
Dieldrin	<0.0640		0.0640	0.0260	ug/L		06/03/24 09:59	06/10/24 19:55	1
Endosulfan I	<0.0640		0.0640	0.0330	ug/L		06/03/24 09:59	06/10/24 19:55	1
Endosulfan II	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 19:55	1
Endosulfan sulfate	<0.0640		0.0640	0.0300	ug/L		06/03/24 09:59	06/10/24 19:55	1
Endrin	<0.0640		0.0640	0.0260	ug/L		06/03/24 09:59	06/10/24 19:55	1
Endrin aldehyde	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 19:55	1
gamma-BHC (Lindane)	<0.0640		0.0640	0.0360	ug/L		06/03/24 09:59	06/10/24 19:55	1
Heptachlor	<0.0640		0.0640	0.0330	ug/L		06/03/24 09:59	06/10/24 19:55	1
Heptachlor epoxide	<0.0640		0.0640	0.0290	ug/L		06/03/24 09:59	06/10/24 19:55	1
Methoxychlor	<0.0640		0.0640	0.0410	ug/L		06/03/24 09:59	06/10/24 19:55	1
Toxaphene	<2.00		2.00	0.690	ug/L		06/03/24 09:59	06/10/24 19:55	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	83		10 - 136	06/03/24 09:59	06/10/24 19:55	1
Tetrachloro-m-xylene	68		10 - 130	06/03/24 09:59	06/10/24 19:55	1

**Lab Sample ID: LCS 310-423348/2-A**  
**Matrix: Water**  
**Analysis Batch: 424040**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423348**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
4,4'-DDD	1.00	0.9836		ug/L		98	36 - 149
4,4'-DDE	1.00	0.9211		ug/L		92	34 - 130
4,4'-DDT	1.00	1.059		ug/L		106	23 - 150
Aldrin	1.00	0.8525		ug/L		85	13 - 120
alpha-BHC	1.00	0.9516		ug/L		95	36 - 127
beta-BHC	1.00	0.9823		ug/L		98	37 - 136
delta-BHC	1.00	0.9732		ug/L		97	33 - 134
Dieldrin	1.00	0.9799		ug/L		98	39 - 130
Endosulfan I	1.00	0.8978		ug/L		90	10 - 120
Endosulfan II	1.00	0.9221		ug/L		92	14 - 120
Endosulfan sulfate	1.00	1.074		ug/L		107	36 - 147
Endrin	1.00	0.9943		ug/L		99	39 - 140
Endrin aldehyde	1.00	0.9283		ug/L		93	32 - 137
gamma-BHC (Lindane)	1.00	0.9814		ug/L		98	36 - 132
Heptachlor	1.00	0.9723		ug/L		97	27 - 120
Heptachlor epoxide	1.00	0.9796		ug/L		98	38 - 133
Methoxychlor	1.00	1.031		ug/L		103	10 - 150

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID:** LCS 310-423348/2-A  
**Matrix:** Water  
**Analysis Batch:** 424040

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 423348

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	82		10 - 136
Tetrachloro-m-xylene	59		10 - 130

**Lab Sample ID:** LCSD 310-423348/3-A  
**Matrix:** Water  
**Analysis Batch:** 424040

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 423348

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits	RPD	Limit	
4,4'-DDD	1.00	0.9246		ug/L		92	36 - 149	6	35	
4,4'-DDE	1.00	0.8723		ug/L		87	34 - 130	5	35	
4,4'-DDT	1.00	0.9931		ug/L		99	23 - 150	6	35	
Aldrin	1.00	0.8142		ug/L		81	13 - 120	5	35	
alpha-BHC	1.00	0.9061		ug/L		91	36 - 127	5	35	
beta-BHC	1.00	0.9345		ug/L		93	37 - 136	5	35	
delta-BHC	1.00	0.9326		ug/L		93	33 - 134	4	35	
Dieldrin	1.00	0.9260		ug/L		93	39 - 130	6	35	
Endosulfan I	1.00	0.8508		ug/L		85	10 - 120	5	35	
Endosulfan II	1.00	0.8732		ug/L		87	14 - 120	5	35	
Endosulfan sulfate	1.00	1.015		ug/L		102	36 - 147	6	35	
Endrin	1.00	0.9332		ug/L		93	39 - 140	6	35	
Endrin aldehyde	1.00	0.8826		ug/L		88	32 - 137	5	35	
gamma-BHC (Lindane)	1.00	0.9326		ug/L		93	36 - 132	5	35	
Heptachlor	1.00	0.9274		ug/L		93	27 - 120	5	35	
Heptachlor epoxide	1.00	0.9264		ug/L		93	38 - 133	6	35	
Methoxychlor	1.00	0.9782		ug/L		98	10 - 150	5	35	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	77		10 - 136
Tetrachloro-m-xylene	53		10 - 130

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID:** MB 310-423348/1-A  
**Matrix:** Water  
**Analysis Batch:** 424041

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 423348

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1221	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1232	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1242	<0.800		0.800	0.170	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1248	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1254	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 19:55	1
PCB-1260	<0.800		0.800	0.110	ug/L		06/03/24 09:59	06/10/24 19:55	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl (Surr)	83		10 - 136	06/03/24 09:59	06/10/24 19:55	1
Tetrachloro-m-xylene	68		10 - 130	06/03/24 09:59	06/10/24 19:55	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: LCS 310-423348/4-A**  
**Matrix: Water**  
**Analysis Batch: 424041**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423348**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
PCB-1016	10.0	8.196		ug/L		82	30 - 133	
PCB-1260	10.0	8.036		ug/L		80	31 - 133	
		<b>LCS</b>	<b>LCS</b>					
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
DCB Decachlorobiphenyl (Surr)	84		10 - 136					
Tetrachloro-m-xylene	63		10 - 130					

**Lab Sample ID: LCSD 310-423348/5-A**  
**Matrix: Water**  
**Analysis Batch: 424041**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423348**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
PCB-1016	10.0	8.445		ug/L		84	30 - 133	3	35	
PCB-1260	10.0	7.988		ug/L		80	31 - 133	1	35	
		<b>LCSD</b>	<b>LCSD</b>							
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
DCB Decachlorobiphenyl (Surr)	76		10 - 136							
Tetrachloro-m-xylene	49		10 - 130							

## Method: 8151A - Herbicides (GC)

**Lab Sample ID: MB 410-514063/1-A**  
**Matrix: Water**  
**Analysis Batch: 514234**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 514063**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,5-T	<0.150		0.150	0.0650	ug/L		06/05/24 15:12	06/06/24 05:59	1
Silvex (2,4,5-TP)	<0.0500		0.0500	0.0220	ug/L		06/05/24 15:12	06/06/24 05:59	1
2,4-D	<0.600		0.600	0.250	ug/L		06/05/24 15:12	06/06/24 05:59	1
		<b>MB</b>	<b>MB</b>						
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
2,4-Dichlorophenylacetic acid (Surr)	58		34 - 142			06/05/24 15:12	06/06/24 05:59	1	
2,4-Dichlorophenylacetic acid (Surr)	56		34 - 142			06/05/24 15:12	06/06/24 05:59	1	

**Lab Sample ID: LCS 410-514063/2-A**  
**Matrix: Water**  
**Analysis Batch: 514234**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 514063**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
2,4,5-T	0.250	0.2014		ug/L		81	57 - 171	
Silvex (2,4,5-TP)	0.250	0.1942		ug/L		78	62 - 170	
2,4-D	2.51	1.818		ug/L		72	53 - 159	
		<b>LCS</b>	<b>LCS</b>					
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
2,4-Dichlorophenylacetic acid (Surr)	70		34 - 142					
2,4-Dichlorophenylacetic acid (Surr)	71		34 - 142					

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Method: 8151A - Herbicides (GC)

**Lab Sample ID:** LCSD 410-514063/3-A  
**Matrix:** Water  
**Analysis Batch:** 514234

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 514063

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T	0.250	0.2211		ug/L		88	57 - 171	9	30
Silvex (2,4,5-TP)	0.250	0.2126		ug/L		85	62 - 170	9	30
2,4-D	2.51	1.960		ug/L		78	53 - 159	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid (Surr)	73		34 - 142
2,4-Dichlorophenylacetic acid (Surr)	76		34 - 142

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

**Lab Sample ID:** MB 310-423406/1-A  
**Matrix:** Water  
**Analysis Batch:** 424025

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 423406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/07/24 14:51	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/07/24 14:51	1
Barium	<0.00200		0.00200	0.000660	mg/L		06/04/24 09:15	06/07/24 14:51	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/07/24 14:51	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/07/24 14:51	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/07/24 14:51	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/07/24 14:51	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/07/24 14:51	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/07/24 14:51	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/07/24 14:51	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/07/24 14:51	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/07/24 14:51	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/07/24 14:51	1

**Lab Sample ID:** MB 310-423406/1-A  
**Matrix:** Water  
**Analysis Batch:** 424663

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 423406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 15:02	1

**Lab Sample ID:** MB 310-423406/1-A  
**Matrix:** Water  
**Analysis Batch:** 424666

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 423406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 15:48	1
Tin	<5.00		5.00	2.30	ug/L		06/04/24 09:15	06/14/24 15:48	1

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: LCS 310-423406/2-A**  
**Matrix: Water**  
**Analysis Batch: 424025**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423406**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Antimony	0.200	0.2090		mg/L		105	80 - 120	
Arsenic	0.200	0.2013		mg/L		101	80 - 120	
Barium	0.100	0.1060		mg/L		106	80 - 120	
Beryllium	0.100	0.09863		mg/L		99	80 - 120	
Cadmium	0.100	0.09976		mg/L		100	80 - 120	
Chromium	0.100	0.09376		mg/L		94	80 - 120	
Copper	0.200	0.2053		mg/L		103	80 - 120	
Lead	0.200	0.2026		mg/L		101	80 - 120	
Nickel	0.200	0.2006		mg/L		100	80 - 120	
Selenium	0.400	0.3836		mg/L		96	80 - 120	
Thallium	0.100	0.1085		mg/L		109	80 - 120	
Vanadium	0.100	0.09165		mg/L		92	80 - 120	
Zinc	0.200	0.1957		mg/L		98	80 - 120	

**Lab Sample ID: LCS 310-423406/2-A**  
**Matrix: Water**  
**Analysis Batch: 424663**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423406**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Silver	0.100	0.1100		mg/L		110	80 - 120	

**Lab Sample ID: LCS 310-423406/2-A**  
**Matrix: Water**  
**Analysis Batch: 424666**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423406**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Cobalt	0.100	0.09650		mg/L		97	80 - 120	
Tin	200	182.7		ug/L		91	80 - 120	

**Lab Sample ID: 310-282518-10 DU**  
**Matrix: Groundwater**  
**Analysis Batch: 424025**

**Client Sample ID: MW-15C**  
**Prep Type: Total/NA**  
**Prep Batch: 423406**

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			Result	Qualifier				
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	<0.00200		<0.00200		mg/L		NC	20
Barium	0.0902		0.08922		mg/L		1	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
Copper	<0.00500		<0.00500		mg/L		NC	20
Lead	<0.000500		<0.000500		mg/L		NC	20
Nickel	0.00664		0.006651		mg/L		0.2	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	<0.00500		<0.00500		mg/L		NC	20
Zinc	<0.0200		<0.0200		mg/L		NC	20

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

Lab Sample ID: 310-282518-10 DU  
 Matrix: Groundwater  
 Analysis Batch: 424663

Client Sample ID: MW-15C  
 Prep Type: Total/NA  
 Prep Batch: 423406

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

Lab Sample ID: 310-282518-10 DU  
 Matrix: Groundwater  
 Analysis Batch: 424666

Client Sample ID: MW-15C  
 Prep Type: Total/NA  
 Prep Batch: 423406

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Cobalt	0.000172	J	0.0001730	J	mg/L		0.6	20
Tin	<0.00500		<5.00		ug/L		NC	20

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-423471/1-A  
 Matrix: Water  
 Analysis Batch: 423808

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 423471

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000200		0.000200	0.000110	mg/L		06/04/24 10:22	06/06/24 11:03	1

Lab Sample ID: LCS 310-423471/2-A  
 Matrix: Water  
 Analysis Batch: 423808

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 423471

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Mercury	0.00167	0.001470		mg/L		88	80 - 120

## Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 310-423646/1-A  
 Matrix: Water  
 Analysis Batch: 423860

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 423646

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cyanide, Total	<0.0100		0.0100	0.00350	mg/L		06/05/24 12:26	06/06/24 17:11	1

Lab Sample ID: LCS 310-423646/2-A  
 Matrix: Water  
 Analysis Batch: 423860

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 423646

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Cyanide, Total	0.200	0.1847		mg/L		92	90 - 110

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

Lab Sample ID: MB 500-770982/1-A  
 Matrix: Water  
 Analysis Batch: 770983

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 770982

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	<1.00		1.00	0.231	mg/L		06/04/24 18:00	06/04/24 21:37	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

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

**Lab Sample ID: LCS 500-770982/2-A**  
**Matrix: Water**  
**Analysis Batch: 770983**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 770982**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.823		mg/L		105	80 - 120

**Lab Sample ID: 310-282518-1 MS**  
**Matrix: Groundwater**  
**Analysis Batch: 770983**

**Client Sample ID: MW-11**  
**Prep Type: Total/NA**  
**Prep Batch: 770982**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<1.00		9.09	8.795		mg/L		97	75 - 125

**Lab Sample ID: 310-282518-1 MSD**  
**Matrix: Groundwater**  
**Analysis Batch: 770983**

**Client Sample ID: MW-11**  
**Prep Type: Total/NA**  
**Prep Batch: 770982**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<1.00		9.09	8.192		mg/L		90	75 - 125	7	20

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

**Lab Sample ID: MB 310-423431/1**  
**Matrix: Water**  
**Analysis Batch: 423431**

**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			06/04/24 07:45	1

**Lab Sample ID: LCS 310-423431/2**  
**Matrix: Water**  
**Analysis Batch: 423431**

**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	91.00		mg/L		91	81 - 116

**Lab Sample ID: 310-282518-8 DU**  
**Matrix: Groundwater**  
**Analysis Batch: 423431**

**Client Sample ID: MW-15R**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	67.0		52.00		mg/L		25	35

# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## GC/MS VOA

### Analysis Batch: 423352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-6	MW-13R	Total/NA	Groundwater	8260D	
310-282518-7	MW-14R	Total/NA	Groundwater	8260D	
310-282518-8	MW-15R	Total/NA	Groundwater	8260D	
310-282518-9	MW-39	Total/NA	Groundwater	8260D	
310-282518-10	MW-15C	Total/NA	Groundwater	8260D	
310-282518-11	MW-44	Total/NA	Groundwater	8260D	
310-282518-12	MW-DC	Total/NA	Groundwater	8260D	
310-282518-13	Trip Blank	Total/NA	Groundwater	8260D	
MB 310-423352/5	Method Blank	Total/NA	Water	8260D	
LCS 310-423352/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-423352/7	Lab Control Sample	Total/NA	Water	8260D	
310-282518-6 MS	MW-13R	Total/NA	Groundwater	8260D	
310-282518-6 MSD	MW-13R	Total/NA	Groundwater	8260D	

### Analysis Batch: 423354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-2	MW-7	Total/NA	Groundwater	8260D	
310-282518-4	MW-10R	Total/NA	Groundwater	8260D	
310-282518-5	MW-12	Total/NA	Groundwater	8260D	
MB 310-423354/5	Method Blank	Total/NA	Water	8260D	
LCS 310-423354/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-423354/7	Lab Control Sample	Total/NA	Water	8260D	

## GC/MS Semi VOA

### Prep Batch: 423508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	3510C	
310-282518-6	MW-13R	Total/NA	Groundwater	3510C	
MB 310-423508/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-423508/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-423508/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 423965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8270E	423508
310-282518-6	MW-13R	Total/NA	Groundwater	8270E	423508
MB 310-423508/1-A	Method Blank	Total/NA	Water	8270E	423508
LCS 310-423508/2-A	Lab Control Sample	Total/NA	Water	8270E	423508
LCSD 310-423508/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	423508

## GC Semi VOA

### Prep Batch: 423348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	3510C	
310-282518-6	MW-13R	Total/NA	Groundwater	3510C	
MB 310-423348/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-423348/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-423348/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-423348/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-423348/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

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# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## GC Semi VOA

### Analysis Batch: 423520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8015C	
310-282518-6	MW-13R	Total/NA	Groundwater	8015C	
MB 310-423520/10	Method Blank	Total/NA	Water	8015C	
LCS 310-423520/11	Lab Control Sample	Total/NA	Water	8015C	

### Analysis Batch: 424040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8081B	423348
310-282518-6	MW-13R	Total/NA	Groundwater	8081B	423348
MB 310-423348/1-A	Method Blank	Total/NA	Water	8081B	423348
LCS 310-423348/2-A	Lab Control Sample	Total/NA	Water	8081B	423348
LCSD 310-423348/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	423348

### Analysis Batch: 424041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8082A	423348
310-282518-6	MW-13R	Total/NA	Groundwater	8082A	423348
MB 310-423348/1-A	Method Blank	Total/NA	Water	8082A	423348
LCS 310-423348/4-A	Lab Control Sample	Total/NA	Water	8082A	423348
LCSD 310-423348/5-A	Lab Control Sample Dup	Total/NA	Water	8082A	423348

### Prep Batch: 514063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8151A	
310-282518-6	MW-13R	Total/NA	Groundwater	8151A	
MB 410-514063/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-514063/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 410-514063/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

### Analysis Batch: 514234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	8151A	514063
310-282518-6	MW-13R	Total/NA	Groundwater	8151A	514063
MB 410-514063/1-A	Method Blank	Total/NA	Water	8151A	514063
LCS 410-514063/2-A	Lab Control Sample	Total/NA	Water	8151A	514063
LCSD 410-514063/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	514063

## Metals

### Prep Batch: 423406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	3005A	
310-282518-2	MW-7	Total/NA	Groundwater	3005A	
310-282518-3	MW-9R	Total/NA	Groundwater	3005A	
310-282518-4	MW-10R	Total/NA	Groundwater	3005A	
310-282518-5	MW-12	Total/NA	Groundwater	3005A	
310-282518-6	MW-13R	Total/NA	Groundwater	3005A	
310-282518-7	MW-14R	Total/NA	Groundwater	3005A	
310-282518-8	MW-15R	Total/NA	Groundwater	3005A	
310-282518-9	MW-39	Total/NA	Groundwater	3005A	
310-282518-10	MW-15C	Total/NA	Groundwater	3005A	

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# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Metals (Continued)

### Prep Batch: 423406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-11	MW-44	Total/NA	Groundwater	3005A	
310-282518-12	MW-DC	Total/NA	Groundwater	3005A	
MB 310-423406/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-423406/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-282518-10 DU	MW-15C	Total/NA	Groundwater	3005A	

### Prep Batch: 423471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	7470A	
310-282518-6	MW-13R	Total/NA	Groundwater	7470A	
MB 310-423471/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-423471/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Analysis Batch: 423808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	7470A	423471
310-282518-6	MW-13R	Total/NA	Groundwater	7470A	423471
MB 310-423471/1-A	Method Blank	Total/NA	Water	7470A	423471
LCS 310-423471/2-A	Lab Control Sample	Total/NA	Water	7470A	423471

### Analysis Batch: 424025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	6020B	423406
310-282518-2	MW-7	Total/NA	Groundwater	6020B	423406
310-282518-3	MW-9R	Total/NA	Groundwater	6020B	423406
310-282518-4	MW-10R	Total/NA	Groundwater	6020B	423406
310-282518-5	MW-12	Total/NA	Groundwater	6020B	423406
310-282518-6	MW-13R	Total/NA	Groundwater	6020B	423406
310-282518-7	MW-14R	Total/NA	Groundwater	6020B	423406
310-282518-8	MW-15R	Total/NA	Groundwater	6020B	423406
310-282518-9	MW-39	Total/NA	Groundwater	6020B	423406
310-282518-10	MW-15C	Total/NA	Groundwater	6020B	423406
310-282518-11	MW-44	Total/NA	Groundwater	6020B	423406
310-282518-12	MW-DC	Total/NA	Groundwater	6020B	423406
MB 310-423406/1-A	Method Blank	Total/NA	Water	6020B	423406
LCS 310-423406/2-A	Lab Control Sample	Total/NA	Water	6020B	423406
310-282518-10 DU	MW-15C	Total/NA	Groundwater	6020B	423406

### Analysis Batch: 424663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	6020B	423406
310-282518-6	MW-13R	Total/NA	Groundwater	6020B	423406
310-282518-7	MW-14R	Total/NA	Groundwater	6020B	423406
310-282518-8	MW-15R	Total/NA	Groundwater	6020B	423406
310-282518-9	MW-39	Total/NA	Groundwater	6020B	423406
310-282518-10	MW-15C	Total/NA	Groundwater	6020B	423406
310-282518-11	MW-44	Total/NA	Groundwater	6020B	423406
310-282518-12	MW-DC	Total/NA	Groundwater	6020B	423406
MB 310-423406/1-A	Method Blank	Total/NA	Water	6020B	423406
LCS 310-423406/2-A	Lab Control Sample	Total/NA	Water	6020B	423406
310-282518-10 DU	MW-15C	Total/NA	Groundwater	6020B	423406

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Metals

### Analysis Batch: 424666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	6020B	423406
310-282518-2	MW-7	Total/NA	Groundwater	6020B	423406
310-282518-3	MW-9R	Total/NA	Groundwater	6020B	423406
310-282518-4	MW-10R	Total/NA	Groundwater	6020B	423406
310-282518-5	MW-12	Total/NA	Groundwater	6020B	423406
310-282518-6	MW-13R	Total/NA	Groundwater	6020B	423406
310-282518-7	MW-14R	Total/NA	Groundwater	6020B	423406
310-282518-8	MW-15R	Total/NA	Groundwater	6020B	423406
310-282518-9	MW-39	Total/NA	Groundwater	6020B	423406
310-282518-10	MW-15C	Total/NA	Groundwater	6020B	423406
310-282518-11	MW-44	Total/NA	Groundwater	6020B	423406
310-282518-12	MW-DC	Total/NA	Groundwater	6020B	423406
MB 310-423406/1-A	Method Blank	Total/NA	Water	6020B	423406
LCS 310-423406/2-A	Lab Control Sample	Total/NA	Water	6020B	423406
310-282518-10 DU	MW-15C	Total/NA	Groundwater	6020B	423406

## General Chemistry

### Analysis Batch: 423431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	I-3765-85	
310-282518-2	MW-7	Total/NA	Groundwater	I-3765-85	
310-282518-3	MW-9R	Total/NA	Groundwater	I-3765-85	
310-282518-4	MW-10R	Total/NA	Groundwater	I-3765-85	
310-282518-5	MW-12	Total/NA	Groundwater	I-3765-85	
310-282518-6	MW-13R	Total/NA	Groundwater	I-3765-85	
310-282518-7	MW-14R	Total/NA	Groundwater	I-3765-85	
310-282518-8	MW-15R	Total/NA	Groundwater	I-3765-85	
310-282518-9	MW-39	Total/NA	Groundwater	I-3765-85	
310-282518-10	MW-15C	Total/NA	Groundwater	I-3765-85	
310-282518-11	MW-44	Total/NA	Groundwater	I-3765-85	
310-282518-12	MW-DC	Total/NA	Groundwater	I-3765-85	
MB 310-423431/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423431/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-282518-8 DU	MW-15R	Total/NA	Groundwater	I-3765-85	

### Prep Batch: 423646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	9012B	
310-282518-6	MW-13R	Total/NA	Groundwater	9012B	
MB 310-423646/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-423646/2-A	Lab Control Sample	Total/NA	Water	9012B	

### Analysis Batch: 423860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-5	MW-12	Total/NA	Groundwater	9012B	423646
310-282518-6	MW-13R	Total/NA	Groundwater	9012B	423646
MB 310-423646/1-A	Method Blank	Total/NA	Water	9012B	423646
LCS 310-423646/2-A	Lab Control Sample	Total/NA	Water	9012B	423646

# QC Association Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## General Chemistry

### Prep Batch: 770982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	9030B	
310-282518-3	MW-9R	Total/NA	Groundwater	9030B	
310-282518-5	MW-12	Total/NA	Groundwater	9030B	
310-282518-6	MW-13R	Total/NA	Groundwater	9030B	
MB 500-770982/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-770982/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-282518-1 MS	MW-11	Total/NA	Groundwater	9030B	
310-282518-1 MSD	MW-11	Total/NA	Groundwater	9030B	

### Analysis Batch: 770983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282518-1	MW-11	Total/NA	Groundwater	9034	770982
310-282518-3	MW-9R	Total/NA	Groundwater	9034	770982
310-282518-5	MW-12	Total/NA	Groundwater	9034	770982
310-282518-6	MW-13R	Total/NA	Groundwater	9034	770982
MB 500-770982/1-A	Method Blank	Total/NA	Water	9034	770982
LCS 500-770982/2-A	Lab Control Sample	Total/NA	Water	9034	770982
310-282518-1 MS	MW-11	Total/NA	Groundwater	9034	770982
310-282518-1 MSD	MW-11	Total/NA	Groundwater	9034	770982

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-11**

**Lab Sample ID: 310-282518-1**

Date Collected: 05/30/24 09:20

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 15:55
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:06
Total/NA	Prep	9030B			770982	CLB	EET CHI	06/04/24 18:10 - 06/04/24 18:12 <sup>1</sup>
Total/NA	Analysis	9034		1	770983	CLB	EET CHI	06/04/24 22:05 - 06/04/24 22:11 <sup>1</sup>
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-7**

**Lab Sample ID: 310-282518-2**

Date Collected: 05/30/24 13:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423354	WSE8	EET CF	06/03/24 19:53
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 15:59
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:08
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-9R**

**Lab Sample ID: 310-282518-3**

Date Collected: 05/30/24 11:46

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:02
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:19
Total/NA	Prep	9030B			770982	CLB	EET CHI	06/04/24 18:17 - 06/04/24 18:19 <sup>1</sup>
Total/NA	Analysis	9034		1	770983	CLB	EET CHI	06/04/24 22:23 - 06/04/24 22:29 <sup>1</sup>
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-10R**

**Lab Sample ID: 310-282518-4**

Date Collected: 05/30/24 12:34

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423354	WSE8	EET CF	06/03/24 20:15
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:06
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:21
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45



# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-12**

**Lab Sample ID: 310-282518-5**

**Date Collected: 05/30/24 10:57**

**Matrix: Groundwater**

**Date Received: 05/31/24 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423354	WSE8	EET CF	06/03/24 20:38
Total/NA	Prep	3510C			423508	JT8P	EET CF	06/04/24 13:08
Total/NA	Analysis	8270E		1	423965	L0FS	EET CF	06/07/24 18:01
Total/NA	Analysis	8015C		1	423520	V7YZ	EET CF	06/05/24 15:23
Total/NA	Prep	3510C			423348	JT8P	EET CF	06/03/24 09:59
Total/NA	Analysis	8081B		1	424040	BW2O	EET CF	06/10/24 21:40
Total/NA	Prep	3510C			423348	JT8P	EET CF	06/03/24 09:59
Total/NA	Analysis	8082A		1	424041	BW2O	EET CF	06/10/24 21:40
Total/NA	Prep	8151A			514063	QJZ6	ELLE	06/05/24 15:12
Total/NA	Analysis	8151A		1	514234	UAMZ	ELLE	06/06/24 09:45
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		4	424666	NFT2	EET CF	06/14/24 16:09
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:23
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:07
Total/NA	Prep	7470A			423471	A6US	EET CF	06/04/24 10:22
Total/NA	Analysis	7470A		1	423808	A6US	EET CF	06/06/24 11:58
Total/NA	Prep	9012B			423646	WZC8	EET CF	06/05/24 12:26
Total/NA	Analysis	9012B		1	423860	ZJX4	EET CF	06/06/24 17:15
Total/NA	Prep	9030B			770982	CLB	EET CHI	06/04/24 18:19 - 06/04/24 18:21 <sup>1</sup>
Total/NA	Analysis	9034		1	770983	CLB	EET CHI	06/04/24 22:29 - 06/04/24 22:34 <sup>1</sup>
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-13R**

**Lab Sample ID: 310-282518-6**

**Date Collected: 05/30/24 08:40**

**Matrix: Groundwater**

**Date Received: 05/31/24 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 03:28
Total/NA	Prep	3510C			423508	JT8P	EET CF	06/04/24 13:08
Total/NA	Analysis	8270E		1	423965	L0FS	EET CF	06/07/24 18:26
Total/NA	Analysis	8015C		1	423520	V7YZ	EET CF	06/05/24 15:41
Total/NA	Prep	3510C			423348	JT8P	EET CF	06/03/24 09:59
Total/NA	Analysis	8081B		1	424040	BW2O	EET CF	06/10/24 22:00
Total/NA	Prep	3510C			423348	JT8P	EET CF	06/03/24 09:59
Total/NA	Analysis	8082A		1	424041	BW2O	EET CF	06/10/24 22:00
Total/NA	Prep	8151A			514063	QJZ6	ELLE	06/05/24 15:12
Total/NA	Analysis	8151A		1	514234	UAMZ	ELLE	06/06/24 11:10
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:13
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:25

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## Client Sample ID: MW-13R

Lab Sample ID: 310-282518-6

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:09
Total/NA	Prep	7470A			423471	A6US	EET CF	06/04/24 10:22
Total/NA	Analysis	7470A		1	423808	A6US	EET CF	06/06/24 11:47
Total/NA	Prep	9012B			423646	WZC8	EET CF	06/05/24 12:26
Total/NA	Analysis	9012B		1	423860	ZJX4	EET CF	06/06/24 17:17
Total/NA	Prep	9030B			770982	CLB	EET CHI	06/04/24 18:21 - 06/04/24 18:23 <sup>1</sup>
Total/NA	Analysis	9034		1	770983	CLB	EET CHI	06/04/24 22:34 - 06/04/24 22:40 <sup>1</sup>
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

## Client Sample ID: MW-14R

Lab Sample ID: 310-282518-7

Date Collected: 05/29/24 15:27

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 03:50
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:31
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:27
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:11
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

## Client Sample ID: MW-15R

Lab Sample ID: 310-282518-8

Date Collected: 05/29/24 09:06

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 04:12
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:35
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:29
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:13
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

## Client Sample ID: MW-39

Lab Sample ID: 310-282518-9

Date Collected: 05/29/24 19:08

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 04:34

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-39**

**Lab Sample ID: 310-282518-9**

Date Collected: 05/29/24 19:08

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		4	424666	NFT2	EET CF	06/14/24 16:38
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:32
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:15
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-282518-10**

Date Collected: 05/29/24 09:58

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 04:55
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:42
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:34
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:17
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-44**

**Lab Sample ID: 310-282518-11**

Date Collected: 05/29/24 16:13

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 05:17
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:49
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:38
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:30
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: MW-DC**

**Lab Sample ID: 310-282518-12**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 05:39
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 16:53

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

**Client Sample ID: MW-DC**

**Lab Sample ID: 310-282518-12**

Date Collected: 05/30/24 08:40

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424025	DHM5	EET CF	06/07/24 15:49
Total/NA	Prep	3005A			423406	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 15:33
Total/NA	Analysis	I-3765-85		1	423431	DGU1	EET CF	06/04/24 07:45

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282518-13**

Date Collected: 05/30/24 00:00

Matrix: Groundwater

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 02:01

\* This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

**Laboratory References:**

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

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

# Accreditation/Certification Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

## 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
8260D		Groundwater	1,2,4-Trichlorobenzene
8260D		Groundwater	Allyl chloride
8260D		Groundwater	Ethyl methacrylate

## Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	082	05-01-26

## Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-24 *

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

# Method Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill Closed 1st 2024 HMSP

Job ID: 310-282518-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
9012B	Cyanide, Total and/or Amenable	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

#### Protocol References:

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

#### Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401  
EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200  
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



Environment Testing  
America



310-282518 Chain of Custody

**Cooler/Sample Receipt and Temperature Log Form**

<b>Client Information</b>			
Client: <u>PCS Engineer</u>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>5/31/24</u>	<u>1600</u>	<u>JS</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: _____			
<b>Condition of Cooler/Containers:</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<u>MW-11, MW-12, MW-13R, MW-9R</u>			
<b>Temperature Record</b>			
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>26</u>	Corrected Temp (°C): <u>26</u>	
<b>Sample Container Temperature</b>			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			





Environment Testing  
America

Place COC scanning label  
here

Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>SCS Engineer</u>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>5/31/24</u>	<u>1600</u>	<u>SK</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: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>2</u>
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?		<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
<u>MW-15C, MW-7, MW-10R, MW-39, MW-44, MW-DC, MW-15R, MW-14R, Trip Blank</u>			
<b>Temperature Record</b>			
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>0.2</u>		Corrected Temp (°C): <u>0.2</u>	
*Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			

Client Information		Sample Information		Lab PM		Carrier Tracking No(s)		COC No:							
Client Contact: Nathan Ohrt		Sample: <i>Manuel Mojon</i>		Yang, Mary E				310-93563-25680 1							
Company: SCS Engineers		Phone: 5-6-2012		E-Mail: Mary.Yang@ETEurofinsUS.com		State of Origin:		Page: Page 1 of 2							
Address: 1690 All State Court Suite 100		Due Date Requested:		PWSID:		Analysis Requested		Job #:							
City: West Des Moines		TAT Requested (days):				6020B - Volatile Appendix I Sublist		Preservation Codes: D - HNO3 A - HCL N - None CB - ZnAcetate/NaOH B - NaOH							
State Zip: IA, 50265		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No				6020B - (MOD) As, Ba, Co, Pb, Ni		Other:							
Phone: 27223105 24		PO #: 27223105 24				9034 Calc - Sulfide		Total Number of Containers							
Email: nohrt@scsengineers.com		WO #:				9081B, 9082A, 9270E									
Project Name: Cherokee Landfill Closed 1st 2024 HMSP Event Desc: 1st 2024		Project #: 31006308				9020B, 7470A - Appendix II Metals									
Site: Iowa		SSOW#:				9012B - Cyanide, Total									
						8016C, DAI - Nonhalogenated Organic Compounds - Dreo									
						815A - (MOD) 815A									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - Appendix I Sublist	9034 Calc - Sulfide	8020B - Volatile Appendix II Sublist	9081B, 9082A, 9270E	9020B, 7470A - Appendix II Metals	9012B - Cyanide, Total	8016C, DAI - Nonhalogenated Organic Compounds - Dreo	815A - (MOD) 815A	Special Instructions/Note:
MW-11	5/20/24	9:20	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X							*SUB method 9034 Sulfide to Chicago
MW-7	5/16/24	9:34	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X							**SUB method 8151 to Lancaster
MW-9R	5/13/24	1:46	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X							
MW-10R	5/3/24	12:34	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-12	5/13/24	2:57	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-13R	5/22/24	8:20	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-14R	5/24/24	15:27	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-15R	5/24/24	06	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-39	5/29/24	19:08	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-15C	5/29/24	9:58	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						
MW-44	5/29/24	03	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	X	X						

**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** *Manuel Mojon* Date/Time: 5/24/24 00 Company: SCS

**Relinquished by** \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

**Relinquished by** \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

**Custody Seals Intact:**  Yes  No **Custody Seal No.** \_\_\_\_\_

**Special Instructions/QC Requirements:** \_\_\_\_\_

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

**Method of Shipment:** \_\_\_\_\_

**Received by** \_\_\_\_\_ Date/Time: 5/27/24 11:00 Company: \_\_\_\_\_

**Received by** \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

**Received by** \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

**Cooler Temperature(s) °C and Other Remarks:** \_\_\_\_\_

<b>Client Information</b> Client Contact: <i>Meredith Moore</i> Nathaniel Oht Company: SCS Engineers Address: 1690 All State Court Suite 100 City: West Des Moines State, Zip: IA, 50265 Phone: 27223105 24 Email: noht@scsengineers.com Project Name: Cherokee Landfill Closed 1st 2024 HMSP Event Desc: 1st 2024 Site: Iowa PWSID:		Lab PM: Yang, Mary E E-Mail: Mary Yang@ET EurofinsUS.com Carrier Tracking No(s): 310-93563-25680 2 State of Origin:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: 27223105 24 WO #: Project #: 31006308 SSOW#:		Analysis Requested 6020B - (MOD) As, Ba, Co, Pb, Ni 904_Calc - Sulfide* 8260D - Volatile Appendix I Sublist 8260D - Volatile Appendix I Sublist 8081B, 8082A, 8270E 6020B, 7470A - Appendix II Metals 9012B - Cyanide, Total 8016C, DAL - Nonhalogenated Organic Compounds - Direct 8161A - (MOD) 8161A** Total Number of Containers:	
Sample Identification MW-DC Trip Blank		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 6020B - Appendix I <input checked="" type="checkbox"/> 8260D - Volatile Appendix I Sublist <input checked="" type="checkbox"/> 1,3765_86 - Total Suspended Solids <input checked="" type="checkbox"/> 6020B - (MOD) As, Ba, Co, Pb, Ni <input checked="" type="checkbox"/> 904_Calc - Sulfide* <input checked="" type="checkbox"/> 8260D - Volatile Appendix I Sublist <input checked="" type="checkbox"/> 8081B, 8082A, 8270E <input checked="" type="checkbox"/> 6020B, 7470A - Appendix II Metals <input checked="" type="checkbox"/> 9012B - Cyanide, Total <input checked="" type="checkbox"/> 8016C, DAL - Nonhalogenated Organic Compounds - Direct <input checked="" type="checkbox"/> 8161A - (MOD) 8161A** <input checked="" type="checkbox"/> Special Instructions/Notes:	
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)		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	
Empty Kit Relinquished by Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Method of Shipment: Date/Time: 5-31-24 1600 Date/Time: <i>MU</i> Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	



**Eurofins Cedar Falls**

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

**Chain of Custody Record**



Environment Testing

<b>Client Information (Sub Contract Lab)</b>			Sampler:		Lab PM: Yang, Mary E		Carrier Tracking No(s):		COC No: 310-73041.1			
Client Contact:			Phone:		E-Mail: Mary.Yang@ET.EurofinsUS.com		State of Origin: Iowa		Page: Page 1 of 1			
Company: Eurofins Lancaster Laboratories Environm					Accreditations Required (See note): State - Iowa; State Program - Iowa					Job #: 310-282518-1		
Address: 2425 New Holland Pike, City: Lancaster State, Zip: PA, 17601 Phone: 717-656-2300(Tel) Email:			Due Date Requested: 6/13/2024 TAT Requested (days):		<b>Analysis Requested</b>						Preservation Codes:	
Project Name: Cherokee Landfill Closed 1st 2024 HMSP Site: 310-SCS Cherokee County Landfill			Project #: 31006308 SSOW#:									
<b>Sample Identification - Client ID (Lab ID)</b>			<b>Sample Date</b>		<b>Sample Time</b>	<b>Sample Type</b> (C=comp, G=grab)	<b>Matrix</b> (W=water, S=solid, O=water/Oil, BT=Tissue, A=Air)	X	X	2	Special Instructions/Note:	
MW-12 (310-282518-5)			5/30/24		10:57 Central		Water	X	X	2		
MW-13R (310-282518-6)			5/30/24		08:40 Central		Water	X	X	2		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.</p>												
<b>Possible Hazard Identification</b>					<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>							
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Deliverable Requested: I, II, III, IV, Other (specify)				Primary Deliverable Rank: 2		Special Instructions/QC Requirements:						
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:					
Relinquished by: <i>[Signature]</i>			Date/Time: 6/24/24 11:55		Company:		Received by: <i>[Signature]</i>		Date/Time: 6/24/24 11:55		Company: EUEP	
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:			Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>11/9/1.5</i>								

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

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-282518-1

**Login Number: 282518**

**List Source: Eurofins Cedar Falls**

**List Number: 1**

**Creator: Costello, Mackenzie K**

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



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-282518-1

**Login Number: 282518**

**List Number: 3**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

**List Creation: 06/04/24 06:32 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-282518-1

**Login Number: 282518**

**List Number: 2**

**Creator: McCaskey, Jonathan**

**List Source: Eurofins Lancaster Laboratories Environment Testing, LLC**

**List Creation: 06/04/24 01:51 PM**

Question	Answer	Comment
The cooler's custody seal is 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 acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required (<math>\leq 6^{\circ}\text{C}</math>, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	





# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 6/17/2024 8:54:13 AM

## JOB DESCRIPTION

Cherokee Landfill-Open 1st 2024 HMSP

## JOB NUMBER

310-282522-1

# Eurofins Cedar Falls

## Job Notes

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

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

## Authorization



Generated  
6/17/2024 8:54:13 AM

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



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# Case Narrative

Client: SCS Engineers  
Project: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Job ID: 310-282522-1**

**Eurofins Cedar Falls**

## Job Narrative 310-282522-1

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

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

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

### Receipt

The samples were received on 5/31/2024 4:00 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

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: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-282522-1	MW-16	Water	05/29/24 11:52	05/31/24 16:00
310-282522-2	MW-27	Water	05/29/24 13:24	05/31/24 16:00
310-282522-3	MW-35	Water	05/29/24 18:23	05/31/24 16:00
310-282522-4	MW-42R	Water	05/29/24 17:13	05/31/24 16:00
310-282522-5	GWD-2	Water	05/29/24 12:23	05/31/24 16:00
310-282522-6	MW-DO	Water	05/29/24 13:24	05/31/24 16:00
310-282522-7	Trip Blank	Water	05/29/24 00:00	05/31/24 16:00

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

# Detection Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

## Client Sample ID: MW-16

Lab Sample ID: 310-282522-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.221		0.00200	0.000660	mg/L	1		6020B	Total/NA
Nickel	0.00716		0.00500	0.00210	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-27

Lab Sample ID: 310-282522-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0323		0.00200	0.000660	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-35

Lab Sample ID: 310-282522-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0170		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00329		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0243		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.63		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-42R

Lab Sample ID: 310-282522-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0158		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00365		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00222	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0100		0.00500	0.00210	mg/L	1		6020B	Total/NA

## Client Sample ID: GWD-2

Lab Sample ID: 310-282522-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00698		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.336		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00636		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0216		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-DO

Lab Sample ID: 310-282522-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0315		0.00200	0.000660	mg/L	1		6020B	Total/NA

## Client Sample ID: Trip Blank

Lab Sample ID: 310-282522-7

No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-16**

**Lab Sample ID: 310-282522-1**

Date Collected: 05/29/24 11:52

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 06:01	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 06:01	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 06:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 06:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 06:01	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 06:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 06:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 06:01	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 06:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 06:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 06:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 06:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 06:01	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 06:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 06:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 06:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 06:01	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 06:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 06:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 06:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 06:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 06:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 06:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 06:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 06:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 06:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 06:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 06:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 06:01	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 06:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 06:01	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 06:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 06:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 06:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 06:01	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 06:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 06:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 06:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 06:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 06:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 06:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 06:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 06:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 06:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 06:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 06:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 06:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/04/24 06:01	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-16**

**Lab Sample ID: 310-282522-1**

Date Collected: 05/29/24 11:52

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130		06/04/24 06:01	1
Toluene-d8 (Surr)	97		80 - 120		06/04/24 06:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 14:50	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:37	1
<b>Barium</b>	<b>0.221</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:37	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:37	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:37	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:37	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:05	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:37	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:05	1
<b>Nickel</b>	<b>0.00716</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:37	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:37	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:38	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:37	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:05	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 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	1.39	mg/L			06/04/24 06:59	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-27**

**Lab Sample ID: 310-282522-2**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 06:23	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 06:23	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 06:23	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 06:23	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 06:23	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 06:23	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 06:23	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 06:23	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 06:23	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 06:23	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 06:23	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 06:23	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 06:23	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 06:23	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 06:23	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 06:23	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 06:23	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 06:23	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 06:23	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 06:23	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 06:23	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 06:23	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 06:23	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 06:23	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 06:23	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 06:23	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 06:23	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 06:23	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 06:23	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 06:23	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 06:23	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 06:23	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 06:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 06:23	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 06:23	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 06:23	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 06:23	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 06:23	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 06:23	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 06:23	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 06:23	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 06:23	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 06:23	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 06:23	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 06:23	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 06:23	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 06:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/04/24 06:23	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-27**

**Lab Sample ID: 310-282522-2**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130		06/04/24 06:23	1
Toluene-d8 (Surr)	98		80 - 120		06/04/24 06:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 14:53	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:39	1
<b>Barium</b>	<b>0.0323</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:39	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:39	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:39	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:39	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:09	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:39	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:09	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:39	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:39	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:41	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:39	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:09	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 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	1.39	mg/L			06/04/24 06:59	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-35**

**Lab Sample ID: 310-282522-3**

Date Collected: 05/29/24 18:23

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 06:44	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 06:44	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 06:44	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 06:44	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 06:44	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 06:44	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 06:44	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 06:44	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 06:44	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 06:44	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 06:44	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 06:44	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 06:44	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 06:44	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 06:44	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 06:44	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 06:44	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 06:44	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 06:44	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 06:44	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 06:44	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 06:44	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 06:44	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 06:44	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 06:44	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 06:44	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 06:44	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 06:44	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 06:44	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 06:44	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 06:44	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 06:44	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 06:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 06:44	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 06:44	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 06:44	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 06:44	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 06:44	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 06:44	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 06:44	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 06:44	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 06:44	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 06:44	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 06:44	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 06:44	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 06:44	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 06:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		06/04/24 06:44	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-35**

**Lab Sample ID: 310-282522-3**

Date Collected: 05/29/24 18:23

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		06/04/24 06:44	1
Toluene-d8 (Surr)	97		80 - 120		06/04/24 06:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 14:57	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:41	1
<b>Barium</b>	<b>0.0170</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:41	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:41	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:41	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:41	1
<b>Cobalt</b>	<b>0.00329</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:12	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:41	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:12	1
<b>Nickel</b>	<b>0.0243</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:41	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:41	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:43	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:41	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:12	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 17:41	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>5.63</b>		1.88	1.39	mg/L			06/04/24 06:59	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-282522-4**

Date Collected: 05/29/24 17:13

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 07:06	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 07:06	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 07:06	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 07:06	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 07:06	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 07:06	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 07:06	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 07:06	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 07:06	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 07:06	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 07:06	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 07:06	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 07:06	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 07:06	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 07:06	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 07:06	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 07:06	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 07:06	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 07:06	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 07:06	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 07:06	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 07:06	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 07:06	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 07:06	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 07:06	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 07:06	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 07:06	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 07:06	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 07:06	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 07:06	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 07:06	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 07:06	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 07:06	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 07:06	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 07:06	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 07:06	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 07:06	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 07:06	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 07:06	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 07:06	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 07:06	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 07:06	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 07:06	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 07:06	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 07:06	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 07:06	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 07:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120		06/04/24 07:06	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-282522-4**

Date Collected: 05/29/24 17:13

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		73 - 130		06/04/24 07:06	1
Toluene-d8 (Surr)	96		80 - 120		06/04/24 07:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 15:01	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:43	1
<b>Barium</b>	<b>0.0158</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:43	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:43	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:43	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:43	1
<b>Cobalt</b>	<b>0.00365</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:16	1
<b>Copper</b>	<b>0.00222 J</b>		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:43	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:16	1
<b>Nickel</b>	<b>0.0100</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:43	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:43	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:45	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:43	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:16	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 17:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			06/04/24 06:59	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: GWD-2**

**Lab Sample ID: 310-282522-5**

Date Collected: 05/29/24 12:23

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 07:28	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 07:28	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 07:28	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 07:28	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 07:28	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 07:28	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 07:28	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 07:28	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 07:28	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 07:28	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 07:28	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 07:28	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 07:28	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 07:28	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 07:28	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 07:28	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 07:28	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 07:28	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 07:28	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 07:28	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 07:28	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 07:28	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 07:28	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 07:28	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 07:28	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 07:28	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 07:28	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 07:28	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 07:28	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 07:28	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 07:28	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 07:28	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 07:28	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 07:28	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 07:28	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 07:28	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 07:28	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 07:28	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 07:28	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 07:28	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 07:28	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 07:28	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 07:28	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 07:28	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 07:28	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 07:28	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 07:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		06/04/24 07:28	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: GWD-2**

**Lab Sample ID: 310-282522-5**

Date Collected: 05/29/24 12:23

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		06/04/24 07:28	1
Toluene-d8 (Surr)	97		80 - 120		06/04/24 07:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 15:04	1
<b>Arsenic</b>	<b>0.00698</b>		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:46	1
<b>Barium</b>	<b>0.336</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:46	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:46	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:46	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:46	1
<b>Cobalt</b>	<b>0.00636</b>		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:19	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:46	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:19	1
<b>Nickel</b>	<b>0.0216</b>		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:46	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:46	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:47	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:46	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:19	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 17:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>11.0</b>		5.00	3.70	mg/L			06/04/24 06:59	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-DO**

**Lab Sample ID: 310-282522-6**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 07:50	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 07:50	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 07:50	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 07:50	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 07:50	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 07:50	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 07:50	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 07:50	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 07:50	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 07:50	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 07:50	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 07:50	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 07:50	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 07:50	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 07:50	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 07:50	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 07:50	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 07:50	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 07:50	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 07:50	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 07:50	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 07:50	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 07:50	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 07:50	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 07:50	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 07:50	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 07:50	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 07:50	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 07:50	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 07:50	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 07:50	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 07:50	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 07:50	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 07:50	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 07:50	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 07:50	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 07:50	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 07:50	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 07:50	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 07:50	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 07:50	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 07:50	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 07:50	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 07:50	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 07:50	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 07:50	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		06/04/24 07:50	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-DO**

**Lab Sample ID: 310-282522-6**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		73 - 130		06/04/24 07:50	1
Toluene-d8 (Surr)	98		80 - 120		06/04/24 07:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 15:08	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/06/24 17:48	1
<b>Barium</b>	<b>0.0315</b>		0.00200	0.000660	mg/L		06/04/24 09:15	06/06/24 17:48	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/06/24 17:48	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/06/24 17:48	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/06/24 17:48	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/13/24 16:37	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/06/24 17:48	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/13/24 16:37	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/06/24 17:48	1
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/06/24 17:48	1
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:58	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/06/24 17:48	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/13/24 16:37	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/06/24 17:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			06/04/24 06:59	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282522-7**

Date Collected: 05/29/24 00:00

Matrix: Water

Date Received: 05/31/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 02:23	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 02:23	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 02:23	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 02:23	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 02:23	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 02:23	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 02:23	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 02:23	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 02:23	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 02:23	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 02:23	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 02:23	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 02:23	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 02:23	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 02:23	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 02:23	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 02:23	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 02:23	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 02:23	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 02:23	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 02:23	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 02:23	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 02:23	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 02:23	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 02:23	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 02:23	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 02:23	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 02:23	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 02:23	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 02:23	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 02:23	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 02:23	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 02:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 02:23	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 02:23	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 02:23	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 02:23	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 02:23	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 02:23	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 02:23	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 02:23	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 02:23	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 02:23	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 02:23	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 02:23	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 02:23	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		80 - 120		06/04/24 02:23	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282522-7**

Date Collected: 05/29/24 00:00

Matrix: Water

Date Received: 05/31/24 16:00

**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>
Dibromofluoromethane (Surr)	99		73 - 130		06/04/24 02:23	1
Toluene-d8 (Surr)	98		80 - 120		06/04/24 02:23	1

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# Definitions/Glossary

Client: SCS Engineers

Job ID: 310-282522-1

Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

## Qualifiers

### GC/MS VOA

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.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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



# Surrogate Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

## 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	BFB	DBFM	TOL
		(80-120)	(73-130)	(80-120)
310-282522-1	MW-16	104	101	97
310-282522-2	MW-27	104	101	98
310-282522-3	MW-35	103	102	97
310-282522-4	MW-42R	104	105	96
310-282522-5	GWD-2	107	102	97
310-282522-6	MW-DO	102	102	98
310-282522-7	Trip Blank	119	99	98
LCS 310-423352/6	Lab Control Sample	102	96	105
LCS 310-423352/7	Lab Control Sample	108	100	84
MB 310-423352/5	Method Blank	108	99	112

### Surrogate Legend

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

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

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

**Lab Sample ID: MB 310-423352/5**  
**Matrix: Water**  
**Analysis Batch: 423352**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0	3.10	ug/L			06/04/24 00:56	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			06/04/24 00:56	1
Benzene	<0.500		0.500	0.220	ug/L			06/04/24 00:56	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			06/04/24 00:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			06/04/24 00:56	1
Bromoform	<5.00		5.00	0.780	ug/L			06/04/24 00:56	1
Bromomethane	<4.00		4.00	1.10	ug/L			06/04/24 00:56	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			06/04/24 00:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			06/04/24 00:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			06/04/24 00:56	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			06/04/24 00:56	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			06/04/24 00:56	1
Chloroethane	<4.00		4.00	0.790	ug/L			06/04/24 00:56	1
Chloroform	<3.00		3.00	1.30	ug/L			06/04/24 00:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			06/04/24 00:56	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			06/04/24 00:56	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			06/04/24 00:56	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			06/04/24 00:56	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			06/04/24 00:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			06/04/24 00:56	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			06/04/24 00:56	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			06/04/24 00:56	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			06/04/24 00:56	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			06/04/24 00:56	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			06/04/24 00:56	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			06/04/24 00:56	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			06/04/24 00:56	1
2-Hexanone	<10.0		10.0	2.00	ug/L			06/04/24 00:56	1
Iodomethane	<10.0		10.0	7.00	ug/L			06/04/24 00:56	1
Methylene chloride	<5.00		5.00	1.70	ug/L			06/04/24 00:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			06/04/24 00:56	1
Styrene	<1.00		1.00	0.370	ug/L			06/04/24 00:56	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			06/04/24 00:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			06/04/24 00:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			06/04/24 00:56	1
Toluene	<1.00		1.00	0.430	ug/L			06/04/24 00:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			06/04/24 00:56	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			06/04/24 00:56	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			06/04/24 00:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			06/04/24 00:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			06/04/24 00:56	1
Trichloroethene	<1.00		1.00	0.430	ug/L			06/04/24 00:56	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			06/04/24 00:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			06/04/24 00:56	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			06/04/24 00:56	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			06/04/24 00:56	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			06/04/24 00:56	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

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

Lab Sample ID: MB 310-423352/5

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		80 - 120		06/04/24 00:56	1
Dibromofluoromethane (Surr)	99		73 - 130		06/04/24 00:56	1
Toluene-d8 (Surr)	112		80 - 120		06/04/24 00:56	1

Lab Sample ID: LCS 310-423352/6

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrylonitrile	200	193.3		ug/L		97	50 - 150
Benzene	20.0	20.30		ug/L		102	72 - 124
Bromochloromethane	20.0	19.65		ug/L		98	73 - 130
Bromodichloromethane	20.0	22.27		ug/L		111	74 - 122
Bromoform	20.0	15.92		ug/L		80	61 - 122
2-Butanone (MEK)	40.0	40.10		ug/L		100	50 - 150
Carbon disulfide	20.0	20.55		ug/L		103	59 - 135
Carbon tetrachloride	20.0	20.07		ug/L		100	67 - 132
Chlorobenzene	20.0	20.10		ug/L		101	76 - 120
Chlorodibromomethane	20.0	21.98		ug/L		110	71 - 121
Chloroform	20.0	19.54		ug/L		98	72 - 125
cis-1,2-Dichloroethene	20.0	19.81		ug/L		99	74 - 123
cis-1,3-Dichloropropene	20.0	23.34		ug/L		117	71 - 125
1,2-Dibromo-3-chloropropane	20.0	18.96		ug/L		95	50 - 150
1,2-Dibromoethane (EDB)	20.0	22.63		ug/L		113	75 - 125
Dibromomethane	20.0	19.49		ug/L		97	74 - 125
1,2-Dichlorobenzene	20.0	20.19		ug/L		101	74 - 120
1,4-Dichlorobenzene	20.0	19.28		ug/L		96	72 - 120
1,1-Dichloroethane	20.0	19.94		ug/L		100	70 - 127
1,2-Dichloroethane	20.0	18.64		ug/L		93	71 - 125
1,1-Dichloroethene	20.0	19.48		ug/L		97	63 - 132
1,2-Dichloropropane	20.0	20.56		ug/L		103	73 - 124
Ethylbenzene	20.0	21.49		ug/L		107	74 - 122
2-Hexanone	40.0	45.51		ug/L		114	60 - 140
Iodomethane	20.0	8.705	J	ug/L		44	10 - 150
Methylene chloride	20.0	21.73		ug/L		109	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	46.68		ug/L		117	60 - 139
Styrene	20.0	17.78		ug/L		89	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.68		ug/L		98	71 - 120
1,1,2,2-Tetrachloroethane	20.0	17.10		ug/L		85	68 - 124
Tetrachloroethene	20.0	22.55		ug/L		113	71 - 130
Toluene	20.0	23.34		ug/L		117	74 - 123
trans-1,4-Dichloro-2-butene	20.0	14.07		ug/L		70	50 - 150
trans-1,2-Dichloroethene	20.0	19.76		ug/L		99	70 - 126
trans-1,3-Dichloropropene	20.0	22.31		ug/L		112	69 - 123
1,1,1-Trichloroethane	20.0	19.42		ug/L		97	73 - 129
1,1,2-Trichloroethane	20.0	23.75		ug/L		119	73 - 123
Trichloroethene	20.0	20.51		ug/L		103	72 - 126

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

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

Lab Sample ID: LCS 310-423352/6

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	20.0	16.45		ug/L		82	65 - 127
Vinyl acetate	40.0	36.62		ug/L		92	50 - 150
Xylenes, Total	40.0	38.88		ug/L		97	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	96		73 - 130
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: LCS 310-423352/7

Matrix: Water

Analysis Batch: 423352

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	14.40		ug/L		72	23 - 150
Chloroethane	20.0	21.34		ug/L		107	54 - 136
Chloromethane	20.0	21.88		ug/L		109	38 - 150
Trichlorofluoromethane	20.0	23.12		ug/L		116	54 - 149
Vinyl chloride	20.0	22.69		ug/L		113	56 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		80 - 120
Dibromofluoromethane (Surr)	100		73 - 130
Toluene-d8 (Surr)	84		80 - 120

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

Lab Sample ID: MB 310-423407/1-A

Matrix: Water

Analysis Batch: 424663

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00100		0.00100	0.000500	mg/L		06/04/24 09:15	06/14/24 14:34	1

Lab Sample ID: MB 310-423407/1-A

Matrix: Water

Analysis Batch: 424666

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 423407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		06/04/24 09:15	06/14/24 14:43	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		06/04/24 09:15	06/14/24 14:43	1
Barium	<0.00200		0.00200	0.000660	mg/L		06/04/24 09:15	06/14/24 14:43	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		06/04/24 09:15	06/14/24 14:43	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		06/04/24 09:15	06/14/24 14:43	1
Chromium	<0.00500		0.00500	0.00120	mg/L		06/04/24 09:15	06/14/24 14:43	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		06/04/24 09:15	06/14/24 14:43	1
Copper	<0.00500		0.00500	0.00180	mg/L		06/04/24 09:15	06/14/24 14:43	1
Lead	<0.000500		0.000500	0.000260	mg/L		06/04/24 09:15	06/14/24 14:43	1
Nickel	<0.00500		0.00500	0.00210	mg/L		06/04/24 09:15	06/14/24 14:43	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

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

Lab Sample ID: MB 310-423407/1-A  
 Matrix: Water  
 Analysis Batch: 424666

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 423407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00500		0.00500	0.00140	mg/L		06/04/24 09:15	06/14/24 14:43	1
Thallium	<0.00100		0.00100	0.000570	mg/L		06/04/24 09:15	06/14/24 14:43	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		06/04/24 09:15	06/14/24 14:43	1
Zinc	<0.0200		0.0200	0.00970	mg/L		06/04/24 09:15	06/14/24 14:43	1

Lab Sample ID: LCS 310-423407/2-A  
 Matrix: Water  
 Analysis Batch: 424663

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 423407

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	0.100	0.1102		mg/L		110	80 - 120

Lab Sample ID: LCS 310-423407/2-A  
 Matrix: Water  
 Analysis Batch: 424666

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 423407

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.1949		mg/L		97	80 - 120
Arsenic	0.200	0.1873		mg/L		94	80 - 120
Barium	0.100	0.1005		mg/L		101	80 - 120
Beryllium	0.100	0.09989		mg/L		100	80 - 120
Cadmium	0.100	0.09382		mg/L		94	80 - 120
Chromium	0.100	0.09804		mg/L		98	80 - 120
Cobalt	0.100	0.09684		mg/L		97	80 - 120
Copper	0.200	0.1959		mg/L		98	80 - 120
Lead	0.200	0.1972		mg/L		99	80 - 120
Nickel	0.200	0.1988		mg/L		99	80 - 120
Selenium	0.400	0.3703		mg/L		93	80 - 120
Thallium	0.100	0.08762		mg/L		88	80 - 120
Vanadium	0.100	0.09673		mg/L		97	80 - 120
Zinc	0.200	0.1923		mg/L		96	80 - 120

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

Lab Sample ID: MB 310-423425/1  
 Matrix: Water  
 Analysis Batch: 423425

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			06/04/24 06:59	1

Lab Sample ID: LCS 310-423425/2  
 Matrix: Water  
 Analysis Batch: 423425

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	89.00		mg/L		89	81 - 116

# QC Association Summary

Client: SCS Engineers  
Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

## GC/MS VOA

### Analysis Batch: 423352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	8260D	
310-282522-2	MW-27	Total/NA	Water	8260D	
310-282522-3	MW-35	Total/NA	Water	8260D	
310-282522-4	MW-42R	Total/NA	Water	8260D	
310-282522-5	GWD-2	Total/NA	Water	8260D	
310-282522-6	MW-DO	Total/NA	Water	8260D	
310-282522-7	Trip Blank	Total/NA	Water	8260D	
MB 310-423352/5	Method Blank	Total/NA	Water	8260D	
LCS 310-423352/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-423352/7	Lab Control Sample	Total/NA	Water	8260D	

## Metals

### Prep Batch: 423407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	3005A	
310-282522-2	MW-27	Total/NA	Water	3005A	
310-282522-3	MW-35	Total/NA	Water	3005A	
310-282522-4	MW-42R	Total/NA	Water	3005A	
310-282522-5	GWD-2	Total/NA	Water	3005A	
310-282522-6	MW-DO	Total/NA	Water	3005A	
MB 310-423407/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-423407/2-A	Lab Control Sample	Total/NA	Water	3005A	

### Analysis Batch: 423881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	6020B	423407
310-282522-2	MW-27	Total/NA	Water	6020B	423407
310-282522-3	MW-35	Total/NA	Water	6020B	423407
310-282522-4	MW-42R	Total/NA	Water	6020B	423407
310-282522-5	GWD-2	Total/NA	Water	6020B	423407
310-282522-6	MW-DO	Total/NA	Water	6020B	423407

### Analysis Batch: 424568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	6020B	423407
310-282522-2	MW-27	Total/NA	Water	6020B	423407
310-282522-3	MW-35	Total/NA	Water	6020B	423407
310-282522-4	MW-42R	Total/NA	Water	6020B	423407
310-282522-5	GWD-2	Total/NA	Water	6020B	423407
310-282522-6	MW-DO	Total/NA	Water	6020B	423407

### Analysis Batch: 424663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	6020B	423407
310-282522-2	MW-27	Total/NA	Water	6020B	423407
310-282522-3	MW-35	Total/NA	Water	6020B	423407
310-282522-4	MW-42R	Total/NA	Water	6020B	423407
310-282522-5	GWD-2	Total/NA	Water	6020B	423407
310-282522-6	MW-DO	Total/NA	Water	6020B	423407
MB 310-423407/1-A	Method Blank	Total/NA	Water	6020B	423407

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# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

## Metals (Continued)

### Analysis Batch: 424663 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-423407/2-A	Lab Control Sample	Total/NA	Water	6020B	423407

### Analysis Batch: 424666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	6020B	423407
310-282522-2	MW-27	Total/NA	Water	6020B	423407
310-282522-3	MW-35	Total/NA	Water	6020B	423407
310-282522-4	MW-42R	Total/NA	Water	6020B	423407
310-282522-5	GWD-2	Total/NA	Water	6020B	423407
310-282522-6	MW-DO	Total/NA	Water	6020B	423407
MB 310-423407/1-A	Method Blank	Total/NA	Water	6020B	423407
LCS 310-423407/2-A	Lab Control Sample	Total/NA	Water	6020B	423407

## General Chemistry

### Analysis Batch: 423425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-282522-1	MW-16	Total/NA	Water	I-3765-85	
310-282522-2	MW-27	Total/NA	Water	I-3765-85	
310-282522-3	MW-35	Total/NA	Water	I-3765-85	
310-282522-4	MW-42R	Total/NA	Water	I-3765-85	
310-282522-5	GWD-2	Total/NA	Water	I-3765-85	
310-282522-6	MW-DO	Total/NA	Water	I-3765-85	
MB 310-423425/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-423425/2	Lab Control Sample	Total/NA	Water	I-3765-85	



# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-16**

**Lab Sample ID: 310-282522-1**

Date Collected: 05/29/24 11:52

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 06:01
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:05
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 14:50
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:37
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:38
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

**Client Sample ID: MW-27**

**Lab Sample ID: 310-282522-2**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 06:23
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:09
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 14:53
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:39
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:41
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

**Client Sample ID: MW-35**

**Lab Sample ID: 310-282522-3**

Date Collected: 05/29/24 18:23

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 06:44
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:12
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 14:57
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:41
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:43
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-282522-4**

Date Collected: 05/29/24 17:13

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 07:06
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:16
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 15:01
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:43
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:45
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

**Client Sample ID: GWD-2**

**Lab Sample ID: 310-282522-5**

Date Collected: 05/29/24 12:23

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 07:28
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:19
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 15:04
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:46
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:47
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

**Client Sample ID: MW-DO**

**Lab Sample ID: 310-282522-6**

Date Collected: 05/29/24 13:24

Matrix: Water

Date Received: 05/31/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 07:50
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424568	NFT2	EET CF	06/13/24 16:37
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424666	NFT2	EET CF	06/14/24 15:08
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	423881	NFT2	EET CF	06/06/24 17:48
Total/NA	Prep	3005A			423407	KM3E	EET CF	06/04/24 09:15
Total/NA	Analysis	6020B		1	424663	NFT2	EET CF	06/14/24 14:58
Total/NA	Analysis	I-3765-85		1	423425	DGU1	EET CF	06/04/24 06:59

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

Job ID: 310-282522-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-282522-7**

**Date Collected: 05/29/24 00:00**

**Matrix: Water**

**Date Received: 05/31/24 16:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	423352	WSE8	EET CF	06/04/24 02:23

**Laboratory References:**

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

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# Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-282522-1

Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

## Laboratory: Eurofins Cedar Falls

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

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

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# Method Summary

Client: SCS Engineers

Job ID: 310-282522-1

Project/Site: Cherokee Landfill-Open 1st 2024 HMSP

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



310-282522 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>SCS Engineers</u>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>5/31/24</u>	<u>1600</u>	<u>[Signature]</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: _____			
<b>Condition of Cooler/Containers</b>			
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? ↓			
<b>Temperature Record</b>			
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>-0.1</u>		Corrected Temp (°C): <u>-0.1</u>	
*Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			

**Chain of Custody Record**

<b>Client Information</b> Client Contact: <b>Nathan Ohrt</b> Company: <b>SCS Engineers</b> Address: <b>1690 All State Court Suite 100</b> City: <b>West Des Moines</b> State, Zip: <b>IA, 50265</b> Phone: <b>27223105 24</b> Email: <b>nohrt@scsengineers.com</b> Project Name: <b>Cherokee Landfill-Open 1st 2024 HMSP</b> Site: <b>Iowa</b>			<b>Sampler</b> Lab PI#: <b>Yang, Mary E</b> E-Mail: <b>Mary Yang@ET EurofinsUS.com</b> PWSID:			Carrier Tracking No(s): State of Origin:			COC No: <b>310-93456-23846 1</b> Page: <b>Page 1 of 1</b> Job #:		
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: <b>27223105 24</b> WO #:			Analysis Requested			Preservation Codes: D - HNO3 A - HCL N - None Other:			Total Number of Containers:		
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=ore/sediment, L=leachate, A=air) Preservation Code: Field Filtered Sample (Yes or No) [X] Perform MS/MSD (Yes or No) [X] 6020B - Appendix I 8260D - Volatile Appendix I Sublist I 3760.05 - Residue, Non-filterable (TSS)			Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=ore/sediment, L=leachate, A=air) Preservation Code: Field Filtered Sample (Yes or No) [X] Perform MS/MSD (Yes or No) [X] 6020B - Appendix I 8260D - Volatile Appendix I Sublist I 3760.05 - Residue, Non-filterable (TSS)			Analysis Requested			Special Instructions/Note:		
MW-16	5/29/24	11:52	Water		X		X				
MW-27	5/29/24	13:24	Water		X		X				
MW-35	5/29/24	16:23	Water		X		X				
MW-42R	5/29/24	17:13	Water		X		X				
GWD-2	5/29/24	12:22	Water		X		X				
MW-DO	5/29/24	3:24	Water		X		X				
TRIPBLANK			Water				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)											
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:											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 5/31/24 11:00 Company: SCS Relinquished by: _____ Date/Time: _____ Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____ Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:											



## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-282522-1

**Login Number: 282522**

**List Source: Eurofins Cedar Falls**

**List Number: 1**

**Creator: Bennett, Samantha**

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





# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 11/12/2024 5:12:16 PM

## JOB DESCRIPTION

Cherokee County Fall 2024 GW  
Cherokee County Landfill

## JOB NUMBER

310-293778-1

# Eurofins Cedar Falls

## Job Notes

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

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

## Authorization



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



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# Case Narrative

Client: SCS Engineers  
Project: Cherokee County Fall 2024 GW

Job ID: 310-293778-1

**Job ID: 310-293778-1**

**Eurofins Cedar Falls**

## Job Narrative 310-293778-1

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 10/26/2024 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6°C and 1.8°C.

### GC/MS VOA

Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: MW-16 (310-293778-1).

Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: MW-16 (310-293778-1).

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

### Metals

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-39 (310-293778-9). The sample(s) was preserved to the appropriate pH in the laboratory.

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: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-293778-1	MW-16	Water	10/24/24 10:59	10/26/24 16:25
310-293778-2	MW-27	Water	10/24/24 09:52	10/26/24 16:25
310-293778-3	MW-35	Water	10/24/24 12:29	10/26/24 16:25
310-293778-4	MW-42R	Water	10/23/24 18:00	10/26/24 16:25
310-293778-5	MW-15C	Water	10/23/24 16:35	10/26/24 16:25
310-293778-6	MW-44	Water	10/23/24 17:31	10/26/24 16:25
310-293778-7	MW-14R	Water	10/23/24 14:16	10/26/24 16:25
310-293778-8	MW-15R	Water	10/23/24 16:01	10/26/24 16:25
310-293778-9	MW-39	Water	10/23/24 14:53	10/26/24 16:25
310-293778-10	MW-40	Water	10/24/24 08:32	10/26/24 16:25
310-293778-11	MW-43	Water	10/23/24 15:26	10/26/24 16:25
310-293778-12	MW-D	Water	10/24/24 09:52	10/26/24 16:25
310-293778-14	Trip Blank 1	Water	10/24/24 00:00	10/26/24 16:25
310-293778-15	Trip Blank 2	Water	10/24/24 00:00	10/26/24 16:25

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# Detection Summary

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

## Client Sample ID: MW-16

## Lab Sample ID: 310-293778-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.171		0.00200	0.000660	mg/L	1		6020B	Total/NA
Nickel	0.00784		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.75		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-27

## Lab Sample ID: 310-293778-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0319		0.00200	0.000660	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.88		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-35

## Lab Sample ID: 310-293778-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00216		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0532		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000437		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.00142	J	0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.0372		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00792		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00264		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0606		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00493	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0306		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	252		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-42R

## Lab Sample ID: 310-293778-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0177		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000148	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00505		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00463	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0136		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.25		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-15C

## Lab Sample ID: 310-293778-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0842		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000301	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00705		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.88		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-44

## Lab Sample ID: 310-293778-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0118		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0193		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000294	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	54.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls



# Detection Summary

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

## Client Sample ID: MW-14R

## Lab Sample ID: 310-293778-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.511		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.543	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.947	J	1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.380	J	1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	0.394	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.000749	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0607		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0146		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0444		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.50		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-15R

## Lab Sample ID: 310-293778-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.40		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	2.57		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.453	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,2-Dichlorobenzene	0.439	J	1.00	0.370	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	1.93		1.00	0.230	ug/L	1		8260D	Total/NA
Arsenic	0.0781		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.521		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.0114		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0107		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	41.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-39

## Lab Sample ID: 310-293778-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.87		0.500	0.220	ug/L	1		8260D	Total/NA
Chlorobenzene	11.7		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.388	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	10.7		1.00	0.230	ug/L	1		8260D	Total/NA
Toluene	0.658	J	1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.0222		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	2.35		0.00800	0.00264	mg/L	4		6020B	Total/NA
Cobalt	0.00637		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000373	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0115		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00139	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	72.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-40

## Lab Sample ID: 310-293778-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0223		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	1.24		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00165		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	51.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-43

## Lab Sample ID: 310-293778-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.53		1.00	0.180	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

## Client Sample ID: MW-43 (Continued)

Lab Sample ID: 310-293778-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00112	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.487		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000763		0.000500	0.000170	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-D

Lab Sample ID: 310-293778-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0318		0.00200	0.000660	mg/L	1		6020B	Total/NA

## Client Sample ID: Trip Blank 1

Lab Sample ID: 310-293778-14

No Detections.

## Client Sample ID: Trip Blank 2

Lab Sample ID: 310-293778-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-16**

**Lab Sample ID: 310-293778-1**

Date Collected: 10/24/24 10:59

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 09:44	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 09:44	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 09:44	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 09:44	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 09:44	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 09:44	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 09:44	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 09:44	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 09:44	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 09:44	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 09:44	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 09:44	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 09:44	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 09:44	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 09:44	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 09:44	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 09:44	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 09:44	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 09:44	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 09:44	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 09:44	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 09:44	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 09:44	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 09:44	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 09:44	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 09:44	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 09:44	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 09:44	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 14:05	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 09:44	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 09:44	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 09:44	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 09:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 09:44	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 09:44	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 09:44	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 09:44	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 09:44	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 09:44	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 09:44	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 09:44	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 09:44	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 09:44	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 09:44	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 09:44	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 09:44	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 09:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		10/31/24 09:44	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-16**

**Lab Sample ID: 310-293778-1**

Date Collected: 10/24/24 10:59

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		11/01/24 14:05	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 09:44	1
Dibromofluoromethane (Surr)	103		73 - 130		11/01/24 14:05	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 09:44	1
Toluene-d8 (Surr)	102		80 - 120		11/01/24 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 21:54	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 21:54	1
<b>Barium</b>	<b>0.171</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 21:54	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 21:54	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 21:54	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 21:54	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 21:54	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 21:54	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 21:54	1
<b>Nickel</b>	<b>0.00784</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 21:54	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 21:54	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 21:54	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 21:54	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 21:54	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 21:54	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>5.75</b>		1.88	1.39	mg/L			10/30/24 13:07	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-27**

**Lab Sample ID: 310-293778-2**

Date Collected: 10/24/24 09:52

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 10:07	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 10:07	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 10:07	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 10:07	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 10:07	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 10:07	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 10:07	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 10:07	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 10:07	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 10:07	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 10:07	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 10:07	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 10:07	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 10:07	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 10:07	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 10:07	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 10:07	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 10:07	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 10:07	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 10:07	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 10:07	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 10:07	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 10:07	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 10:07	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 10:07	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 10:07	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 10:07	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 10:07	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 14:27	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 10:07	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 10:07	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 10:07	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 10:07	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 10:07	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 10:07	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 10:07	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 10:07	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 10:07	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 10:07	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 10:07	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 10:07	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 10:07	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 10:07	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 10:07	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 10:07	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 10:07	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 10:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		10/31/24 10:07	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-27**

**Lab Sample ID: 310-293778-2**

Date Collected: 10/24/24 09:52

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		11/01/24 14:27	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 10:07	1
Dibromofluoromethane (Surr)	102		73 - 130		11/01/24 14:27	1
Toluene-d8 (Surr)	97		80 - 120		10/31/24 10:07	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 14:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:03	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:03	1
<b>Barium</b>	<b>0.0319</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:03	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:03	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:03	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:03	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:03	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:03	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:03	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:03	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:03	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:03	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:03	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:03	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>1.88</b>		1.88	1.39	mg/L			10/30/24 13:07	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-35**

**Lab Sample ID: 310-293778-3**

Date Collected: 10/24/24 12:29

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 10:30	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 10:30	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 10:30	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 10:30	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 10:30	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 10:30	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 10:30	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 10:30	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 10:30	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 10:30	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 10:30	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 10:30	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 10:30	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 10:30	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 10:30	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 10:30	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 10:30	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 10:30	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 10:30	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 10:30	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 10:30	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 10:30	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 10:30	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 10:30	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 10:30	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 10:30	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 10:30	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 10:30	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 14:50	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 10:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 10:30	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 10:30	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 10:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 10:30	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 10:30	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 10:30	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 10:30	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 10:30	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 10:30	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 10:30	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 10:30	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 10:30	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 10:30	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 10:30	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 10:30	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 10:30	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 10:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		10/31/24 10:30	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-35**

**Lab Sample ID: 310-293778-3**

Date Collected: 10/24/24 12:29

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		11/01/24 14:50	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 10:30	1
Dibromofluoromethane (Surr)	104		73 - 130		11/01/24 14:50	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 10:30	1
Toluene-d8 (Surr)	95		80 - 120		11/01/24 14:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Arsenic</b>	<b>0.00216</b>		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Barium</b>	<b>0.0532</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:05	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Cadmium</b>	<b>0.000437</b>		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Chromium</b>	<b>0.00142</b>	<b>J</b>	0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Cobalt</b>	<b>0.0372</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Copper</b>	<b>0.00792</b>		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Lead</b>	<b>0.00264</b>		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Nickel</b>	<b>0.0606</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:05	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:05	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:05	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Vanadium</b>	<b>0.00493</b>	<b>J</b>	0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:05	1
<b>Zinc</b>	<b>0.0306</b>		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>252</b>		15.0	11.1	mg/L			10/30/24 13:07	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-293778-4**

Date Collected: 10/23/24 18:00

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 10:53	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 10:53	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 10:53	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 10:53	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 10:53	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 10:53	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 10:53	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 10:53	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 10:53	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 10:53	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 10:53	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 10:53	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 10:53	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 10:53	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 10:53	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 10:53	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 10:53	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 10:53	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 10:53	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 10:53	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 10:53	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 10:53	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 10:53	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 10:53	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 10:53	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 10:53	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 10:53	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 10:53	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 15:12	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 10:53	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 10:53	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 10:53	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 10:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 10:53	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 10:53	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 10:53	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 10:53	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 10:53	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 10:53	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 10:53	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 10:53	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 10:53	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 10:53	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 10:53	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 10:53	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 10:53	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 10:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		10/31/24 10:53	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-293778-4**

Date Collected: 10/23/24 18:00

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		11/01/24 15:12	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 10:53	1
Dibromofluoromethane (Surr)	103		73 - 130		11/01/24 15:12	1
Toluene-d8 (Surr)	97		80 - 120		10/31/24 10:53	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 15:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:08	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:08	1
<b>Barium</b>	<b>0.0177</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:08	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:08	1
<b>Cadmium</b>	<b>0.000148 J</b>		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:08	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:08	1
<b>Cobalt</b>	<b>0.00505</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:08	1
<b>Copper</b>	<b>0.00463 J</b>		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:08	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:08	1
<b>Nickel</b>	<b>0.0136</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:08	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:08	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:08	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:08	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:08	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>2.25</b>		1.88	1.39	mg/L			10/29/24 10:35	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-293778-5**

Date Collected: 10/23/24 16:35

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 11:16	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 11:16	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 11:16	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 11:16	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 11:16	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 11:16	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 11:16	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 11:16	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 11:16	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 11:16	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 11:16	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 11:16	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 11:16	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 11:16	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 11:16	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 11:16	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 11:16	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 11:16	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 11:16	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 11:16	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 11:16	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 11:16	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 11:16	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 11:16	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 11:16	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 11:16	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 11:16	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 11:16	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 15:35	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 11:16	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 11:16	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 11:16	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 11:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 11:16	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 11:16	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 11:16	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 11:16	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 11:16	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 11:16	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 11:16	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 11:16	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 11:16	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 11:16	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 11:16	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 11:16	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 11:16	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 11:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		10/31/24 11:16	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-293778-5**

Date Collected: 10/23/24 16:35

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		11/01/24 15:35	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 11:16	1
Dibromofluoromethane (Surr)	103		73 - 130		11/01/24 15:35	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 11:16	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:22	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:22	1
<b>Barium</b>	<b>0.0842</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:22	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:22	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:22	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:22	1
<b>Cobalt</b>	<b>0.000301</b>	<b>J</b>	0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:22	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:22	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:22	1
<b>Nickel</b>	<b>0.00705</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:22	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:22	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:22	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:22	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>2.88</b>		1.88	1.39	mg/L			10/29/24 11:21	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-44**

**Lab Sample ID: 310-293778-6**

Date Collected: 10/23/24 17:31

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 11:39	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 11:39	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 11:39	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 11:39	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 11:39	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 11:39	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 11:39	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 11:39	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 11:39	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 11:39	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 11:39	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 11:39	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 11:39	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 11:39	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 11:39	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 11:39	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 11:39	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 11:39	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 11:39	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 11:39	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 11:39	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 11:39	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 11:39	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 11:39	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 11:39	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 11:39	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 11:39	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 11:39	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 15:58	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 11:39	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 11:39	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 11:39	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 11:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 11:39	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 11:39	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 11:39	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 11:39	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 11:39	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 11:39	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 11:39	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 11:39	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 11:39	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 11:39	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 11:39	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 11:39	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 11:39	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		10/31/24 11:39	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-44**

**Lab Sample ID: 310-293778-6**

Date Collected: 10/23/24 17:31

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		11/01/24 15:58	1
Dibromofluoromethane (Surr)	102		73 - 130		10/31/24 11:39	1
Dibromofluoromethane (Surr)	103		73 - 130		11/01/24 15:58	1
Toluene-d8 (Surr)	92		80 - 120		10/31/24 11:39	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:25	1
<b>Arsenic</b>	<b>0.0118</b>		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:25	1
<b>Barium</b>	<b>0.0193</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:25	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:25	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:25	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:25	1
<b>Cobalt</b>	<b>0.000294 J</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:25	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:25	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:25	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:25	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:25	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:25	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:25	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:25	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>54.0</b>		15.0	11.1	mg/L			10/29/24 11:21	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-14R**

**Lab Sample ID: 310-293778-7**

Date Collected: 10/23/24 14:16

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 12:02	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 12:02	1
<b>Benzene</b>	<b>0.511</b>		0.500	0.220	ug/L			10/31/24 12:02	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 12:02	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 12:02	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 12:02	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 12:02	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 12:02	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 12:02	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 12:02	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 12:02	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 12:02	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 12:02	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 12:02	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 12:02	1
<b>cis-1,2-Dichloroethene</b>	<b>0.543</b>	<b>J</b>	1.00	0.210	ug/L			10/31/24 12:02	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 12:02	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 12:02	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 12:02	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 12:02	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 12:02	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 12:02	1
<b>1,1-Dichloroethane</b>	<b>0.947</b>	<b>J</b>	1.00	0.220	ug/L			10/31/24 12:02	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 12:02	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 12:02	1
<b>1,2-Dichloropropane</b>	<b>0.380</b>	<b>J</b>	1.00	0.270	ug/L			10/31/24 12:02	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 12:02	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 12:02	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 16:21	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 12:02	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 12:02	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 12:02	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 12:02	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 12:02	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 12:02	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 12:02	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 12:02	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 12:02	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 12:02	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 12:02	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 12:02	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 12:02	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 12:02	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 12:02	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 12:02	1
<b>Vinyl chloride</b>	<b>0.394</b>	<b>J</b>	1.00	0.180	ug/L			10/31/24 12:02	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 12:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		10/31/24 12:02	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-14R**

**Lab Sample ID: 310-293778-7**

Date Collected: 10/23/24 14:16

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		11/01/24 16:21	1
Dibromofluoromethane (Surr)	102		73 - 130		10/31/24 12:02	1
Dibromofluoromethane (Surr)	104		73 - 130		11/01/24 16:21	1
Toluene-d8 (Surr)	97		80 - 120		10/31/24 12:02	1
Toluene-d8 (Surr)	95		80 - 120		11/01/24 16:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:28	1
<b>Arsenic</b>	<b>0.000749</b>	<b>J</b>	0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:28	1
<b>Barium</b>	<b>0.0607</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:28	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:28	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:28	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:28	1
<b>Cobalt</b>	<b>0.0146</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:28	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:28	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:28	1
<b>Nickel</b>	<b>0.0444</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:28	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:28	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:28	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:28	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:28	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>4.50</b>		1.88	1.39	mg/L			10/29/24 10:35	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-15R**

**Lab Sample ID: 310-293778-8**

Date Collected: 10/23/24 16:01

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 12:24	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 12:24	1
<b>Benzene</b>	<b>1.40</b>		0.500	0.220	ug/L			10/31/24 12:24	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 12:24	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 12:24	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 12:24	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 12:24	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 12:24	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 12:24	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 12:24	1
<b>Chlorobenzene</b>	<b>2.57</b>		1.00	0.400	ug/L			10/31/24 12:24	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 12:24	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 12:24	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 12:24	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 12:24	1
<b>cis-1,2-Dichloroethene</b>	<b>0.453</b>	<b>J</b>	1.00	0.210	ug/L			10/31/24 12:24	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 12:24	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 12:24	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 12:24	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 12:24	1
<b>1,2-Dichlorobenzene</b>	<b>0.439</b>	<b>J</b>	1.00	0.370	ug/L			10/31/24 12:24	1
<b>1,4-Dichlorobenzene</b>	<b>1.93</b>		1.00	0.230	ug/L			10/31/24 12:24	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 12:24	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 12:24	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 12:24	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 12:24	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 12:24	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 12:24	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 16:43	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 12:24	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 12:24	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 12:24	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 12:24	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 12:24	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 12:24	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 12:24	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 12:24	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 12:24	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 12:24	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 12:24	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 12:24	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 12:24	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 12:24	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 12:24	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 12:24	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 12:24	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		10/31/24 12:24	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-15R**

**Lab Sample ID: 310-293778-8**

Date Collected: 10/23/24 16:01

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		11/01/24 16:43	1
Dibromofluoromethane (Surr)	102		73 - 130		10/31/24 12:24	1
Dibromofluoromethane (Surr)	103		73 - 130		11/01/24 16:43	1
Toluene-d8 (Surr)	97		80 - 120		10/31/24 12:24	1
Toluene-d8 (Surr)	103		80 - 120		11/01/24 16:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:31	1
<b>Arsenic</b>	<b>0.0781</b>		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:31	1
<b>Barium</b>	<b>0.521</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:31	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:31	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:31	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:31	1
<b>Cobalt</b>	<b>0.0114</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:31	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:31	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:31	1
<b>Nickel</b>	<b>0.0107</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:31	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:31	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:31	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:31	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:31	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:31	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>41.0</b>		15.0	11.1	mg/L			10/29/24 10:35	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-39**

**Lab Sample ID: 310-293778-9**

Date Collected: 10/23/24 14:53

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 12:47	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 12:47	1
<b>Benzene</b>	<b>1.87</b>		0.500	0.220	ug/L			10/31/24 12:47	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 12:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 12:47	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 12:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 12:47	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 12:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 12:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 12:47	1
<b>Chlorobenzene</b>	<b>11.7</b>		1.00	0.400	ug/L			10/31/24 12:47	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 12:47	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 12:47	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 12:47	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 12:47	1
<b>cis-1,2-Dichloroethene</b>	<b>0.388</b>	<b>J</b>	1.00	0.210	ug/L			10/31/24 12:47	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 12:47	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 12:47	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 12:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 12:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 12:47	1
<b>1,4-Dichlorobenzene</b>	<b>10.7</b>		1.00	0.230	ug/L			10/31/24 12:47	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 12:47	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 12:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 12:47	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 12:47	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 12:47	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 12:47	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 17:06	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 12:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 12:47	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 12:47	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 12:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 12:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 12:47	1
<b>Toluene</b>	<b>0.658</b>	<b>J</b>	1.00	0.430	ug/L			10/31/24 12:47	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 12:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 12:47	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 12:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 12:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 12:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 12:47	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 12:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 12:47	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 12:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 12:47	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		10/31/24 12:47	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-39**

**Lab Sample ID: 310-293778-9**

Date Collected: 10/23/24 14:53

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		11/01/24 17:06	1
Dibromofluoromethane (Surr)	102		73 - 130		10/31/24 12:47	1
Dibromofluoromethane (Surr)	102		73 - 130		11/01/24 17:06	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 12:47	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Arsenic</b>	<b>0.0222</b>		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Barium</b>	<b>2.35</b>		0.00800	0.00264	mg/L		11/05/24 09:30	11/08/24 13:01	4
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:34	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Cobalt</b>	<b>0.00637</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:34	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Lead</b>	<b>0.000373</b>	<b>J</b>	0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Nickel</b>	<b>0.0115</b>		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:34	1
<b>Vanadium</b>	<b>0.00139</b>	<b>J</b>	0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:34	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>72.0</b>		15.0	11.1	mg/L			10/29/24 10:35	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-40**

**Lab Sample ID: 310-293778-10**

Date Collected: 10/24/24 08:32

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/30/24 09:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					10/30/24 09:30	1
Dibromofluoromethane (Surr)	103		73 - 130					10/30/24 09:30	1
Toluene-d8 (Surr)	97		80 - 120					10/30/24 09:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.0223</b>		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:37	1
<b>Barium</b>	<b>1.24</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:37	1
<b>Cobalt</b>	<b>0.00165</b>		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total Suspended Solids (USGS I-3765-85)</b>	<b>51.0</b>		15.0	11.1	mg/L			10/30/24 13:07	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-43**

**Lab Sample ID: 310-293778-11**

Date Collected: 10/23/24 15:26

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	1.53		1.00	0.180	ug/L			10/30/24 09:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					10/30/24 09:53	1
Dibromofluoromethane (Surr)	101		73 - 130					10/30/24 09:53	1
Toluene-d8 (Surr)	96		80 - 120					10/30/24 09:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00112	J	0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:39	1
Barium	0.487		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:39	1
Cobalt	0.000763		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:39	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	1.39	mg/L			10/29/24 11:21	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-D**

**Lab Sample ID: 310-293778-12**

Date Collected: 10/24/24 09:52

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 13:10	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 13:10	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 13:10	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 13:10	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 13:10	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 13:10	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 13:10	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 13:10	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 13:10	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 13:10	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 13:10	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 13:10	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 13:10	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 13:10	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 13:10	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 13:10	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 13:10	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 13:10	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 13:10	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 13:10	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 13:10	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 13:10	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 13:10	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 13:10	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 13:10	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 13:10	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 13:10	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 13:10	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 17:29	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 13:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 13:10	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 13:10	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 13:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 13:10	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 13:10	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 13:10	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 13:10	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 13:10	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 13:10	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 13:10	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 13:10	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 13:10	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 13:10	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 13:10	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 13:10	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 13:10	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		10/31/24 13:10	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-D**

**Lab Sample ID: 310-293778-12**

Date Collected: 10/24/24 09:52

Matrix: Water

Date Received: 10/26/24 16:25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		11/01/24 17:29	1
Dibromofluoromethane (Surr)	101		73 - 130		10/31/24 13:10	1
Dibromofluoromethane (Surr)	102		73 - 130		11/01/24 17:29	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 13:10	1
Toluene-d8 (Surr)	98		80 - 120		11/01/24 17:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 22:45	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 22:45	1
<b>Barium</b>	<b>0.0318</b>		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 22:45	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 22:45	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 22:45	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 22:45	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 22:45	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 22:45	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 22:45	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 22:45	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 22:45	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 22:45	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 22:45	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 22:45	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 22:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			10/30/24 13:07	1



# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 310-293778-14**

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 07:05	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 07:05	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 07:05	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 07:05	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 07:05	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 07:05	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 07:05	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 07:05	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 07:05	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 07:05	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 07:05	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 07:05	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 07:05	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 07:05	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 07:05	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 07:05	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 07:05	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 07:05	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 07:05	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 07:05	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 07:05	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 07:05	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 07:05	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 07:05	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 07:05	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 07:05	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 07:05	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 07:05	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 13:42	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 07:05	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 07:05	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 07:05	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 07:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 07:05	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 07:05	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 07:05	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 07:05	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 07:05	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 07:05	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 07:05	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 07:05	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 07:05	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 07:05	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 07:05	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 07:05	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 07:05	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 07:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		10/31/24 07:05	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

**Client Sample ID: Trip Blank 1**

**Lab Sample ID: 310-293778-14**

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	101		80 - 120		11/01/24 13:42	1
Dibromofluoromethane (Surr)	100		73 - 130		10/31/24 07:05	1
Dibromofluoromethane (Surr)	100		73 - 130		11/01/24 13:42	1
Toluene-d8 (Surr)	97		80 - 120		10/31/24 07:05	1
Toluene-d8 (Surr)	96		80 - 120		11/01/24 13:42	1

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 310-293778-15**

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 12:58	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 12:58	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 12:58	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 12:58	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 12:58	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 12:58	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 12:58	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 12:58	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 12:58	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 12:58	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 12:58	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 12:58	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 12:58	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 12:58	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 12:58	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 12:58	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 12:58	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 12:58	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 12:58	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 12:58	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 12:58	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 12:58	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 12:58	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 12:58	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 12:58	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 12:58	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 12:58	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 12:58	1
Iodomethane	<10.0		10.0	7.00	ug/L			10/31/24 12:58	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 12:58	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 12:58	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 12:58	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 12:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 12:58	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 12:58	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 12:58	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 12:58	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 12:58	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 12:58	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 12:58	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 12:58	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 12:58	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 12:58	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 12:58	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 12:58	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 12:58	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 12:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		10/31/24 12:58	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

**Client Sample ID: Trip Blank 2**

**Lab Sample ID: 310-293778-15**

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

**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>
Dibromofluoromethane (Surr)	99		73 - 130		10/31/24 12:58	1
Toluene-d8 (Surr)	103		80 - 120		10/31/24 12:58	1

- 1
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- 15

# Definitions/Glossary

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

## Qualifiers

### GC/MS VOA

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.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Surrogate Summary

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County 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)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-293778-1	MW-16	101	101	96
310-293778-1	MW-16	101	103	102
310-293778-2	MW-27	100	101	97
310-293778-2	MW-27	100	102	96
310-293778-3	MW-35	101	101	96
310-293778-3	MW-35	102	104	95
310-293778-4	MW-42R	101	101	97
310-293778-4	MW-42R	98	103	96
310-293778-5	MW-15C	99	101	96
310-293778-5	MW-15C	100	103	96
310-293778-6	MW-44	106	102	92
310-293778-6	MW-44	102	103	96
310-293778-7	MW-14R	101	102	97
310-293778-7	MW-14R	101	104	95
310-293778-8	MW-15R	103	102	97
310-293778-8	MW-15R	100	103	103
310-293778-9	MW-39	99	102	96
310-293778-9	MW-39	101	102	96
310-293778-10	MW-40	99	103	97
310-293778-11	MW-43	99	101	96
310-293778-12	MW-D	101	101	96
310-293778-12	MW-D	101	102	98
310-293778-14	Trip Blank 1	100	100	97
310-293778-14	Trip Blank 1	101	100	96
310-293778-15	Trip Blank 2	102	99	103
LCS 310-437919/7	Lab Control Sample	100	101	97
LCS 310-438078/6	Lab Control Sample	100	99	99
LCS 310-438078/7	Lab Control Sample	100	101	97
LCS 310-438190/6	Lab Control Sample	99	95	108
LCS 310-438190/7	Lab Control Sample	101	100	106
LCS 310-438391/6	Lab Control Sample	104	101	98
LCS 310-438391/7	Lab Control Sample	102	102	99
MB 310-437919/5	Method Blank	100	102	96
MB 310-438078/5	Method Blank	100	100	96
MB 310-438190/5	Method Blank	103	98	104
MB 310-438391/5	Method Blank	107	102	97

**Surrogate Legend**

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

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: MB 310-437919/5**  
**Matrix: Water**  
**Analysis Batch: 437919**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/30/24 07:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					10/30/24 07:13	1
Dibromofluoromethane (Surr)	102		73 - 130					10/30/24 07:13	1
Toluene-d8 (Surr)	96		80 - 120					10/30/24 07:13	1

**Lab Sample ID: LCS 310-437919/7**  
**Matrix: Water**  
**Analysis Batch: 437919**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	20.0	17.71		ug/L		89	56 - 140
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		80 - 120				
Dibromofluoromethane (Surr)	101		73 - 130				
Toluene-d8 (Surr)	97		80 - 120				

**Lab Sample ID: MB 310-438078/5**  
**Matrix: Water**  
**Analysis Batch: 438078**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 05:11	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 05:11	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 05:11	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 05:11	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 05:11	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 05:11	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 05:11	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 05:11	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 05:11	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 05:11	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 05:11	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 05:11	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 05:11	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 05:11	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 05:11	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 05:11	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 05:11	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 05:11	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 05:11	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 05:11	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 05:11	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 05:11	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 05:11	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 05:11	1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

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

**Lab Sample ID: MB 310-438078/5**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 438078**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 05:11	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 05:11	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 05:11	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 05:11	1
Iodomethane	<10.0		10.0	7.00	ug/L			10/31/24 05:11	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 05:11	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 05:11	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 05:11	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 05:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 05:11	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 05:11	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 05:11	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 05:11	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 05:11	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 05:11	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 05:11	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 05:11	1
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 05:11	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 05:11	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 05:11	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 05:11	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 05:11	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 05:11	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		10/31/24 05:11	1
Dibromofluoromethane (Surr)	100		73 - 130		10/31/24 05:11	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 05:11	1

**Lab Sample ID: LCS 310-438078/6**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 438078**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acrylonitrile	200	214.1		ug/L		107	50 - 150
Benzene	20.0	21.34		ug/L		107	72 - 124
Bromochloromethane	20.0	21.41		ug/L		107	73 - 130
Bromodichloromethane	20.0	20.27		ug/L		101	74 - 122
Bromoform	20.0	20.03		ug/L		100	61 - 122
2-Butanone (MEK)	40.0	39.44		ug/L		99	50 - 150
Carbon disulfide	20.0	20.96		ug/L		105	59 - 135
Carbon tetrachloride	20.0	21.35		ug/L		107	67 - 132
Chlorobenzene	20.0	20.99		ug/L		105	76 - 120
Chlorodibromomethane	20.0	20.35		ug/L		102	71 - 121
Chloroform	20.0	19.65		ug/L		98	72 - 125
cis-1,2-Dichloroethene	20.0	20.95		ug/L		105	74 - 123
cis-1,3-Dichloropropene	20.0	20.13		ug/L		101	71 - 125

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438078/6**

**Matrix: Water**

**Analysis Batch: 438078**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2-Dibromo-3-chloropropane	20.0	20.78		ug/L		104	50 - 150
1,2-Dibromoethane (EDB)	20.0	21.38		ug/L		107	75 - 125
Dibromomethane	20.0	20.97		ug/L		105	74 - 125
1,2-Dichlorobenzene	20.0	20.95		ug/L		105	74 - 120
1,4-Dichlorobenzene	20.0	20.82		ug/L		104	72 - 120
1,1-Dichloroethane	20.0	20.84		ug/L		104	70 - 127
1,2-Dichloroethane	20.0	19.41		ug/L		97	71 - 125
1,1-Dichloroethane	20.0	21.20		ug/L		106	63 - 132
1,2-Dichloropropane	20.0	21.16		ug/L		106	73 - 124
Ethylbenzene	20.0	21.24		ug/L		106	74 - 122
2-Hexanone	40.0	39.93		ug/L		100	60 - 140
Iodomethane	20.0	9.404	J	ug/L		47	10 - 150
Methylene chloride	20.0	21.04		ug/L		105	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	40.85		ug/L		102	60 - 139
Styrene	20.0	21.80		ug/L		109	74 - 121
1,1,1,2-Tetrachloroethane	20.0	20.47		ug/L		102	71 - 120
1,1,2,2-Tetrachloroethane	20.0	21.41		ug/L		107	68 - 124
Tetrachloroethene	20.0	21.59		ug/L		108	71 - 130
Toluene	20.0	20.87		ug/L		104	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.03		ug/L		90	50 - 150
trans-1,2-Dichloroethene	20.0	21.20		ug/L		106	70 - 126
trans-1,3-Dichloropropene	20.0	20.13		ug/L		101	69 - 123
1,1,1-Trichloroethane	20.0	20.92		ug/L		105	73 - 129
1,1,2-Trichloroethane	20.0	21.18		ug/L		106	73 - 123
Trichloroethene	20.0	21.35		ug/L		107	72 - 126
1,2,3-Trichloropropane	20.0	20.97		ug/L		105	65 - 127
Vinyl acetate	40.0	39.57		ug/L		99	50 - 150
Xylenes, Total	40.0	42.56		ug/L		106	73 - 123

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

**Lab Sample ID: LCS 310-438078/7**

**Matrix: Water**

**Analysis Batch: 438078**

**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	15.81		ug/L		79	23 - 150
Chloroethane	20.0	17.99		ug/L		90	54 - 136
Chloromethane	20.0	19.13		ug/L		96	38 - 150
Trichlorofluoromethane	20.0	21.02		ug/L		105	54 - 149
Vinyl chloride	20.0	19.27		ug/L		96	56 - 140

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

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438078/7**  
**Matrix: Water**  
**Analysis Batch: 438078**

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

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>Toluene-d8 (Surr)</i>	97		80 - 120

**Lab Sample ID: MB 310-438190/5**  
**Matrix: Water**  
**Analysis Batch: 438190**

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

<b>Analyte</b>	<b>MB</b>	<b>MB</b>	<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>Result</b>	<b>Qualifier</b>							
Acetone	<10.0		10.0	3.10	ug/L			10/31/24 09:57	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			10/31/24 09:57	1
Benzene	<0.500		0.500	0.220	ug/L			10/31/24 09:57	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			10/31/24 09:57	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			10/31/24 09:57	1
Bromoform	<5.00		5.00	0.780	ug/L			10/31/24 09:57	1
Bromomethane	<4.00		4.00	1.10	ug/L			10/31/24 09:57	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			10/31/24 09:57	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			10/31/24 09:57	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			10/31/24 09:57	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			10/31/24 09:57	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			10/31/24 09:57	1
Chloroethane	<4.00		4.00	0.790	ug/L			10/31/24 09:57	1
Chloroform	<3.00		3.00	1.30	ug/L			10/31/24 09:57	1
Chloromethane	<3.00		3.00	0.610	ug/L			10/31/24 09:57	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			10/31/24 09:57	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			10/31/24 09:57	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			10/31/24 09:57	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			10/31/24 09:57	1
Dibromomethane	<1.00		1.00	0.330	ug/L			10/31/24 09:57	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			10/31/24 09:57	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			10/31/24 09:57	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			10/31/24 09:57	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			10/31/24 09:57	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			10/31/24 09:57	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			10/31/24 09:57	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			10/31/24 09:57	1
2-Hexanone	<10.0		10.0	2.00	ug/L			10/31/24 09:57	1
Iodomethane	<10.0		10.0	7.00	ug/L			10/31/24 09:57	1
Methylene chloride	<5.00		5.00	1.70	ug/L			10/31/24 09:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/31/24 09:57	1
Styrene	<1.00		1.00	0.370	ug/L			10/31/24 09:57	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			10/31/24 09:57	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			10/31/24 09:57	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			10/31/24 09:57	1
Toluene	<1.00		1.00	0.430	ug/L			10/31/24 09:57	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			10/31/24 09:57	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			10/31/24 09:57	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			10/31/24 09:57	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			10/31/24 09:57	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			10/31/24 09:57	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: MB 310-438190/5**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 438190**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichloroethene	<1.00		1.00	0.430	ug/L			10/31/24 09:57	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			10/31/24 09:57	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			10/31/24 09:57	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			10/31/24 09:57	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			10/31/24 09:57	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			10/31/24 09:57	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	103		80 - 120		10/31/24 09:57	1
Dibromofluoromethane (Surr)	98		73 - 130		10/31/24 09:57	1
Toluene-d8 (Surr)	104		80 - 120		10/31/24 09:57	1

**Lab Sample ID: LCS 310-438190/6**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 438190**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acetone	40.0	35.16		ug/L		88	50 - 150
Acrylonitrile	200	182.9		ug/L		91	50 - 150
Benzene	20.0	17.78		ug/L		89	72 - 124
Bromochloromethane	20.0	17.43		ug/L		87	73 - 130
Bromodichloromethane	20.0	16.92		ug/L		85	74 - 122
Bromoform	20.0	17.32		ug/L		87	61 - 122
2-Butanone (MEK)	40.0	35.63		ug/L		89	50 - 150
Carbon disulfide	20.0	16.80		ug/L		84	59 - 135
Carbon tetrachloride	20.0	17.07		ug/L		85	67 - 132
Chlorobenzene	20.0	19.47		ug/L		97	76 - 120
Chlorodibromomethane	20.0	16.20		ug/L		81	71 - 121
Chloroform	20.0	18.10		ug/L		91	72 - 125
cis-1,2-Dichloroethene	20.0	18.08		ug/L		90	74 - 123
cis-1,3-Dichloropropene	20.0	17.63		ug/L		88	71 - 125
1,2-Dibromo-3-chloropropane	20.0	19.98		ug/L		100	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.85		ug/L		89	75 - 125
Dibromomethane	20.0	17.09		ug/L		85	74 - 125
1,2-Dichlorobenzene	20.0	19.83		ug/L		99	74 - 120
1,4-Dichlorobenzene	20.0	20.18		ug/L		101	72 - 120
1,1-Dichloroethane	20.0	18.05		ug/L		90	70 - 127
1,2-Dichloroethane	20.0	17.43		ug/L		87	71 - 125
1,1-Dichloroethane	20.0	17.51		ug/L		88	63 - 132
1,2-Dichloropropane	20.0	18.95		ug/L		95	73 - 124
Ethylbenzene	20.0	19.70		ug/L		99	74 - 122
2-Hexanone	40.0	39.55		ug/L		99	60 - 140
Iodomethane	20.0	17.97		ug/L		90	10 - 150
Methylene chloride	20.0	17.93		ug/L		90	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	37.82		ug/L		95	60 - 139
Styrene	20.0	20.07		ug/L		100	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.66		ug/L		98	71 - 120
1,1,2,2-Tetrachloroethane	20.0	20.25		ug/L		101	68 - 124

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438190/6**

**Matrix: Water**

**Analysis Batch: 438190**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Tetrachloroethene	20.0	16.63		ug/L		83	71 - 130
Toluene	20.0	17.11		ug/L		86	74 - 123
trans-1,4-Dichloro-2-butene	20.0	16.87		ug/L		84	50 - 150
trans-1,2-Dichloroethene	20.0	17.46		ug/L		87	70 - 126
trans-1,3-Dichloropropene	20.0	16.92		ug/L		85	69 - 123
1,1,1-Trichloroethane	20.0	17.47		ug/L		87	73 - 129
1,1,2-Trichloroethane	20.0	18.52		ug/L		93	73 - 123
Trichloroethene	20.0	17.03		ug/L		85	72 - 126
1,2,3-Trichloropropane	20.0	20.56		ug/L		103	65 - 127
Vinyl acetate	40.0	31.93		ug/L		80	50 - 150
Xylenes, Total	40.0	39.48		ug/L		99	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	95		73 - 130
Toluene-d8 (Surr)	108		80 - 120

**Lab Sample ID: LCS 310-438190/7**

**Matrix: Water**

**Analysis Batch: 438190**

**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	21.97		ug/L		110	23 - 150
Chloroethane	20.0	18.62		ug/L		93	54 - 136
Chloromethane	20.0	19.70		ug/L		99	38 - 150
Trichlorofluoromethane	20.0	19.02		ug/L		95	54 - 149
Vinyl chloride	20.0	19.75		ug/L		99	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	100		73 - 130
Toluene-d8 (Surr)	106		80 - 120

**Lab Sample ID: MB 310-438391/5**

**Matrix: Water**

**Analysis Batch: 438391**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0		10.0	3.10	ug/L			11/01/24 12:10	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/01/24 12:10	1
Benzene	<0.500		0.500	0.220	ug/L			11/01/24 12:10	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/01/24 12:10	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/01/24 12:10	1
Bromoform	<5.00		5.00	0.780	ug/L			11/01/24 12:10	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/01/24 12:10	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/01/24 12:10	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/01/24 12:10	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/01/24 12:10	1

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# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: MB 310-438391/5**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 438391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/01/24 12:10	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/01/24 12:10	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/01/24 12:10	1
Chloroform	<3.00		3.00	1.30	ug/L			11/01/24 12:10	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/01/24 12:10	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/01/24 12:10	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/01/24 12:10	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/01/24 12:10	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/01/24 12:10	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/01/24 12:10	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/01/24 12:10	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/01/24 12:10	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/01/24 12:10	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/01/24 12:10	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/01/24 12:10	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/01/24 12:10	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/01/24 12:10	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/01/24 12:10	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/01/24 12:10	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/01/24 12:10	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/01/24 12:10	1
Styrene	<1.00		1.00	0.370	ug/L			11/01/24 12:10	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/01/24 12:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/01/24 12:10	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/01/24 12:10	1
Toluene	<1.00		1.00	0.430	ug/L			11/01/24 12:10	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/01/24 12:10	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/01/24 12:10	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/01/24 12:10	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/01/24 12:10	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/01/24 12:10	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/01/24 12:10	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/01/24 12:10	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/01/24 12:10	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/01/24 12:10	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/01/24 12:10	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/01/24 12:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		80 - 120		11/01/24 12:10	1
Dibromofluoromethane (Surr)	102		73 - 130		11/01/24 12:10	1
Toluene-d8 (Surr)	97		80 - 120		11/01/24 12:10	1

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438391/6**

**Matrix: Water**

**Analysis Batch: 438391**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	34.92		ug/L		87	50 - 150
Acrylonitrile	200	195.2		ug/L		98	50 - 150
Benzene	20.0	20.72		ug/L		104	72 - 124
Bromochloromethane	20.0	20.75		ug/L		104	73 - 130
Bromodichloromethane	20.0	20.13		ug/L		101	74 - 122
Bromoform	20.0	20.55		ug/L		103	61 - 122
2-Butanone (MEK)	40.0	36.48		ug/L		91	50 - 150
Carbon disulfide	20.0	21.05		ug/L		105	59 - 135
Carbon tetrachloride	20.0	22.10		ug/L		111	67 - 132
Chlorobenzene	20.0	20.22		ug/L		101	76 - 120
Chlorodibromomethane	20.0	20.09		ug/L		100	71 - 121
Chloroform	20.0	19.59		ug/L		98	72 - 125
cis-1,2-Dichloroethene	20.0	20.86		ug/L		104	74 - 123
cis-1,3-Dichloropropene	20.0	20.23		ug/L		101	71 - 125
1,2-Dibromo-3-chloropropane	20.0	19.35		ug/L		97	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.82		ug/L		99	75 - 125
Dibromomethane	20.0	19.99		ug/L		100	74 - 125
1,2-Dichlorobenzene	20.0	20.26		ug/L		101	74 - 120
1,4-Dichlorobenzene	20.0	20.21		ug/L		101	72 - 120
1,1-Dichloroethane	20.0	20.83		ug/L		104	70 - 127
1,2-Dichloroethane	20.0	18.66		ug/L		93	71 - 125
1,1-Dichloroethene	20.0	21.39		ug/L		107	63 - 132
1,2-Dichloropropane	20.0	20.16		ug/L		101	73 - 124
Ethylbenzene	20.0	20.74		ug/L		104	74 - 122
2-Hexanone	40.0	35.81		ug/L		90	60 - 140
Iodomethane	20.0	10.80		ug/L		54	10 - 150
Methylene chloride	20.0	19.72		ug/L		99	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	36.01		ug/L		90	60 - 139
Styrene	20.0	21.05		ug/L		105	74 - 121
1,1,1,2-Tetrachloroethane	20.0	20.42		ug/L		102	71 - 120
1,1,2,2-Tetrachloroethane	20.0	19.87		ug/L		99	68 - 124
Tetrachloroethene	20.0	21.36		ug/L		107	71 - 130
Toluene	20.0	20.03		ug/L		100	74 - 123
trans-1,4-Dichloro-2-butene	20.0	19.35		ug/L		97	50 - 150
trans-1,2-Dichloroethene	20.0	21.14		ug/L		106	70 - 126
trans-1,3-Dichloropropene	20.0	20.16		ug/L		101	69 - 123
1,1,1-Trichloroethane	20.0	21.15		ug/L		106	73 - 129
1,1,2-Trichloroethane	20.0	19.58		ug/L		98	73 - 123
Trichloroethene	20.0	21.25		ug/L		106	72 - 126
1,2,3-Trichloropropane	20.0	19.51		ug/L		98	65 - 127
Vinyl acetate	40.0	40.52		ug/L		101	50 - 150
Xylenes, Total	40.0	41.17		ug/L		103	73 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		80 - 120
Dibromofluoromethane (Surr)	101		73 - 130
Toluene-d8 (Surr)	98		80 - 120

# QC Sample Results

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438391/7**  
**Matrix: Water**  
**Analysis Batch: 438391**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	14.70		ug/L		74	23 - 150
Chloroethane	20.0	18.69		ug/L		93	54 - 136
Chloromethane	20.0	19.70		ug/L		99	38 - 150
Trichlorofluoromethane	20.0	22.79		ug/L		114	54 - 149
Vinyl chloride	20.0	20.17		ug/L		101	56 - 140

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

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

**Lab Sample ID: MB 310-438626/1-A**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.00200		0.00200	0.00100	mg/L		11/05/24 09:30	11/07/24 21:49	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/05/24 09:30	11/07/24 21:49	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/05/24 09:30	11/07/24 21:49	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/05/24 09:30	11/07/24 21:49	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/05/24 09:30	11/07/24 21:49	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/05/24 09:30	11/07/24 21:49	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/05/24 09:30	11/07/24 21:49	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/05/24 09:30	11/07/24 21:49	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/05/24 09:30	11/07/24 21:49	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/05/24 09:30	11/07/24 21:49	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/05/24 09:30	11/07/24 21:49	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/05/24 09:30	11/07/24 21:49	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/05/24 09:30	11/07/24 21:49	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/05/24 09:30	11/07/24 21:49	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/05/24 09:30	11/07/24 21:49	1

**Lab Sample ID: LCS 310-438626/2-A**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.1867		mg/L		93	80 - 120
Arsenic	0.200	0.1983		mg/L		99	80 - 120
Barium	0.100	0.09701		mg/L		97	80 - 120
Beryllium	0.100	0.1005		mg/L		100	80 - 120
Cadmium	0.100	0.09395		mg/L		94	80 - 120
Chromium	0.100	0.1040		mg/L		104	80 - 120
Cobalt	0.100	0.1018		mg/L		102	80 - 120
Copper	0.200	0.2093		mg/L		105	80 - 120
Lead	0.200	0.2117		mg/L		106	80 - 120
Nickel	0.200	0.2067		mg/L		103	80 - 120

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: LCS 310-438626/2-A**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Selenium	0.400	0.3819		mg/L		95	80 - 120	
Silver	0.100	0.1191		mg/L		119	80 - 120	
Thallium	0.100	0.1150		mg/L		115	80 - 120	
Vanadium	0.100	0.1018		mg/L		102	80 - 120	
Zinc	0.200	0.1925		mg/L		96	80 - 120	

**Lab Sample ID: 310-293778-1 MS**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: MW-16**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	
Antimony	<0.00200		0.200	0.1991		mg/L		100	75 - 125	
Arsenic	<0.00200		0.200	0.2057		mg/L		103	75 - 125	
Barium	0.171		0.100	0.2767		mg/L		105	75 - 125	
Beryllium	<0.00100		0.100	0.1035		mg/L		103	75 - 125	
Cadmium	<0.000200		0.100	0.09748		mg/L		97	75 - 125	
Chromium	<0.00500		0.100	0.1017		mg/L		102	75 - 125	
Cobalt	<0.000500		0.100	0.09909		mg/L		99	75 - 125	
Copper	<0.00500		0.200	0.2006		mg/L		100	75 - 125	
Lead	<0.000500		0.200	0.2056		mg/L		103	75 - 125	
Nickel	0.00784		0.200	0.2055		mg/L		99	75 - 125	
Selenium	<0.00500		0.400	0.3974		mg/L		99	75 - 125	
Silver	<0.00100		0.100	0.1124		mg/L		112	75 - 125	
Thallium	<0.00100		0.100	0.1096		mg/L		110	75 - 125	
Vanadium	<0.00500		0.100	0.1037		mg/L		104	75 - 125	
Zinc	<0.0200		0.200	0.1902		mg/L		95	75 - 125	

**Lab Sample ID: 310-293778-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: MW-16**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	
									Limits		RPD	Limit
Antimony	<0.00200		0.200	0.1979		mg/L		99	75 - 125	1	20	
Arsenic	<0.00200		0.200	0.2054		mg/L		103	75 - 125	0	20	
Barium	0.171		0.100	0.2779		mg/L		106	75 - 125	0	20	
Beryllium	<0.00100		0.100	0.1055		mg/L		105	75 - 125	2	20	
Cadmium	<0.000200		0.100	0.09781		mg/L		98	75 - 125	0	20	
Chromium	<0.00500		0.100	0.1025		mg/L		102	75 - 125	1	20	
Cobalt	<0.000500		0.100	0.09997		mg/L		100	75 - 125	1	20	
Copper	<0.00500		0.200	0.2037		mg/L		102	75 - 125	2	20	
Lead	<0.000500		0.200	0.2089		mg/L		104	75 - 125	2	20	
Nickel	0.00784		0.200	0.2070		mg/L		100	75 - 125	1	20	
Selenium	<0.00500		0.400	0.4021		mg/L		101	75 - 125	1	20	
Silver	<0.00100		0.100	0.1143		mg/L		114	75 - 125	2	20	
Thallium	<0.00100		0.100	0.1110		mg/L		111	75 - 125	1	20	
Vanadium	<0.00500		0.100	0.1041		mg/L		104	75 - 125	0	20	
Zinc	<0.0200		0.200	0.1902		mg/L		95	75 - 125	0	20	



# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: 310-293778-11 DU**  
**Matrix: Water**  
**Analysis Batch: 439075**

**Client Sample ID: MW-43**  
**Prep Type: Total/NA**  
**Prep Batch: 438626**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	0.00112	J	0.001107	J	mg/L		1	20
Barium	0.487		0.4936		mg/L		1	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	0.000763		0.0007490		mg/L		2	20
Copper	<0.00500		<0.00500		mg/L		NC	20
Lead	<0.000500		<0.000500		mg/L		NC	20
Nickel	0.00553		0.005625		mg/L		2	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Silver	<0.00100		<0.00100		mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	<0.00500		<0.00500		mg/L		NC	20
Zinc	<0.0200		<0.0200		mg/L		NC	20

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

**Lab Sample ID: MB 310-437897/1**  
**Matrix: Water**  
**Analysis Batch: 437897**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00	3.70	mg/L			10/29/24 10:35	1

**Lab Sample ID: LCS 310-437897/2**  
**Matrix: Water**  
**Analysis Batch: 437897**

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Suspended Solids	100	98.00		mg/L		98	81 - 116

**Lab Sample ID: MB 310-437903/1**  
**Matrix: Water**  
**Analysis Batch: 437903**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Suspended Solids	<5.00		5.00	3.70	mg/L			10/29/24 11:21	1

**Lab Sample ID: LCS 310-437903/2**  
**Matrix: Water**  
**Analysis Batch: 437903**

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Total Suspended Solids	100	101.0		mg/L		101	81 - 116

# QC Sample Results

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

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

**Lab Sample ID: MB 310-438098/1**  
**Matrix: Water**  
**Analysis Batch: 438098**

**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			10/30/24 13:07	1

**Lab Sample ID: LCS 310-438098/2**  
**Matrix: Water**  
**Analysis Batch: 438098**

**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	113.0		mg/L		113	81 - 116

**Lab Sample ID: 310-293778-10 DU**  
**Matrix: Water**  
**Analysis Batch: 438098**

**Client Sample ID: MW-40**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	51.0		53.00		mg/L		4	35

# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

## GC/MS VOA

### Analysis Batch: 437919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-10	MW-40	Total/NA	Water	8260D	
310-293778-11	MW-43	Total/NA	Water	8260D	
MB 310-437919/5	Method Blank	Total/NA	Water	8260D	
LCS 310-437919/7	Lab Control Sample	Total/NA	Water	8260D	

### Analysis Batch: 438078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-1	MW-16	Total/NA	Water	8260D	
310-293778-2	MW-27	Total/NA	Water	8260D	
310-293778-3	MW-35	Total/NA	Water	8260D	
310-293778-4	MW-42R	Total/NA	Water	8260D	
310-293778-5	MW-15C	Total/NA	Water	8260D	
310-293778-6	MW-44	Total/NA	Water	8260D	
310-293778-7	MW-14R	Total/NA	Water	8260D	
310-293778-8	MW-15R	Total/NA	Water	8260D	
310-293778-9	MW-39	Total/NA	Water	8260D	
310-293778-12	MW-D	Total/NA	Water	8260D	
310-293778-14	Trip Blank 1	Total/NA	Water	8260D	
MB 310-438078/5	Method Blank	Total/NA	Water	8260D	
LCS 310-438078/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-438078/7	Lab Control Sample	Total/NA	Water	8260D	

### Analysis Batch: 438190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-15	Trip Blank 2	Total/NA	Water	8260D	
MB 310-438190/5	Method Blank	Total/NA	Water	8260D	
LCS 310-438190/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-438190/7	Lab Control Sample	Total/NA	Water	8260D	

### Analysis Batch: 438391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-1	MW-16	Total/NA	Water	8260D	
310-293778-2	MW-27	Total/NA	Water	8260D	
310-293778-3	MW-35	Total/NA	Water	8260D	
310-293778-4	MW-42R	Total/NA	Water	8260D	
310-293778-5	MW-15C	Total/NA	Water	8260D	
310-293778-6	MW-44	Total/NA	Water	8260D	
310-293778-7	MW-14R	Total/NA	Water	8260D	
310-293778-8	MW-15R	Total/NA	Water	8260D	
310-293778-9	MW-39	Total/NA	Water	8260D	
310-293778-12	MW-D	Total/NA	Water	8260D	
310-293778-14	Trip Blank 1	Total/NA	Water	8260D	
MB 310-438391/5	Method Blank	Total/NA	Water	8260D	
LCS 310-438391/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-438391/7	Lab Control Sample	Total/NA	Water	8260D	

## Metals

### Prep Batch: 438626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-1	MW-16	Total/NA	Water	3005A	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

## Metals (Continued)

### Prep Batch: 438626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-2	MW-27	Total/NA	Water	3005A	
310-293778-3	MW-35	Total/NA	Water	3005A	
310-293778-4	MW-42R	Total/NA	Water	3005A	
310-293778-5	MW-15C	Total/NA	Water	3005A	
310-293778-6	MW-44	Total/NA	Water	3005A	
310-293778-7	MW-14R	Total/NA	Water	3005A	
310-293778-8	MW-15R	Total/NA	Water	3005A	
310-293778-9	MW-39	Total/NA	Water	3005A	
310-293778-10	MW-40	Total/NA	Water	3005A	
310-293778-11	MW-43	Total/NA	Water	3005A	
310-293778-12	MW-D	Total/NA	Water	3005A	
MB 310-438626/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-438626/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-293778-1 MS	MW-16	Total/NA	Water	3005A	
310-293778-1 MSD	MW-16	Total/NA	Water	3005A	
310-293778-11 DU	MW-43	Total/NA	Water	3005A	

### Analysis Batch: 439075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-1	MW-16	Total/NA	Water	6020B	438626
310-293778-2	MW-27	Total/NA	Water	6020B	438626
310-293778-3	MW-35	Total/NA	Water	6020B	438626
310-293778-4	MW-42R	Total/NA	Water	6020B	438626
310-293778-5	MW-15C	Total/NA	Water	6020B	438626
310-293778-6	MW-44	Total/NA	Water	6020B	438626
310-293778-7	MW-14R	Total/NA	Water	6020B	438626
310-293778-8	MW-15R	Total/NA	Water	6020B	438626
310-293778-9	MW-39	Total/NA	Water	6020B	438626
310-293778-10	MW-40	Total/NA	Water	6020B	438626
310-293778-11	MW-43	Total/NA	Water	6020B	438626
310-293778-12	MW-D	Total/NA	Water	6020B	438626
MB 310-438626/1-A	Method Blank	Total/NA	Water	6020B	438626
LCS 310-438626/2-A	Lab Control Sample	Total/NA	Water	6020B	438626
310-293778-1 MS	MW-16	Total/NA	Water	6020B	438626
310-293778-1 MSD	MW-16	Total/NA	Water	6020B	438626
310-293778-11 DU	MW-43	Total/NA	Water	6020B	438626

### Analysis Batch: 439156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-9	MW-39	Total/NA	Water	6020B	438626

## General Chemistry

### Analysis Batch: 437897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-4	MW-42R	Total/NA	Water	I-3765-85	
310-293778-7	MW-14R	Total/NA	Water	I-3765-85	
310-293778-8	MW-15R	Total/NA	Water	I-3765-85	
310-293778-9	MW-39	Total/NA	Water	I-3765-85	
MB 310-437897/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-437897/2	Lab Control Sample	Total/NA	Water	I-3765-85	

# QC Association Summary

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

## General Chemistry

### Analysis Batch: 437903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-5	MW-15C	Total/NA	Water	I-3765-85	
310-293778-6	MW-44	Total/NA	Water	I-3765-85	
310-293778-11	MW-43	Total/NA	Water	I-3765-85	
MB 310-437903/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-437903/2	Lab Control Sample	Total/NA	Water	I-3765-85	

### Analysis Batch: 438098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-293778-1	MW-16	Total/NA	Water	I-3765-85	
310-293778-2	MW-27	Total/NA	Water	I-3765-85	
310-293778-3	MW-35	Total/NA	Water	I-3765-85	
310-293778-10	MW-40	Total/NA	Water	I-3765-85	
310-293778-12	MW-D	Total/NA	Water	I-3765-85	
MB 310-438098/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-438098/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-293778-10 DU	MW-40	Total/NA	Water	I-3765-85	

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# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-16**

**Lab Sample ID: 310-293778-1**

Date Collected: 10/24/24 10:59

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 09:44
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 14:05
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 21:54
Total/NA	Analysis	I-3765-85		1	438098	DGU1	EET CF	10/30/24 13:07

**Client Sample ID: MW-27**

**Lab Sample ID: 310-293778-2**

Date Collected: 10/24/24 09:52

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 10:07
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 14:27
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:03
Total/NA	Analysis	I-3765-85		1	438098	DGU1	EET CF	10/30/24 13:07

**Client Sample ID: MW-35**

**Lab Sample ID: 310-293778-3**

Date Collected: 10/24/24 12:29

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 10:30
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 14:50
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:05
Total/NA	Analysis	I-3765-85		1	438098	DGU1	EET CF	10/30/24 13:07

**Client Sample ID: MW-42R**

**Lab Sample ID: 310-293778-4**

Date Collected: 10/23/24 18:00

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 10:53
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 15:12
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:08
Total/NA	Analysis	I-3765-85		1	437897	DGU1	EET CF	10/29/24 10:35

# Lab Chronicle

Client: SCS Engineers  
 Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
 SDG: Cherokee County Landfill

**Client Sample ID: MW-15C**

**Lab Sample ID: 310-293778-5**

Date Collected: 10/23/24 16:35

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 11:16
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 15:35
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:22
Total/NA	Analysis	I-3765-85		1	437903	DGU1	EET CF	10/29/24 11:21

**Client Sample ID: MW-44**

**Lab Sample ID: 310-293778-6**

Date Collected: 10/23/24 17:31

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 11:39
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 15:58
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:25
Total/NA	Analysis	I-3765-85		1	437903	DGU1	EET CF	10/29/24 11:21

**Client Sample ID: MW-14R**

**Lab Sample ID: 310-293778-7**

Date Collected: 10/23/24 14:16

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 12:02
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 16:21
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:28
Total/NA	Analysis	I-3765-85		1	437897	DGU1	EET CF	10/29/24 10:35

**Client Sample ID: MW-15R**

**Lab Sample ID: 310-293778-8**

Date Collected: 10/23/24 16:01

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 12:24
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 16:43
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:31
Total/NA	Analysis	I-3765-85		1	437897	DGU1	EET CF	10/29/24 10:35

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

**Client Sample ID: MW-39**  
**Date Collected: 10/23/24 14:53**  
**Date Received: 10/26/24 16:25**

**Lab Sample ID: 310-293778-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 12:47
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 17:06
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:34
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		4	439156	A6US	EET CF	11/08/24 13:01
Total/NA	Analysis	I-3765-85		1	437897	DGU1	EET CF	10/29/24 10:35

**Client Sample ID: MW-40**  
**Date Collected: 10/24/24 08:32**  
**Date Received: 10/26/24 16:25**

**Lab Sample ID: 310-293778-10**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	437919	FE5V	EET CF	10/30/24 09:30
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:37
Total/NA	Analysis	I-3765-85		1	438098	DGU1	EET CF	10/30/24 13:07

**Client Sample ID: MW-43**  
**Date Collected: 10/23/24 15:26**  
**Date Received: 10/26/24 16:25**

**Lab Sample ID: 310-293778-11**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	437919	FE5V	EET CF	10/30/24 09:53
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:39
Total/NA	Analysis	I-3765-85		1	437903	DGU1	EET CF	10/29/24 11:21

**Client Sample ID: MW-D**  
**Date Collected: 10/24/24 09:52**  
**Date Received: 10/26/24 16:25**

**Lab Sample ID: 310-293778-12**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 13:10
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 17:29
Total/NA	Prep	3005A			438626	F5MW	EET CF	11/05/24 09:30
Total/NA	Analysis	6020B		1	439075	A6US	EET CF	11/07/24 22:45
Total/NA	Analysis	I-3765-85		1	438098	DGU1	EET CF	10/30/24 13:07

**Client Sample ID: Trip Blank 1**  
**Date Collected: 10/24/24 00:00**  
**Date Received: 10/26/24 16:25**

**Lab Sample ID: 310-293778-14**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438078	FE5V	EET CF	10/31/24 07:05

Eurofins Cedar Falls



# Lab Chronicle

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

## Client Sample ID: Trip Blank 1

Lab Sample ID: 310-293778-14

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438391	FE5V	EET CF	11/01/24 13:42

## Client Sample ID: Trip Blank 2

Lab Sample ID: 310-293778-15

Date Collected: 10/24/24 00:00

Matrix: Water

Date Received: 10/26/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	438190	WSE8	EET CF	10/31/24 12:58

### 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: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

## Laboratory: Eurofins Cedar Falls

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

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

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

# Method Summary

Client: SCS Engineers  
Project/Site: Cherokee County Fall 2024 GW

Job ID: 310-293778-1  
SDG: Cherokee County Landfill

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

**Protocol References:**

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

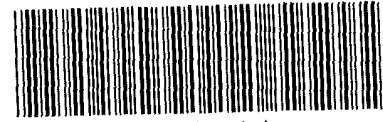
**Laboratory References:**

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





Environment Testing  
America



310-293778 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <b>SCS Engineers</b>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE <b>10-25-24</b>	TIME <b>1625</b>	Received By: <b>CGC</b>
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: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?		<b>HCl</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
<b>MW-16, MW-27, MW-35, MW-44, MW-40, MW-15C, MW-42R</b>			
<b>Temperature Record</b>			
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: <b>P</b>		Correction Factor (°C): <b>0</b>	
• <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <b>1.8</b>		Corrected Temp (°C): <b>1.8</b>	
• <b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <b>SCS Engineers</b>			
City/State:	CITY	STATE	Project:
<b>Receipt Information</b>			
Date/Time Received:	DATE <b>10-25-24</b>	TIME <b>1625</b>	Received By: <b>CGC</b>
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: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <b>2</b> of <b>2</b>	
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?	<b>HCl</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<b>MW-14A, MW-15A, MW-39, MW-43, MW-0</b>			
<b>Temperature Record</b>			
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: <b>P</b>		Correction Factor (°C): <b>0</b>	
• <b>Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <b>1.6</b>		Corrected Temp (°C): <b>1.6</b>	
• <b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
<b>Exceptions Noted</b>			
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			
<b>Additional Comments</b>			

Cedar Falls, IA 50613-6907  
phone 319.277.2401 fax 319.277.2425

TestAmerica Laboratories, Inc. db/a Eurofins TestAmerica

Regulatory Program:  DW  NPDES  RCRA  Deter

Client Contact		Project Manager:		Site Contact:		Date:		COC No.	
SCS Engineers		Email: smarczewski@sceengineers.com		Lab Contact:		Carrier:		of COGs	
Sean Marczewski		Cell: 712-661-9682		Appendix I		Total Suspended Solids		Arsenic	
1690 All-State Court, Suite 100		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Barium		Cobalt		Vinyl Chloride	
West Des Moines, IA 50265		Other: <input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Appendix I		Cobalt		Trip Blank	
Project Name: Cherokee County Fall 2024 GW		Analysis Turnaround Time		Perform MS/MSD (Y/N)		Appendix I		Filtered Sample (Y/N)	
Site: Cherokee County Landfill		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
P O # 27223105 25		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix	
MW-16	10/24/24	10:59	G			X			
MW-27	10/24/24	9:52	G			X			
MW-35	10/24/24	10:29	G			X			
MW-42R	10/23/24	18:00	G			X			
GWD-2			G			X			
MW-15C	10/23/24	16:35	G			X			
MW-44	10/23/24	17:31	G			X			
MW-14R	10/23/24	14:16	G			X			
MW-15R	10/23/24	16:01	G			X			
MW-39	10/23/24	14:53	G			X			
MW-40	10/24/24	8:32	G			X	X	X	
MW-43	10/24/24	15:46	G			X	X	X	
MW-D	10/24/24	9:52	G			X			
Trip Blank			G						X

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:

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Received by	Company	Cooler Temp. (°C)	Obs'd	Cor'd	Therm ID No.
Received by	Company				
Received in Laboratory by	Company				

Received in Laboratory by: **CS** Company: **CS** Date/Time: **10/25/24 14:40**

Received in Laboratory by: **CS** Company: **CS** Date/Time: **10/25/24 16:25**

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-293778-1  
SDG Number: Cherokee County Landfill

**Login Number: 293778**

**List Number: 1**

**Creator: Bunker, Xavier M**

**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 Documentation



Completed by: Michael Morgan  
 Sample Date: 3/4/2024  
 Lab Report Date: 3/15/2024  
 Site Name: Cherokee County Sanitary Landfill  
 Project Type: Winter 2024 HMSP Retest  
 Lab Report Number: 310-276347-1

OK NO N/A NOTES

**Sample Collection and Sample Handling**

Chain of Custody  
 Temperature  
 Preservation  
 Condition  
 Case Narrative  
 Holding Times

X			
X			
X			
X			
X			
X			

**Analytical Sensitivity and Blanks**

Method Blank Detections  
 Trip Blank Detections

X			No detections.
X			No detections.

**Accuracy**

ICV/CCV  
 LCS/LCSD  
 MS/MSD  
 Surrogates (organics only)  
 Other QA QC samples

X			
X			
X			
X			
X			

**Precision**

QA/QC Sample RPDs  
 Field Duplicates

X			
		X	

Completed by: Michael Morgan  
 Sample Date: 5/28/2024 - 5/30/2024  
 Lab Report Date: 6/17/2024  
 Site Name: Cherokee County Sanitary Landfill  
 Project Type: 1<sup>st</sup> 2024 Open Unit HMSP  
 Lab Report Number: 310-282522-1

OK NO N/A NOTES

**Sample Collection and Sample Handling**

Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Case Narrative	X			
Holding Times	X			

**Analytical Sensitivity and Blanks**

Method Blank Detections	X			No detections.
Trip Blank Detections	X			No detections.

**Accuracy**

ICV/CCV	X			
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Other QA QC samples	X			

**Precision**

QA/QC Sample RPDs	X			
Field Duplicates	X			Sample MW-27 and duplicate sample MW-DO had <50% RPD for analyzed parameters .

Completed by: Michael Morgan  
 Sample Date: 5/28/2024 - 5/30/2024  
 Lab Report Date: 6/17/2024  
 Site Name: Cherokee County Sanitary Landfill  
 Project Type: 1<sup>st</sup> 2024 Closed Unit HMSP  
 Lab Report Number: 310-282518-1

OK NO N/A NOTES

**Sample Collection and Sample Handling**

Chain of Custody  
 Temperature  
 Preservation  
 Condition  
 Case Narrative  
 Holding Times

X			
X			
X			
X			
X			
X			

**Analytical Sensitivity and Blanks**

Method Blank Detections  
 Trip Blank Detections

X			No detections.
X			No detections.

**Accuracy**

ICV/CCV

	X		Method 8270E: The continuing calibration verification (CCV) associated with batch 310-423965 recovered above the upper control limit for 1,4-Naphthoquinone (22.6%D), Di-n-butyl phthalate (20.7%D), Dimethyl phthalate (25.5%D), 3-Nitroaniline (24.7%D), Safrole (23.4%D), 1,3-Dinitrobenzene (31.0%D), o,o',o'' Triethylphosphorothioate (23.7%D), Hexachloropropene (122.8%D) and Dinoseb (33.9%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.
--	---	--	--

LCS/LCSD

	X		Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analytes: Famphur and Kepone These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.  Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analyte(s): p-Phenylene diamine. p- Phenylene diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/reanalysis was not performed.  Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-423508 and analytical batch 310-423965 recovered outside control limits for the following analytes: Methapyrilene.
--	---	--	--

MS/MSD

	X		PCBs Method 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.  Pesticides Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-423348. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch
Surrogates (organics only)	X		
Other QA QC samples	X		

**Precision**

QA/QC Sample RPDs

X			
	X		Sample MW-13R and duplicate sample MW-DC had <50% RPD for analyzed parameters except for Arsenic, Barium, Cobalt, Nickel, and cis-1,2-Dichloroethene.

Field Duplicates

Completed by: Michael Morgan  
 Sample Date: 10/23/2024 - 10/24/2024  
 Lab Report Date: 11/12/2024  
 Site Name: Cherokee County Sanitary Landfill  
 Project Type: 2<sup>nd</sup> 2024 Open & Closed Units  
 Lab Report Number: 310-293778-1

OK NO N/A NOTES

**Sample Collection and Sample Handling**

Chain of Custody  
 Temperature

X			
X			

Preservation

	X		Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-39 (310-293778-9). The sample(s) was preserved to the appropriate pH in the laboratory.
--	---	--	---

Condition

X			
---	--	--	--

Case Narrative

	X		Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: MW-16 (310-293778-1).
--	---	--	--

Holding Times

X			
---	--	--	--

**Analytical Sensitivity and Blanks**

Method Blank Detections  
 Trip Blank Detections

X			No detections.
X			No detections.

**Accuracy**

ICV/CCV  
 LCS/LCSD  
 MS/MSD  
 Surrogates (organics only)  
 Other QA QC samples

X			
X			
X			
X			
X			

**Precision**

QA/QC Sample RPDs  
 Field Duplicates

X			
X			Sample MW-27 and duplicate sample MW-D had <50% RPD for analyzed parameters.

## Appendix C-1

### Summary of Groundwater Chemistry – Closed MSWLF Unit

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Total Metals Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	10/19/2009	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	N/A
	3/2/2010	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	N/A
	5/20/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	8/27/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	9/28/2011	0.0275	0.0086	< 0.007	0.0081	0.0251	0.0202	0.0267	0.0387	0.0183	N/A	0.0409	0.0121	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	4/26/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.0022	< 0.002	0.0024	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/24/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	5/7/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.0021	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/18/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	3/25/2014	< 0.002	< 0.002	< 0.01	< 0.002	< 0.002	< 0.002	< 0.01	< 0.01	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	9/30/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.000336*	< 0.001	0.0002*	0.000331*	< 0.001	0.000471*	< 0.001	0.00105	< 0.001	N/A	< 0.001	0.000447*	N/A
	10/12/2015	< 0.001	0.000194*	< 0.001	0.000251*	0.000223*	0.000224*	< 0.001	< 0.001	0.000976*	N/A	< 0.001	< 0.001	N/A
	4/12/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000641*	0.000339*	< 0.001	0.00117	N/A	0.00025*	< 0.001	N/A
	9/22/2016	N/A	< 0.001	< 0.001	N/A	0.00119	< 0.001	< 0.001	0.000483*	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	3/20/2017	< 0.001	< 0.001	0.00068*	< 0.001	0.000485*	N/A	0.000286*	0.000214*	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.00043*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.001	< 0.001	0.000625*	< 0.001	< 0.001	< 0.001	0.000337*	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	7/24/2017	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	< 0.001	0.00091*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	5/15/2018	N/A	N/A	N/A	N/A	0.000641*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	N/A	< 0.003	< 0.003	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.008	< 0.002
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
<b>Total Metals Constituents</b>															
<b>Antimony, mg/L (CAS NO - 7440-36-0)</b>	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
<b>Arsenic, mg/L (CAS NO - 7440-38-2)</b>	10/19/2009	< 0.01	< 0.01	< 0.01	< 0.01	N/A	0.01	< 0.01	< 0.01	< 0.01	N/A	0.03	N/A	N/A	
	3/2/2010	< 0.005	< 0.005	< 0.005	< 0.005	N/A	0.009	< 0.005	< 0.005	0.009	N/A	0.027	N/A	N/A	
	5/20/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.023	< 0.005	< 0.005	0.008	N/A	0.028	< 0.005	N/A	
	8/27/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.009	< 0.005	< 0.005	< 0.005	N/A	0.022	< 0.005	N/A	
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.011	< 0.005	< 0.005	< 0.005	N/A	0.024	< 0.005	N/A	
	4/29/2011	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A	0.03	< 0.01	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	
	9/28/2011	< 0.02	< 0.02	< 0.02	< 0.02	0.0182	0.0491	< 0.02	< 0.02	0.0172	N/A	0.0291	< 0.02	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0171	N/A	
	4/26/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0399	< 0.004	< 0.004	0.0109	N/A	0.0167	0.0152	N/A	
	7/27/2012	N/A	N/A	N/A	N/A	N/A	0.0162	N/A	N/A	0.0068	N/A	N/A	N/A	N/A	
	10/24/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0135	0.0055	< 0.004	< 0.004	N/A	0.0123	0.0109	N/A	
	5/7/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0147	< 0.004	< 0.004	< 0.004	N/A	0.0042	0.0208	N/A	
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0229	0.0045	< 0.004	0.0049	N/A	0.015	0.0249	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	3/25/2014	< 0.004	0.0064	< 0.02	< 0.004	< 0.004	0.0138	< 0.02	< 0.02	< 0.004	< 0.004	0.0194	0.0245	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0213	N/A	N/A	
	9/30/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0182	< 0.004	< 0.004	0.0047	< 0.004	0.0271	0.0171	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	N/A	0.0056	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	< 0.002	< 0.002	< 0.002	0.0022	< 0.002	0.00764	0.00539	< 0.002	0.00133*	N/A	0.02	0.0253	N/A	
	10/12/2015	< 0.002	< 0.002	< 0.002	0.00117*	< 0.002	0.00139*	0.0108	0.00206	< 0.002	0.00304	N/A	0.0477	0.0223	
	4/12/2016	< 0.002	< 0.002	< 0.002	0.00167*	0.00271	0.0124	0.00475	< 0.002	0.00388	N/A	0.186	0.0239	N/A	
	9/22/2016	N/A	< 0.002	< 0.002	N/A	< 0.002	0.00468	0.013	< 0.002	< 0.002	< 0.002	0.047	0.0129	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	
	3/20/2017	< 0.002	< 0.002	0.000661*	< 0.002	0.000553*	N/A	0.00373	< 0.002	0.000593*	< 0.002	0.0578	0.00991	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	0.000632*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.00563	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	< 0.002	< 0.002	0.000865*	< 0.002	0.000654*	0.00589	0.00327	< 0.002	0.000708*	< 0.002	0.0754	0.0158	N/A	
	7/24/2017	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 0.002	< 0.002	0.00063*	< 0.002	0.000875*	0.00188*	0.0167	0.0042	0.000724*	< 0.002	0.052	0.0182	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	0.000938*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 0.002	< 0.002	< 0.002	< 0.002	0.000595*	0.00313	0.00414	0.00434	0.000746*	< 0.002	0.0637	0.0144	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.00645	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	0.000428*	0.000337*	0.000594*	0.000665*	0.00071*	0.00245	0.000907*	0.00161	0.000833*	N/A	0.0686	0.0138	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	0.0015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 0.002	< 0.002	< 0.002	< 0.002	0.000823*	0.00874	0.00112*	0.00106*	0.00104*	< 0.002	0.11	0.019	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00118*	N/A	N/A	N/A	N/A	
3/11/2020	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00156*	0.00166*	< 0.002	0.000919*	N/A	0.0768	0.0196	N/A		
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0212	N/A		
8/19/2020	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.0026	0.00203	< 0.002	< 0.002	< 0.002	0.0575	0.0192	< 0.002		
8/19/2020	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
3/23/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00158*	0.00207	0.00316	0.000776*	< 0.002	0.0134	0.0201	0.00495		
3/23/2021	N/A	N/A	N/A	N/A	N/A	0.0015*	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
9/15/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00547	0.0023	0.00847	< 0.002	< 0.002	0.007	0.0198	0.0115		
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.00217	N/A	N/A	N/A	N/A	N/A	N/A		
5/11/2022	< 0.002	< 0.002	< 0.002	0.000901*	N/A	0.000954*	< 0.002	0.00454	< 0.002	< 0.002	0.0126	0.0243	0.0019*		
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0046	N/A	N/A	N/A	N/A	N/A		



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## Summary of Groundwater Chemistry

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	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Arsenic, mg/L (CAS NO - 7440-38-2)</b>														
	9/28/2022	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	0.00121*	< 0.002	<b>0.0107</b>	<b>0.0398</b>	<b>0.0132</b>
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	3/8/2023	N/A	N/A	< 0.002	< 0.002	< 0.002	0.00142*	N/A	< 0.002	0.000781*	< 0.002	<b>0.00216</b>	<b>0.0211</b>	<b>0.00524</b>
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.000927*	N/A	0.000714*	< 0.002	<b>0.0289</b>	<b>0.0253</b>	<b>0.0115</b>
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.000856*	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	< 0.002	< 0.002	0.000805*	<b>0.00399</b>	<b>0.0217</b>	<b>0.0547</b>	< 0.002	< 0.002	0.00119*	<b>0.0219</b>	<b>0.00971</b>
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0011*	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000749*	< 0.002	<b>0.0781</b>	<b>0.0222</b>	<b>0.0118</b>
<b>Barium, mg/L (CAS NO - 7440-39-3)</b>														
	10/19/2009	<b>0.05</b>	< 0.05	< 0.05	< 0.05	N/A	< 0.05	<b>0.12</b>	< 0.05	<b>0.35</b>	N/A	<b>0.78</b>	N/A	N/A
	3/2/2010	< 0.05	<b>0.08</b>	< 0.05	< 0.05	N/A	< 0.05	<b>0.07</b>	< 0.05	<b>0.38</b>	N/A	<b>0.71</b>	N/A	N/A
	5/20/2010	< 0.05	<b>0.1</b>	< 0.05	< 0.05	<b>0.07</b>	< 0.05	<b>0.07</b>	< 0.05	<b>0.19</b>	N/A	<b>0.78</b>	<b>0.93</b>	N/A
	8/27/2010	< 0.05	<b>0.05</b>	< 0.05	< 0.05	<b>0.63</b>	< 0.05	<b>0.08</b>	< 0.05	<b>0.15</b>	N/A	<b>0.68</b>	<b>0.75</b>	N/A
	10/1/2010	< 0.05	< 0.05	< 0.05	< 0.05	<b>0.08</b>	< 0.05	<b>0.08</b>	< 0.05	<b>0.11</b>	N/A	<b>0.68</b>	<b>0.73</b>	N/A
	4/29/2011	< 0.05	< 0.05	< 0.05	< 0.05	<b>0.09</b>	< 0.05	< 0.05	< 0.05	<b>0.14</b>	N/A	<b>0.62</b>	<b>1</b>	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<b>0.25</b>	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.12</b>	N/A
	9/28/2011	<b>0.0457</b>	<b>0.0584</b>	<b>0.0319</b>	<b>0.0306</b>	<b>0.0889</b>	<b>0.0468</b>	<b>0.1217</b>	<b>0.0321</b>	<b>0.1176</b>	N/A	<b>0.6741</b>	<b>1.26</b>	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>1.63</b>	N/A
	4/26/2012	<b>0.0529</b>	<b>0.0342</b>	<b>0.0206</b>	<b>0.0407</b>	<b>0.0603</b>	<b>0.0673</b>	<b>0.09</b>	<b>0.0388</b>	<b>0.118</b>	N/A	<b>0.759</b>	<b>1.73</b>	N/A
	10/24/2012	<b>0.0547</b>	<b>0.0906</b>	<b>0.0221</b>	<b>0.0199</b>	<b>0.054</b>	<b>0.0361</b>	<b>0.118</b>	<b>0.0252</b>	<b>0.0413</b>	N/A	<b>0.687</b>	<b>2.14</b>	N/A
	5/7/2013	<b>0.0913</b>	<b>0.0399</b>	<b>0.0198</b>	<b>0.0178</b>	<b>0.0564</b>	<b>0.0872</b>	<b>0.0906</b>	<b>0.0286</b>	<b>0.168</b>	N/A	<b>0.717</b>	<b>2.32</b>	N/A
	7/24/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.057</b>	N/A	N/A	N/A	N/A
	10/18/2013	<b>0.0547</b>	<b>0.0303</b>	<b>0.024</b>	<b>0.0169</b>	<b>0.0905</b>	<b>0.049</b>	<b>0.153</b>	<b>0.0279</b>	<b>0.0521</b>	N/A	<b>0.789</b>	<b>2.53</b>	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.131</b>	N/A	<b>0.0774</b>	N/A	N/A	N/A	N/A
	3/25/2014	<b>0.0483</b>	<b>0.143</b>	<b>0.0282</b>	<b>0.0171</b>	<b>0.173</b>	<b>0.0351</b>	<b>0.101</b>	<b>0.0309</b>	<b>0.0545</b>	<b>0.126</b>	<b>0.723</b>	<b>2.42</b>	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.698</b>	N/A	N/A
	5/21/2014	N/A	N/A	N/A	N/A	<b>0.0607</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/30/2014	<b>0.0777</b>	<b>0.0328</b>	<b>0.0156</b>	<b>0.0167</b>	<b>0.295</b>	<b>0.0378</b>	<b>0.0846</b>	<b>0.0326</b>	<b>0.046</b>	<b>0.711</b>	<b>0.693</b>	<b>2.12</b>	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<b>2.01</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<b>0.0469</b>	<b>0.0376</b>	<b>0.0168</b>	<b>0.0333</b>	<b>0.0538</b>	<b>0.0298</b>	<b>0.0922</b>	<b>0.0266</b>	<b>0.0509</b>	N/A	<b>0.666</b>	<b>2.48</b>	N/A
	10/12/2015	<b>0.0484</b>	<b>0.0477</b>	<b>0.0153</b>	<b>0.0194</b>	<b>0.0491</b>	<b>0.0303</b>	<b>0.114</b>	<b>0.0238</b>	<b>0.0745</b>	N/A	<b>0.67</b>	<b>3.3</b>	N/A
	4/12/2016	<b>0.0462</b>	<b>0.0294</b>	<b>0.0122</b>	<b>0.0149</b>	<b>0.0463</b>	<b>0.0269</b>	<b>0.0695</b>	<b>0.0225</b>	<b>0.0537</b>	N/A	<b>0.622</b>	<b>2.48</b>	N/A
	9/22/2016	N/A	<b>0.0309</b>	<b>0.0159</b>	N/A	<b>0.0247</b>	<b>0.127</b>	<b>0.155</b>	<b>0.254</b>	<b>0.0538</b>	<b>0.126</b>	<b>0.642</b>	<b>1.86</b>	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0528</b>	N/A	N/A	N/A	N/A
	3/20/2017	<b>0.0586</b>	<b>0.0362</b>	<b>0.0156</b>	<b>0.0169</b>	<b>0.0243</b>	N/A	<b>0.0936</b>	<b>0.139</b>	<b>0.0866</b>	<b>0.135</b>	<b>0.583</b>	<b>1.13</b>	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<b>0.0281</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<b>0.156</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<b>0.0531</b>	<b>0.0321</b>	<b>0.0206</b>	<b>0.0174</b>	<b>0.025</b>	<b>0.131</b>	<b>0.136</b>	<b>0.251</b>	<b>0.0582</b>	<b>0.121</b>	<b>0.732</b>	<b>1.29</b>	N/A
	7/24/2017	N/A	<b>0.0328</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<b>0.0619</b>	<b>0.0345</b>	<b>0.018</b>	<b>0.0212</b>	<b>0.0454</b>	<b>0.139</b>	<b>0.0907</b>	<b>0.191</b>	<b>0.0633</b>	N/A	<b>0.57</b>	<b>1.89</b>	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<b>0.0503</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<b>0.0562</b>	<b>0.0344</b>	<b>0.0184</b>	<b>0.0177</b>	<b>0.047</b>	<b>0.0861</b>	<b>0.16</b>	<b>0.229</b>	<b>0.0676</b>	N/A	<b>0.75</b>	<b>1.9</b>	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<b>0.12</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<b>0.0541</b>	<b>0.0264</b>	<b>0.0151</b>	<b>0.0171</b>	<b>0.0335</b>	<b>0.104</b>	<b>0.0587</b>	<b>0.22</b>	<b>0.0582</b>	N/A	<b>0.507</b>	<b>1.56</b>	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<b>0.0938</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<b>0.0519</b>	<b>0.0281</b>	<b>0.0141</b>	<b>0.0151</b>	<b>0.0413</b>	<b>0.142</b>	<b>0.122</b>	<b>0.249</b>	<b>0.0596</b>	<b>0.119</b>	<b>0.66</b>	<b>1.65</b>	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.069</b>	N/A	N/A	N/A	N/A
	3/11/2020	<b>0.0566</b>	<b>0.0262</b>	<b>0.0144</b>	<b>0.0151</b>	<b>0.0414</b>	<b>0.0904</b>	<b>0.0589</b>	<b>0.163</b>	<b>0.0589</b>	N/A	<b>0.479</b>	<b>1.63</b>	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>1.64</b>	N/A
	8/19/2020	<b>0.055</b>	<b>0.0269</b>	<b>0.0148</b>	<b>0.0169</b>	<b>0.0469</b>	<b>0.119</b>	<b>0.121</b>	<b>0.223</b>	<b>0.0761</b>	<b>0.101</b>	<b>0.512</b>	<b>1.6</b>	<b>0.0393</b>
	8/19/2020	N/A	N/A	N/A	<b>0.0155</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Barium, mg/L (CAS NO - 7440-39-3)</b>														
	3/23/2021	0.0623	0.0295	0.0166	0.0182	0.055	0.102	0.0933	0.126	0.0735	0.121	0.463	2.04	0.0331
	3/23/2021	N/A	N/A	N/A	N/A	N/A	0.0916	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	0.062	0.029	0.0153	0.0182	0.0567	0.133	0.122	0.121	0.0717	0.114	0.554	3.03	0.0248
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.123	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	0.0564	0.0261	0.0149	0.0161	N/A	0.0954	0.0545	0.0837	0.0766	0.104	0.475	2.55	0.0192
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0841	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	0.0608	N/A	N/A	N/A	0.0758	0.108	0.382	3.17	0.0216
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.109	N/A	N/A	N/A	N/A
	3/8/2023	N/A	N/A	0.0144	0.0155	0.0706	0.0879	N/A	0.0688	0.0614	0.111	0.446	1.63	0.0185
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.0669	N/A	0.0849	0.0948	0.553	2.69	0.0185
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.066	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	0.0132	0.014	0.0694	0.121	0.678	0.672	0.0934	0.0902	0.0867	0.704	0.019
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0839	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0607	0.0842	0.521	2.35	0.0193
<b>Beryllium, mg/L (CAS NO - 7440-41-7)</b>														
	10/19/2009	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A
	3/2/2010	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	N/A
	5/20/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	8/27/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/1/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	4/29/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/28/2011	0.0154	0.0201	0.0196	0.0202	0.0199	0.0198	0.0186	0.0185	0.0185	N/A	0.0188	0.0184	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.02	< 0.004	< 0.004	< 0.004	< 0.02	< 0.02	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	10/12/2015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000057*	N/A	< 0.001	< 0.001	N/A
	4/12/2016	< 0.001	< 0.001	< 0.001	< 0.001	0.000547*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/22/2016	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	0.0261	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	3/20/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	7/24/2017	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Beryllium, mg/L (CAS NO - 7440-41-7)</b>														
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<b>Cadmium, mg/L (CAS NO - 7440-43-9)</b>														
	10/19/2009	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	N/A
	3/2/2010	< 0.00025	<b>0.0013</b>	< 0.00025	< 0.00025	N/A	< 0.00025	< 0.00025	<b>0.0031</b>	<b>0.00081</b>	N/A	<b>0.00034</b>	N/A	N/A
	5/20/2010	< 0.00025	<b>0.00094</b>	< 0.00025	<b>0.00099</b>	<b>0.0042</b>	< 0.00025	<b>0.00033</b>	<b>0.00069</b>	<b>0.0036</b>	N/A	< 0.00025	<b>0.0024</b>	N/A
	8/27/2010	< 0.005	< 0.005	< 0.005	<b>0.006</b>	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	9/28/2011	<b>0.0154</b>	<b>0.0201</b>	<b>0.0234</b>	<b>0.0231</b>	<b>0.0215</b>	<b>0.0174</b>	<b>0.0176</b>	<b>0.017</b>	<b>0.0167</b>	N/A	<b>0.0176</b>	<b>0.0176</b>	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0008	N/A
	4/26/2012	< 0.0008	<b>0.0105</b>	<b>0.0066</b>	<b>0.0041</b>	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	N/A	< 0.0008	<b>0.0009</b>	N/A
	10/24/2012	<b>0.0015</b>	<b>0.0057</b>	<b>0.0014</b>	<b>0.0022</b>	<b>0.0012</b>	< 0.0008	< 0.0008	< 0.0008	< 0.0008	N/A	< 0.0008	<b>0.0011</b>	N/A
	5/7/2013	< 0.0008	<b>0.0019</b>	<b>0.0079</b>	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	N/A	< 0.0008	< 0.0008	N/A
	10/18/2013	< 0.0008	< 0.0008	<b>0.0022</b>	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	< 0.0008	N/A	< 0.0008	< 0.0008	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.007</b>	N/A	N/A	N/A
	3/25/2014	< 0.0008	<b>0.0031</b>	< 0.004	<b>0.0082</b>	<b>0.0698</b>	< 0.0008	< 0.004	< 0.004	< 0.0008	<b>0.005</b>	< 0.0008	<b>0.0029</b>	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0008	N/A	N/A
	5/21/2014	N/A	N/A	N/A	N/A	<b>0.0122</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/30/2014	< 0.0008	< 0.0008	<b>0.0045</b>	<b>0.0054</b>	<b>0.021</b>	< 0.0008	< 0.0008	<b>0.0238</b>	< 0.0008	<b>0.0023</b>	< 0.0008	<b>0.0014</b>	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<b>0.0218</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 0.0005	<b>0.00358</b>	< 0.0005	<b>0.000649</b>	<b>0.0159</b>	< 0.0005	< 0.0005	<b>0.00835</b>	0.000168*	N/A	< 0.0005	0.000247*	N/A
	10/12/2015	< 0.0005	<b>0.0494</b>	< 0.0005	<b>0.0103</b>	<b>0.00127</b>	< 0.0005	< 0.0005	<b>0.00104</b>	0.000424*	N/A	< 0.0005	0.000202*	N/A
	4/12/2016	0.000057*	<b>0.00077</b>	0.000059*	0.000064*	<b>0.000941</b>	< 0.0005	< 0.0005	<b>0.00235</b>	0.000425*	N/A	0.000079*	< 0.0005	N/A
	9/22/2016	N/A	<b>0.0005</b>	0.000118*	N/A	0.00022*	< 0.0005	< 0.0005	0.000168*	0.000041*	N/A	< 0.0005	< 0.0005	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	3/20/2017	0.000071*	0.000382*	< 0.0005	0.00009*	0.000107*	N/A	0.000058*	0.000137*	0.000062*	N/A	< 0.0005	< 0.0005	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.000131*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.000073*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	0.000048*	0.000401*	< 0.001	< 0.0005	< 0.0005	< 0.0005	0.000073*	0.000157*	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	7/24/2017	N/A	0.000451*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.0005	0.000199*	< 0.0005	< 0.0005	0.00014*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	5/15/2018	N/A	N/A	N/A	N/A	0.000175*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.0005	0.000081*	0.000157*	< 0.0005	0.000117*	< 0.0005	0.000062*	< 0.0005	0.000105*	N/A	< 0.0005	< 0.0005	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Cadmium, mg/L (CAS NO - 7440-43-9)</b>														
	5/29/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.0001	0.000207	0.000146	< 0.0001	0.000087*	< 0.0001	0.00004*	0.000057*	< 0.0001	N/A	< 0.0001	< 0.0001	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A
	3/11/2020	< 0.0001	0.000159	0.000084*	< 0.0001	0.000074*	< 0.0001	< 0.0001	0.000056*	< 0.0001	N/A	< 0.0001	< 0.0001	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A
	8/19/2020	< 0.0001	0.000183	0.000185	0.000054*	0.000187	< 0.0001	< 0.0001	0.000077*	0.000153	N/A	< 0.0001	< 0.0001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	0.000101	0.000275	0.000122	< 0.0001	< 0.0001	< 0.0001	0.000187	< 0.0001	0.000129	N/A	0.000337	< 0.0001	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.0001	0.000117	0.000139	< 0.0001	< 0.0001	< 0.0001	0.000602	< 0.0001	0.000106	< 0.0001	0.000243	< 0.0001	< 0.0001
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.000562	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.0001	0.000182	0.0001	< 0.0001	N/A	< 0.0001	0.000057*	< 0.0001	0.000145	0.000103	0.0001	< 0.0004	< 0.0001
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000101	0.000069*	< 0.0001	< 0.0001	< 0.0001
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000074*	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	0.000085*	0.000077*	0.000055*	< 0.0001
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000189*	< 0.0002	< 0.0002	< 0.0002	< 0.0002
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	0.00011*	< 0.0002	0.000164*	< 0.0002	< 0.0002
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000164*	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
<b>Chromium, mg/L (CAS NO - 7440-47-3)</b>														
	10/19/2009	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A
	3/2/2010	< 0.01	0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	N/A	N/A
	5/20/2010	< 0.01	0.014	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	N/A
	8/27/2010	< 0.01	< 0.01	< 0.01	< 0.01	0.015	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	N/A
	10/1/2010	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	N/A
	4/29/2011	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/28/2011	0.0069	0.0125	0.0117	0.0117	0.012	0.0109	0.0121	0.0173	0.0159	N/A	0.015	0.0199	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.04	N/A
	4/26/2012	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	10/24/2012	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	5/7/2013	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	10/18/2013	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	0.0099	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.008	N/A	N/A	N/A
	3/25/2014	< 0.008	0.0125	< 0.01	< 0.008	< 0.008	< 0.008	< 0.01	< 0.01	< 0.008	< 0.008	< 0.008	< 0.008	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.008	N/A	N/A
	9/30/2014	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	N/A
	2/24/2015	N/A	N/A	N/A	N/A	0.0174	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 0.005	< 0.005	< 0.005	0.0023*	0.00165*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	10/12/2015	< 0.005	0.00181*	< 0.005	< 0.005	0.00209*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	4/12/2016	0.000612*	0.000391*	< 0.005	0.000356*	0.00662	< 0.005	< 0.005	0.00186*	0.000433*	N/A	0.000524*	< 0.005	N/A
	9/22/2016	N/A	< 0.005	< 0.005	N/A	0.0021*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	0.000479*	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/20/2017	< 0.005	< 0.005	< 0.005	< 0.005	0.000981*	N/A	0.00126*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.00121*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	7/24/2017	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Chromium, mg/L (CAS NO - 7440-47-3)</b>														
	5/15/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.00151*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	5/15/2018	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	0.00114*	0.00123*	0.00114*	< 0.005	< 0.005	0.00213*	< 0.005	< 0.005	< 0.005	N/A	< 0.005	0.00164*	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/11/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	8/19/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	8/19/2020	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.005
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
<b>Cobalt, mg/L (CAS NO - 7440-48-4)</b>														
	10/19/2009	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	N/A
	3/2/2010	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	0.06	N/A	0.03	N/A	N/A
	5/20/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	8/27/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	10/1/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	4/29/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	0.08	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	0.08	N/A
	9/28/2011	0.0081	0.0103	0.0199	0.0132	0.0131	0.0099	0.0101	0.0108	0.0268	N/A	0.0406	0.0876	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0893	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0177	N/A	0.0233	0.0994	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0104	N/A	0.0077	0.0369	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0137	N/A	0.0062	0.0498	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0053	< 0.004	0.0075	N/A	0.0206	0.0291	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	3/25/2014	< 0.004	0.0074	< 0.02	< 0.004	< 0.004	< 0.004	< 0.02	< 0.02	0.0061	< 0.004	0.0184	0.0636	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0193	N/A	N/A
	9/30/2014	< 0.0008	< 0.0008	< 0.0008	< 0.0008	0.0027	< 0.0008	< 0.0008	0.0017	0.0073	0.0015	0.0181	0.0232	N/A
	2/24/2015	N/A	N/A	N/A	N/A	0.0108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.000192*	0.000357*	0.00034*	0.00168	0.00123	0.000237*	0.00284	0.00174	0.0102	N/A	0.013	0.0217	N/A
	10/12/2015	< 0.0005	0.000643	0.00149	0.000852	0.00362	0.000097*	0.000476*	0.0011	0.00681	N/A	0.0187	0.0235	N/A
	4/12/2016	0.000164*	0.000185*	0.000358*	0.000435*	0.0149	0.000137*	0.00128	0.00111	0.00671	0.000321*	0.0164	0.0173	N/A
	9/22/2016	N/A	0.00003*	0.00171	N/A	N/A	0.000077*	0.00177	0.00144	0.0078	0.00315	0.000056*	0.0229	0.0165
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00306	N/A	N/A	N/A	N/A
	3/20/2017	0.000103*	0.000083*	0.000424*	0.000162*	0.000099*	N/A	0.00133	0.00316	0.00395	0.000099*	0.0196	0.0268	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.000126*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Cobalt, mg/L (CAS NO - 7440-48-4)</b>														
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.00299	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	0.000055*	< 0.0005	0.000442*	0.000093*	0.000134*	0.00157	0.00117	0.00463	0.007	0.000214*	0.0277	0.0229	N/A
	7/24/2017	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	0.000101*	0.000187*	0.00052	0.000117*	0.000741	0.00427	0.00186	0.00486	0.00552	0.000121*	0.0177	0.0289	N/A
	5/15/2018	N/A	N/A	N/A	N/A	0.00125	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.0005	< 0.0005	0.000569	0.000152*	0.00138	0.000484*	0.0016	0.0056	0.00899	0.000239*	0.0194	0.025	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.00127	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.001	< 0.001	< 0.001	< 0.001	0.000995*	0.00192	< 0.001	0.00877	0.00978	N/A	0.0174	0.0208	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	0.00154	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.0005	< 0.0005	0.000111*	< 0.0005	0.00256	0.00288	< 0.0005	0.00856	0.0112	0.000206*	0.0221	0.0228	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0117	N/A	N/A	N/A	N/A
	3/11/2020	< 0.0005	< 0.0005	0.000727	< 0.0005	0.00289	0.00201	0.000582	0.00637	0.0117	N/A	0.0167	0.0156	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0208	N/A
	8/19/2020	< 0.0005	< 0.0005	< 0.0005	0.000106*	0.00507	0.00235	0.000536	0.00569	0.00111	0.000268*	0.0141	0.0275	0.00442
	8/19/2020	N/A	N/A	N/A	0.000192*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	0.00013*	0.000101*	< 0.0005	0.000163*	0.00559	0.00143	0.000889	0.00429	0.0136	0.000252*	0.0189	0.0241	0.00282
	3/23/2021	N/A	N/A	N/A	N/A	N/A	0.00133	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.0005	< 0.0005	0.000279*	0.000446*	0.00593	0.00182	0.00254	0.00601	0.0119	0.000276*	0.0127	0.02	0.00119
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.00246	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.0005	< 0.0005	0.000246*	0.000365*	N/A	0.00147	0.000247*	0.00505	0.0109	0.000265*	0.00592	0.012	0.000949
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00491	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	0.00377	N/A	N/A	N/A	0.0109	0.000238*	0.0077	0.014	0.000643
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00024*	N/A	N/A	N/A
	3/8/2023	N/A	N/A	0.000303*	0.000773	0.00456	0.000823	N/A	0.00201	0.0119	0.000397*	0.00368	0.0411	0.000584
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.000729	N/A	0.00257	0.000711	0.0105	0.0152	0.000345*
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.000977	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	< 0.0005	0.000294*	0.00741	0.00235	0.00975	0.0123	0.0009	0.000172*	0.0025	0.00978	0.000362*
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00232	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0146	0.000301*	0.0114	0.00637	0.000294*
<b>Copper, mg/L (CAS NO - 7440-50-8)</b>														
	10/19/2009	< 0.01	< 0.01	< 0.01	0.02	N/A	< 0.01	< 0.01	< 0.01	0.03	N/A	< 0.01	N/A	N/A
	3/2/2010	< 0.005	0.012	< 0.005	0.008	N/A	< 0.005	< 0.005	< 0.005	0.011	N/A	< 0.005	N/A	N/A
	5/20/2010	< 0.005	0.015	< 0.005	0.027	0.005	< 0.005	< 0.005	0.005	0.007	N/A	< 0.005	0.009	N/A
	8/27/2010	< 0.005	< 0.005	< 0.005	0.011	0.027	< 0.005	< 0.005	< 0.005	0.005	N/A	< 0.005	0.015	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005	< 0.005	< 0.005	0.008	N/A	< 0.005	0.008	N/A
	4/29/2011	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	0.02	N/A
	9/28/2011	0.0077	0.0135	0.0104	0.0116	0.0106	0.0094	0.0128	0.0101	0.014	N/A	0.0107	0.0198	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0366	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	< 0.004	0.0054	0.005	0.0049	0.0053	0.0059	N/A	< 0.004	0.0283	N/A
	10/24/2012	0.0133	0.0075	< 0.004	< 0.004	0.0058	< 0.004	< 0.004	< 0.004	0.007	N/A	< 0.004	0.0072	N/A
	5/7/2013	0.0068	< 0.004	< 0.004	< 0.004	0.0044	< 0.004	< 0.004	0.0098	0.0059	N/A	< 0.004	0.0246	N/A
	7/24/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0138	N/A
	10/18/2013	< 0.004	< 0.004	0.0041	0.0045	0.0042	< 0.004	0.0132	0.171	< 0.004	N/A	< 0.004	0.0164	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	0.0377	N/A
	3/25/2014	0.0051	0.0227	< 0.02	< 0.004	0.0083	< 0.004	< 0.02	0.0478	< 0.004	< 0.004	0.0074	0.0669	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0091	N/A	N/A
	9/30/2014	0.0111	< 0.004	< 0.004	< 0.004	0.009	< 0.004	< 0.004	0.0281	< 0.004	< 0.004	< 0.004	0.0106	N/A
	2/24/2015	N/A	N/A	N/A	N/A	0.0209	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.00295	0.00134*	0.00211	0.00837	0.00403	< 0.002	< 0.002	0.00359	0.00131*	N/A	< 0.002	0.00553	N/A
	10/12/2015	0.000491*	0.013	0.00082*	0.00219	0.00689	0.00111*	0.000815*	0.000675*	0.00247	N/A	0.00133*	0.00478	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Copper, mg/L (CAS NO - 7440-50-8)</b>														
	4/12/2016	< 0.005	0.00522	< 0.005	< 0.005	0.0275	< 0.005	0.00136*	0.0025*	0.00188*	N/A	0.00612	< 0.005	N/A
	9/22/2016	N/A	0.00143*	< 0.005	N/A	0.00153*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	2.58	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/20/2017	< 0.005	< 0.005	< 0.005	0.00636	< 0.005	N/A	0.0025*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	7/24/2017	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00248*	0.00188*	< 0.005	N/A	0.00165*	< 0.005	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	0.00225	0.00187*	0.00248	0.0024	0.00167*	0.00216	0.00143*	0.00206	0.00455	N/A	0.00642	0.0186	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	0.000674*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/11/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	8/19/2020	< 0.005	0.00189*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00193*	N/A	< 0.005	< 0.005	N/A
	8/19/2020	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00248*	< 0.005	< 0.005	N/A	0.00222*	0.00184*	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00472*	< 0.005	< 0.005	< 0.005	0.00227*	< 0.005	< 0.005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.00441*	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.005
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00188*	< 0.005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00202*	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	0.00185*	< 0.005	0.00189*	< 0.005	< 0.005	0.00187*	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
<b>Lead, mg/L (CAS NO - 7439-92-1)</b>														
	10/19/2009	0.02	0.02	< 0.01	< 0.01	N/A	< 0.01	< 0.01	< 0.01	0.01	N/A	< 0.01	N/A	N/A
	3/2/2010	0.003	0.006	< 0.001	< 0.001	N/A	< 0.001	< 0.001	0.001	0.004	N/A	< 0.001	N/A	N/A
	5/20/2010	0.001	0.007	< 0.001	0.001	< 0.001	0.001	0.001	0.003	0.002	N/A	< 0.001	< 0.001	N/A
	8/27/2010	< 0.005	< 0.005	0.006	< 0.005	0.007	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A
	9/28/2011	< 0.008	0.0106	< 0.008	0.0085	< 0.008	0.0084	< 0.008	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0109	< 0.004	0.0042	< 0.004	N/A	< 0.004	0.0092	N/A
	10/24/2012	0.0222	0.0065	< 0.004	< 0.004	< 0.004	< 0.004	0.0043	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	5/7/2013	0.0076	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	0.0156	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0057	< 0.004	< 0.004	N/A	< 0.004	0.0113	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	N/A
	3/25/2014	0.0048	0.022	< 0.02	< 0.004	< 0.004	< 0.004	< 0.02	< 0.02	< 0.004	< 0.004	< 0.004	0.0254	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	9/30/2014	0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0049	< 0.004	< 0.004	< 0.004	0.0053	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Lead, mg/L (CAS NO - 7439-92-1)</b>														
	2/24/2015	N/A	N/A	N/A	N/A	0.0079	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.00219	0.00391	0.00123	0.00392	0.00113	0.000883	0.000142*	0.000455*	0.00197	N/A	0.00044*	0.00282	N/A
	10/12/2015	0.000274*	0.00316	0.000181*	0.000855	0.00202	0.000327*	0.000196*	0.000128*	0.00075	N/A	0.000535	0.0021	N/A
	4/12/2016	0.00179	0.00042*	0.000328*	0.000401*	0.00663	0.000275*	0.00179	0.00156	0.000485*	N/A	0.00224	0.00044*	N/A
	9/22/2016	N/A	< 0.0005	0.000636	N/A	< 0.0005	0.000216*	0.00056	< 0.0005	< 0.0005	N/A	0.00024*	0.000769	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	3/20/2017	0.00177	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	0.00166	< 0.0005	0.000517	N/A	0.000379*	0.000421*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	0.00144	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	0.00036*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000618	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	7/24/2017	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	0.00108	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00102	< 0.0005	< 0.0005	N/A	0.00047*	0.000503	N/A
	5/15/2018	N/A	N/A	N/A	N/A	0.00025*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000629	< 0.0005	0.00048*	N/A	< 0.0005	< 0.0005	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.00145	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	0.000603	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000349*	< 0.0005	< 0.0005	< 0.0005	N/A	0.000404*	0.00112	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	0.000517	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00104	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	3/11/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000776	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	8/19/2020	< 0.0005	0.000111*	< 0.0005	< 0.0005	0.000254*	0.000392*	0.000224*	< 0.0005	< 0.0005	N/A	0.000676	< 0.0005	N/A
	8/19/2020	N/A	N/A	N/A	0.000143*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	0.000771	0.000299*	< 0.0005	0.000299*	< 0.0005	0.000976	0.000817	0.000215*	0.000282*	N/A	0.000363*	0.000559	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	0.000862	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	0.000703	0.000213*	< 0.0005	0.000283*	< 0.0005	0.00159	0.000632	< 0.0005	< 0.0005	< 0.0005	0.000302*	< 0.0005	< 0.0005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.000583	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	0.000517	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00104*	< 0.0005
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	0.000249*	< 0.0005	0.000689	0.000289*	< 0.0005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	3/8/2023	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	0.000658	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00137	< 0.0005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	0.00111	0.000397*	< 0.0005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	0.000892	0.000573	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000583	< 0.0005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	0.000373*	< 0.0005
<b>Mercury, mg/L (CAS NO - 7439-97-6)</b>														
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	10/24/2012	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Total Metals Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	10/19/2009	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	<b>0.07</b>	N/A	< 0.05	N/A	N/A
	3/2/2010	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	<b>0.12</b>	N/A	< 0.001	N/A	N/A
	5/20/2010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	<b>0.17</b>	N/A	<b>0.05</b>	<b>0.12</b>	N/A
	8/27/2010	<b>0.006</b>	<b>0.008</b>	<b>0.023</b>	<b>0.009</b>	<b>0.032</b>	<b>0.006</b>	<b>0.014</b>	<b>0.011</b>	<b>0.084</b>	N/A	<b>0.063</b>	<b>0.12</b>	N/A
	10/1/2010	< 0.001	<b>0.006</b>	<b>0.023</b>	< 0.001	<b>0.015</b>	< 0.001	<b>0.018</b>	<b>0.014</b>	<b>0.074</b>	N/A	<b>0</b>	<b>0.11</b>	N/A
	4/29/2011	<b>0.005</b>	<b>0.006</b>	<b>0.017</b>	<b>0.006</b>	< 0.005	< 0.005	<b>0.013</b>	<b>0.012</b>	<b>0.043</b>	N/A	<b>0.037</b>	<b>0.17</b>	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<b>0.015</b>	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.16</b>	N/A
	9/28/2011	<b>0.0077</b>	<b>0.0149</b>	<b>0.0201</b>	<b>0.0159</b>	<b>0.0205</b>	<b>0.014</b>	<b>0.0212</b>	<b>0.0184</b>	<b>0.063</b>	N/A	<b>0.0509</b>	<b>0.1628</b>	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.175</b>	N/A
	4/26/2012	<b>0.0094</b>	<b>0.0088</b>	<b>0.044</b>	<b>0.0125</b>	<b>0.0257</b>	<b>0.0103</b>	<b>0.0233</b>	<b>0.0275</b>	<b>0.093</b>	N/A	<b>0.0349</b>	<b>0.202</b>	N/A
	10/24/2012	<b>0.0117</b>	<b>0.0124</b>	<b>0.035</b>	<b>0.0126</b>	<b>0.0238</b>	<b>0.0095</b>	<b>0.0205</b>	<b>0.0265</b>	<b>0.0519</b>	N/A	<b>0.0211</b>	<b>0.0896</b>	N/A
	5/7/2013	<b>0.0097</b>	<b>0.0066</b>	<b>0.0211</b>	<b>0.0065</b>	<b>0.0133</b>	<b>0.0092</b>	<b>0.02</b>	<b>0.023</b>	<b>0.049</b>	N/A	<b>0.0181</b>	<b>0.12</b>	N/A
	10/18/2013	< 0.004	< 0.004	<b>0.0065</b>	< 0.004	<b>0.0044</b>	< 0.004	<b>0.0312</b>	<b>0.019</b>	<b>0.0327</b>	N/A	<b>0.0213</b>	<b>0.0439</b>	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.01</b>	N/A	N/A	N/A
	3/25/2014	< 0.004	<b>0.0231</b>	< 0.02	< 0.004	<b>0.0062</b>	< 0.004	<b>0.0225</b>	< 0.02	<b>0.0267</b>	<b>0.0088</b>	<b>0.0229</b>	<b>0.0945</b>	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0259</b>	N/A	N/A
	9/30/2014	< 0.004	< 0.004	<b>0.0059</b>	< 0.004	<b>0.0074</b>	< 0.004	<b>0.0124</b>	<b>0.0126</b>	<b>0.0346</b>	<b>0.0145</b>	<b>0.0207</b>	<b>0.0209</b>	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<b>0.0237</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<b>0.00581</b>	<b>0.00148*</b>	<b>0.00671</b>	<b>0.0289</b>	<b>0.0042*</b>	<b>0.000794*</b>	<b>0.0135</b>	<b>0.0132</b>	<b>0.0364</b>	N/A	<b>0.0166</b>	<b>0.0498</b>	N/A
	10/12/2015	<b>0.000745*</b>	<b>0.00389*</b>	<b>0.00814</b>	<b>0.00345*</b>	<b>0.0102</b>	<b>0.000796*</b>	<b>0.0145</b>	<b>0.00635</b>	<b>0.0634</b>	N/A	<b>0.0213</b>	<b>0.0426</b>	N/A
	4/12/2016	<b>0.00203*</b>	< 0.005	<b>0.00673</b>	<b>0.00627</b>	<b>0.0232</b>	< 0.005	<b>0.00796</b>	<b>0.00596</b>	<b>0.0483</b>	N/A	<b>0.0184</b>	<b>0.032</b>	N/A
	9/22/2016	N/A	< 0.005	<b>0.00943</b>	N/A	< 0.005	<b>0.00462*</b>	<b>0.0121</b>	<b>0.0213</b>	<b>0.0222</b>	<b>0.00686</b>	<b>0.0221</b>	<b>0.0265</b>	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0216</b>	N/A	N/A	N/A	N/A
	3/20/2017	<b>0.00126*</b>	<b>0.0012*</b>	<b>0.00235*</b>	<b>0.000954*</b>	<b>0.00132*</b>	N/A	<b>0.0108</b>	<b>0.015</b>	<b>0.0256</b>	<b>0.00771</b>	<b>0.0227</b>	<b>0.0348</b>	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<b>0.00155*</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<b>0.00794</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.005	< 0.005	<b>0.00312*</b>	< 0.005	<b>0.00116*</b>	<b>0.00409*</b>	<b>0.0198</b>	<b>0.0156</b>	<b>0.034</b>	<b>0.00714</b>	<b>0.0283</b>	<b>0.0246</b>	N/A
	7/24/2017	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	<b>0.00215*</b>	<b>0.00194*</b>	< 0.005	<b>0.00271*</b>	<b>0.00749</b>	<b>0.00732</b>	<b>0.0166</b>	<b>0.0266</b>	N/A	<b>0.0185</b>	<b>0.0365</b>	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<b>0.00372*</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	<b>0.00117*</b>	<b>0.00876</b>	< 0.005	<b>0.00578</b>	<b>0.00105*</b>	<b>0.0192</b>	<b>0.0119</b>	<b>0.0426</b>	N/A	<b>0.0186</b>	<b>0.0287</b>	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<b>0.00372*</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<b>0.00182*</b>	<b>0.0024</b>	<b>0.00546</b>	<b>0.0012*</b>	<b>0.00555</b>	<b>0.00365</b>	<b>0.00273</b>	<b>0.0223</b>	<b>0.0396</b>	N/A	<b>0.0176</b>	<b>0.0276</b>	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<b>0.00549</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	<b>0.00776</b>	< 0.005	<b>0.00821</b>	<b>0.00716</b>	<b>0.0147</b>	<b>0.017</b>	<b>0.0413</b>	N/A	<b>0.02</b>	<b>0.029</b>	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0414</b>	N/A	N/A	N/A	N/A
	3/11/2020	< 0.005	< 0.005	<b>0.0075</b>	< 0.005	<b>0.0108</b>	<b>0.00557</b>	<b>0.0106</b>	<b>0.0168</b>	<b>0.0419</b>	N/A	<b>0.0154</b>	<b>0.0237</b>	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0279</b>	N/A
	8/19/2020	< 0.005	< 0.005	<b>0.00719</b>	< 0.005	<b>0.0206</b>	<b>0.00607</b>	<b>0.0176</b>	<b>0.0141</b>	<b>0.0152</b>	N/A	<b>0.0123</b>	<b>0.0302</b>	N/A
	8/19/2020	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.005	< 0.005	<b>0.00578</b>	< 0.005	<b>0.0185</b>	<b>0.00297*</b>	<b>0.0247</b>	<b>0.014</b>	<b>0.0482</b>	N/A	<b>0.109</b>	<b>0.0376</b>	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<b>0.00297*</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.005	< 0.005	<b>0.00573</b>	< 0.005	<b>0.0163</b>	<b>0.00442*</b>	<b>0.0473</b>	<b>0.0147</b>	<b>0.0407</b>	<b>0.00449*</b>	<b>0.0459</b>	<b>0.0306</b>	< 0.005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0455</b>	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.005	< 0.005	<b>0.00496*</b>	< 0.005	N/A	<b>0.0085</b>	<b>0.0201</b>	<b>0.0144</b>	<b>0.0472</b>	<b>0.00609</b>	<b>0.0134</b>	<b>0.0211</b>	<b>0.00201*</b>
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.0145</b>	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	<b>0.00893</b>	N/A	N/A	N/A	<b>0.0386</b>	<b>0.00669</b>	<b>0.00908</b>	<b>0.0244</b>	< 0.005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.00681</b>	N/A	N/A	N/A
	3/8/2023	N/A	N/A	<b>0.00717</b>	< 0.005	<b>0.0105</b>	<b>0.00599</b>	N/A	<b>0.0137</b>	<b>0.0456</b>	<b>0.00658</b>	<b>0.0141</b>	<b>0.0844</b>	< 0.005

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Nickel, mg/L (CAS NO - 7440-02-0)</b>														
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.0474	N/A	0.0242	0.00737	0.012	0.0213	<0.005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	0.0382	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	0.00331*	<0.005	0.0252	0.00777	0.0157	0.0183	0.0126	0.00664	0.0107	0.0157	<0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0104	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0444	0.00705	0.0107	0.0115	<0.005
<b>Selenium, mg/L (CAS NO - 7782-49-2)</b>														
	10/19/2009	<0.01	<0.01	<0.01	<0.01	N/A	<0.01	<0.01	<0.01	<0.01	N/A	<0.01	N/A	N/A
	3/2/2010	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	N/A	N/A
	5/20/2010	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	N/A	<0.005	<0.005	N/A
	8/27/2010	<0.005	0.007	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	10/1/2010	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	4/29/2011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	<0.01	<0.01	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	N/A	N/A	N/A	<0.01	N/A
	9/28/2011	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	<0.01	<0.01	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.004	N/A
	4/26/2012	<0.004	0.0053	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.0044	N/A	<0.004	0.0139	N/A
	10/24/2012	<0.004	<0.004	<0.004	0.0056	<0.004	<0.004	<0.004	<0.004	<0.004	N/A	<0.004	0.0042	N/A
	5/7/2013	<0.004	0.005	<0.004	0.0059	<0.004	<0.004	0.0092	<0.004	<0.004	N/A	<0.004	0.0084	N/A
	7/24/2013	N/A	N/A	N/A	N/A	N/A	N/A	<0.004	N/A	N/A	N/A	N/A	<0.004	N/A
	10/18/2013	<0.004	0.0071	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	N/A	<0.004	<0.004	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.004	N/A	N/A	N/A
	3/25/2014	<0.004	0.0078	<0.02	0.0129	<0.004	<0.004	<0.02	<0.02	<0.004	<0.004	<0.004	<0.004	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.004	N/A	N/A
	9/30/2014	<0.004	0.0041	<0.004	0.0081	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<0.005	0.00571	<0.005	0.00476*	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	10/12/2015	<0.005	0.0048*	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	4/12/2016	<0.005	0.005	<0.005	<0.005	0.00105*	<0.005	<0.005	0.00181*	<0.005	N/A	<0.005	<0.005	N/A
	9/22/2016	N/A	0.0106	<0.005	N/A	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A
	3/20/2017	<0.005	0.0157	<0.005	<0.005	0.00111*	N/A	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.00129*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<0.005	0.0105	<0.005	<0.005	<0.005	<0.005	0.00113*	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	7/24/2017	N/A	0.0112	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<0.005	0.0135	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	0.00184*	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<0.0025	0.0141	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	N/A	<0.0025	<0.0025	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<0.0025	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<0.005	0.0146	<0.005	<0.005	<0.005	<0.005	0.00197*	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A
	3/11/2020	<0.005	0.0176	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	N/A
	8/19/2020	<0.005	0.0164	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	8/19/2020	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	0.00693	<0.005	<0.005	N/A	<0.005	<0.005	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<0.005	0.0165	0.001*	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<0.005	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

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	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Selenium, mg/L (CAS NO - 7782-49-2)</b>														
	5/11/2022	< 0.005	0.0188	< 0.005	< 0.005	N/A	< 0.005	0.0191	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.005
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00154*	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
<b>Silver, mg/L (CAS NO - 7440-22-4)</b>														
	10/19/2009	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	< 0.01	N/A	N/A
	3/2/2010	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	N/A
	5/20/2010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/27/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A
	9/28/2011	0.0034	0.0159	0.0156	0.0163	0.016	0.0162	0.016	0.0162	0.0166	N/A	0.0161	0.0201	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	4/26/2012	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	N/A	< 0.008	< 0.008	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.02	< 0.004	< 0.004	< 0.004	< 0.02	< 0.02	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.000043*	0.000047*	0.000055*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	10/12/2015	0.000129*	0.000117*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000145*	< 0.001	N/A	< 0.001	< 0.001	N/A
	4/12/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/22/2016	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	0.0268	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/20/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	7/24/2017	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000335*	< 0.001	N/A	< 0.001	< 0.002	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Silver, mg/L (CAS NO - 7440-22-4)</b>														
	3/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000856*	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<b>Thallium, mg/L (CAS NO - 7440-28-0)</b>														
	10/19/2009	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	N/A
	3/2/2010	< 0.00025	0.00056	< 0.00025	< 0.00025	N/A	< 0.00025	< 0.00025	< 0.00025	< 0.00025	N/A	< 0.00025	N/A	N/A
	5/20/2010	< 0.00025	0.00056	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	< 0.00025	N/A	< 0.00025	< 0.00025	N/A
	8/27/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/1/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	4/29/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	9/28/2011	0.0233	0.052	0.0621	0.0151	< 0.01	0.0193	0.0655	0.5551	< 0.01	N/A	< 0.01	< 0.01	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	4/26/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/24/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	5/7/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	< 0.004	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 0.001	0.000056*	0.000049*	< 0.001	< 0.001	< 0.001	< 0.001	0.000038*	0.000123*	N/A	< 0.001	< 0.001	N/A
	10/12/2015	0.000039*	0.000081*	0.000064*	< 0.001	0.000053*	< 0.001	0.000041*	0.000065*	0.000095*	N/A	0.000035*	0.000044*	N/A
	4/12/2016	0.000031*	0.000056*	< 0.001	< 0.001	0.000026*	< 0.001	< 0.001	0.000046*	0.000116*	N/A	0.000029*	< 0.001	N/A
	9/22/2016	N/A	0.000036*	0.000026*	N/A	< 0.001	< 0.001	< 0.001	0.000058*	< 0.001	N/A	< 0.001	0.000038*	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	3/20/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	7/24/2017	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Thallium, mg/L (CAS NO - 7440-28-0)</b>														
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	0.0011	0.00108	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	0.000833*	0.00168	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0121	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<b>Tin, mg/L (CAS NO - 7440-31-5)</b>														
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	10/24/2012	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	N/A	< 0.005	N/A	< 0.005	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.005	N/A	N/A	N/A	N/A	N/A
<b>Vanadium, mg/L (CAS NO - 7440-62-2)</b>														
	10/19/2009	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	N/A
	3/2/2010	< 0.02	0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A
	5/20/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	8/27/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	10/1/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	4/29/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	< 0.05	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	9/28/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.04	N/A
	4/26/2012	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	10/24/2012	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	5/7/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	10/18/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0231	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	< 0.02	N/A	N/A	N/A
	3/25/2014	< 0.02	0.0424	< 0.1	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	9/30/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.000868*	0.00167*	0.00186*	0.0134	0.00254*	0.000606*	0.000466*	0.000789*	0.00479*	N/A	< 0.005	0.00138*	N/A
	10/12/2015	< 0.005	0.00224*	0.000453*	0.00533	0.00365*	< 0.005	0.000455*	< 0.005	0.00811	N/A	< 0.005	0.00138*	N/A

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	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Vanadium, mg/L (CAS NO - 7440-62-2)</b>														
	4/12/2016	0.000563*	0.000666*	0.000639*	0.00488*	0.0127	< 0.005	0.000432*	0.00037*	0.0039*	N/A	0.001*	0.000873*	N/A
	9/22/2016	N/A	0.000453*	0.000556*	N/A	0.00115*	0.000346*	0.000906*	0.000305*	0.0011*	N/A	0.00033*	0.00134*	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00104*	N/A	N/A	N/A	N/A
	3/20/2017	< 0.005	< 0.005	< 0.005	0.00147*	0.00137*	N/A	0.00275*	< 0.005	0.00143*	N/A	0.000968*	0.000941*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.00153*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.005	0.0015*	0.000933*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	7/24/2017	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	0.000916*	< 0.005	0.0013*	0.00103*	< 0.005	0.00432*	< 0.005	< 0.005	N/A	0.000852*	< 0.005	N/A
	5/15/2018	N/A	N/A	N/A	N/A	0.00104*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	0.000601*	< 0.005	0.00231*	0.00108*	< 0.005	0.00197*	< 0.005	< 0.005	N/A	0.000597*	0.00099*	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.000982*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	0.00164*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/11/2020	< 0.005	0.000965*	< 0.005	0.00171*	0.00138*	0.000867*	< 0.005	< 0.005	0.000839*	N/A	< 0.005	< 0.005	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	8/19/2020	< 0.005	< 0.005	< 0.005	0.00139*	0.00139*	< 0.005	< 0.005	< 0.005	0.00148*	N/A	0.00128*	< 0.005	N/A
	8/19/2020	N/A	N/A	N/A	0.00151*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.005	< 0.005	< 0.005	0.00215*	0.00132*	< 0.005	0.00484*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.005	< 0.005	< 0.005	0.00124*	< 0.005	< 0.005	0.0029*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.00283*	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.005	< 0.005	< 0.005	0.00124*	N/A	< 0.005	0.00318*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.005
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00196*	< 0.005
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00143*	< 0.005	0.00206*	0.00159*	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00139*	< 0.005
<b>Zinc, mg/L (CAS NO - 7440-66-6)</b>														
	10/19/2009	< 0.02	0.03	< 0.02	0.18	N/A	< 0.02	< 0.02	0.03	0.09	N/A	< 0.02	N/A	N/A
	3/2/2010	< 0.02	0.02	< 0.02	0.1	N/A	< 0.02	< 0.02	< 0.02	0.02	N/A	< 0.02	N/A	N/A
	5/20/2010	< 0.02	0.03	< 0.02	0.04	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	8/27/2010	< 0.02	< 0.02	< 0.02	0.03	0.05	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	10/1/2010	< 0.02	< 0.02	0.03	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	4/29/2011	< 0.02	0.02	0.02	0.04	0.03	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	6/8/2011	N/A	N/A	N/A	0.07	0.03	N/A	N/A	N/A	N/A	N/A	N/A	0.02	N/A
	9/28/2011	0.0363	0.0393	0.0454	0.0479	0.0542	0.0173	0.0315	0.0252	0.0294	N/A	0.0268	0.0318	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.117	N/A
	4/26/2012	0.0104	0.0116	0.0146	0.0313	0.0226	0.0206	0.0145	0.0237	0.017	N/A	0.0083	0.0199	N/A
	10/24/2012	0.0551	0.0445	0.0772	0.0427	0.0333	0.0417	0.0204	< 0.02	0.0223	N/A	0.0108	0.0332	N/A
	5/7/2013	0.0164	0.0334	< 0.008	0.0121	0.008	< 0.008	< 0.008	0.0168	0.0115	N/A	< 0.008	0.0267	N/A
	10/18/2013	0.0119	0.0206	0.0345	0.0182	0.0314	0.0112	0.0287	0.274	< 0.02	N/A	0.0217	0.059	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0108	0.0823	N/A
	3/25/2014	0.0336	0.113	< 0.1	0.0206	0.091	< 0.008	< 0.1	0.122	< 0.008	< 0.008	0.0187	0.114	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0202	N/A	N/A
	9/30/2014	0.0096	0.0202	0.0157	0.0188	0.0812	0.0113	< 0.008	0.0664	< 0.008	0.0426	< 0.008	0.012	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Total Metals Constituents</b>														
<b>Zinc, mg/L (CAS NO - 7440-66-6)</b>														
	2/24/2015	N/A	N/A	N/A	N/A	0.127	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.0122	0.0339	0.00944*	0.105	0.0608	< 0.01	< 0.01	0.0126	0.0148	N/A	< 0.01	0.0155	N/A
	10/12/2015	< 0.01	0.119	0.0111	0.0118	0.05	< 0.01	0.00803*	0.0297	0.0128	N/A	0.0138	< 0.01	N/A
	4/12/2016	0.00556*	0.0111	< 0.01	0.0144	0.046	< 0.01	0.0159	0.0117	0.00721*	N/A	0.00868*	< 0.01	N/A
	9/22/2016	N/A	0.049	0.00833*	N/A	0.0188	< 0.01	0.00737*	0.0213	< 0.01	N/A	< 0.01	2.85	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A
	3/20/2017	0.0598	0.0187*	1.3	< 0.02	2.47	N/A	0.0159*	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	0.0138*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0702	< 0.02	N/A	< 0.02	< 0.02	N/A
	7/24/2017	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.02	< 0.02	< 0.02	< 0.02	0.0107*	0.0148*	< 0.02	< 0.02	0.0675	N/A	< 0.02	< 0.02	N/A
	5/15/2018	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	0.0104*	0.0099*	< 0.02	0.00879*	0.00846*	0.0098*	< 0.02	0.00997*	0.00903*	N/A	0.0102*	0.0244	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	0.0185*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0105*	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	3/11/2020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0107*	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	8/19/2020	< 0.02	< 0.02	< 0.02	< 0.02	0.011*	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	8/19/2020	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0104*	< 0.02	< 0.02	< 0.02	N/A	< 0.02	< 0.02	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0117*	0.0179*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	0.0168*	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 0.02	< 0.02	< 0.02	< 0.02	N/A	0.0102*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.08	< 0.02
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	0.00713*	< 0.02	< 0.02
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	0.0106*	< 0.02	< 0.02
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
<b>Total Suspended Solids, mg/L (CAS NO - TSS)</b>														
	9/30/2014	30	53	7	11	58	29	6	9	6	15	41	135	N/A
	4/15/2015	23.5	77.8	133	265	21.8	16	6.33	21.6	209	8.25	24	192	N/A
	10/12/2015	2.25	19.1	203	17	146	6.12	15	3.87	17.1	13.9	37.9	124	N/A
	4/12/2016	6.12	4.88	293	16.8	304	17.5	104	14.9	18.8	28.1	45.8	123	N/A
	9/22/2016	N/A	3.5	303	N/A	17.3	22.3	31	2.75	15	6.5	54.5	138	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.5	N/A	N/A	N/A	N/A
	12/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	39.4	N/A	N/A
	3/20/2017	11	11.9	3.13	7.5	3	N/A	46.6	8.5	38.4	3.25	96.5	88.6	N/A
	3/20/2017	N/A	N/A	N/A	N/A	2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	2	1.13*	1.88	2.75	2.63	47.5	6.38	< 1.88	4	4.38	76.4	61.4	N/A
	7/24/2017	N/A	0.875*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	3.75	38.5	2.25	2.38	3.25*	9	82	11.5	17.3	0.875*	10.5	71	N/A
	5/15/2018	N/A	N/A	N/A	N/A	7.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Total Metals Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Total Suspended Solids, mg/L (CAS NO - TSS)	8/22/2018	1.5*	2.38	2	4	3	65	21.5	9	3.25	1.5*	60	70	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	2.25	< 1.88	< 1.88	1*	1.38*	23.8	0.875*	3.38	2	N/A	50.1	59.5	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	24.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	1*	< 1.88	< 1.88	< 1.88	4.13	64	1.13*	2.38	< 1.88	< 1.88	66	60	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.63*	N/A	N/A	N/A	N/A	
	3/11/2020	1.88	1.13*	2.25	1.38*	1.75*	21.5	3	2.25	1.75*	N/A	49	96	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	89	N/A	
	8/19/2020	1.5*	< 1.88	0.875*	2.75	10.8	30.4	5.87	2	1.38*	1.38*	60	60.7	1.63*	
	8/19/2020	N/A	N/A	N/A	2.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	7.75	7.75	1.88	5.63	1.5*	18.5	32	9.25	3.63	1.88	26	68	26	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	25.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	4.88	25.1	1.88	5.37	0.875*	79	17.8	15.8	5.13	< 1.88	24.3	91.3	46.3	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	6	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	0.75*	< 1.88	2.63	1.38*	N/A	18.8	1*	10.4	1.25*	0.875*	18.5	68	19	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.33	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	2.63	N/A	N/A	N/A	12.3	1.25*	48	110	60
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.63*	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	2.5	N/A	20	N/A	1.13*	2.25	1.5*	3.75	86	18.5	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.38	N/A	1*	2	79	88	58
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	2.88	8.37	6.75	78	< 1.88	3.5	2	< 1.88	67	123	48	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.63	N/A	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.5	2.88	41	72	54	

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

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	< 1	< 1
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1
	5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	
3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	
8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	< 1	< 1
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	1.4	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	1.3	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	1.2	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	1.6	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.3	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	0.558*	< 1	< 1	< 1	< 1	1.33	N/A	< 1	0.771*	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.35	N/A	< 1	< 1	N/A
	4/12/2016	< 1	< 1	< 1	0.595*	< 1	< 1	< 1	< 1	1.29	N/A	0.294*	0.28*	N/A
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	1.11	N/A	< 1	< 1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.2	N/A	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	0.66*	< 1	N/A	< 1	1.06	1.39	N/A	< 1	0.339*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.448*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	0.243*	< 1	0.993*	1.32	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	0.654*	< 1	< 1	< 1	0.535*	1.43	N/A	< 1	0.631*	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	0.609*	< 1	< 1	< 1	< 1	1.38	N/A	< 1	0.291*	N/A
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 1	< 1	< 1	0.573*	< 1	< 1	< 1	< 1	1.01	N/A	< 1	0.554*	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	9/19/2019	< 1	< 1	< 1	0.45*	< 1	0.236*	< 1	0.327*	0.718*	N/A	< 1	< 1	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.831*	N/A	N/A	N/A	N/A	
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.708*	N/A	< 1	< 1	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	8/19/2020	< 1	< 1	0.265*	0.483*	< 1	< 1	< 1	< 1	0.418*	N/A	< 1	< 1	N/A	
	8/19/2020	N/A	N/A	N/A	0.542*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 1	< 1	0.271*	0.555*	< 1	< 1	< 1	< 1	1.37	N/A	< 1	0.788*	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 1	< 1	0.3*	0.365*	< 1	< 1	< 1	1.18	1.08	< 1	< 1	0.233*	< 1	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	1.36	0.732*	< 1	< 1	< 1	< 1	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.53	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.893*	< 1	< 1	0.38*	< 1	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	0.495*	N/A	< 1	N/A	0.261*	1.34	< 1	< 1	0.319*	< 1	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	N/A	N/A	0.313*	N/A	< 1	< 1	0.545*	0.227*	< 1	< 1	0.319*	< 1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.41*	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.947*	< 1	< 1	< 1	< 1	
	1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
3/2/2010		< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
5/20/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
4/26/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A
5/7/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
10/12/2015		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
4/12/2016		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
9/22/2016		N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
3/20/2017		< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
3/20/2017		N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
7/24/2017		N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	N/A
5/15/2018		N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	8/22/2018	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A
	3/11/2020	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A
	8/19/2020	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	8/19/2020	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<2	<2	<2	<2	N/A	<2	<2	<2	<2	<2	<2	<2	<2
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<2	N/A	<2	N/A	<2	<2	<2	<2	<2	<2
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2
	5/29/2024	N/A	N/A	N/A	<2	N/A	<2	<2	<2	<2	<2	<2	<2	<2
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	<2	<2	<2	<2
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	<5	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A	
3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
6/21/2017	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
	1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
4/26/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
5/7/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	
10/12/2015		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	
4/12/2016		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	



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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	9/22/2016	N/A	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	
	3/20/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	N/A
	7/24/2017	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	N/A
	5/15/2018	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	< 1.2	< 1.2	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	< 1.2	< 1.2	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/19/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	10/12/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	4/12/2016	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	9/22/2016	N/A	< 0.13	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A
	3/20/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	7/24/2017	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	< 0.34	< 0.34	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	< 0.34	< 0.34	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	0.397*	<1
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	0.386*	0.234*
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	N/A	<1	<1
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	0.284*
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	0.172*	0.211*
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	0.458*
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.404*
	8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.453*
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	0.376*	<1	
5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	0.424*	<1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	0.439*	<1	
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A	
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	N/A	<1	0.226*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	0.194*	<1	<1	<1	N/A	<1	0.205*	N/A
	5/15/2018	N/A	N/A	N/A	N/A	N/A	0.205*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	5/11/2022	<1	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	<1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1
5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	<1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1	
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.392*	N/A	< 1	< 1
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.312*	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.512*	N/A	< 1	< 1	
3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.498*	< 1	< 1	< 1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	0.342*	< 1	< 1	< 1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.406*	< 1	< 1	< 1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	0.585*	< 1	< 1	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.38*	< 1	< 1	< 1	
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	6	N/A	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	6	N/A	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	10	N/A	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	13	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	7	N/A	
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.9	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.1	6.6	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	1.6	1.4	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	1.9	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.4	11.2	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.9	5.2	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.6	4.4	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.2	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.1	26.2	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.06	5.21	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.85	< 1	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	12.9	N/A
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.61	9.55	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	4.5	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.516*	< 1	N/A	0.845*	7.78	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.36	7.45	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.1	8.01	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.695*	< 1	N/A	1.36	7.92	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.595*	< 1	N/A	1.7	16.8	N/A
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	N/A	
8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	10.4	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.366*	< 1	N/A	0.482*	7.48	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.341*	< 1	< 1	0.43*	13.6	< 1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	0.41*	5.17	< 1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	10.3	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	1.57	11	< 1	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	0.378*	< 1	< 1	2.01	10.7	< 1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.363*	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	1.93	10.7	< 1	
2-Butanone, ug/L (CAS NO - 78-93-3)	10/19/2009	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	
	3/2/2010	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	
	5/20/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	8/27/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	10/1/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	4/29/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	9/28/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
	4/26/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/24/2012	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A
	11/28/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/18/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/25/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	2.12*	N/A
	10/12/2015	< 10	< 10	< 10	8.61*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	4/12/2016	< 10	< 10	< 10	4.04*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	2.91*	N/A
	9/22/2016	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/20/2017	< 10	< 10	4.45*	3.52*	4.06*	N/A	< 10	< 10	< 10	< 10	N/A	< 10	1.05*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	3.54*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 10	< 10	1.69*	1.92*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
2-Butanone, ug/L (CAS NO - 78-93-3)	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	
2-Hexanone, ug/L (CAS NO - 591-78-6)	10/19/2009	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	
	3/2/2010	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	
	5/20/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	8/27/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	10/1/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	4/29/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	9/28/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
	4/26/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/24/2012	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	< 5	< 5	N/A	
	11/28/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/18/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/25/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	10/12/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/22/2016	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/20/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



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Cherokee County Solid Waste Commission - 18-SDP-01-75P

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2-Hexanone, ug/L (CAS NO - 591-78-6)	9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	10/19/2009	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A
	3/2/2010	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A
	5/20/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/27/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	10/1/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	4/29/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/28/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/26/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/24/2012	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	< 5	< 5	N/A
	11/28/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/18/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/30/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	10/12/2015	< 10	< 10	< 10	2.61*	< 10	1.9*	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	9/22/2016	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/20/2017	< 10	< 10	< 10	1.21*	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	3/20/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 10	< 10	< 10	1.05*	< 10	2.45*	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	3.68*	< 10	< 10	< 10	N/A	< 10	< 10
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 10	< 10	< 10	< 10	2.77*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	Acetone, ug/L (CAS NO - 67-64-1)	10/19/2009	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	10	N/A	< 10	N/A
3/2/2010		< 10	< 10	< 10	< 10	N/A	< 10	< 10	15	< 10	N/A	< 10	N/A	N/A
5/20/2010		< 10	< 10	< 10	< 10	< 10	< 10	< 10	15	< 10	N/A	< 10	< 10	N/A
8/27/2010		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
10/1/2010		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
4/29/2011		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
6/8/2011		N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
9/28/2011		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
4/26/2012		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	124	N/A
10/24/2012		< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	N/A	N/A	< 10	11.8
11/28/2012		N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A
5/7/2013		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	12.5	< 10	N/A	< 10	346
10/18/2013		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	249	< 10	N/A	< 10	10.5
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
3/25/2014		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	98.4	< 10	< 10	< 10	< 10
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
9/30/2014		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	13.2	< 10	< 10	< 10	< 10
2/24/2015		N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	2.1*	2.09*	< 10	N/A	< 10	5.56*
10/12/2015		< 10	< 10	< 10	15.8	< 10	< 10	3.75*	6.85*	< 10	N/A	< 10	< 10	< 10
4/12/2016		3.41*	6.7*	2.4*	7.67*	5.69*	2.15*	4.25*	< 10	4.22*	N/A	4.43*	17.7	N/A
9/22/2016		N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
3/20/2017		3.15*	3.52*	24.9	9.69*	33.5	N/A	3.27*	4.07*	3.18*	N/A	3.11*	4.18*	N/A
3/20/2017		N/A	N/A	N/A	N/A	23.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	2.71*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		< 10	< 10	12.9	7.31*	3.45*	22.1	< 10	< 10	2.74*	N/A	3.24*	5.48*	N/A
7/24/2017		N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		< 10	2.03*	2.33*	3.41*	4.56*	2.34*	3.01*	2.6*	2.96*	N/A	3.24*	6.47*	N/A
5/15/2018		N/A	N/A	N/A	N/A	4.45*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		< 10	< 10	< 10	4.17*	< 10	< 10	3.52*	< 10	< 10	N/A	< 10	< 10	< 10
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	16.2	< 10	N/A	< 10	< 10	< 10	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Acetone, ug/L (CAS NO - 67-64-1)	9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/19/2020	3.1*	< 10	5.37*	< 10	3.69*	< 10	< 10	< 10	< 10	N/A	< 10	3.72*	N/A
	8/19/2020	N/A	N/A	N/A	3.47*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	4.54*	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	3.65*	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	40	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	6.48*	< 10	4.46*
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	4.09*	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	8.93*	< 10	< 10	< 10	4.61*	< 10
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.3*	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	Acrylonitrile, ug/L (CAS NO - 107-13-1)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
3/2/2010		< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
5/20/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
4/26/2012		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
10/24/2012		< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	N/A
11/28/2012		N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A
5/7/2013		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
10/18/2013		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
3/25/2014		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
9/30/2014		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	1.79*
10/12/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
4/12/2016		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
9/22/2016		N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A
3/20/2017		< 10	< 10	< 10	< 10	0.562*	N/A	< 10	< 10	< 10	< 10	N/A	< 10	2.5*
3/20/2017		N/A	N/A	N/A	N/A	0.758*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
7/24/2017		N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		< 10	< 10	< 10	< 10	18.6	< 10	< 10	< 10	< 10	< 10	N/A	< 10	1.44*
5/15/2018		N/A	N/A	N/A	N/A	17.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
<b>Appendix I VOC Constituents</b>															
<b>Acrylonitrile, ug/L (CAS NO - 107-13-1)</b>															
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
	3/11/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
	8/19/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/19/2020	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	
	5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	
<b>Benzene, ug/L (CAS NO - 71-43-2)</b>															
	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.9	N/A	
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1	2	N/A	
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	1.9	N/A	
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.6	N/A	
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.2	1.7	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.1	N/A	N/A	
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	1.6	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.4	N/A	N/A	
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	1.5	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.153*	N/A	1.21	1.82	N/A	
	10/12/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	1.11	2.02	N/A	
	4/12/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.142*	< 0.5	0.114*	N/A	0.742	3.05	N/A	
	9/22/2016	N/A	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	0.628	3.46	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	
	3/20/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	0.24*	0.161*	N/A	0.685	2.6	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.722	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Benzene, ug/L (CAS NO - 71-43-2)	7/24/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.2*	0.286*	N/A	1.06	2.73	N/A	
	7/24/2017	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.29*	< 0.5	0.191*	0.391*	N/A	0.477*	2.14	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.349*	N/A	1.1	1.79	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.235*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.227*	< 0.5	0.242*	0.573	N/A	0.962	2.09	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.463*	< 0.5	0.356*	0.374*	N/A	1.09	1.99	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.531	N/A	N/A	N/A	N/A	
	3/11/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.315*	0.314*	N/A	1.12	2.51	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/19/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.311*	< 0.5	< 0.5	< 0.5	N/A	0.73	1.92	N/A	
	8/19/2020	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.426*	N/A	0.447*	2.08	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.36*	< 0.5	< 0.5	0.462*	< 0.5	0.367*	2.38	< 0.5	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	0.468*	< 0.5	< 0.5	1.82	< 0.5	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.606	< 0.5	0.432*	1.68	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	0.548	< 0.5	0.285*	1.45	< 0.5	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	0.502	2.33	< 0.5	
	5/29/2024	N/A	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	0.237*	< 0.5	< 0.5	1.08	1.63	< 0.5	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.238*	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.511	< 0.5	1.4	1.87	< 0.5	
	Bromochloromethane, ug/L (CAS NO - 74-97-5)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
		8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
		10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
4/26/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	
5/7/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/12/2015		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/12/2016		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Bromochloromethane, ug/L (CAS NO - 74-97-5)	9/22/2016	N/A	<5	<5	N/A	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	
	3/20/2017	<5	<5	<5	<5	<5	N/A	<5	<5	<5	N/A	<5	<5	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	7/24/2017	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A
	3/11/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	8/19/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/19/2020	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<5	<5	<5	<5	<5	N/A	<5	<5	<5	<5	<5	<5	<5	<5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5	<5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<5	N/A	<5	N/A	<5	<5	<5	<5	<5	<5	<5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5	<5
	5/29/2024	N/A	N/A	N/A	<5	N/A	<5	<5	<5	<5	<5	<5	<5	<5	<5
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5	<5	
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	
5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1	
Bromoform, ug/L (CAS NO - 75-25-2)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Bromoform, ug/L (CAS NO - 75-25-2)	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	10/12/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	9/22/2016	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/20/2017	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	3/20/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	7/24/2017	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	5/15/2018	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5
	8/19/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	8/19/2020	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	
5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	
Bromomethane, ug/L (CAS NO - 74-83-9)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Bromomethane, ug/L (CAS NO - 74-83-9)	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A	
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	0.312*	0.268*	< 4	0.23*	< 4	< 4	0.257*	0.348*	0.248*	N/A	0.266*	0.228*	N/A	
	10/12/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	4/12/2016	< 4	< 4	0.97*	< 4	0.595*	0.537*	0.647*	0.719*	0.305*	N/A	0.678*	< 4	N/A	
	9/22/2016	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
	3/20/2017	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	7/24/2017	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 4	< 4	< 4	< 4	1.16*	< 4	1.13*	< 4	< 4	N/A	1.12*	< 4	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	1.51*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
	3/11/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/19/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	8/19/2020	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4		
5/29/2024	N/A	N/A	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A		
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4		
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	8	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.6	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	4/12/2016	< 1	0.273*	< 1	5.86	< 1	0.374*	1.67	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	< 1	1.62	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	1.96	2.04	1.58	N/A	0.484*	0.324*	0.264*	N/A	< 1	0.406*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	0.536*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	0.18*	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	0.632*	0.408*	< 1	0.193*	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	3.61	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	3.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	1.12	< 1	< 1	< 1	< 1	N/A	0.677*	< 1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	0.702*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	0.705*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	0.672*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	8/19/2020	< 1	< 1	< 1	< 1	0.86*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	0.589*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 1	< 1	< 1	< 1	0.752*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	4.6	< 1
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	6.83	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	< 1	< 1
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	10/12/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	4/12/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	9/22/2016	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	3/20/2017	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	3/20/2017	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	7/24/2017	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	5/15/2018	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	3/11/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2
	8/19/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
	8/19/2020	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2
3/23/2021	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	5/29/2024	N/A	N/A	N/A	<2	N/A	<2	<2	<2	<2	<2	<2	<2	<2
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	<2	<2	<2	<2
Chlorobenzene, ug/L (CAS NO - 108-90-7)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	6	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	8	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	8	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.3	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	2.6	4.4	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	<1	N/A	1.9	3.2	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	2.6	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	1.7	6.2	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	3.3	5.1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.5	4.8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.9	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	3	9.4	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.16	5.63	N/A
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	3.14	5.5	N/A
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.15	13.9	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	1.48	<1	N/A	2.18	12.3	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	1.52	9.42	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	13.7	N/A
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	1.46	<1	N/A	0.846*	9.4	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	0.972*	<1	N/A	<1	8.9	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2019	<1	<1	<1	<1	<1	<1	<1	2.04	<1	N/A	1.64	9.87	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	<1	<1	<1	<1	<1	<1	<1	3.51	<1	N/A	2.2	11.5	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
3/11/2020	<1	<1	<1	<1	<1	<1	<1	3.64	<1	N/A	2.23	20.3	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19.4	N/A	
8/19/2020	<1	<1	<1	<1	<1	<1	<1	1.96	<1	N/A	1.32	15.4	N/A	
8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	<1	<1	<1	<1	<1	<1	<1	1.13	<1	N/A	0.714*	9.19	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	<1	<1	<1	<1	<1	<1	<1	1.64	<1	<1	0.654*	17.1	<1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	<1	<1	<1	<1	N/A	<1	<1	0.85*	<1	<1	0.566*	8.58	<1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.08	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	0.667*	8.17	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	0.514*	5.84	<1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	1.62	12.4	<1
	5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	1.53	<1	<1	1.96	10.4	<1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.63	N/A	N/A	N/A	N/A	N/A
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	2.57	11.7	<1
	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/12/2015	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/12/2016	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/22/2016	N/A	<5	<5	N/A	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A
	3/20/2017	<5	<5	<5	<5	<5	N/A	<5	<5	<5	N/A	<5	<5	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	7/24/2017	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	
3/11/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	
8/19/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
8/19/2020	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	
Chloroethane, ug/L (CAS NO - 75-00-3)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	1.3	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	1.5	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.3	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	2.5	1.2	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.6	1.3	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.7	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.4	2.4	1.3	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.493*	N/A	1.77*	1.07*
	10/12/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	2.68*	< 4
	4/12/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	1.41*	1.25*
	9/22/2016	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A
	3/20/2017	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	N/A	< 4	< 4
	3/20/2017	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	0.995*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	1.22*	< 4
	7/24/2017	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.834*	0.61*	N/A	< 4	0.693*
5/15/2018	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018	< 4	< 4	0.812*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	0.848*	< 4	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 4	< 4	0.875*	< 4	< 4	< 4	< 4	< 4	1.37*	< 4	N/A	1.03*	< 4	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	
3/11/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	8/19/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.06*	< 4	N/A	0.959*	< 4	N/A
	8/19/2020	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	0.822*	< 4	< 4
	5/29/2024	N/A	N/A	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	1.47*	< 4	< 4
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4
Chloroform, ug/L (CAS NO - 67-66-3)	10/19/2009	< 5	< 5	< 5	20	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	7	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	< 1	< 1
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	1.36	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	4/12/2016	< 1	< 1	< 1	0.499*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	0.405*	< 1	N/A	< 1	< 1	< 1	N/A	0.295*	< 1	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Chloroform, ug/L (CAS NO - 67-66-3)	9/19/2019	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A
	8/19/2020	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	8/19/2020	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<3	<3	<3	<3	N/A	<3	<3	<3	<3	<3	<3	<3	<3	<3
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	<3	<3	<3	<3
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<3	N/A	<3	N/A	<3	<3	<3	<3	<3	<3	<3
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	<3	<3	<3	<3	<3
	5/29/2024	N/A	N/A	N/A	<3	N/A	<3	<3	<3	<3	<3	<3	<3	<3	<3
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	<3	<3	<3	<3
	Chloromethane, ug/L (CAS NO - 74-87-3)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
3/2/2010		<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
5/20/2010		<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
8/27/2010		<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
10/1/2010		<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
4/29/2011		<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
9/28/2011		<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	<5	N/A
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
4/26/2012		<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A
10/24/2012		<1	<1	<1	N/A	<1	N/A	<1	<1	<1	N/A	N/A	<1	<1	N/A
11/28/2012		N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A
5/7/2013		<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	3.7	N/A	N/A
10/18/2013		<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	2.1	N/A	N/A
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
3/25/2014		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
9/30/2014		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
2/24/2015		N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
10/12/2015		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
4/12/2016		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
9/22/2016		N/A	<3	<3	N/A	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A
3/20/2017		<3	<3	<3	<3	<3	N/A	<3	<3	<3	<3	N/A	<3	<3	N/A
3/20/2017		N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	<3	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
7/24/2017		N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
5/15/2018		N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	8/22/2018	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A
	3/11/2020	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A
	8/19/2020	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	8/19/2020	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<3	<3	<3	<3	<3	<3	<3	<3	<3	N/A	<3	<3	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<3	<3	<3	<3	N/A	<3	<3	<3	<3	<3	<3	<3	<3
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	<3	<3	<3	<3
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<3	N/A	<3	N/A	<3	<3	<3	<3	<3	<3
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	<3	<3	<3	<3
	5/29/2024	N/A	N/A	N/A	<3	N/A	<3	<3	<3	<3	<3	<3	<3	<3
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	<3	<3	<3	<3
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.3	N/A
	4/26/2012	<1	<1	<1	1.9	<1	<1	<1	<1	<1	N/A	<1	1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	1.1	N/A
	11/28/2012	N/A	N/A	N/A	1.5	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	2	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	3.1	<1	<1	<1	<1	1.1	N/A	1.1	1.3	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	N/A
	3/25/2014	<1	<1	<1	3.2	<1	<1	<1	<1	1	<1	<1	1.1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	1.7	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	1.21	<1	<1	<1	<1	0.969*	N/A	0.603*	0.981*	N/A
	10/12/2015	<1	<1	<1	0.695*	<1	<1	<1	<1	<1	N/A	0.599*	0.935*	N/A
	4/12/2016	<1	<1	<1	1.16	<1	<1	<1	<1	0.722*	N/A	0.261*	0.503*	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	1.43	<1	0.878*	<1	N/A	<1	0.684*	N/A
9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
3/20/2017	<1	<1	<1	1.18	<1	N/A	<1	0.871*	0.951*	N/A	<1	0.675*	N/A	
3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
6/21/2017	N/A	N/A	N/A	N/A	N/A	1.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	7/24/2017	< 1	< 1	0.225*	0.886*	< 1	1.06	< 1	0.76*	1.23	N/A	0.27*	0.43*	N/A	
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 1	< 1	0.205*	1.25	< 1	1.06	< 1	0.529*	1.48	N/A	< 1	1.02	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 1	< 1	0.409*	1.14	< 1	0.472*	< 1	0.46*	1.26	N/A	0.373*	0.645*	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 1	< 1	0.416*	1.17	< 1	0.776*	< 1	0.574*	1.08	N/A	0.231*	0.979*	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	1.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 1	< 1	0.595*	0.922*	< 1	1.76	< 1	0.892*	0.877*	N/A	< 1	0.717*	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.472*	N/A	N/A	N/A	N/A	
	3/11/2020	< 1	< 1	0.416*	1.14	< 1	1.05	< 1	0.58*	0.286*	N/A	< 1	0.603*	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.853*	
	8/19/2020	< 1	< 1	0.558*	1.02	< 1	1.77	< 1	0.427*	< 1	N/A	< 1	0.535*	N/A	
	8/19/2020	N/A	N/A	N/A	1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 1	< 1	0.303*	1.07	< 1	0.535*	< 1	0.25*	1.03	N/A	< 1	1.18	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	0.614*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 1	< 1	0.663*	0.849*	< 1	1.67	< 1	0.284*	0.636*	< 1	< 1	0.693*	< 1	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	1.09	0.685*	0.757*	1.18	N/A	0.397*	0.302*	0.255*	0.466*	< 1	< 1	0.796*	< 1	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.344*	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.673*	< 1	< 1	0.689*	< 1	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	0.761*	N/A	< 1	N/A	< 1	0.573*	< 1	< 1	0.349*	< 1	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	0.265*	0.384*	< 1	
	5/29/2024	N/A	N/A	N/A	0.551*	N/A	0.479*	< 1	< 1	< 1	< 1	0.36*	0.472*	< 1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.223*	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.543*	< 1	0.453*	0.388*	
	cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
		4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
		10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
		11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
		5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/12/2015		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/12/2016		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
9/22/2016		N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	
3/20/2017		< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
3/20/2017		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7/24/2017		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
7/24/2017		N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/15/2018		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
5/15/2018		N/A	N/A	N/A	N/A	< 5	N/A	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-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	8/22/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	
	3/11/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/19/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	8/19/2020	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5
	Ethylbenzene, ug/L (CAS NO - 100-41-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
5/20/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
4/26/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	
5/7/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/12/2015		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
4/12/2016		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
9/22/2016		N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.863*	N/A	
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/20/2017		< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
6/21/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Ethylbenzene, ug/L (CAS NO - 100-41-4)	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	
	Iodomethane, ug/L (CAS NO - 74-88-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
		5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
4/26/2012		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	
5/7/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
10/18/2013		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	
3/25/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
10/12/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
4/12/2016		< 10	7.39*	< 10	< 10	< 10	9.35*	< 10	< 10	< 10	< 10	N/A	< 10	< 10	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
<b>Appendix I VOC Constituents</b> <b>Iodomethane, ug/L (CAS NO - 74-88-4)</b>	9/22/2016	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/20/2017	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	
<b>Methylene Bromide, ug/L (CAS NO - 74-95-3)</b>	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Methylene Bromide, ug/L (CAS NO - 74-95-3)	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1	
5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1	<1	
Methylene Chloride, ug/L (CAS NO - 75-09-2)	10/19/2009	<10	<10	<10	<10	N/A	<10	<10	<10	<10	N/A	<10	N/A	N/A
	3/2/2010	<10	<10	<10	<10	N/A	<10	<10	<10	<10	N/A	<10	N/A	N/A
	5/20/2010	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	<10	N/A
	8/27/2010	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	<10	N/A
	10/1/2010	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	<10	N/A
	4/29/2011	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	<10	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<10	<10	<10	<10	<10	<10	<10	<10	<10	N/A	<10	<10	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	4/26/2012	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/24/2012	<5	<5	<5	N/A	<5	N/A	<5	<5	<5	N/A	<5	<5	N/A
	11/28/2012	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	<5	N/A	<5	N/A
	5/7/2013	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/18/2013	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A
	3/25/2014	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A
	9/30/2014	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<5	<5	0.222*	0.285*	0.171*	<5	<5	0.222*	0.345*	N/A	0.268*	0.656*	N/A
	10/12/2015	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	0.368*	N/A
	4/12/2016	0.644*	<5	<5	0.319*	<5	0.174*	<5	<5	<5	N/A	0.231*	<5	N/A
	9/22/2016	N/A	<5	<5	N/A	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A
	3/20/2017	<5	<5	<5	0.235*	<5	N/A	<5	<5	<5	N/A	<5	<5	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<5	<5	<5	0.291*	<5	<5	<5	<5	<5	N/A	<5	0.353*	N/A
	7/24/2017	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<5	<5	<5	0.17*	<5	<5	<5	<5	0.202*	N/A	<5	0.24*	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A
	3/11/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5
	8/19/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/19/2020	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<5	<5	<5	<5	<5	N/A	<5	<5	<5	<5	<5	<5	<5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<5	N/A	<5	N/A	<5	<5	<5	<5	<5	<5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5
	5/29/2024	N/A	N/A	N/A	<5	N/A	<5	<5	<5	<5	<5	<5	<5	<5
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	<5	<5	<5	<5
Styrene, ug/L (CAS NO - 100-42-5)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Styrene, ug/L (CAS NO - 100-42-5)	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.53	N/A	< 1	< 1
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	2.52
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/20/2017	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	1.03	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/15/2018	N/A	N/A	N/A	N/A	N/A	0.908*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
	11/28/2012	N/A	N/A	N/A	1.6	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	1.8	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/18/2013	< 1	< 1	< 1	1.7	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	0.603*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	4/12/2016	< 1	< 1	< 1	0.311*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/20/2017	0.291*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	N/A	< 1	0.203*	N/A
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	0.182*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.493*	< 1	< 1	< 1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	
Toluene, ug/L (CAS NO - 108-88-3)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Toluene, ug/L (CAS NO - 108-88-3)	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	< 1	< 1
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	0.841*	0.206*	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.223*
	10/12/2015	< 1	< 1	1.14	14.4	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.32*
	4/12/2016	< 1	< 1	0.867*	1.15	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.22
	9/22/2016	N/A	< 1	0.842*	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.76
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/20/2017	< 1	< 1	0.176*	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	0.728*
	3/20/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	0.198*	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 1	< 1	< 1	< 1	< 1	0.189*	< 1	< 1	< 1	< 1	N/A	< 1	0.588*
	7/24/2017	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	< 1	0.2*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.67*
	5/15/2018	N/A	N/A	N/A	N/A	0.162*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.83*
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.438*
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9/19/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.606*	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
3/11/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
8/19/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
8/19/2020	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	
3/23/2021	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/15/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.44*	
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	
5/11/2022	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	0.696*	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	
3/8/2023	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	0.996*	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Toluene, ug/L (CAS NO - 108-88-3)	5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	<1	0.635*	<1	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	0.658*	<1	
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	<1	N/A	N/A	<1	<1	
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	10/12/2015	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	4/12/2016	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	9/22/2016	N/A	<1	<1	N/A	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
	3/20/2017	<1	<1	<1	<1	<1	N/A	<1	<1	<1	N/A	<1	<1	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	0.475*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1		
5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A		
9/19/2019	<1	<1	<1	<1	<1	<1	0.279*	<1	<1	<1	N/A	<1	<1		
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A		
3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1		
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1		
8/19/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1		
8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1		
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A		
9/15/2021	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A		
5/11/2022	<1	<1	<1	<1	N/A	<1	<1	<1	<1	<1	<1	<1	<1		
5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A		

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	N/A	N/A
	3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
	5/29/2024	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	<1	<1	<1	<1	<1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/12/2015	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/12/2016	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/22/2016	N/A	<5	<5	N/A	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A
	3/20/2017	<5	<5	<5	<5	<5	N/A	<5	<5	<5	N/A	<5	<5	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	7/24/2017	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	5/15/2018	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	
3/11/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	
8/19/2020	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
8/19/2020	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/23/2021	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	9/15/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	10/19/2009	< 20	< 20	< 20	< 20	N/A	< 20	< 20	< 20	< 20	N/A	< 20	N/A	N/A
	3/2/2010	< 20	< 20	< 20	< 20	N/A	< 20	< 20	< 20	< 20	N/A	< 20	N/A	N/A
	5/20/2010	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	< 20	N/A
	8/27/2010	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	< 20	N/A
	10/1/2010	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	< 20	N/A
	4/29/2011	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	< 20	N/A
	6/8/2011	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A
	9/28/2011	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	< 20	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/26/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/24/2012	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	< 5	< 5	N/A
	11/28/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	10/18/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/30/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	10/12/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	9/22/2016	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/20/2017	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	3/20/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	
3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	
3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	Trichloroethene, ug/L (CAS NO - 79-01-6)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
3/2/2010		< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A
5/20/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
8/27/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
4/26/2012		< 1	< 1	< 1	4.5	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
10/24/2012		< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	< 1	< 1	N/A
11/28/2012		N/A	N/A	N/A	2.2	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A
5/7/2013		< 1	< 1	< 1	3	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
10/18/2013		< 1	< 1	< 1	3.2	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
3/25/2014		< 1	< 1	< 1	3.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
9/30/2014		< 1	< 1	< 1	2.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		< 1	< 1	< 1	1.25	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
10/12/2015		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
4/12/2016		< 1	< 1	< 1	1.27	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.213*	N/A
9/22/2016		N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
3/20/2017		< 1	< 1	< 1	1.11	< 1	N/A	< 1	< 1	< 1	N/A	< 1	< 1	N/A
3/20/2017		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		< 1	< 1	< 1	0.939*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
7/24/2017		N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		< 1	< 1	< 1	2.06	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
5/15/2018		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		< 1	< 1	< 1	1.73	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A
8/22/2018	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2019	< 1	< 1	< 1	1.75	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	N/A	
5/29/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Trichloroethene, ug/L (CAS NO - 79-01-6)	9/19/2019	<1	<1	<1	1.76	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
	3/11/2020	<1	<1	<1	2.13	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	8/19/2020	<1	<1	<1	1.45	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	8/19/2020	N/A	N/A	N/A	1.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	<1	<1	<1	1.61	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	<1	<1	<1	1.53	<1	<1	<1	<1	<1	<1	<1	<1	<1
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	<1	<1	<1	1.57	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	<1	<1
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	1.49	N/A	<1	N/A	<1	<1	<1	<1	<1	<1
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	0.946*	N/A	<1	<1	<1	<1	<1	<1	<1	<1
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A
	4/26/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/24/2012	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	<1	<1	N/A
	11/28/2012	N/A	N/A	N/A	<1	N/A	N/A	N/A	<1	N/A	N/A	<1	N/A	N/A
	5/7/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	10/18/2013	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A
	3/25/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
	9/30/2014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A
	2/24/2015	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	N/A	<4	<4
	10/12/2015	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	N/A	<4	<4
	4/12/2016	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	N/A	<4	<4
	9/22/2016	N/A	<4	<4	N/A	<4	<4	<4	<4	<4	N/A	<4	<4	N/A
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	N/A	N/A
	3/20/2017	<4	<4	<4	<4	<4	N/A	<4	<4	<4	N/A	<4	<4	N/A
	3/20/2017	N/A	N/A	N/A	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/21/2017	N/A	N/A	N/A	N/A	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/24/2017	<4	<4	<4	<4	<4	<4	<4	<4	<4	N/A	<4	<4	N/A
	7/24/2017	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/15/2018	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	N/A	<4	<4
	5/15/2018	N/A	N/A	N/A	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	8/22/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	
	3/11/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/19/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A
	8/19/2020	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	9/15/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4
	5/29/2024	N/A	N/A	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4
	Vinyl Acetate, ug/L (CAS NO - 108-05-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
		3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
		5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
		8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A
10/1/2010		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
4/29/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
6/8/2011		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
9/28/2011		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
1/6/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	
4/26/2012		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/24/2012		< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A
11/28/2012		N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A
5/7/2013		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
10/18/2013		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
12/19/2013		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	
3/25/2014		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A
9/30/2014		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
4/15/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
10/12/2015		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
4/12/2016		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
9/22/2016		N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
9/22/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
3/20/2017		< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
3/20/2017		N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	7/24/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A	
	7/24/2017	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/15/2018	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/19/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	N/A
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/15/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/11/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	3/8/2023	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	10/19/2009	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	3/2/2010	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	
	5/20/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	14	N/A	
	8/27/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	13	N/A	
	10/1/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	N/A	
	4/29/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	11	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	N/A
	9/28/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	16	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.7	N/A
	4/26/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	N/A	1.1	9.2	N/A
	10/24/2012	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	N/A	N/A	1.3	9.9	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	1.7	N/A	N/A
	5/7/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.6	7.2	N/A
	10/18/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	2.5	9.5	N/A
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/25/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	2.1	4.4	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.187*	< 1	0.637*	N/A	1.32	5.8	N/A
	10/12/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.31	5.86	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	0.691*	3.32	N/A

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	9/22/2016	N/A	<1	<1	N/A	<1	0.525*	<1	<1	0.195*	<1	0.394*	3.74	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	
	3/20/2017	<1	<1	<1	<1	<1	N/A	0.421*	<1	0.8*	N/A	0.637*	4.27	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	<1	<1	<1	<1	<1	0.543*	<1	<1	0.801*	<1	1.16	2.44	N/A	
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	<1	<1	<1	<1	<1	0.397*	<1	0.315*	0.901*	N/A	0.254*	5.75	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	<1	<1	<1	<1	<1	<1	<1	<1	1.36	N/A	1.22	4.56	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	<1	<1	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	<1	<1	<1	<1	<1	0.648*	<1	0.28*	0.648*	<1	1.04	3.62	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.337*	N/A	N/A	N/A	N/A	
	3/11/2020	<1	<1	<1	<1	<1	<1	<1	<1	<1	N/A	0.569*	3.3	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.51	N/A
	8/19/2020	<1	<1	<1	<1	<1	0.523*	<1	<1	<1	<1	0.661*	2.33	<1	
	8/19/2020	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	<1	<1	<1	<1	<1	<1	<1	<1	0.664*	<1	<1	5.13	<1	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	<1	<1	<1	<1	<1	0.531*	<1	<1	0.656*	<1	<1	3.25	<1	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	<1	<1	<1	0.226*	N/A	<1	<1	<1	0.401*	<1	<1	<1	<1	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.503*	<1	<1	3.81	<1	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A		
3/8/2023	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	0.594*	<1	<1	2.25	<1		
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	<1	0.74*	2.38	<1		
5/29/2024	N/A	N/A	N/A	<1	N/A	<1	<1	<1	<1	<1	1.18	2.03	<1		
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A		
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.394*	<1	<1	<1		
Xylenes, total, ug/L (CAS NO - 1330-20-7)	10/19/2009	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	3/2/2010	<5	<5	<5	<5	N/A	<5	<5	<5	<5	N/A	<5	N/A	N/A	
	5/20/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	8/27/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	10/1/2010	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	4/29/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	6/8/2011	N/A	N/A	N/A	N/A	<5	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	
	9/28/2011	<5	<5	<5	<5	<5	<5	<5	<5	<5	N/A	<5	<5	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	
	4/26/2012	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A	
	10/24/2012	<2	<2	<2	N/A	<2	N/A	<2	<2	<2	N/A	<2	<2	N/A	
	11/28/2012	N/A	N/A	N/A	<2	N/A	N/A	N/A	N/A	<2	N/A	<2	N/A	N/A	
	5/7/2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A	
	10/18/2013	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	<2	<2	N/A	
	12/19/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	N/A	
	3/25/2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2	N/A	N/A	
	9/30/2014	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Xylenes, total, ug/L (CAS NO - 1330-20-7)	2/24/2015	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	0.217*	N/A	
	10/12/2015	< 3	< 3	< 3	0.181*	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	4/12/2016	< 3	< 3	< 3	0.166*	< 3	< 3	< 3	< 3	< 3	N/A	< 3	0.484*	N/A	
	9/22/2016	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	< 3	0.264*	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
	3/20/2017	< 3	< 3	0.131*	0.192*	< 3	N/A	< 3	< 3	< 3	N/A	< 3	0.203*	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	6/21/2017	N/A	N/A	N/A	N/A	N/A	N/A	0.186*	N/A	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	< 3	< 3	< 3	0.143*	< 3	0.635*	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	7/24/2017	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
	3/11/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	3/11/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	8/19/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	8/19/2020	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
	9/15/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	
	5/11/2022	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	
	5/11/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	
9/28/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A		
3/8/2023	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3		
9/26/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3		
5/29/2024	N/A	N/A	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3		
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A		
10/23/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3		

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

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	N/A	< 10.4	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	N/A	< 10.8	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
10/24/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
5/7/2013		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	N/A	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	< 5	N/A	N/A	< 5	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	< 5	N/A	N/A	< 5	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	N/A	< 10.4	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6		

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
10/24/2012		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	< 4	N/A	< 4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	< 4	N/A	< 4	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5
10/24/2012		N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 1.05	N/A	< 1.03	N/A	N/A	< 1.19	N/A	< 1.03	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 1.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.05	N/A
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 1.1	< 1.1	N/A	N/A	N/A	N/A	N/A
8/19/2020		N/A	N/A	N/A	< 1.08	N/A	< 1.14	N/A	N/A	< 1.08	N/A	< 1.12	N/A	N/A
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.156	< 0.159	N/A	N/A	N/A	N/A	N/A
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.6
	4/26/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	10/24/2012	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A
	5/7/2013	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A
	10/18/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.6	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	< 0.7	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	0.9	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 1.05	N/A	< 1.03	N/A	N/A	< 1.19	N/A	< 1.03	< 1.03	N/A
	10/12/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.31	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 1.12	N/A	N/A	N/A	N/A	N/A	N/A	< 1.08	N/A
	3/20/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.09	N/A
	7/24/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.04	N/A
	5/15/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.1	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.05	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1.1	< 1.1	N/A	N/A	N/A	N/A	N/A
	8/19/2020	N/A	N/A	N/A	< 1.08	N/A	< 1.14	N/A	N/A	< 1.08	N/A	< 1.12	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0522	< 0.0529	N/A	N/A	N/A	N/A	N/A
	2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	2,4-D [2C], ug/L (CAS NO - 94-75-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2
10/24/2012		N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	< 2	N/A
5/7/2013		N/A	N/A	N/A	2.3	N/A	< 2	N/A	N/A	< 2	N/A	< 2	< 2	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 1.05	N/A	< 1.03	N/A	N/A	< 1.19	N/A	< 1.03	N/A	N/A
10/12/2015		N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/12/2016		N/A	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 1.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/20/2017		N/A	N/A	N/A	< 11.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7/24/2017		N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/15/2018		N/A	N/A	N/A	< 1.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.05	N/A
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 1.1	< 1.1	N/A	N/A	N/A	N/A	N/A
8/19/2020		N/A	N/A	N/A	< 1.08	N/A	< 1.14	N/A	N/A	< 1.08	N/A	< 1.12	N/A	N/A
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.626	< 0.635	N/A	N/A	N/A	N/A	N/A	
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.345*	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 20.2	N/A	< 20.4	N/A	N/A	< 20.2	N/A	< 20.8	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 21.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	< 21.1	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 21.3	N/A	< 21.3	N/A	N/A	< 21.3	N/A	< 21.5	N/A	N/A
3/23/2021	N/A	N/A	N/A	N/A	< 21.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	2-Methylphenol, ug/L (CAS NO - 95-48-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
2-Naphthylamine, ug/L (CAS NO - 91-59-8)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	2-Nitroaniline, ug/L (CAS NO - 88-74-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
		5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 50.5	N/A	< 51	N/A	N/A	< 50.5	N/A	< 52.1	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	3/4-Methylphenol, ug/L (CAS NO - T-34MP)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	< 28.5	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	< 10	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	10/12/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	0.248*	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.9	N/A	
	7/24/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.8	N/A	
	5/15/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.26*	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3-Chloropropene, ug/L (CAS NO - 107-05-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1
		10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A		
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A		

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
4,4`-DDD, ug/L (CAS NO - 72-54-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	N/A	< 0.032	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00664*	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	0.00539*	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	4,4`-DDE, ug/L (CAS NO - 72-55-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	N/A	< 0.032	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
4,4`-DDT, ug/L (CAS NO - 50-29-3)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	N/A	< 0.032	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	4-Chloroaniline, ug/L (CAS NO - 106-47-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	N/A	0.184*	N/A	< 10.4	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	4-Nitroaniline, ug/L (CAS NO - 100-01-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
4-Nitrophenol, ug/L (CAS NO - 100-02-7)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	



# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Acenaphthene, ug/L (CAS NO - 83-32-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Acenaphthylene, ug/L (CAS NO - 208-96-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Acetonitrile, ug/L (CAS NO - 75-05-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/28/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Acetonitrile, ug/L (CAS NO - 75-05-8)	5/7/2013	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	< 10	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	855*	N/A	870*	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A
	Acetophenone, ug/L (CAS NO - 98-86-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	1.62*	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Acrolein, ug/L (CAS NO - 107-02-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	11/28/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	< 10	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A
3/23/2021	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Aldrin, ug/L (CAS NO - 309-00-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Aldrin, ug/L (CAS NO - 309-00-2)	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Anthracene, ug/L (CAS NO - 120-12-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Benzyl alcohol, ug/L (CAS NO - 100-51-6)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Alpha-BHC, ug/L (CAS NO - 319-84-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Alpha-BHC, ug/L (CAS NO - 319-84-6)	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00243*	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Beta-BHC, ug/L (CAS NO - 319-85-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	0.00494*	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	0.00538*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	Delta-BHC, ug/L (CAS NO - 319-86-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00599*	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	14	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
10/18/2013		N/A	N/A	N/A	N/A	N/A	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	< 10	9	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	< 10	< 8	28	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	20	484	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	3.75*	N/A	4.83*	9.29*	203	8.55*	N/A	13.2	N/A	N/A	
10/12/2015		N/A	N/A	N/A	N/A	N/A	3.4*	8.83*	4.97*	N/A	N/A	4.62*	N/A	N/A	
4/12/2016		N/A	N/A	N/A	N/A	N/A	0.578*	2.86*	0.804*	N/A	N/A	0.407*	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	0.95*	1*	0.856*	0.853*	N/A	N/A	1.11*	N/A	N/A	
12/12/2016		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.4	N/A	N/A	
3/20/2017		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.6	N/A	N/A	< 10	N/A	N/A	
6/21/2017		N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7/24/2017		N/A	N/A	N/A	N/A	N/A	< 10.8	< 10.8	< 10.8	N/A	N/A	< 11.1	N/A	N/A	
5/15/2018	N/A	N/A	N/A	N/A	N/A	< 10.4	< 10.4	< 10.8	N/A	N/A	< 10.4	N/A	N/A		

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	8/22/2018	N/A	N/A	N/A	N/A	N/A	< 10.4	< 10.6	< 10.6	N/A	N/A	< 10.5	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10.7	< 10.5	< 10.6	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	< 10.8	< 10.9	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Chlordane, ug/L (CAS NO - 57-74-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A
		10/24/2012	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.13	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	< 0.1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 2	N/A	< 2.06	N/A	N/A	< 2	N/A	< 2	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 2.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.17	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 2.13	< 2.08	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 2.2	N/A	< 2.13	N/A	N/A	< 2.13	N/A	< 2.06	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 1.96	N/A	N/A	N/A	N/A	N/A	
Chlorobenzilate, ug/L (CAS NO - 510-15-6)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Chloroprene, ug/L (CAS NO - 126-99-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
		10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
11/28/2012		N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Chloroprene, ug/L (CAS NO - 126-99-8)	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
Chrysenes, ug/L (CAS NO - 218-01-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Cyanide, mg/L (CAS NO - 57-12-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.007	N/A
	10/24/2012	N/A	N/A	N/A	< 0.007	N/A	< 0.007	N/A	N/A	< 0.007	N/A	< 0.007	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.007	N/A	< 0.007	N/A	N/A	< 0.007	N/A	< 0.007	< 0.007	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	N/A	N/A	N/A	< 0.01	N/A
	3/11/2020	N/A	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A
	Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Dibenzofuran, ug/L (CAS NO - 132-64-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
		5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	< 3	N/A	< 3	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	< 3	N/A	< 3	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A		
Dieldrin, ug/L (CAS NO - 60-57-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	0.0022*	N/A	N/A	0.0038*	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	0.337*	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Dimethoate, ug/L (CAS NO - 60-51-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A
	10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	0.684*	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 20.2	N/A	< 20.4	N/A	N/A	< 20.2	N/A	< 20.8	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	1.87*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	< 21.1	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 21.3	N/A	< 21.3	N/A	N/A	< 21.3	N/A	< 21.5	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 21.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	
Dinoseb, ug/L (CAS NO - 88-85-7)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
		10/24/2012	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Diphenylamine, ug/L (CAS NO - 122-39-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Diphenylamine, ug/L (CAS NO - 122-39-4)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	
Disulfoton, ug/L (CAS NO - 298-04-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Endosulfan I, ug/L (CAS NO - 959-98-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	0.0123*	N/A	0.00336*	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	0.0173*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Endosulfan II, ug/L (CAS NO - 33213-65-9)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Endrin, ug/L (CAS NO - 72-20-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	0.00891*	N/A	0.00822*	N/A	N/A	0.00952*	N/A	0.0106*	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
		10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	11/28/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	< 10	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	
	Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

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Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Famphur, ug/L (CAS NO - 52-85-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A
10/24/2012		N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 20.2	N/A	< 20.4	N/A	N/A	< 20.2	N/A	< 20.8	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 21.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Fluoranthene, ug/L (CAS NO - 206-44-0)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Fluorene, ug/L (CAS NO - 86-73-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Heptachlor, ug/L (CAS NO - 76-44-8)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Heptachlor, ug/L (CAS NO - 76-44-8)	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	0.00416*	N/A	N/A	0.00356*	N/A	< 0.033	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
	Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A	
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 20.2	N/A	< 20.4	N/A	N/A	< 20.2	N/A	< 20.8	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 21.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Hexachloroethane, ug/L (CAS NO - 67-72-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A



# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Isobutanol, mg/L (CAS NO - 78-83-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	N/A	< 10	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	N/A	< 10	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	Isodrin, ug/L (CAS NO - 465-73-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	N/A	< 10.4	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	N/A	< 10.8	N/A
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Isophorone, ug/L (CAS NO - 78-59-1)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	N/A	< 10.4	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	N/A	< 10.8	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	Isosafrole, ug/L (CAS NO - 120-58-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	N/A	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	N/A	< 10.4	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Isosafrole, ug/L (CAS NO - 120-58-1)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
Kepone, ug/L (CAS NO - 143-50-0)	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Methacrylonitrile, ug/L (CAS NO - 126-98-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
		10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
		11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Methapyrilene, ug/L (CAS NO - 91-80-5)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Methoxychlor, ug/L (CAS NO - 72-43-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
		10/24/2012	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.06	N/A	< 0.05	N/A	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Methoxychlor, ug/L (CAS NO - 72-43-5)	4/15/2015	N/A	N/A	N/A	< 0.032	N/A	< 0.033	N/A	N/A	< 0.032	N/A	< 0.032	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.034	< 0.0333	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.0352	N/A	< 0.034	N/A	N/A	< 0.034	N/A	< 0.033	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.064	< 0.0627	N/A	N/A	N/A	N/A	N/A
Methyl Methacrylate, ug/L (CAS NO - 80-62-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	11/28/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	< 1	N/A	< 1	< 1	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	< 2	N/A	< 2	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A
Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	Naphthalene, ug/L (CAS NO - 91-20-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	< 5	N/A	< 5	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	< 5	N/A	< 5	N/A	N/A
3/23/2021		N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A
Nitrobenzene, ug/L (CAS NO - 98-95-3)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Nitrobenzene, ug/L (CAS NO - 98-95-3)	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
		5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
		5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
		3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A
		10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A
5/7/2013		N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
O-Toluidine, ug/L (CAS NO - 95-53-4)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	< 0.4	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1016, ug/L (CAS NO - 12674-11-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.13	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	< 0.1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1221, ug/L (CAS NO - 11104-28-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.26	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	< 0.2	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1232, ug/L (CAS NO - 11141-16-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.26	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	< 0.2	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	N/A
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
PCB-1232, ug/L (CAS NO - 11141-16-5)	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	
PCB-1242, ug/L (CAS NO - 53469-21-9)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.26	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	< 0.2	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	
	PCB-1248, ug/L (CAS NO - 12672-29-6)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A
		10/24/2012	N/A	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.26	N/A	< 0.2	N/A	N/A	< 0.2	N/A	< 0.2	< 0.2	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	
PCB-1254, ug/L (CAS NO - 11097-69-1)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A
		10/24/2012	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 0.13	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	< 0.1	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A	
	PCB-1260, ug/L (CAS NO - 11096-82-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A
		10/24/2012	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 0.13	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	< 0.1	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 0.833	N/A	< 0.825	N/A	N/A	< 0.816	N/A	< 0.851	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
PCB-1260, ug/L (CAS NO - 11096-82-5)	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.842	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 0.879	N/A	< 0.851	N/A	N/A	< 0.851	N/A	< 0.825	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 0.842	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.784	N/A	N/A	N/A	N/A	N/A
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A
	Phenacetin, ug/L (CAS NO - 62-44-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Phenacetin, ug/L (CAS NO - 62-44-2)	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Phenanthrene, ug/L (CAS NO - 85-01-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A	
	10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Phenol, ug/L (CAS NO - 108-95-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Phorate, ug/L (CAS NO - 298-02-2)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A
		10/24/2012	N/A	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A	< 0.4	N/A	< 0.4	N/A	N/A
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.4	< 0.4	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Pronamide, ug/L (CAS NO - 23950-58-5)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
		5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Pronamide, ug/L (CAS NO - 23950-58-5)	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Propionitrile, ug/L (CAS NO - 107-12-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	10/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	11/28/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	< 10	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	< 10	N/A	< 10	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
	Pyrene, ug/L (CAS NO - 129-00-0)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
10/24/2012		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A	
5/7/2013		N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	< 10.6	N/A	< 10.6	N/A	N/A	< 10.6	N/A	< 10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	
Safrole, ug/L (CAS NO - 94-59-7)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 8	N/A
		10/24/2012	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	N/A	N/A
	5/7/2013	N/A	N/A	N/A	< 8	N/A	< 8	N/A	N/A	< 8	N/A	< 8	< 8	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 8	< 8	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	< 8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	< 10.1	N/A	< 10.2	N/A	N/A	< 10.1	N/A	< 10.4	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	< 10.5	N/A	N/A	N/A	N/A	N/A	
Sulfide, mg/L (CAS NO - 18496-25-8)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	
	10/24/2012	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	< 0.1	N/A	< 0.1	< 0.3	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG	
Sulfide, mg/L (CAS NO - 18496-25-8)	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.15	0.36	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.11	1.1	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	0.13	N/A	<0.1	<0.1	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	<1	<1	<1	<1	<1	<1	N/A	<1	N/A	N/A	
	10/12/2015	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	4/12/2016	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	9/22/2016	N/A	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	3/20/2017	<1	<1	43.6	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	3/20/2017	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	<1	<1	16.8	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	7/24/2017	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/15/2018	<1	<1	<1	N/A	2.49	N/A	0.393*	<1	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	<1	<1	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	<1	N/A	
	9/19/2019	N/A	N/A	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	<1	<1	<1	<1	<1	<1	N/A	N/A	<1	N/A	N/A	
	8/19/2020	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/23/2021	N/A	N/A	N/A	N/A	<10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/15/2021	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	9/28/2022	N/A	N/A	N/A	N/A	0.886*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	3/8/2023	N/A	N/A	<1	N/A	0.832*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	5/29/2024	N/A	N/A	<1	N/A	<1	N/A	<1	<1	N/A	N/A	N/A	N/A	N/A	
	Thionazin, ug/L (CAS NO - 297-97-2)	1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.4	N/A
		10/24/2012	N/A	N/A	N/A	<0.4	N/A	<0.4	N/A	N/A	<0.4	N/A	<0.4	<0.4	N/A
5/7/2013		N/A	N/A	N/A	<0.4	N/A	<0.4	N/A	N/A	<0.4	N/A	<0.4	<0.4	N/A	
3/25/2014		N/A	N/A	N/A	N/A	N/A	N/A	<0.4	<0.4	N/A	N/A	N/A	N/A	N/A	
9/30/2014		N/A	N/A	N/A	N/A	N/A	N/A	<0.4	<0.4	N/A	N/A	N/A	N/A	N/A	
2/24/2015		N/A	N/A	N/A	N/A	<0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4/15/2015		N/A	N/A	N/A	<10.1	N/A	<10.2	N/A	N/A	<10.1	N/A	<10.4	N/A	N/A	
9/22/2016		N/A	N/A	N/A	N/A	<10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8/22/2018		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10.6	N/A	
5/29/2019		N/A	N/A	N/A	N/A	N/A	N/A	<10.6	<10.5	N/A	N/A	N/A	N/A	N/A	
3/11/2020		N/A	N/A	N/A	<10.6	N/A	<10.6	N/A	N/A	<10.6	N/A	<10.8	N/A	N/A	
3/23/2021		N/A	N/A	N/A	N/A	<10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5/29/2024		N/A	N/A	N/A	N/A	N/A	N/A	<10	<10	N/A	N/A	N/A	N/A	N/A	
Toxaphene, ug/L (CAS NO - 8001-35-2)		1/6/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.2	N/A
	10/24/2012	N/A	N/A	N/A	<0.2	N/A	<0.2	N/A	N/A	<0.2	N/A	<0.2	N/A	N/A	
	5/7/2013	N/A	N/A	N/A	<0.26	N/A	<0.2	N/A	N/A	<0.2	N/A	<0.2	<0.2	N/A	
	3/25/2014	N/A	N/A	N/A	N/A	N/A	N/A	<0.2	<0.2	N/A	N/A	N/A	N/A	N/A	
	9/30/2014	N/A	N/A	N/A	N/A	N/A	N/A	<0.2	<0.2	N/A	N/A	N/A	N/A	N/A	
	2/24/2015	N/A	N/A	N/A	N/A	<0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/15/2015	N/A	N/A	N/A	<2	N/A	<2.06	N/A	N/A	<2	N/A	<2	N/A	N/A	
	9/22/2016	N/A	N/A	N/A	N/A	<2.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	8/22/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2.17	N/A	
	5/29/2019	N/A	N/A	N/A	N/A	N/A	N/A	<2.13	<2.08	N/A	N/A	N/A	N/A	N/A	
	3/11/2020	N/A	N/A	N/A	<2.2	N/A	<2.13	N/A	N/A	<2.13	N/A	<2.06	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-1 UPG	MW-4 UPG	MW-11 UPG	MW-7 DNG	MW-9R DNG	MW-10R DNG	MW-12 DNG	MW-13R DNG	MW-14R DNG	MW-15C DNG	MW-15R DNG	MW-39 DNG	MW-44 DNG
Toxaphene, ug/L (CAS NO - 8001-35-2)	3/23/2021	N/A	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/29/2024	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 1.96	N/A	N/A	N/A	N/A	N/A

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

**Denotes Detection.**

**Denotes Confirmed Outlier. Statistically Excluded.**

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

## Appendix C-2

### Summary of Groundwater Chemistry – Open MSWLF Unit

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	2/21/2008	< 0.005	N/A	N/A	N/A	N/A
	4/17/2008	< 0.005	< 0.005	N/A	N/A	N/A
	6/19/2008	< 0.005	< 0.005	N/A	N/A	N/A
	8/7/2008	< 0.005	< 0.005	N/A	N/A	N/A
	10/1/2008	< 0.005	< 0.005	N/A	N/A	N/A
	12/2/2008	< 0.005	< 0.005	N/A	N/A	N/A
	4/15/2009	< 0.005	< 0.005	N/A	N/A	N/A
	10/19/2009	< 0.005	< 0.005	< 0.005	N/A	N/A
	5/20/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/28/2011	0.0101	0.0249	0.0332	N/A	N/A
	4/26/2012	< 0.002	< 0.002	< 0.002	N/A	N/A
	10/24/2012	< 0.002	< 0.002	0.0027	N/A	N/A
	5/7/2013	< 0.002	< 0.002	0.0034	N/A	N/A
	10/18/2013	< 0.002	< 0.002	< 0.002	N/A	N/A
	3/25/2014	< 0.002	< 0.002	< 0.002	N/A	N/A
	9/30/2014	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/15/2015	< 0.001	N/A	0.00151	N/A	< 0.001
	10/12/2015	< 0.001	N/A	0.000485*	N/A	< 0.001
	10/12/2015	< 0.001	N/A	N/A	N/A	N/A
	4/12/2016	< 0.001	N/A	0.000651*	N/A	< 0.001
	4/12/2016	< 0.001	N/A	N/A	N/A	N/A
	6/21/2016	< 0.003	N/A	N/A	N/A	N/A
	9/23/2016	< 0.001	N/A	0.000779*	N/A	N/A
	9/23/2016	< 0.001	N/A	N/A	N/A	N/A
	3/21/2017	< 0.001	0.000388*	0.000379*	N/A	N/A
	3/21/2017	N/A	N/A	0.000552*	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	7/24/2017	< 0.001	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	5/15/2018	< 0.001	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	8/22/2018	< 0.001	N/A	N/A	N/A	N/A
	5/29/2019	< 0.003	< 0.003	< 0.003	< 0.003	N/A
	5/29/2019	N/A	N/A	< 0.003	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.015	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/19/2019	< 0.001	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.00423	N/A
	1/23/2020	N/A	N/A	N/A	0.00289	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	0.00184	< 0.001
3/11/2020	N/A	< 0.001	N/A	N/A	N/A	
8/19/2020	< 0.001	< 0.001	< 0.001	0.00104	N/A	
8/19/2020	N/A	N/A	N/A	0.00105	N/A	
3/23/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	
3/23/2021	< 0.002	N/A	N/A	N/A	N/A	
9/16/2021	< 0.002	< 0.002	< 0.002	< 0.002	N/A	
9/16/2021	N/A	< 0.002	N/A	N/A	N/A	
5/10/2022	< 0.002	< 0.002	< 0.008	< 0.002	N/A	
5/10/2022	N/A	N/A	< 0.002	N/A	N/A	
9/28/2022	< 0.002	< 0.002	< 0.002	< 0.002	N/A	
9/28/2022	N/A	N/A	N/A	< 0.002	N/A	

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	3/7/2023	< 0.002	< 0.002	< 0.002	0.00125*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.002	N/A
	9/26/2023	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	9/26/2023	< 0.002	N/A	N/A	N/A	N/A
	5/29/2024	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	5/29/2024	N/A	< 0.002	N/A	N/A	N/A
	10/23/2024	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	10/23/2024	N/A	< 0.002	N/A	N/A	N/A
Arsenic, mg/L (CAS NO - 7440-38-2)	2/21/2008	< 0.01	N/A	N/A	N/A	N/A
	4/17/2008	< 0.01	< 0.01	N/A	N/A	N/A
	6/19/2008	< 0.01	< 0.01	N/A	N/A	N/A
	8/7/2008	< 0.01	< 0.01	N/A	N/A	N/A
	10/1/2008	< 0.01	< 0.01	N/A	N/A	N/A
	12/2/2008	< 0.01	< 0.01	N/A	N/A	N/A
	4/15/2009	0.01	< 0.01	N/A	N/A	N/A
	10/19/2009	< 0.01	< 0.01	< 0.01	N/A	N/A
	5/20/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/28/2011	< 0.0172	< 0.0172	< 0.0172	N/A	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/24/2012	< 0.004	< 0.004	0.0116	N/A	N/A
	5/7/2013	< 0.004	< 0.004	0.0079	N/A	N/A
	10/18/2013	< 0.004	< 0.004	0.0099	N/A	N/A
	3/25/2014	< 0.004	< 0.004	0.01	N/A	N/A
	9/30/2014	< 0.004	< 0.004	0.0074	N/A	N/A
	4/15/2015	< 0.002	N/A	0.0071	N/A	< 0.002
	10/12/2015	< 0.002	N/A	0.00112*	N/A	0.0154
	10/12/2015	< 0.002	N/A	N/A	N/A	N/A
	4/12/2016	< 0.002	N/A	0.00166*	N/A	0.0334
	4/12/2016	< 0.002	N/A	N/A	N/A	N/A
	6/21/2016	< 0.001	N/A	N/A	N/A	N/A
	9/23/2016	< 0.002	N/A	< 0.002	N/A	N/A
	9/23/2016	< 0.002	N/A	N/A	N/A	N/A
	3/21/2017	< 0.002	< 0.002	< 0.002	N/A	N/A
	3/21/2017	N/A	N/A	< 0.002	N/A	N/A
	7/24/2017	< 0.002	< 0.002	0.000881*	N/A	N/A
	7/24/2017	< 0.002	N/A	N/A	N/A	N/A
	5/15/2018	< 0.002	< 0.002	< 0.002	N/A	N/A
	5/15/2018	< 0.002	N/A	N/A	N/A	N/A
	8/22/2018	< 0.002	< 0.002	0.00107*	N/A	N/A
	8/22/2018	< 0.002	N/A	N/A	N/A	N/A
	5/29/2019	0.000415*	0.000425*	0.000727*	0.00129	N/A
	5/29/2019	N/A	N/A	0.000662*	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.0298	N/A
	9/19/2019	< 0.002	< 0.002	0.00105*	N/A	N/A
	9/19/2019	< 0.002	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.0011*	N/A
	1/23/2020	N/A	N/A	N/A	0.00087*	N/A
3/11/2020	< 0.002	< 0.002	0.00126*	< 0.002	0.00374	
3/11/2020	N/A	< 0.002	N/A	N/A	N/A	
8/19/2020	< 0.002	< 0.002	0.000959*	0.0009*	N/A	
8/19/2020	N/A	N/A	N/A	< 0.002	N/A	



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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	3/23/2021	< 0.002	< 0.002	< 0.002	< 0.002	0.0013*
	3/23/2021	< 0.002	N/A	N/A	N/A	N/A
	9/16/2021	< 0.002	< 0.002	< 0.002	0.000903*	N/A
	9/16/2021	N/A	< 0.002	N/A	N/A	N/A
	5/10/2022	< 0.002	< 0.002	< 0.008	< 0.002	N/A
	5/10/2022	N/A	N/A	< 0.002	N/A	N/A
	9/28/2022	< 0.002	< 0.002	0.000849*	0.000881*	N/A
	9/28/2022	N/A	N/A	N/A	0.00081*	N/A
	3/7/2023	< 0.002	< 0.002	< 0.002	0.00139*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.002	N/A
	9/26/2023	< 0.002	< 0.002	0.000912*	0.00102*	N/A
	9/26/2023	< 0.002	N/A	N/A	N/A	N/A
	5/29/2024	< 0.002	< 0.002	< 0.002	< 0.002	0.00698
	5/29/2024	N/A	< 0.002	N/A	N/A	N/A
	10/23/2024	< 0.002	< 0.002	0.00216	< 0.002	N/A
	10/23/2024	N/A	< 0.002	N/A	N/A	N/A
Barium, mg/L (CAS NO - 7440-39-3)	2/21/2008	0.18	N/A	N/A	N/A	N/A
	4/17/2008	0.17	< 0.05	N/A	N/A	N/A
	6/19/2008	0.32	< 0.05	N/A	N/A	N/A
	8/7/2008	0.2	< 0.05	N/A	N/A	N/A
	10/1/2008	0.021	< 0.05	N/A	N/A	N/A
	12/2/2008	0.25	< 0.05	N/A	N/A	N/A
	4/15/2009	0.33	< 0.05	N/A	N/A	N/A
	10/19/2009	0.26	< 0.05	0.46	N/A	N/A
	5/20/2010	0.3	< 0.05	0.1	N/A	N/A
	10/1/2010	0.27	< 0.05	0.06	N/A	N/A
	4/29/2011	0.29	< 0.05	< 0.05	N/A	N/A
	9/28/2011	0.278	0.0413	0.05895	N/A	N/A
	4/26/2012	0.323	0.0359	0.046	N/A	N/A
	10/24/2012	0.28	0.0337	0.0426	N/A	N/A
	5/7/2013	0.324	0.0364	0.0411	N/A	N/A
	10/18/2013	0.277	0.0322	0.03	N/A	N/A
	3/25/2014	0.31	0.0301	0.0404	N/A	N/A
	9/30/2014	0.289	0.0313	0.0313	N/A	N/A
	4/15/2015	0.296	N/A	0.0258	N/A	0.335
	10/12/2015	0.33	N/A	0.042	N/A	1.75
	10/12/2015	0.331	N/A	N/A	N/A	N/A
	4/12/2016	0.342	N/A	0.0318	N/A	2.04
	4/12/2016	0.307	N/A	N/A	N/A	N/A
	6/21/2016	0.335	N/A	N/A	N/A	N/A
	9/23/2016	0.326	N/A	0.0376	N/A	N/A
	9/23/2016	0.336	N/A	N/A	N/A	N/A
	3/21/2017	0.377	0.0339	0.0294	N/A	N/A
	3/21/2017	N/A	N/A	0.0263	N/A	N/A
	7/24/2017	0.309	0.0327	0.0198	N/A	N/A
	7/24/2017	0.321	N/A	N/A	N/A	N/A
	5/15/2018	0.332	0.0336	0.0187	N/A	N/A
	5/15/2018	0.311	N/A	N/A	N/A	N/A
8/22/2018	0.385	0.036	0.021	N/A	N/A	
8/22/2018	0.352	N/A	N/A	N/A	N/A	
5/29/2019	0.313	0.0326	0.0172	0.0315	N/A	
5/29/2019	N/A	N/A	0.0165	N/A	N/A	
8/1/2019	N/A	N/A	N/A	0.0245	N/A	

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Barium, mg/L (CAS NO - 7440-39-3)	9/19/2019	0.353	0.0379	0.0206	N/A	N/A
	9/19/2019	0.34	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.03	N/A
	1/23/2020	N/A	N/A	N/A	0.0294	N/A
	3/11/2020	0.333	0.0355	0.0199	0.029	0.229
	3/11/2020	N/A	0.0346	N/A	N/A	N/A
	8/19/2020	0.305	0.0369	0.0192	0.0254	N/A
	8/19/2020	N/A	N/A	N/A	0.025	N/A
	3/23/2021	0.273	0.0333	0.0184	0.0225	0.216
	3/23/2021	0.269	N/A	N/A	N/A	N/A
	9/16/2021	0.268	0.0317	0.0188	0.0228	N/A
	9/16/2021	N/A	0.0329	N/A	N/A	N/A
	5/10/2022	0.262	0.0339	0.0179	0.0191	N/A
	5/10/2022	N/A	N/A	0.0174	N/A	N/A
	9/28/2022	0.257	0.0332	0.0211	0.0209	N/A
	9/28/2022	N/A	N/A	N/A	0.0202	N/A
	3/7/2023	0.245	0.0337	0.0181	0.0192	N/A
	3/7/2023	N/A	N/A	N/A	0.0189	N/A
	9/26/2023	0.251	0.0337	0.0183	0.0196	N/A
	9/26/2023	0.264	N/A	N/A	N/A	N/A
5/29/2024	0.221	0.0323	0.017	0.0158	0.336	
5/29/2024	N/A	0.0315	N/A	N/A	N/A	
10/23/2024	0.171	0.0319	0.0532	0.0177	N/A	
10/23/2024	N/A	0.0318	N/A	N/A	N/A	
Beryllium, mg/L (CAS NO - 7440-41-7)	2/21/2008	< 0.02	N/A	N/A	N/A	N/A
	4/17/2008	< 0.02	< 0.02	N/A	N/A	N/A
	6/19/2008	< 0.02	< 0.02	N/A	N/A	N/A
	8/7/2008	< 0.02	< 0.02	N/A	N/A	N/A
	10/1/2008	< 0.02	< 0.02	N/A	N/A	N/A
	12/2/2008	< 0.02	< 0.02	N/A	N/A	N/A
	4/15/2009	< 0.02	< 0.02	N/A	N/A	N/A
	10/19/2009	< 0.02	< 0.02	< 0.02	N/A	N/A
	5/20/2010	< 0.002	< 0.002	< 0.002	N/A	N/A
	10/1/2010	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/29/2011	< 0.002	< 0.002	< 0.002	N/A	N/A
	9/28/2011	0.0187	0.0187	0.0184	N/A	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	< 0.001	N/A	< 0.001	N/A	< 0.001
	10/12/2015	0.000047*	N/A	< 0.001	N/A	0.000076*
	10/12/2015	< 0.001	N/A	N/A	N/A	N/A
	4/12/2016	< 0.001	N/A	< 0.001	N/A	< 0.001
	4/12/2016	< 0.001	N/A	N/A	N/A	N/A
	6/21/2016	< 0.001	N/A	N/A	N/A	N/A
	9/23/2016	< 0.001	N/A	< 0.001	N/A	N/A
	9/23/2016	< 0.001	N/A	N/A	N/A	N/A
	3/21/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/21/2017	N/A	N/A	< 0.001	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	7/24/2017	< 0.001	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Beryllium, mg/L (CAS NO - 7440-41-7)	5/15/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	5/15/2018	< 0.001	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	8/22/2018	< 0.001	N/A	N/A	N/A	N/A
	5/29/2019	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	5/29/2019	N/A	N/A	< 0.001	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.001	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/19/2019	< 0.001	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.001	N/A
	1/23/2020	N/A	N/A	N/A	< 0.001	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/11/2020	N/A	< 0.001	N/A	N/A	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A
	3/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/23/2021	< 0.001	N/A	N/A	N/A	N/A
	9/16/2021	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	9/16/2021	N/A	< 0.001	N/A	N/A	N/A
	5/10/2022	< 0.001	< 0.001	< 0.004	< 0.001	N/A
	5/10/2022	N/A	N/A	< 0.001	N/A	N/A
	9/28/2022	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	9/28/2022	N/A	N/A	N/A	< 0.001	N/A
	3/7/2023	< 0.001	< 0.001	< 0.001	0.000448*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.001	N/A
	9/26/2023	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	9/26/2023	< 0.001	N/A	N/A	N/A	N/A
	5/29/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/29/2024	N/A	< 0.001	N/A	N/A	N/A
	10/23/2024	< 0.001	< 0.001	< 0.001	< 0.001	N/A
10/23/2024	N/A	< 0.001	N/A	N/A	N/A	
Cadmium, mg/L (CAS NO - 7440-43-9)	2/21/2008	< 0.001	N/A	N/A	N/A	N/A
	4/17/2008	< 0.001	< 0.001	N/A	N/A	N/A
	6/19/2008	0.002	< 0.001	N/A	N/A	N/A
	8/7/2008	< 0.001	0.001	N/A	N/A	N/A
	10/1/2008	< 0.001	< 0.001	N/A	N/A	N/A
	12/2/2008	< 0.001	< 0.001	N/A	N/A	N/A
	4/15/2009	0.002	< 0.001	N/A	N/A	N/A
	10/19/2009	0.011	< 0.001	< 0.001	N/A	N/A
	3/2/2010	< 0.001	N/A	N/A	N/A	N/A
	5/20/2010	< 0.00025	< 0.00025	< 0.00025	N/A	N/A
	10/1/2010	< 0.00025	< 0.00025	< 0.00025	N/A	N/A
	4/29/2011	< 0.00025	< 0.00025	< 0.00025	N/A	N/A
	9/28/2011	0.0164	0.0162	0.0164	N/A	N/A
	4/26/2012	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	10/24/2012	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	5/7/2013	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	10/18/2013	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	3/25/2014	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	9/30/2014	< 0.0008	< 0.0008	< 0.0008	N/A	N/A
	4/15/2015	< 0.0005	N/A	0.000119*	N/A	< 0.0005
	10/12/2015	< 0.0005	N/A	0.000378*	N/A	0.000678
	10/12/2015	< 0.0005	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Cadmium, mg/L (CAS NO - 7440-43-9)	4/12/2016	0.000041*	N/A	0.000308*	N/A	0.00145
	4/12/2016	0.000061*	N/A	N/A	N/A	N/A
	6/21/2016	< 0.0005	N/A	N/A	N/A	N/A
	9/23/2016	0.000063*	N/A	0.000076*	N/A	N/A
	9/23/2016	0.000054*	N/A	N/A	N/A	N/A
	3/21/2017	0.000073*	< 0.0005	< 0.0005	N/A	N/A
	3/21/2017	N/A	N/A	< 0.0005	N/A	N/A
	7/24/2017	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	7/24/2017	< 0.0005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	5/15/2018	< 0.0005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	8/22/2018	< 0.0005	N/A	N/A	N/A	N/A
	5/29/2019	< 0.0005	< 0.0005	0.000329*	< 0.0005	N/A
	5/29/2019	N/A	N/A	0.000338*	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.0025	N/A
	9/19/2019	< 0.0001	< 0.0001	< 0.0001	N/A	N/A
	9/19/2019	< 0.0001	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.000173	N/A
	1/23/2020	N/A	N/A	N/A	0.000184	N/A
	3/11/2020	< 0.0001	< 0.0001	< 0.0001	0.000185	< 0.0001
	3/11/2020	N/A	< 0.0001	N/A	N/A	N/A
	8/19/2020	< 0.0001	< 0.0001	< 0.0001	0.000272	N/A
	8/19/2020	N/A	N/A	N/A	0.000262	N/A
	3/23/2021	0.0003	< 0.0001	0.000059*	0.000222	0.000594
	3/23/2021	0.000267	N/A	N/A	N/A	N/A
	9/16/2021	< 0.0001	< 0.0001	< 0.0001	0.000058*	N/A
	9/16/2021	N/A	< 0.0001	N/A	N/A	N/A
	5/10/2022	0.000094*	< 0.0001	< 0.0004	0.000197	N/A
	5/10/2022	N/A	N/A	< 0.0001	N/A	N/A
	9/28/2022	0.000064*	< 0.0001	< 0.0001	0.00012	N/A
	9/28/2022	N/A	N/A	N/A	0.00012	N/A
	3/7/2023	0.000149	< 0.0001	< 0.0001	0.000598	N/A
	3/7/2023	N/A	N/A	N/A	0.00018	N/A
	9/26/2023	< 0.0002	< 0.0002	0.000122*	< 0.0002	N/A
9/26/2023	< 0.0002	N/A	N/A	N/A	N/A	
5/29/2024	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
5/29/2024	N/A	< 0.0002	N/A	N/A	N/A	
10/23/2024	< 0.0002	< 0.0002	0.000437	0.000148*	N/A	
10/23/2024	N/A	< 0.0002	N/A	N/A	N/A	
Chromium, mg/L (CAS NO - 7440-47-3)	2/21/2008	< 0.02	N/A	N/A	N/A	N/A
	4/17/2008	< 0.02	< 0.02	N/A	N/A	N/A
	6/19/2008	< 0.02	< 0.02	N/A	N/A	N/A
	8/7/2008	< 0.02	< 0.02	N/A	N/A	N/A
	10/1/2008	< 0.02	< 0.02	N/A	N/A	N/A
	12/2/2008	< 0.02	< 0.02	N/A	N/A	N/A
	4/15/2009	< 0.02	< 0.02	N/A	N/A	N/A
	10/19/2009	< 0.02	< 0.02	< 0.02	N/A	N/A
	5/20/2010	< 0.01	< 0.01	< 0.01	N/A	N/A
	10/1/2010	< 0.01	< 0.01	< 0.01	N/A	N/A
	4/29/2011	< 0.01	< 0.01	< 0.01	N/A	N/A
	9/28/2011	0.0109	0.0111	0.0173	N/A	N/A
	4/26/2012	< 0.008	< 0.008	< 0.008	N/A	N/A
	10/24/2012	< 0.008	< 0.008	< 0.008	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chromium, mg/L (CAS NO - 7440-47-3)	5/7/2013	< 0.008	< 0.008	< 0.008	N/A	N/A
	10/18/2013	< 0.008	< 0.008	< 0.008	N/A	N/A
	3/25/2014	< 0.008	< 0.008	< 0.008	N/A	N/A
	9/30/2014	< 0.008	< 0.008	< 0.008	N/A	N/A
	4/15/2015	< 0.005	N/A	< 0.005	N/A	< 0.005
	10/12/2015	< 0.005	N/A	< 0.005	N/A	< 0.005
	10/12/2015	< 0.005	N/A	N/A	N/A	N/A
	4/12/2016	< 0.005	N/A	< 0.005	N/A	0.000809*
	4/12/2016	< 0.005	N/A	N/A	N/A	N/A
	6/21/2016	< 0.005	N/A	N/A	N/A	N/A
	9/23/2016	< 0.005	N/A	0.000441*	N/A	N/A
	9/23/2016	< 0.005	N/A	N/A	N/A	N/A
	3/21/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/21/2017	N/A	N/A	< 0.005	N/A	N/A
	7/24/2017	< 0.005	0.000737*	< 0.005	N/A	N/A
	7/24/2017	< 0.005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	< 0.005	< 0.005	N/A	N/A
	5/15/2018	< 0.005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	0.000785*	< 0.005	N/A	N/A
	8/22/2018	< 0.005	N/A	N/A	N/A	N/A
	5/29/2019	< 0.005	< 0.005	0.00293*	0.00138*	N/A
	5/29/2019	N/A	N/A	< 0.005	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.025	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/19/2019	< 0.005	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.005	N/A
	1/23/2020	N/A	N/A	N/A	< 0.005	N/A
	3/11/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	3/11/2020	N/A	< 0.005	N/A	N/A	N/A
	8/19/2020	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	8/19/2020	N/A	N/A	N/A	< 0.005	N/A
	3/23/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	3/23/2021	< 0.005	N/A	N/A	N/A	N/A
	9/16/2021	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/16/2021	N/A	< 0.005	N/A	N/A	N/A
	5/10/2022	< 0.005	< 0.005	< 0.02	< 0.005	N/A
	5/10/2022	N/A	N/A	< 0.005	N/A	N/A
	9/28/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/28/2022	N/A	N/A	N/A	< 0.005	N/A
	3/7/2023	< 0.005	< 0.005	< 0.005	< 0.005	N/A
3/7/2023	N/A	N/A	N/A	< 0.005	N/A	
9/26/2023	< 0.005	< 0.005	< 0.005	< 0.005	N/A	
9/26/2023	< 0.005	N/A	N/A	N/A	N/A	
5/29/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
5/29/2024	N/A	< 0.005	N/A	N/A	N/A	
10/23/2024	< 0.005	< 0.005	0.00142*	< 0.005	N/A	
10/23/2024	N/A	< 0.005	N/A	N/A	N/A	
Cobalt, mg/L (CAS NO - 7440-48-4)	2/21/2008	< 0.05	N/A	N/A	N/A	N/A
	4/17/2008	< 0.05	< 0.05	N/A	N/A	N/A
	6/19/2008	< 0.05	< 0.05	N/A	N/A	N/A
	8/7/2008	< 0.05	< 0.05	N/A	N/A	N/A
	10/1/2008	< 0.05	< 0.05	N/A	N/A	N/A
	12/2/2008	< 0.05	< 0.05	N/A	N/A	N/A
	4/15/2009	< 0.05	< 0.05	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	10/19/2009	< 0.05	< 0.05	< 0.05	N/A	N/A
	5/20/2010	< 0.02	< 0.02	< 0.02	N/A	N/A
	10/1/2010	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/29/2011	< 0.02	< 0.02	< 0.02	N/A	N/A
	9/28/2011	0.0997	0.011	0.0237	N/A	N/A
	4/26/2012	< 0.004	< 0.004	0.0112	N/A	N/A
	10/24/2012	< 0.004	< 0.004	0.0422	N/A	N/A
	5/7/2013	< 0.004	< 0.004	0.0326	N/A	N/A
	10/18/2013	< 0.004	< 0.004	0.0202	N/A	N/A
	3/25/2014	< 0.004	< 0.004	0.0505	N/A	N/A
	9/30/2014	< 0.0008	< 0.0008	0.0406	N/A	N/A
	4/15/2015	0.00018*	N/A	0.0307	N/A	0.000068*
	10/12/2015	0.000317*	N/A	0.0196	N/A	0.00652
	10/12/2015	0.000301*	N/A	N/A	N/A	N/A
	4/12/2016	0.000526	N/A	0.0209	N/A	0.015
	4/12/2016	0.000453*	N/A	N/A	N/A	N/A
	6/21/2016	0.00026*	N/A	N/A	N/A	N/A
	9/23/2016	0.00024*	N/A	0.0022	N/A	N/A
	9/23/2016	0.000245*	N/A	N/A	N/A	N/A
	3/21/2017	0.000172*	0.00012*	0.00118	N/A	N/A
	3/21/2017	N/A	N/A	0.00109	N/A	N/A
	7/24/2017	0.000305*	0.000046*	0.00462	N/A	N/A
	7/24/2017	0.000304*	N/A	N/A	N/A	N/A
	5/15/2018	0.000136*	< 0.0005	0.000683	N/A	N/A
	5/15/2018	0.000126*	N/A	N/A	N/A	N/A
	8/22/2018	0.000301*	< 0.0005	0.00462	N/A	N/A
	8/22/2018	0.000304*	N/A	N/A	N/A	N/A
	5/29/2019	< 0.001	< 0.001	0.00208	0.00386	N/A
	5/29/2019	N/A	N/A	0.00218	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.00583	N/A
	9/19/2019	0.000107*	< 0.0005	0.00802	N/A	N/A
	9/19/2019	0.000106*	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.0046	N/A
	1/23/2020	N/A	N/A	N/A	0.00358	N/A
	3/11/2020	0.000116*	< 0.0005	0.00784	0.00394	0.00539
	3/11/2020	N/A	< 0.0005	N/A	N/A	N/A
	8/19/2020	0.000099*	0.000133*	0.00553	0.00341	N/A
	8/19/2020	N/A	N/A	N/A	0.00344	N/A
	3/23/2021	0.000222*	< 0.0005	0.00264	0.00386	0.00205
	3/23/2021	0.000224*	N/A	N/A	N/A	N/A
9/16/2021	0.000254*	< 0.0005	0.00641	0.00463	N/A	
9/16/2021	N/A	0.000247*	N/A	N/A	N/A	
5/10/2022	0.000257*	< 0.0005	0.00391	0.00512	N/A	
5/10/2022	N/A	N/A	0.00206	N/A	N/A	
9/28/2022	< 0.0005	< 0.0005	0.0114	0.00499	N/A	
9/28/2022	N/A	N/A	N/A	0.00487	N/A	
3/7/2023	< 0.0005	< 0.0005	0.00598	0.0056	N/A	
3/7/2023	N/A	N/A	N/A	0.00528	N/A	
9/26/2023	< 0.0005	< 0.0005	0.00519	0.00819	N/A	
9/26/2023	< 0.0005	N/A	N/A	N/A	N/A	
3/4/2024	N/A	N/A	N/A	0.00535	N/A	
5/29/2024	< 0.0005	< 0.0005	0.00329	0.00365	0.00636	
5/29/2024	N/A	< 0.0005	N/A	N/A	N/A	

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	10/23/2024	< 0.0005	< 0.0005	0.0372	0.00505	N/A
	10/23/2024	N/A	< 0.0005	N/A	N/A	N/A
Copper, mg/L (CAS NO - 7440-50-8)	2/21/2008	< 0.01	N/A	N/A	N/A	N/A
	4/17/2008	< 0.01	< 0.01	N/A	N/A	N/A
	6/19/2008	0.02	< 0.01	N/A	N/A	N/A
	8/7/2008	< 0.01	< 0.01	N/A	N/A	N/A
	10/1/2008	< 0.01	< 0.01	N/A	N/A	N/A
	12/2/2008	< 0.01	< 0.01	N/A	N/A	N/A
	4/15/2009	0.02	< 0.01	N/A	N/A	N/A
	10/19/2009	< 0.01	< 0.01	< 0.01	N/A	N/A
	5/20/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/28/2011	0.0106	0.0099	0.0085	N/A	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	5/7/2013	0.0047	< 0.004	< 0.004	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	3/25/2014	0.0082	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	0.000517*	N/A	0.0102	N/A	0.000706*
	7/28/2015	N/A	N/A	0.0212	N/A	N/A
	10/12/2015	< 0.002	N/A	0.00131*	N/A	0.00168*
	10/12/2015	< 0.002	N/A	N/A	N/A	N/A
	4/12/2016	< 0.005	N/A	< 0.005	N/A	0.00367*
	4/12/2016	< 0.005	N/A	N/A	N/A	N/A
	6/21/2016	< 0.002	N/A	N/A	N/A	N/A
	9/23/2016	< 0.005	N/A	< 0.005	N/A	N/A
	9/23/2016	0.00128*	N/A	N/A	N/A	N/A
	3/21/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/21/2017	N/A	N/A	< 0.005	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	7/24/2017	< 0.005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	< 0.005	< 0.005	N/A	N/A
	5/15/2018	< 0.005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/22/2018	< 0.005	N/A	N/A	N/A	N/A
	5/29/2019	0.00136*	0.00102*	0.0033	0.00905	N/A
5/29/2019	N/A	N/A	0.00298	N/A	N/A	
8/1/2019	N/A	N/A	N/A	0.00793	N/A	
9/19/2019	< 0.005	< 0.005	< 0.005	N/A	N/A	
9/19/2019	< 0.005	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 0.005	N/A	
1/23/2020	N/A	N/A	N/A	0.00219*	N/A	
3/11/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
3/11/2020	N/A	< 0.005	N/A	N/A	N/A	
8/19/2020	< 0.005	< 0.005	< 0.005	0.00449*	N/A	
8/19/2020	N/A	N/A	N/A	0.00389*	N/A	
3/23/2021	0.0106	< 0.005	< 0.005	0.00292*	0.00455*	
3/23/2021	0.0103	N/A	N/A	N/A	N/A	
9/16/2021	< 0.005	< 0.005	< 0.005	< 0.005	N/A	
9/16/2021	N/A	< 0.005	N/A	N/A	N/A	
5/10/2022	< 0.005	< 0.005	< 0.02	0.00276*	N/A	
5/10/2022	N/A	N/A	< 0.005	N/A	N/A	

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	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
<b>Total Metals Constituents</b> Copper, mg/L (CAS NO - 7440-50-8)	9/28/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/28/2022	N/A	N/A	N/A	< 0.005	N/A
	3/7/2023	< 0.005	< 0.005	< 0.005	0.00389*	N/A
	3/7/2023	N/A	N/A	N/A	0.00293*	N/A
	9/26/2023	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/26/2023	< 0.005	N/A	N/A	N/A	N/A
	5/29/2024	< 0.005	< 0.005	< 0.005	0.00222*	< 0.005
	5/29/2024	N/A	< 0.005	N/A	N/A	N/A
	10/23/2024	< 0.005	< 0.005	0.00792	0.00463*	N/A
	10/23/2024	N/A	< 0.005	N/A	N/A	N/A
<b>Lead, mg/L (CAS NO - 7439-92-1)</b>	2/21/2008	< 0.01	N/A	N/A	N/A	N/A
	4/17/2008	< 0.01	< 0.01	N/A	N/A	N/A
	6/19/2008	0.01	< 0.01	N/A	N/A	N/A
	8/7/2008	< 0.01	< 0.01	N/A	N/A	N/A
	10/1/2008	< 0.01	< 0.01	N/A	N/A	N/A
	12/2/2008	< 0.01	< 0.01	N/A	N/A	N/A
	4/15/2009	0.01	< 0.01	N/A	N/A	N/A
	10/19/2009	< 0.01	< 0.01	< 0.01	N/A	N/A
	5/20/2010	< 0.001	< 0.001	< 0.001	N/A	N/A
	10/1/2010	< 0.001	< 0.001	< 0.001	N/A	N/A
	4/29/2011	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/28/2011	< 0.008	0.0091	0.0107	N/A	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	0.000135*	N/A	0.000342*	N/A	< 0.0005
	10/12/2015	0.000266*	N/A	0.000126*	N/A	0.000387*
	10/12/2015	0.000174*	N/A	N/A	N/A	N/A
	4/12/2016	< 0.0005	N/A	0.000286*	N/A	0.00114
	4/12/2016	< 0.0005	N/A	N/A	N/A	N/A
	6/21/2016	0.000209*	N/A	N/A	N/A	N/A
	9/23/2016	0.000486*	N/A	< 0.0005	N/A	N/A
	9/23/2016	0.00047*	N/A	N/A	N/A	N/A
	3/21/2017	< 0.0005	< 0.0005	0.000334*	N/A	N/A
	3/21/2017	N/A	N/A	< 0.0005	N/A	N/A
	7/24/2017	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	7/24/2017	< 0.0005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	5/15/2018	< 0.0005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	8/22/2018	< 0.0005	N/A	N/A	N/A	N/A
	5/29/2019	< 0.0005	< 0.0005	< 0.0005	0.000323*	N/A
	5/29/2019	N/A	N/A	< 0.0005	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.00125*	N/A
	9/19/2019	< 0.0005	< 0.0005	< 0.0005	N/A	N/A
	9/19/2019	< 0.0005	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.0005	N/A
	1/23/2020	N/A	N/A	N/A	< 0.0005	N/A
3/11/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
3/11/2020	N/A	< 0.0005	N/A	N/A	N/A	



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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Lead, mg/L (CAS NO - 7439-92-1)	8/19/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	8/19/2020	N/A	N/A	N/A	< 0.0005	N/A
	3/23/2021	0.000345*	< 0.0005	< 0.0005	< 0.0005	0.00168
	3/23/2021	0.000322*	N/A	N/A	N/A	N/A
	9/16/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	9/16/2021	N/A	0.000228*	N/A	N/A	N/A
	5/10/2022	< 0.0005	< 0.0005	< 0.002	< 0.0005	N/A
	5/10/2022	N/A	N/A	< 0.0005	N/A	N/A
	9/28/2022	0.000423*	< 0.0005	< 0.0005	< 0.0005	N/A
	9/28/2022	N/A	N/A	N/A	< 0.0005	N/A
	3/7/2023	< 0.0005	< 0.0005	< 0.0005	0.00102	N/A
	3/7/2023	N/A	N/A	N/A	< 0.0005	N/A
	9/26/2023	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	9/26/2023	< 0.0005	N/A	N/A	N/A	N/A
	5/29/2024	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/29/2024	N/A	< 0.0005	N/A	N/A	N/A
10/23/2024	< 0.0005	< 0.0005	0.00264	< 0.0005	N/A	
10/23/2024	N/A	< 0.0005	N/A	N/A	N/A	
Mercury, mg/L (CAS NO - 7439-97-6)	10/12/2015	N/A	N/A	< 0.0002	N/A	N/A
	6/21/2016	< 0.0002	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.0002	N/A	N/A
	3/21/2017	< 0.0002	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.0002	N/A	N/A
	5/10/2022	< 0.0002	N/A	N/A	N/A	N/A
Nickel, mg/L (CAS NO - 7440-02-0)	2/21/2008	< 0.05	N/A	N/A	N/A	N/A
	4/17/2008	< 0.05	< 0.05	N/A	N/A	N/A
	6/19/2008	< 0.05	< 0.05	N/A	N/A	N/A
	8/7/2008	< 0.05	< 0.05	N/A	N/A	N/A
	10/1/2008	< 0.05	< 0.05	N/A	N/A	N/A
	12/2/2008	< 0.05	< 0.05	N/A	N/A	N/A
	4/15/2009	< 0.05	< 0.05	N/A	N/A	N/A
	10/19/2009	< 0.05	< 0.05	< 0.05	N/A	N/A
	5/20/2010	< 0.001	< 0.001	< 0.001	N/A	N/A
	10/1/2010	0.006	< 0.001	< 0.001	N/A	N/A
	4/29/2011	0.006	0.007	0.046	N/A	N/A
	9/28/2011	0.0149	0.0147	0.046	N/A	N/A
	4/26/2012	0.0118	0.013	0.054	N/A	N/A
	10/24/2012	0.0097	0.0116	0.227	N/A	N/A
	5/7/2013	0.0122	0.0068	0.158	N/A	N/A
	10/18/2013	0.0049	< 0.004	0.0733	N/A	N/A
	3/25/2014	0.005	< 0.004	0.16	N/A	N/A
	9/30/2014	0.0042	< 0.004	0.13	N/A	N/A
	4/15/2015	0.00348*	N/A	0.114	N/A	0.00157*
	10/12/2015	0.00577	N/A	0.0631	N/A	0.0176
	10/12/2015	0.00545	N/A	N/A	N/A	N/A
	4/12/2016	0.0111	N/A	0.0628	N/A	0.0276
	4/12/2016	0.00963	N/A	N/A	N/A	N/A
	6/21/2016	0.00409	N/A	N/A	N/A	N/A
	9/23/2016	0.00425*	N/A	0.00799	N/A	N/A
	9/23/2016	0.00448*	N/A	N/A	N/A	N/A
	3/21/2017	0.00679	< 0.005	0.00536	N/A	N/A
	3/21/2017	N/A	N/A	0.0045*	N/A	N/A
	7/24/2017	0.0125	< 0.005	0.0157	N/A	N/A
	7/24/2017	0.0126	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	5/15/2018	0.00696	< 0.005	0.011	N/A	N/A
	5/15/2018	0.00696	N/A	N/A	N/A	N/A
	8/22/2018	0.0126	< 0.005	0.0208	N/A	N/A
	8/22/2018	0.0129	N/A	N/A	N/A	N/A
	5/29/2019	0.00638	< 0.002	0.033	0.0469	N/A
	5/29/2019	N/A	N/A	0.0325	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.024	N/A
	9/19/2019	0.00739	< 0.005	0.0333	N/A	N/A
	9/19/2019	0.00709	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.0244	N/A
	1/23/2020	N/A	N/A	N/A	0.0203	N/A
	3/11/2020	0.00812	< 0.005	0.0277	0.0205	0.0197
	3/11/2020	N/A	< 0.005	N/A	N/A	N/A
	8/19/2020	0.00851	< 0.005	0.0343	0.0243	N/A
	8/19/2020	N/A	N/A	N/A	0.0233	N/A
	3/23/2021	0.00894	< 0.005	0.0229	0.0167	0.0211
	3/23/2021	0.0087	N/A	N/A	N/A	N/A
	9/16/2021	0.00873	< 0.005	0.0249	0.016	N/A
	9/16/2021	N/A	< 0.005	N/A	N/A	N/A
	5/10/2022	0.0121	< 0.005	0.0332	0.0143	N/A
	5/10/2022	N/A	N/A	0.0196	N/A	N/A
	9/28/2022	0.00721	< 0.005	0.0334	0.0152	N/A
	9/28/2022	N/A	N/A	N/A	0.0144	N/A
	3/7/2023	0.00849	< 0.005	0.0305	0.0148	N/A
	3/7/2023	N/A	N/A	N/A	0.0141	N/A
	9/26/2023	0.00737	< 0.005	0.029	0.0146	N/A
	9/26/2023	0.00763	N/A	N/A	N/A	N/A
	5/29/2024	0.00716	< 0.005	0.0243	0.01	0.0216
	5/29/2024	N/A	< 0.005	N/A	N/A	N/A
	10/23/2024	0.00784	< 0.005	0.0606	0.0136	N/A
10/23/2024	N/A	< 0.005	N/A	N/A	N/A	
Selenium, mg/L (CAS NO - 7782-49-2)	2/21/2008	< 0.01	N/A	N/A	N/A	N/A
	4/17/2008	< 0.01	< 0.01	N/A	N/A	N/A
	6/19/2008	< 0.01	< 0.01	N/A	N/A	N/A
	8/7/2008	< 0.01	< 0.01	N/A	N/A	N/A
	10/1/2008	< 0.01	< 0.01	N/A	N/A	N/A
	12/2/2008	< 0.01	< 0.01	N/A	N/A	N/A
	4/15/2009	< 0.01	< 0.01	N/A	N/A	N/A
	10/19/2009	< 0.01	< 0.01	< 0.01	N/A	N/A
	5/20/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	10/1/2010	< 0.005	< 0.005	< 0.005	N/A	N/A
	4/29/2011	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/28/2011	< 0.01	< 0.01	< 0.01	N/A	N/A
	4/26/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	< 0.005	N/A	< 0.005	N/A	< 0.005
	10/12/2015	< 0.005	N/A	< 0.005	N/A	< 0.005
	10/12/2015	< 0.005	N/A	N/A	N/A	N/A
	4/12/2016	< 0.005	N/A	0.00288*	N/A	0.000661*
	4/12/2016	< 0.005	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Selenium, mg/L (CAS NO - 7782-49-2)	6/21/2016	< 0.0025	N/A	N/A	N/A	N/A
	9/23/2016	< 0.005	N/A	< 0.005	N/A	N/A
	9/23/2016	< 0.005	N/A	N/A	N/A	N/A
	3/21/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/21/2017	N/A	N/A	< 0.005	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	7/24/2017	< 0.005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	< 0.005	< 0.005	N/A	N/A
	5/15/2018	< 0.005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	< 0.005	< 0.005	N/A	N/A
	8/22/2018	< 0.005	N/A	N/A	N/A	N/A
	5/29/2019	< 0.0025	< 0.0025	< 0.0025	0.00227*	N/A
	5/29/2019	N/A	N/A	< 0.0025	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.00208*	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	N/A	N/A
	9/19/2019	< 0.005	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.0114	N/A
	1/23/2020	N/A	N/A	N/A	0.00542	N/A
	3/11/2020	< 0.005	< 0.005	< 0.005	0.00408*	< 0.005
	3/11/2020	N/A	< 0.005	N/A	N/A	N/A
	8/19/2020	< 0.005	< 0.005	< 0.005	0.00744	N/A
	8/19/2020	N/A	N/A	N/A	0.0075	N/A
	3/23/2021	< 0.005	< 0.005	< 0.005	0.00144*	0.00119*
	3/23/2021	< 0.005	N/A	N/A	N/A	N/A
	9/16/2021	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/16/2021	N/A	< 0.005	N/A	N/A	N/A
	5/10/2022	< 0.005	< 0.005	< 0.02	0.00112*	N/A
	5/10/2022	N/A	N/A	< 0.005	N/A	N/A
	9/28/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/28/2022	N/A	N/A	N/A	< 0.005	N/A
	3/7/2023	< 0.005	< 0.005	< 0.005	0.00246*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.005	N/A
	9/26/2023	< 0.005	< 0.005	< 0.005	< 0.005	N/A
9/26/2023	< 0.005	N/A	N/A	N/A	N/A	
5/29/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	
5/29/2024	N/A	< 0.005	N/A	N/A	N/A	
10/23/2024	< 0.005	< 0.005	< 0.005	< 0.005	N/A	
10/23/2024	N/A	< 0.005	N/A	N/A	N/A	
Silver, mg/L (CAS NO - 7440-22-4)	2/21/2008	< 0.01	N/A	N/A	N/A	N/A
	4/17/2008	< 0.01	< 0.01	N/A	N/A	N/A
	6/19/2008	< 0.01	< 0.01	N/A	N/A	N/A
	8/7/2008	< 0.01	< 0.01	N/A	N/A	N/A
	10/1/2008	< 0.01	< 0.01	N/A	N/A	N/A
	12/2/2008	< 0.01	< 0.01	N/A	N/A	N/A
	4/15/2009	< 0.01	< 0.01	N/A	N/A	N/A
	10/19/2009	< 0.01	< 0.01	< 0.01	N/A	N/A
	5/20/2010	< 0.001	< 0.001	< 0.001	N/A	N/A
	10/1/2010	< 0.001	< 0.001	< 0.001	N/A	N/A
	4/29/2011	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/28/2011	0.0162	0.0161	0.0183	N/A	N/A
	4/26/2012	< 0.008	< 0.008	< 0.008	N/A	N/A
	10/24/2012	< 0.004	< 0.004	< 0.004	N/A	N/A
	5/7/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Silver, mg/L (CAS NO - 7440-22-4)	3/25/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	< 0.001	N/A	< 0.001	N/A	< 0.001
	10/12/2015	< 0.001	N/A	< 0.001	N/A	< 0.001
	10/12/2015	< 0.001	N/A	N/A	N/A	N/A
	4/12/2016	< 0.001	N/A	< 0.001	N/A	< 0.001
	4/12/2016	< 0.001	N/A	N/A	N/A	N/A
	6/21/2016	< 0.0005	N/A	N/A	N/A	N/A
	9/23/2016	< 0.001	N/A	< 0.001	N/A	N/A
	9/23/2016	< 0.001	N/A	N/A	N/A	N/A
	3/21/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/21/2017	N/A	N/A	< 0.001	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	7/24/2017	< 0.001	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	5/15/2018	< 0.001	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	8/22/2018	< 0.001	N/A	N/A	N/A	N/A
	5/29/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	5/29/2019	N/A	N/A	< 0.0005	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.0005	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/19/2019	< 0.001	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.001	N/A
	1/23/2020	N/A	N/A	N/A	< 0.001	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/11/2020	N/A	< 0.001	N/A	N/A	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A
	3/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/23/2021	< 0.001	N/A	N/A	N/A	N/A
	9/16/2021	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	9/16/2021	N/A	< 0.001	N/A	N/A	N/A
	5/10/2022	< 0.001	< 0.001	< 0.004	< 0.001	N/A
	5/10/2022	N/A	N/A	< 0.001	N/A	N/A
	9/28/2022	0.000752*	< 0.001	< 0.001	< 0.001	N/A
	9/28/2022	N/A	N/A	N/A	< 0.001	N/A
	3/7/2023	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	3/7/2023	N/A	N/A	N/A	< 0.001	N/A
	9/26/2023	< 0.001	< 0.001	< 0.001	< 0.001	N/A
9/26/2023	< 0.001	N/A	N/A	N/A	N/A	
5/29/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
5/29/2024	N/A	< 0.001	N/A	N/A	N/A	
10/23/2024	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
10/23/2024	N/A	< 0.001	N/A	N/A	N/A	
Thallium, mg/L (CAS NO - 7440-28-0)	2/21/2008	< 0.001	N/A	N/A	N/A	N/A
	4/17/2008	< 0.001	< 0.001	N/A	N/A	N/A
	6/19/2008	< 0.001	< 0.001	N/A	N/A	N/A
	8/7/2008	< 0.001	< 0.001	N/A	N/A	N/A
	10/1/2008	< 0.001	< 0.001	N/A	N/A	N/A
	12/2/2008	< 0.001	< 0.001	N/A	N/A	N/A
	4/15/2009	< 0.001	< 0.001	N/A	N/A	N/A
	10/19/2009	< 0.001	< 0.001	< 0.001	N/A	N/A
	5/20/2010	< 0.00025	< 0.00025	< 0.00025	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Thallium, mg/L (CAS NO - 7440-28-0)	10/1/2010	< 0.00025	< 0.00025	< 0.00025	N/A	N/A
	4/29/2011	< 0.00025	< 0.00025	< 0.00025	N/A	N/A
	9/28/2011	0.045	0.0308	< 0.01	N/A	N/A
	4/26/2012	< 0.002	< 0.002	< 0.002	N/A	N/A
	10/24/2012	< 0.002	< 0.002	< 0.002	N/A	N/A
	5/7/2013	< 0.002	< 0.002	< 0.002	N/A	N/A
	10/18/2013	< 0.004	< 0.004	< 0.004	N/A	N/A
	3/25/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	9/30/2014	< 0.004	< 0.004	< 0.004	N/A	N/A
	4/15/2015	< 0.001	N/A	0.000045*	N/A	< 0.001
	10/12/2015	< 0.001	N/A	0.000123*	N/A	< 0.001
	10/12/2015	< 0.001	N/A	N/A	N/A	N/A
	4/12/2016	< 0.001	N/A	0.000139*	N/A	< 0.001
	4/12/2016	< 0.001	N/A	N/A	N/A	N/A
	6/21/2016	< 0.002	N/A	N/A	N/A	N/A
	9/23/2016	0.000028*	N/A	< 0.001	N/A	N/A
	9/23/2016	0.00003*	N/A	N/A	N/A	N/A
	3/21/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	3/21/2017	N/A	N/A	< 0.001	N/A	N/A
	7/24/2017	< 0.001	< 0.001	< 0.001	N/A	N/A
	7/24/2017	< 0.001	N/A	N/A	N/A	N/A
	5/15/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	5/15/2018	< 0.001	N/A	N/A	N/A	N/A
	8/22/2018	< 0.001	< 0.001	< 0.001	N/A	N/A
	8/22/2018	< 0.001	N/A	N/A	N/A	N/A
	5/29/2019	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	5/29/2019	N/A	N/A	< 0.002	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.01	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	N/A	N/A
	9/19/2019	< 0.001	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.001	N/A
	1/23/2020	N/A	N/A	N/A	< 0.001	N/A
	3/11/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/11/2020	N/A	< 0.001	N/A	N/A	N/A
	8/19/2020	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	8/19/2020	N/A	N/A	N/A	< 0.001	N/A
	3/23/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	3/23/2021	< 0.001	N/A	N/A	N/A	N/A
	9/16/2021	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	9/16/2021	N/A	< 0.001	N/A	N/A	N/A
5/10/2022	< 0.001	< 0.001	< 0.004	< 0.001	N/A	
5/10/2022	N/A	N/A	< 0.001	N/A	N/A	
9/28/2022	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
9/28/2022	N/A	N/A	N/A	< 0.001	N/A	
3/7/2023	< 0.001	< 0.001	< 0.001	0.000837*	N/A	
3/7/2023	N/A	N/A	N/A	< 0.001	N/A	
9/26/2023	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
9/26/2023	< 0.001	N/A	N/A	N/A	N/A	
5/29/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
5/29/2024	N/A	< 0.001	N/A	N/A	N/A	
10/23/2024	< 0.001	< 0.001	< 0.001	< 0.001	N/A	
10/23/2024	N/A	< 0.001	N/A	N/A	N/A	
Tin, mg/L (CAS NO - 7440-31-5)	10/12/2015	N/A	N/A	< 0.005	N/A	N/A
	6/21/2016	< 0.005	N/A	N/A	N/A	N/A

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Tin, mg/L (CAS NO - 7440-31-5)	9/23/2016	N/A	N/A	< 0.005	N/A	N/A
	3/21/2017	< 0.005	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.005	N/A	N/A
	5/10/2022	< 0.005	N/A	N/A	N/A	N/A
Vanadium, mg/L (CAS NO - 7440-62-2)	2/21/2008	< 0.05	N/A	N/A	N/A	N/A
	4/17/2008	< 0.05	< 0.05	N/A	N/A	N/A
	6/19/2008	< 0.05	< 0.05	N/A	N/A	N/A
	8/7/2008	< 0.05	< 0.05	N/A	N/A	N/A
	10/1/2008	< 0.05	< 0.05	N/A	N/A	N/A
	12/2/2008	< 0.05	< 0.05	N/A	N/A	N/A
	4/15/2009	< 0.05	< 0.05	N/A	N/A	N/A
	10/19/2009	< 0.05	< 0.05	< 0.05	N/A	N/A
	5/20/2010	< 0.02	< 0.02	< 0.02	N/A	N/A
	10/1/2010	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/29/2011	< 0.02	< 0.02	< 0.02	N/A	N/A
	9/28/2011	< 0.002	< 0.002	< 0.002	N/A	N/A
	4/26/2012	< 0.02	< 0.02	< 0.02	N/A	N/A
	10/24/2012	< 0.02	< 0.02	< 0.02	N/A	N/A
	5/7/2013	< 0.02	< 0.02	< 0.02	N/A	N/A
	10/18/2013	< 0.02	< 0.02	< 0.02	N/A	N/A
	3/25/2014	< 0.02	< 0.02	< 0.02	N/A	N/A
	9/30/2014	< 0.02	< 0.02	< 0.02	N/A	N/A
	4/15/2015	< 0.005	N/A	0.00427*	N/A	0.000575*
	10/12/2015	< 0.005	N/A	0.00392*	N/A	0.00267*
	10/12/2015	< 0.005	N/A	N/A	N/A	N/A
	4/12/2016	< 0.005	N/A	0.00557	N/A	0.00303*
	4/12/2016	< 0.005	N/A	N/A	N/A	N/A
	6/21/2016	< 0.005	N/A	N/A	N/A	N/A
	9/23/2016	0.000298*	N/A	0.00109*	N/A	N/A
	9/23/2016	0.000297*	N/A	N/A	N/A	N/A
	3/21/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	3/21/2017	N/A	N/A	< 0.005	N/A	N/A
	7/24/2017	< 0.005	< 0.005	< 0.005	N/A	N/A
	7/24/2017	< 0.005	N/A	N/A	N/A	N/A
	5/15/2018	< 0.005	0.000674*	< 0.005	N/A	N/A
	5/15/2018	< 0.005	N/A	N/A	N/A	N/A
	8/22/2018	< 0.005	0.000912*	< 0.005	N/A	N/A
	8/22/2018	< 0.005	N/A	N/A	N/A	N/A
	5/29/2019	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	5/29/2019	N/A	N/A	< 0.005	N/A	N/A
	8/1/2019	N/A	N/A	N/A	0.0169*	N/A
	9/19/2019	< 0.005	0.000927*	< 0.005	N/A	N/A
	9/19/2019	< 0.005	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	0.00153*	N/A
	1/23/2020	N/A	N/A	N/A	0.00138*	N/A
	3/11/2020	< 0.005	0.000978*	< 0.005	0.00123*	< 0.005
3/11/2020	N/A	0.000882*	N/A	N/A	N/A	
8/19/2020	< 0.005	0.00141*	0.00107*	0.00186*	N/A	
8/19/2020	N/A	N/A	N/A	0.00189*	N/A	
3/23/2021	< 0.005	< 0.005	< 0.005	0.00111*	0.00195*	
3/23/2021	< 0.005	N/A	N/A	N/A	N/A	
9/16/2021	< 0.005	< 0.005	< 0.005	< 0.005	N/A	
9/16/2021	N/A	< 0.005	N/A	N/A	N/A	

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Vanadium, mg/L (CAS NO - 7440-62-2)	5/10/2022	< 0.005	< 0.005	< 0.02	< 0.005	N/A
	5/10/2022	N/A	N/A	< 0.005	N/A	N/A
	9/28/2022	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	9/28/2022	N/A	N/A	N/A	< 0.005	N/A
	3/7/2023	< 0.005	< 0.005	< 0.005	0.00124*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.005	N/A
	9/26/2023	< 0.005	0.00151*	0.00134*	0.00136*	N/A
	9/26/2023	0.00112*	N/A	N/A	N/A	N/A
	5/29/2024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/29/2024	N/A	< 0.005	N/A	N/A	N/A
	10/23/2024	< 0.005	< 0.005	0.00493*	< 0.005	N/A
	10/23/2024	N/A	< 0.005	N/A	N/A	N/A
	Zinc, mg/L (CAS NO - 7440-66-6)	2/21/2008	< 0.02	N/A	N/A	N/A
4/17/2008		< 0.02	0.03	N/A	N/A	N/A
6/19/2008		0.05	< 0.02	N/A	N/A	N/A
8/7/2008		< 0.02	< 0.02	N/A	N/A	N/A
10/1/2008		< 0.02	< 0.02	N/A	N/A	N/A
12/2/2008		< 0.02	< 0.02	N/A	N/A	N/A
4/15/2009		0.05	< 0.02	N/A	N/A	N/A
10/19/2009		0.03	< 0.02	0.04	N/A	N/A
5/20/2010		< 0.02	< 0.02	< 0.02	N/A	N/A
10/1/2010		< 0.02	< 0.02	< 0.02	N/A	N/A
4/29/2011		< 0.02	< 0.02	< 0.02	N/A	N/A
9/28/2011		0.037	0.019	0.017	N/A	N/A
4/26/2012		0.0171	< 0.008	0.0109	N/A	N/A
10/24/2012		< 0.02	< 0.02	< 0.02	N/A	N/A
5/7/2013		< 0.008	< 0.008	< 0.008	N/A	N/A
10/18/2013		< 0.02	< 0.02	< 0.02	N/A	N/A
3/25/2014		0.0139	< 0.008	< 0.02	N/A	N/A
9/30/2014		< 0.008	< 0.008	0.0145	N/A	N/A
4/15/2015		< 0.01	N/A	< 0.01	N/A	< 0.01
10/12/2015		< 0.01	N/A	0.00839*	N/A	< 0.01
10/12/2015		< 0.01	N/A	N/A	N/A	N/A
4/12/2016		< 0.01	N/A	0.0057*	N/A	0.00744*
4/12/2016		< 0.01	N/A	N/A	N/A	N/A
6/21/2016		< 0.02	N/A	N/A	N/A	N/A
9/23/2016		< 0.01	N/A	0.147	N/A	N/A
9/23/2016		< 0.01	N/A	N/A	N/A	N/A
3/21/2017		< 0.02	< 0.02	< 0.02	N/A	N/A
3/21/2017		N/A	N/A	< 0.02	N/A	N/A
7/24/2017		< 0.02	< 0.02	< 0.02	N/A	N/A
7/24/2017		< 0.02	N/A	N/A	N/A	N/A
5/15/2018		< 0.02	< 0.02	< 0.02	N/A	N/A
5/15/2018		< 0.02	N/A	N/A	N/A	N/A
8/22/2018		< 0.02	< 0.02	< 0.02	N/A	N/A
8/22/2018		< 0.02	N/A	N/A	N/A	N/A
5/29/2019		0.00708*	< 0.02	0.00773*	0.0191*	N/A
5/29/2019		N/A	N/A	< 0.02	N/A	N/A
8/1/2019	N/A	N/A	N/A	0.0263	N/A	
9/19/2019	< 0.02	< 0.02	< 0.02	N/A	N/A	
9/19/2019	< 0.02	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	0.0117*	N/A	
1/23/2020	N/A	N/A	N/A	< 0.02	N/A	

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	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
<b>Total Metals Constituents</b>						
<b>Zinc, mg/L (CAS NO - 7440-66-6)</b>	3/11/2020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	3/11/2020	N/A	< 0.02	N/A	N/A	N/A
	8/19/2020	< 0.02	< 0.02	< 0.02	0.0136*	N/A
	8/19/2020	N/A	N/A	N/A	0.0115*	N/A
	3/23/2021	< 0.02	< 0.02	< 0.02	< 0.02	0.0108*
	3/23/2021	< 0.02	N/A	N/A	N/A	N/A
	9/16/2021	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	9/16/2021	N/A	< 0.02	N/A	N/A	N/A
	5/10/2022	< 0.02	< 0.02	< 0.08	< 0.02	N/A
	5/10/2022	N/A	N/A	< 0.02	N/A	N/A
	9/28/2022	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	9/28/2022	N/A	N/A	N/A	< 0.02	N/A
	3/7/2023	< 0.02	< 0.02	< 0.02	0.0148*	N/A
	3/7/2023	N/A	N/A	N/A	< 0.02	N/A
	9/26/2023	< 0.02	< 0.02	< 0.02	0.00651*	N/A
	9/26/2023	< 0.02	N/A	N/A	N/A	N/A
	5/29/2024	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	5/29/2024	N/A	< 0.02	N/A	N/A	N/A
	10/23/2024	< 0.02	< 0.02	0.0306	< 0.02	N/A
	10/23/2024	N/A	< 0.02	N/A	N/A	N/A
<b>Total Suspended Solids, mg/L (CAS NO - TSS)</b>	9/30/2014	29	5	10	N/A	N/A
	4/15/2015	8.4	N/A	6.8	N/A	< 1.88
	7/28/2015	N/A	N/A	133	N/A	N/A
	10/12/2015	4.13	N/A	11.8	N/A	89.7
	10/12/2015	4	N/A	N/A	N/A	N/A
	3/2/2016	N/A	N/A	3.87	N/A	N/A
	4/12/2016	2.75	N/A	3.75	N/A	162
	4/12/2016	6.87	N/A	N/A	N/A	N/A
	6/21/2016	1*	N/A	1.75*	N/A	N/A
	9/23/2016	11.5	N/A	6.6	N/A	N/A
	9/23/2016	45	N/A	N/A	N/A	N/A
	12/12/2016	N/A	N/A	1.88	N/A	N/A
	3/21/2017	18.2	11.6	19	N/A	N/A
	3/21/2017	N/A	N/A	10.9	N/A	N/A
	7/24/2017	< 1.88	0.875*	3.87	N/A	N/A
	7/24/2017	1.13*	N/A	N/A	N/A	N/A
	5/15/2018	< 1.88	< 1.88	1.25*	N/A	N/A
	5/15/2018	< 1.88	N/A	N/A	N/A	N/A
	8/22/2018	2.75	1.88	1.5*	N/A	N/A
	8/22/2018	4.75	N/A	N/A	N/A	N/A
	5/29/2019	0.75*	< 1.88	< 1.88	8.38	N/A
	5/29/2019	N/A	N/A	1*	N/A	N/A
	8/1/2019	N/A	N/A	N/A	11.3	N/A
	9/19/2019	< 1.88	< 1.88	1.13*	N/A	N/A
	9/19/2019	< 1.88	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	45.5	N/A
	1/23/2020	N/A	N/A	N/A	2.38	N/A
	3/11/2020	8.25	2	3.63	0.875*	4.67
	3/11/2020	N/A	1*	N/A	N/A	N/A
	8/19/2020	1.63*	< 1.88	2.63	1.88	N/A
	8/19/2020	N/A	N/A	N/A	1.63*	N/A
	3/23/2021	8.75	4	3.87	2.38	8.8
	3/23/2021	10.1	N/A	N/A	N/A	N/A



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## Summary of Groundwater Chemistry

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Total Metals Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Total Suspended Solids, mg/L (CAS NO - TSS)	9/16/2021	3.13	2.38	1.88	0.875*	N/A
	9/16/2021	N/A	1.88	N/A	N/A	N/A
	5/10/2022	< 1.88	1.38*	1.5*	1.75*	N/A
	5/10/2022	N/A	N/A	< 1.88	N/A	N/A
	9/28/2022	2.25	4.5	4	1.75*	N/A
	9/28/2022	N/A	N/A	N/A	2.25	N/A
	3/7/2023	0.75*	5.25	1.25*	1.13*	N/A
	3/7/2023	N/A	N/A	N/A	1.13*	N/A
	9/26/2023	3.75	1.13*	3.87	3.63	N/A
	9/26/2023	< 1.88	N/A	N/A	N/A	N/A
	3/4/2024	N/A	N/A	N/A	< 1.88	N/A
	5/29/2024	< 1.88	< 1.88	5.63	< 1.88	11
	5/29/2024	N/A	< 1.88	N/A	N/A	N/A
	10/23/2024	5.75	1.88	252	2.25	N/A
	10/23/2024	N/A	< 1.88	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.

<b>Denotes Detection.</b>
<b>Denotes Confirmed Outlier. Statistically Excluded.</b>

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

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
9/16/2021	N/A	< 1	N/A	N/A	N/A	
5/10/2022	< 1	< 1	< 1	< 1	N/A	
5/10/2022	N/A	N/A	< 1	N/A	N/A	
9/28/2022	< 1	< 1	< 1	< 1	N/A	
9/28/2022	N/A	N/A	N/A	< 1	N/A	
3/7/2023	< 1	< 1	< 1	< 1	N/A	
3/7/2023	N/A	N/A	N/A	< 1	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
3/11/2020	N/A	< 1	N/A	N/A	N/A	
8/19/2020	< 1	< 1	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	
3/23/2021	< 1	N/A	N/A	N/A	N/A	
9/16/2021	< 1	< 1	< 1	< 1	N/A	
9/16/2021	N/A	< 1	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG	
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	5/10/2022	< 1	< 1	< 1	< 1	N/A	
	5/10/2022	N/A	N/A	< 1	N/A	N/A	
	9/28/2022	< 1	< 1	< 1	< 1	N/A	
	9/28/2022	N/A	N/A	N/A	< 1	N/A	
	3/7/2023	< 1	< 1	< 1	< 1	N/A	
	3/7/2023	N/A	N/A	N/A	< 1	N/A	
	9/26/2023	< 1	< 1	< 1	< 1	N/A	
	9/26/2023	< 1	N/A	N/A	N/A	N/A	
	5/29/2024	< 1	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	< 1	N/A	N/A	N/A	
	10/23/2024	< 1	< 1	< 1	< 1	N/A	
	10/23/2024	N/A	< 1	N/A	N/A	N/A	
	1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
		4/17/2008	< 5	< 5	N/A	N/A	N/A
6/19/2008		< 5	< 5	N/A	N/A	N/A	
8/7/2008		< 5	< 5	N/A	N/A	N/A	
10/1/2008		< 5	< 5	N/A	N/A	N/A	
12/2/2008		< 5	< 5	N/A	N/A	N/A	
4/15/2009		< 5	< 5	N/A	N/A	N/A	
10/19/2009		< 5	< 5	< 5	N/A	N/A	
5/20/2010		< 5	< 5	< 5	N/A	N/A	
10/1/2010		< 5	< 5	< 5	N/A	N/A	
4/29/2011		< 5	< 5	< 5	N/A	N/A	
9/28/2011		< 5	< 5	< 5	N/A	N/A	
4/26/2012		< 1	< 1	< 1	N/A	N/A	
10/24/2012		< 1	< 1	< 1	N/A	N/A	
5/7/2013		< 1	< 1	< 1	N/A	N/A	
10/18/2013		< 1	< 1	< 1	N/A	N/A	
3/25/2014		< 1	< 1	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	N/A	N/A	
4/15/2015		< 1	N/A	< 1	N/A	< 1	
10/12/2015		< 1	N/A	< 1	N/A	< 1	
4/12/2016		< 1	N/A	< 1	N/A	< 1	
4/12/2016		< 1	N/A	N/A	N/A	N/A	
6/21/2016		< 1	N/A	N/A	N/A	N/A	
9/23/2016		< 1	N/A	< 1	N/A	N/A	
9/23/2016		< 1	N/A	N/A	N/A	N/A	
3/21/2017		< 1	< 1	< 1	N/A	N/A	
3/21/2017		N/A	N/A	< 1	N/A	N/A	
7/24/2017		< 1	< 1	< 1	N/A	N/A	
7/24/2017		< 1	N/A	N/A	N/A	N/A	
5/15/2018		< 1	< 1	< 1	N/A	N/A	
5/15/2018		< 1	N/A	N/A	N/A	N/A	
8/22/2018		< 1	< 1	< 1	N/A	N/A	
8/22/2018		< 1	N/A	N/A	N/A	N/A	
5/29/2019		< 1	< 1	< 1	< 1	N/A	
5/29/2019		N/A	N/A	< 1	N/A	N/A	
8/1/2019		N/A	N/A	N/A	< 1	N/A	
9/19/2019		< 1	< 1	< 1	N/A	N/A	
9/19/2019		< 1	N/A	N/A	N/A	N/A	
10/10/2019		N/A	N/A	N/A	< 1	N/A	
1/23/2020		N/A	N/A	N/A	< 1	N/A	
3/11/2020	< 1	< 1	< 1	< 1	< 1		
3/11/2020	N/A	< 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-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
10/23/2024	N/A	< 1	N/A	N/A	N/A	
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
5/29/2019	< 1	< 1	< 1	< 1	N/A	
5/29/2019	N/A	N/A	< 1	N/A	N/A	
8/1/2019	N/A	N/A	N/A	< 1	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
5/29/2024	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
7/24/2017	< 1	< 1	< 1	N/A	N/A	
7/24/2017	< 1	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
10/23/2024	N/A	< 1	N/A	N/A	N/A	
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 2	N/A	< 2	N/A	< 2
	10/12/2015	< 2	N/A	< 2	N/A	< 2
	4/12/2016	< 2	N/A	< 2	N/A	< 2
	4/12/2016	< 2	N/A	N/A	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	9/23/2016	< 2	N/A	< 2	N/A	N/A
	9/23/2016	< 2	N/A	N/A	N/A	N/A
	3/21/2017	< 2	< 2	< 2	N/A	N/A
	3/21/2017	N/A	N/A	< 2	N/A	N/A
	7/24/2017	< 2	< 2	< 2	N/A	N/A
	7/24/2017	< 2	N/A	N/A	N/A	N/A
	5/15/2018	< 2	< 2	< 2	N/A	N/A
	5/15/2018	< 2	N/A	N/A	N/A	N/A
	8/22/2018	< 2	< 2	< 2	N/A	N/A
	8/22/2018	< 2	N/A	N/A	N/A	N/A
	5/29/2019	< 2	< 2	< 2	< 2	N/A
	5/29/2019	N/A	N/A	< 2	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 2	N/A
	9/19/2019	< 2	< 2	< 2	N/A	N/A
	9/19/2019	< 2	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 2	N/A
	1/23/2020	N/A	N/A	N/A	< 2	N/A
	3/11/2020	< 2	< 2	< 2	< 2	< 2
	3/11/2020	N/A	< 2	N/A	N/A	N/A
	8/19/2020	< 2	< 2	< 2	< 2	N/A
	8/19/2020	N/A	N/A	N/A	< 2	N/A
	3/23/2021	< 2	< 2	< 2	< 2	< 2
	3/23/2021	< 2	N/A	N/A	N/A	N/A
	9/16/2021	< 2	< 2	< 2	< 2	N/A
	9/16/2021	N/A	< 2	N/A	N/A	N/A
	5/10/2022	< 2	< 2	< 2	< 2	N/A
	5/10/2022	N/A	N/A	< 2	N/A	N/A
	9/28/2022	< 2	< 2	< 2	< 2	N/A
	9/28/2022	N/A	N/A	N/A	< 2	N/A
	3/7/2023	< 2	< 2	< 2	< 2	N/A
	3/7/2023	N/A	N/A	N/A	< 2	N/A
	9/26/2023	< 2	< 2	< 2	< 2	N/A
	9/26/2023	< 2	N/A	N/A	N/A	N/A
5/29/2024	< 2	< 2	< 2	< 2	< 2	
5/29/2024	N/A	< 2	N/A	N/A	N/A	
10/23/2024	< 2	< 2	< 2	< 2	N/A	
10/23/2024	N/A	< 2	N/A	N/A	N/A	
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A



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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 0.5	N/A	< 0.5	N/A	< 0.5
	10/12/2015	< 0.5	N/A	< 0.5	N/A	< 0.5
	4/12/2016	< 0.5	N/A	< 0.5	N/A	< 0.5
	4/12/2016	< 0.5	N/A	N/A	N/A	N/A
	6/21/2016	< 0.5	N/A	N/A	N/A	N/A
	9/23/2016	< 0.5	N/A	< 0.5	N/A	N/A
	9/23/2016	< 0.5	N/A	N/A	N/A	N/A
	3/21/2017	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/21/2017	N/A	N/A	< 0.5	N/A	N/A
	7/24/2017	< 0.5	< 0.5	< 0.5	N/A	N/A
	7/24/2017	< 0.5	N/A	N/A	N/A	N/A
	5/15/2018	< 0.5	< 0.5	< 0.5	N/A	N/A
	5/15/2018	< 0.5	N/A	N/A	N/A	N/A
	8/22/2018	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/22/2018	< 0.5	N/A	N/A	N/A	N/A
	5/29/2019	< 1.2	< 1.2	< 1.2	< 1.2	N/A
	5/29/2019	N/A	N/A	< 1.2	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1.2	N/A
	9/19/2019	< 1.2	< 1.2	< 1.2	N/A	N/A
	9/19/2019	< 1.2	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1.2	N/A
	1/23/2020	N/A	N/A	N/A	< 5	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5
	3/11/2020	N/A	< 5	N/A	N/A	N/A
	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
	9/16/2021	N/A	< 5	N/A	N/A	N/A
	5/10/2022	< 5	< 5	< 5	< 5	N/A
	5/10/2022	N/A	N/A	< 5	N/A	N/A
	9/28/2022	< 5	< 5	< 5	< 5	N/A
9/28/2022	N/A	N/A	N/A	< 5	N/A	
3/7/2023	< 5	< 5	< 5	< 5	N/A	
3/7/2023	N/A	N/A	N/A	< 5	N/A	
9/26/2023	< 5	< 5	< 5	< 5	N/A	
9/26/2023	< 5	N/A	N/A	N/A	N/A	
5/29/2024	< 5	< 5	< 5	< 5	< 5	
5/29/2024	N/A	< 5	N/A	N/A	N/A	
10/23/2024	< 5	< 5	< 5	< 5	N/A	
10/23/2024	N/A	< 5	N/A	N/A	N/A	
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 0.13	N/A	< 0.13	N/A	< 0.13
	10/12/2015	< 0.13	N/A	< 0.13	N/A	< 0.13
	4/12/2016	< 0.13	N/A	< 0.13	N/A	< 0.13
	4/12/2016	< 0.13	N/A	N/A	N/A	N/A
	6/21/2016	< 0.13	N/A	N/A	N/A	N/A
	9/23/2016	< 0.13	N/A	< 0.13	N/A	N/A
	9/23/2016	< 0.13	N/A	N/A	N/A	N/A
	3/21/2017	< 0.13	< 0.13	< 0.13	N/A	N/A
	3/21/2017	N/A	N/A	< 0.13	N/A	N/A
	7/24/2017	< 0.13	< 0.13	< 0.13	N/A	N/A
	7/24/2017	< 0.13	N/A	N/A	N/A	N/A
	5/15/2018	< 0.13	< 0.13	< 0.13	N/A	N/A
	5/15/2018	< 0.13	N/A	N/A	N/A	N/A
	8/22/2018	< 0.13	< 0.13	< 0.13	N/A	N/A
	8/22/2018	< 0.13	N/A	N/A	N/A	N/A
	5/29/2019	< 0.34	< 0.34	< 0.34	< 0.34	N/A
	5/29/2019	N/A	N/A	< 0.34	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.34	N/A
	9/19/2019	< 0.34	< 0.34	< 0.34	N/A	N/A
	9/19/2019	< 0.34	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.34	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
9/16/2021	N/A	< 1	N/A	N/A	N/A	
5/10/2022	< 1	< 1	< 1	< 1	N/A	
5/10/2022	N/A	N/A	< 1	N/A	N/A	
9/28/2022	< 1	< 1	< 1	< 1	N/A	
9/28/2022	N/A	N/A	N/A	< 1	N/A	
3/7/2023	< 1	< 1	< 1	< 1	N/A	
3/7/2023	N/A	N/A	N/A	< 1	N/A	
9/26/2023	< 1	< 1	< 1	< 1	N/A	
9/26/2023	< 1	N/A	N/A	N/A	N/A	
5/29/2024	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	< 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-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
9/19/2019	< 1	< 1	< 1	N/A	N/A	
9/19/2019	< 1	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 1	N/A	
1/23/2020	N/A	N/A	N/A	< 1	N/A	
3/11/2020	< 1	< 1	< 1	< 1	< 1	
3/11/2020	N/A	< 1	N/A	N/A	N/A	
8/19/2020	< 1	< 1	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	
3/23/2021	< 1	N/A	N/A	N/A	N/A	
9/16/2021	< 1	< 1	< 1	< 1	N/A	
9/16/2021	N/A	< 1	N/A	N/A	N/A	
5/10/2022	< 1	< 1	< 1	< 1	N/A	
5/10/2022	N/A	N/A	< 1	N/A	N/A	
9/28/2022	< 1	< 1	< 1	< 1	N/A	
9/28/2022	N/A	N/A	N/A	< 1	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
8/19/2020	< 1	< 1	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	
3/23/2021	< 1	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
5/29/2019	N/A	N/A	< 1	N/A	N/A	
8/1/2019	N/A	N/A	N/A	< 1	N/A	
9/19/2019	< 1	< 1	< 1	N/A	N/A	
9/19/2019	< 1	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 1	N/A	
1/23/2020	N/A	N/A	N/A	< 1	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG	
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	5/29/2019	< 1	< 1	< 1	< 1	N/A	
	5/29/2019	N/A	N/A	< 1	N/A	N/A	
	8/1/2019	N/A	N/A	N/A	< 1	N/A	
	9/19/2019	< 1	< 1	< 1	N/A	N/A	
	9/19/2019	< 1	N/A	N/A	N/A	N/A	
	10/10/2019	N/A	N/A	N/A	< 1	N/A	
	1/23/2020	N/A	N/A	N/A	< 1	N/A	
	3/11/2020	< 1	< 1	< 1	< 1	< 1	
	3/11/2020	N/A	< 1	N/A	N/A	N/A	
	8/19/2020	< 1	< 1	< 1	< 1	N/A	
	8/19/2020	N/A	N/A	N/A	< 1	N/A	
	3/23/2021	< 1	< 1	< 1	< 1	< 1	
	3/23/2021	< 1	N/A	N/A	N/A	N/A	
	9/16/2021	< 1	< 1	< 1	< 1	N/A	
	9/16/2021	N/A	< 1	N/A	N/A	N/A	
	5/10/2022	< 1	< 1	< 1	< 1	N/A	
	5/10/2022	N/A	N/A	< 1	N/A	N/A	
	9/28/2022	< 1	< 1	< 1	< 1	N/A	
	9/28/2022	N/A	N/A	N/A	< 1	N/A	
	3/7/2023	< 1	< 1	< 1	< 1	N/A	
	3/7/2023	N/A	N/A	N/A	< 1	N/A	
	9/26/2023	< 1	< 1	< 1	< 1	N/A	
	9/26/2023	< 1	N/A	N/A	N/A	N/A	
	5/29/2024	< 1	< 1	< 1	< 1	< 1	
	5/29/2024	N/A	< 1	N/A	N/A	N/A	
	10/23/2024	< 1	< 1	< 1	< 1	N/A	
	10/23/2024	N/A	< 1	N/A	N/A	N/A	
	2-Butanone, ug/L (CAS NO - 78-93-3)	2/21/2008	< 10	N/A	N/A	N/A	N/A
		4/17/2008	< 10	< 10	N/A	N/A	N/A
		6/19/2008	< 10	< 10	N/A	N/A	N/A
8/7/2008		< 10	< 10	N/A	N/A	N/A	
10/1/2008		< 10	< 10	N/A	N/A	N/A	
12/2/2008		< 10	< 10	N/A	N/A	N/A	
4/15/2009		< 10	< 10	N/A	N/A	N/A	
10/19/2009		< 10	< 10	< 10	N/A	N/A	
5/20/2010		< 10	< 10	< 10	N/A	N/A	
10/1/2010		< 10	< 10	< 10	N/A	N/A	
4/29/2011		< 10	< 10	< 10	N/A	N/A	
9/28/2011		< 10	< 10	< 10	N/A	N/A	
4/26/2012		< 5	< 5	< 5	N/A	N/A	
10/24/2012		< 5	< 5	< 5	N/A	N/A	
5/7/2013		< 5	< 5	< 5	N/A	N/A	
10/18/2013		< 5	< 5	< 5	N/A	N/A	
3/25/2014		< 5	< 5	< 5	N/A	N/A	
9/30/2014		< 5	< 5	< 5	N/A	N/A	
4/15/2015		< 10	N/A	< 10	N/A	< 10	
10/12/2015		< 10	N/A	< 10	N/A	< 10	
4/12/2016		< 10	N/A	< 10	N/A	4.47*	
4/12/2016		< 10	N/A	N/A	N/A	N/A	
6/21/2016		< 10	N/A	N/A	N/A	N/A	
9/23/2016		< 10	N/A	< 10	N/A	N/A	
9/23/2016		< 10	N/A	N/A	N/A	N/A	
3/21/2017		< 10	< 10	< 10	N/A	N/A	
3/21/2017		N/A	N/A	< 10	N/A	N/A	



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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
2-Butanone, ug/L (CAS NO - 78-93-3)	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	7.26*
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
	9/16/2021	N/A	< 10	N/A	N/A	N/A
	5/10/2022	< 10	< 10	< 10	< 10	N/A
	5/10/2022	N/A	N/A	< 10	N/A	N/A
	9/28/2022	< 10	< 10	< 10	< 10	N/A
	9/28/2022	N/A	N/A	N/A	< 10	N/A
	3/7/2023	< 10	< 10	< 10	< 10	N/A
	3/7/2023	N/A	N/A	N/A	< 10	N/A
	9/26/2023	< 10	< 10	< 10	< 10	N/A
	9/26/2023	< 10	N/A	N/A	N/A	N/A
	5/29/2024	< 10	< 10	< 10	< 10	< 10
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	
2-Hexanone, ug/L (CAS NO - 591-78-6)	2/21/2008	< 10	N/A	N/A	N/A	N/A
	4/17/2008	< 10	< 10	N/A	N/A	N/A
	6/19/2008	< 10	< 10	N/A	N/A	N/A
	8/7/2008	< 10	< 10	N/A	N/A	N/A
	10/1/2008	< 10	< 10	N/A	N/A	N/A
	12/2/2008	< 10	< 10	N/A	N/A	N/A
	4/15/2009	< 10	< 10	N/A	N/A	N/A
	10/19/2009	< 10	< 10	< 10	N/A	N/A
	5/20/2010	< 10	< 10	< 10	N/A	N/A
	10/1/2010	< 10	< 10	< 10	N/A	N/A
	4/29/2011	< 10	< 10	< 10	N/A	N/A
	9/28/2011	< 10	< 10	< 10	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
2-Hexanone, ug/L (CAS NO - 591-78-6)	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
	9/16/2021	N/A	< 10	N/A	N/A	N/A
	5/10/2022	< 10	< 10	< 10	< 10	N/A
	5/10/2022	N/A	N/A	< 10	N/A	N/A
	9/28/2022	< 10	< 10	< 10	< 10	N/A
	9/28/2022	N/A	N/A	N/A	< 10	N/A
	3/7/2023	< 10	< 10	< 10	< 10	N/A
	3/7/2023	N/A	N/A	N/A	< 10	N/A
9/26/2023	< 10	< 10	< 10	< 10	N/A	
9/26/2023	< 10	N/A	N/A	N/A	N/A	
5/29/2024	< 10	< 10	< 10	< 10	< 10	
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	2/21/2008	< 10	N/A	N/A	N/A	N/A
	4/17/2008	< 10	< 10	N/A	N/A	N/A
	6/19/2008	< 10	< 10	N/A	N/A	N/A
	8/7/2008	< 10	< 10	N/A	N/A	N/A
	10/1/2008	< 10	< 10	N/A	N/A	N/A
	12/2/2008	< 10	< 10	N/A	N/A	N/A
	4/15/2009	< 10	< 10	N/A	N/A	N/A
	10/19/2009	< 10	< 10	< 10	N/A	N/A
	5/20/2010	< 10	< 10	< 10	N/A	N/A
	10/1/2010	< 10	< 10	< 10	N/A	N/A
	4/29/2011	< 10	< 10	< 10	N/A	N/A
	9/28/2011	< 10	< 10	< 10	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
	9/16/2021	N/A	< 10	N/A	N/A	N/A
	5/10/2022	< 10	< 10	< 10	< 10	N/A
	5/10/2022	N/A	N/A	< 10	N/A	N/A
	9/28/2022	< 10	< 10	< 10	< 10	N/A
	9/28/2022	N/A	N/A	N/A	< 10	N/A
	3/7/2023	< 10	< 10	< 10	< 10	N/A
	3/7/2023	N/A	N/A	N/A	< 10	N/A
9/26/2023	< 10	< 10	< 10	< 10	N/A	
9/26/2023	< 10	N/A	N/A	N/A	N/A	
5/29/2024	< 10	< 10	< 10	< 10	< 10	
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	
Acetone, ug/L (CAS NO - 67-64-1)	2/21/2008	< 10	N/A	N/A	N/A	N/A
	4/17/2008	< 10	< 10	N/A	N/A	N/A
	6/19/2008	< 10	< 10	N/A	N/A	N/A
	8/7/2008	< 10	< 10	N/A	N/A	N/A
	10/1/2008	< 10	< 10	N/A	N/A	N/A
	12/2/2008	< 10	< 10	N/A	N/A	N/A
	4/15/2009	< 10	190	N/A	N/A	N/A
	10/19/2009	< 10	< 10	< 10	N/A	N/A

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Acetone, ug/L (CAS NO - 67-64-1)	5/20/2010	< 10	< 10	< 10	N/A	N/A
	10/1/2010	14	< 10	< 10	N/A	N/A
	2/15/2011	< 10	N/A	N/A	N/A	N/A
	4/29/2011	< 10	< 10	< 10	N/A	N/A
	9/28/2011	< 10	< 10	< 10	N/A	N/A
	4/26/2012	< 10	< 10	< 10	N/A	N/A
	10/24/2012	< 10	< 10	< 10	N/A	N/A
	5/7/2013	< 10	< 10	< 10	N/A	N/A
	10/18/2013	< 10	< 10	< 10	N/A	N/A
	3/25/2014	< 10	< 10	< 10	N/A	N/A
	9/30/2014	< 10	< 10	< 10	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	12.1
	4/12/2016	< 10	N/A	< 10	N/A	9.26*
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	4.6*	3.24*	N/A	N/A
	3/21/2017	N/A	N/A	3.43*	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	1.98*	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	3.89*	3.57*	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	4.13*	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	3.6*	N/A
	8/19/2020	N/A	N/A	N/A	3.92*	N/A
	3/23/2021	< 10	< 10	< 10	< 10	4.81*
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
9/16/2021	N/A	< 10	N/A	N/A	N/A	
5/10/2022	< 10	< 10	< 10	< 10	N/A	
5/10/2022	N/A	N/A	< 10	N/A	N/A	
9/28/2022	< 10	5.5*	6.48*	< 10	N/A	
9/28/2022	N/A	N/A	N/A	< 10	N/A	
3/7/2023	4.42*	< 10	< 10	< 10	N/A	
3/7/2023	N/A	N/A	N/A	< 10	N/A	
9/26/2023	< 10	< 10	< 10	< 10	N/A	
9/26/2023	< 10	N/A	N/A	N/A	N/A	
5/29/2024	< 10	< 10	< 10	< 10	< 10	
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Acrylonitrile, ug/L (CAS NO - 107-13-1)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 5	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5
	3/11/2020	N/A	< 5	N/A	N/A	N/A
	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
9/16/2021	N/A	< 5	N/A	N/A	N/A	
5/10/2022	< 5	< 5	< 5	< 5	N/A	
5/10/2022	N/A	N/A	< 5	N/A	N/A	
9/28/2022	< 5	< 5	< 5	< 5	N/A	
9/28/2022	N/A	N/A	N/A	< 5	N/A	
3/7/2023	< 5	< 5	< 5	< 5	N/A	
3/7/2023	N/A	N/A	N/A	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Acrylonitrile, ug/L (CAS NO - 107-13-1)	9/26/2023	< 5	< 5	< 5	< 5	N/A
	9/26/2023	< 5	N/A	N/A	N/A	N/A
	5/29/2024	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	< 5	N/A	N/A	N/A
	10/23/2024	< 5	< 5	< 5	< 5	N/A
	10/23/2024	N/A	< 5	N/A	N/A	N/A
Benzene, ug/L (CAS NO - 71-43-2)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 0.5	N/A	< 0.5	N/A	< 0.5
	10/12/2015	< 0.5	N/A	< 0.5	N/A	< 0.5
	4/12/2016	< 0.5	N/A	0.131*	N/A	0.348*
	4/12/2016	< 0.5	N/A	N/A	N/A	N/A
	6/21/2016	< 0.5	N/A	N/A	N/A	N/A
	9/23/2016	< 0.5	N/A	< 0.5	N/A	N/A
	9/23/2016	< 0.5	N/A	N/A	N/A	N/A
	3/21/2017	< 0.5	< 0.5	< 0.5	N/A	N/A
	3/21/2017	N/A	N/A	< 0.5	N/A	N/A
	7/24/2017	< 0.5	< 0.5	< 0.5	N/A	N/A
	7/24/2017	< 0.5	N/A	N/A	N/A	N/A
	5/15/2018	< 0.5	< 0.5	< 0.5	N/A	N/A
	5/15/2018	< 0.5	N/A	N/A	N/A	N/A
	8/22/2018	< 0.5	< 0.5	< 0.5	N/A	N/A
	8/22/2018	< 0.5	N/A	N/A	N/A	N/A
	5/29/2019	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	5/29/2019	N/A	N/A	< 0.5	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 0.5	N/A
	9/19/2019	< 0.5	< 0.5	< 0.5	N/A	N/A
	9/19/2019	< 0.5	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 0.5	N/A
	1/23/2020	N/A	N/A	N/A	< 0.5	N/A
3/11/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
3/11/2020	N/A	< 0.5	N/A	N/A	N/A	
8/19/2020	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
8/19/2020	N/A	N/A	N/A	< 0.5	N/A	
3/23/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
3/23/2021	< 0.5	N/A	N/A	N/A	N/A	
9/16/2021	< 0.5	< 0.5	< 0.5	< 0.5	N/A	
9/16/2021	N/A	< 0.5	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Benzene, ug/L (CAS NO - 71-43-2)	5/10/2022	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	5/10/2022	N/A	N/A	< 0.5	N/A	N/A
	9/28/2022	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	9/28/2022	N/A	N/A	N/A	< 0.5	N/A
	3/7/2023	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	3/7/2023	N/A	N/A	N/A	< 0.5	N/A
	9/26/2023	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	9/26/2023	< 0.5	N/A	N/A	N/A	N/A
	5/29/2024	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/29/2024	N/A	< 0.5	N/A	N/A	N/A
	10/23/2024	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	10/23/2024	N/A	< 0.5	N/A	N/A	N/A
	Bromochloromethane, ug/L (CAS NO - 74-97-5)	2/21/2008	< 5	N/A	N/A	N/A
4/17/2008		< 5	< 5	N/A	N/A	N/A
6/19/2008		< 5	< 5	N/A	N/A	N/A
8/7/2008		< 5	< 5	N/A	N/A	N/A
10/1/2008		< 5	< 5	N/A	N/A	N/A
12/2/2008		< 5	< 5	N/A	N/A	N/A
4/15/2009		< 5	< 5	N/A	N/A	N/A
10/19/2009		< 5	< 5	< 5	N/A	N/A
5/20/2010		< 5	< 5	< 5	N/A	N/A
10/1/2010		< 5	< 5	< 5	N/A	N/A
4/29/2011		< 5	< 5	< 5	N/A	N/A
9/28/2011		< 5	< 5	< 5	N/A	N/A
4/26/2012		< 1	< 1	< 1	N/A	N/A
10/24/2012		< 1	< 1	< 1	N/A	N/A
5/7/2013		< 1	< 1	< 1	N/A	N/A
10/18/2013		< 1	< 1	< 1	N/A	N/A
3/25/2014		< 1	< 1	< 1	N/A	N/A
9/30/2014		< 1	< 1	< 1	N/A	N/A
4/15/2015		< 5	N/A	< 5	N/A	< 5
10/12/2015		< 5	N/A	< 5	N/A	< 5
4/12/2016		< 5	N/A	< 5	N/A	< 5
4/12/2016		< 5	N/A	N/A	N/A	N/A
6/21/2016		< 5	N/A	N/A	N/A	N/A
9/23/2016		< 5	N/A	< 5	N/A	N/A
9/23/2016		< 5	N/A	N/A	N/A	N/A
3/21/2017		< 5	< 5	< 5	N/A	N/A
3/21/2017		N/A	N/A	< 5	N/A	N/A
7/24/2017		< 5	< 5	< 5	N/A	N/A
7/24/2017		< 5	N/A	N/A	N/A	N/A
5/15/2018		< 5	< 5	< 5	N/A	N/A
5/15/2018		< 5	N/A	N/A	N/A	N/A
8/22/2018		< 5	< 5	< 5	N/A	N/A
8/22/2018		< 5	N/A	N/A	N/A	N/A
5/29/2019		< 5	< 5	< 5	< 5	N/A
5/29/2019		N/A	N/A	< 5	N/A	N/A
8/1/2019		N/A	N/A	N/A	< 5	N/A
9/19/2019	< 5	< 5	< 5	N/A	N/A	
9/19/2019	< 5	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 5	N/A	
1/23/2020	N/A	N/A	N/A	< 5	N/A	
3/11/2020	< 5	< 5	< 5	< 5	< 5	
3/11/2020	N/A	< 5	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
	9/16/2021	N/A	< 5	N/A	N/A	N/A
	5/10/2022	< 5	< 5	< 5	< 5	N/A
	5/10/2022	N/A	N/A	< 5	N/A	N/A
	9/28/2022	< 5	< 5	< 5	< 5	N/A
	9/28/2022	N/A	N/A	N/A	< 5	N/A
	3/7/2023	< 5	< 5	< 5	< 5	N/A
	3/7/2023	N/A	N/A	N/A	< 5	N/A
	9/26/2023	< 5	< 5	< 5	< 5	N/A
	9/26/2023	< 5	N/A	N/A	N/A	N/A
	5/29/2024	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	< 5	N/A	N/A	N/A
10/23/2024	< 5	< 5	< 5	< 5	N/A	
10/23/2024	N/A	< 5	N/A	N/A	N/A	
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
5/29/2019	< 1	< 1	< 1	< 1	N/A	
5/29/2019	N/A	N/A	< 1	N/A	N/A	
8/1/2019	N/A	N/A	N/A	< 1	N/A	



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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
5/29/2024	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
Bromoform, ug/L (CAS NO - 75-25-2)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 5	N/A	< 5	N/A	< 5
	10/12/2015	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	N/A	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	< 5	N/A	< 5	N/A	N/A
	9/23/2016	< 5	N/A	N/A	N/A	N/A
	3/21/2017	< 5	< 5	< 5	N/A	N/A
	3/21/2017	N/A	N/A	< 5	N/A	N/A
7/24/2017	< 5	< 5	< 5	N/A	N/A	
7/24/2017	< 5	N/A	N/A	N/A	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Bromoform, ug/L (CAS NO - 75-25-2)	5/15/2018	< 5	< 5	< 5	N/A	N/A
	5/15/2018	< 5	N/A	N/A	N/A	N/A
	8/22/2018	< 5	< 5	< 5	N/A	N/A
	8/22/2018	< 5	N/A	N/A	N/A	N/A
	5/29/2019	< 5	< 5	< 5	< 5	N/A
	5/29/2019	N/A	N/A	< 5	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 5	N/A
	9/19/2019	< 5	< 5	< 5	N/A	N/A
	9/19/2019	< 5	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 5	N/A
	1/23/2020	N/A	N/A	N/A	< 5	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5
	3/11/2020	N/A	< 5	N/A	N/A	N/A
	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
	9/16/2021	N/A	< 5	N/A	N/A	N/A
	5/10/2022	< 5	< 5	< 5	< 5	N/A
	5/10/2022	N/A	N/A	< 5	N/A	N/A
	9/28/2022	< 5	< 5	< 5	< 5	N/A
	9/28/2022	N/A	N/A	N/A	< 5	N/A
	3/7/2023	< 5	< 5	< 5	< 5	N/A
	3/7/2023	N/A	N/A	N/A	< 5	N/A
	9/26/2023	< 5	< 5	< 5	< 5	N/A
	9/26/2023	< 5	N/A	N/A	N/A	N/A
	5/29/2024	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	< 5	N/A	N/A	N/A
	10/23/2024	< 5	< 5	< 5	< 5	N/A
10/23/2024	N/A	< 5	N/A	N/A	N/A	
Bromomethane, ug/L (CAS NO - 74-83-9)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	0.397*	N/A	0.363*	N/A	< 4
	10/12/2015	< 4	N/A	< 4	N/A	< 4
	4/12/2016	< 4	N/A	< 4	N/A	< 4
	4/12/2016	0.957*	N/A	N/A	N/A	N/A
	6/21/2016	< 4	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-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Bromomethane, ug/L (CAS NO - 74-83-9)	9/23/2016	< 4	N/A	< 4	N/A	N/A
	9/23/2016	< 4	N/A	N/A	N/A	N/A
	3/21/2017	0.244*	0.299*	< 4	N/A	N/A
	3/21/2017	N/A	N/A	< 4	N/A	N/A
	7/24/2017	< 4	< 4	< 4	N/A	N/A
	7/24/2017	< 4	N/A	N/A	N/A	N/A
	5/15/2018	< 4	< 4	< 4	N/A	N/A
	5/15/2018	< 4	N/A	N/A	N/A	N/A
	8/22/2018	< 4	< 4	< 4	N/A	N/A
	8/22/2018	< 4	N/A	N/A	N/A	N/A
	5/29/2019	< 4	< 4	< 4	< 4	N/A
	5/29/2019	N/A	N/A	< 4	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 4	N/A
	9/19/2019	< 4	< 4	< 4	N/A	N/A
	9/19/2019	< 4	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 4	N/A
	1/23/2020	N/A	N/A	N/A	< 4	N/A
	3/11/2020	< 4	< 4	< 4	< 4	< 4
	3/11/2020	N/A	< 4	N/A	N/A	N/A
	8/19/2020	< 4	< 4	< 4	< 4	N/A
	8/19/2020	N/A	N/A	N/A	< 4	N/A
	3/23/2021	< 4	< 4	< 4	< 4	< 4
	3/23/2021	< 4	N/A	N/A	N/A	N/A
	9/16/2021	< 4	< 4	< 4	< 4	N/A
	9/16/2021	N/A	< 4	N/A	N/A	N/A
	5/10/2022	< 4	< 4	< 4	< 4	N/A
	5/10/2022	N/A	N/A	< 4	N/A	N/A
	9/28/2022	< 4	< 4	< 4	< 4	N/A
	9/28/2022	N/A	N/A	N/A	< 4	N/A
	3/7/2023	< 4	< 4	< 4	< 4	N/A
	3/7/2023	N/A	N/A	N/A	< 4	N/A
	9/26/2023	< 4	< 4	< 4	< 4	N/A
	9/26/2023	< 4	N/A	N/A	N/A	N/A
5/29/2024	< 4	< 4	< 4	< 4	< 4	
5/29/2024	N/A	< 4	N/A	N/A	N/A	
10/23/2024	< 4	< 4	< 4	< 4	N/A	
10/23/2024	N/A	< 4	N/A	N/A	N/A	
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	0.334*	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	0.339*	N/A	N/A
	3/21/2017	N/A	N/A	0.325*	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 2	N/A	< 2	N/A	< 2
	10/12/2015	< 2	N/A	< 2	N/A	< 2
	4/12/2016	< 2	N/A	< 2	N/A	< 2
	4/12/2016	< 2	N/A	N/A	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	< 2	N/A	< 2	N/A	N/A
	9/23/2016	< 2	N/A	N/A	N/A	N/A
	3/21/2017	< 2	< 2	< 2	N/A	N/A
	3/21/2017	N/A	N/A	< 2	N/A	N/A
	7/24/2017	< 2	< 2	< 2	N/A	N/A
	7/24/2017	< 2	N/A	N/A	N/A	N/A
	5/15/2018	< 2	< 2	< 2	N/A	N/A
	5/15/2018	< 2	N/A	N/A	N/A	N/A
	8/22/2018	< 2	< 2	< 2	N/A	N/A
	8/22/2018	< 2	N/A	N/A	N/A	N/A
	5/29/2019	< 2	< 2	< 2	< 2	N/A
	5/29/2019	N/A	N/A	< 2	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 2	N/A
	9/19/2019	< 2	< 2	< 2	N/A	N/A
	9/19/2019	< 2	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 2	N/A
	1/23/2020	N/A	N/A	N/A	< 2	N/A
	3/11/2020	< 2	< 2	< 2	< 2	< 2
	3/11/2020	N/A	< 2	N/A	N/A	N/A
	8/19/2020	< 2	< 2	< 2	< 2	N/A
	8/19/2020	N/A	N/A	N/A	< 2	N/A
	3/23/2021	< 2	< 2	< 2	< 2	< 2
	3/23/2021	< 2	N/A	N/A	N/A	N/A
	9/16/2021	< 2	< 2	< 2	< 2	N/A
	9/16/2021	N/A	< 2	N/A	N/A	N/A
	5/10/2022	< 2	< 2	< 2	< 2	N/A
	5/10/2022	N/A	N/A	< 2	N/A	N/A
	9/28/2022	< 2	< 2	< 2	< 2	N/A
9/28/2022	N/A	N/A	N/A	< 2	N/A	
3/7/2023	< 2	< 2	< 2	< 2	N/A	
3/7/2023	N/A	N/A	N/A	< 2	N/A	
9/26/2023	< 2	< 2	< 2	< 2	N/A	
9/26/2023	< 2	N/A	N/A	N/A	N/A	
5/29/2024	< 2	< 2	< 2	< 2	< 2	
5/29/2024	N/A	< 2	N/A	N/A	N/A	
10/23/2024	< 2	< 2	< 2	< 2	N/A	
10/23/2024	N/A	< 2	N/A	N/A	N/A	
Chlorobenzene, ug/L (CAS NO - 108-90-7)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
9/16/2021	N/A	< 1	N/A	N/A	N/A	
5/10/2022	< 1	< 1	< 1	< 1	N/A	
5/10/2022	N/A	N/A	< 1	N/A	N/A	
9/28/2022	< 1	< 1	< 1	< 1	N/A	
9/28/2022	N/A	N/A	N/A	< 1	N/A	
3/7/2023	< 1	< 1	< 1	< 1	N/A	
3/7/2023	N/A	N/A	N/A	< 1	N/A	
9/26/2023	< 1	< 1	< 1	< 1	N/A	
9/26/2023	< 1	N/A	N/A	N/A	N/A	
5/29/2024	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	< 1	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 5	N/A	< 5	N/A	< 5
	10/12/2015	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	N/A	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	< 5	N/A	< 5	N/A	N/A
	9/23/2016	< 5	N/A	N/A	N/A	N/A
	3/21/2017	< 5	< 5	< 5	N/A	N/A
	3/21/2017	N/A	N/A	< 5	N/A	N/A
	7/24/2017	< 5	< 5	< 5	N/A	N/A
	7/24/2017	< 5	N/A	N/A	N/A	N/A
	5/15/2018	< 5	< 5	< 5	N/A	N/A
	5/15/2018	< 5	N/A	N/A	N/A	N/A
	8/22/2018	< 5	< 5	< 5	N/A	N/A
	8/22/2018	< 5	N/A	N/A	N/A	N/A
	5/29/2019	< 5	< 5	< 5	< 5	N/A
	5/29/2019	N/A	N/A	< 5	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 5	N/A
9/19/2019	< 5	< 5	< 5	N/A	N/A	
9/19/2019	< 5	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 5	N/A	
1/23/2020	N/A	N/A	N/A	< 5	N/A	
3/11/2020	< 5	< 5	< 5	< 5	< 5	
3/11/2020	N/A	< 5	N/A	N/A	N/A	
8/19/2020	< 5	< 5	< 5	< 5	N/A	
8/19/2020	N/A	N/A	N/A	< 5	N/A	
3/23/2021	< 5	< 5	< 5	< 5	< 5	
3/23/2021	< 5	N/A	N/A	N/A	N/A	
9/16/2021	< 5	< 5	< 5	< 5	N/A	
9/16/2021	N/A	< 5	N/A	N/A	N/A	
5/10/2022	< 5	< 5	< 5	< 5	N/A	
5/10/2022	N/A	N/A	< 5	N/A	N/A	
9/28/2022	< 5	< 5	< 5	< 5	N/A	
9/28/2022	N/A	N/A	N/A	< 5	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	3/7/2023	< 5	< 5	< 5	< 5	N/A
	3/7/2023	N/A	N/A	N/A	< 5	N/A
	9/26/2023	< 5	< 5	< 5	< 5	N/A
	9/26/2023	< 5	N/A	N/A	N/A	N/A
	5/29/2024	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	< 5	N/A	N/A	N/A
	10/23/2024	< 5	< 5	< 5	< 5	N/A
	10/23/2024	N/A	< 5	N/A	N/A	N/A
Chloroethane, ug/L (CAS NO - 75-00-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 4	N/A	< 4	N/A	< 4
	10/12/2015	< 4	N/A	< 4	N/A	< 4
	4/12/2016	< 4	N/A	< 4	N/A	< 4
	4/12/2016	< 4	N/A	N/A	N/A	N/A
	6/21/2016	< 4	N/A	N/A	N/A	N/A
	9/23/2016	< 4	N/A	< 4	N/A	N/A
	9/23/2016	< 4	N/A	N/A	N/A	N/A
	3/21/2017	< 4	< 4	< 4	N/A	N/A
	3/21/2017	N/A	N/A	< 4	N/A	N/A
	7/24/2017	< 4	< 4	< 4	N/A	N/A
	7/24/2017	< 4	N/A	N/A	N/A	N/A
	5/15/2018	< 4	< 4	< 4	N/A	N/A
	5/15/2018	< 4	N/A	N/A	N/A	N/A
	8/22/2018	< 4	< 4	< 4	N/A	N/A
	8/22/2018	< 4	N/A	N/A	N/A	N/A
	5/29/2019	< 4	< 4	< 4	< 4	N/A
	5/29/2019	N/A	N/A	< 4	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 4	N/A
	9/19/2019	< 4	< 4	< 4	N/A	N/A
	9/19/2019	< 4	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 4	N/A
	1/23/2020	N/A	N/A	N/A	< 4	N/A
	3/11/2020	< 4	< 4	< 4	< 4	< 4
	3/11/2020	N/A	< 4	N/A	N/A	N/A
8/19/2020	< 4	< 4	< 4	< 4	N/A	
8/19/2020	N/A	N/A	N/A	< 4	N/A	
3/23/2021	< 4	< 4	< 4	< 4	< 4	
3/23/2021	< 4	N/A	N/A	N/A	N/A	



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	9/16/2021	< 4	< 4	< 4	< 4	N/A
	9/16/2021	N/A	< 4	N/A	N/A	N/A
	5/10/2022	< 4	< 4	< 4	< 4	N/A
	5/10/2022	N/A	N/A	< 4	N/A	N/A
	9/28/2022	< 4	< 4	< 4	< 4	N/A
	9/28/2022	N/A	N/A	N/A	< 4	N/A
	3/7/2023	< 4	< 4	< 4	< 4	N/A
	3/7/2023	N/A	N/A	N/A	< 4	N/A
	9/26/2023	< 4	< 4	< 4	< 4	N/A
	9/26/2023	< 4	N/A	N/A	N/A	N/A
	5/29/2024	< 4	< 4	< 4	< 4	< 4
	5/29/2024	N/A	< 4	N/A	N/A	N/A
	10/23/2024	< 4	< 4	< 4	< 4	N/A
	10/23/2024	N/A	< 4	N/A	N/A	N/A
Chloroform, ug/L (CAS NO - 67-66-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 3	< 3	< 3	N/A	N/A
	8/22/2018	< 3	N/A	N/A	N/A	N/A
	5/29/2019	< 3	< 3	< 3	< 3	N/A
5/29/2019	N/A	N/A	< 3	N/A	N/A	
8/1/2019	N/A	N/A	N/A	< 3	N/A	
9/19/2019	< 3	< 3	< 3	N/A	N/A	
9/19/2019	< 3	N/A	N/A	N/A	N/A	
10/10/2019	N/A	N/A	N/A	< 3	N/A	
1/23/2020	N/A	N/A	N/A	< 3	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chloroform, ug/L (CAS NO - 67-66-3)	3/11/2020	< 3	< 3	< 3	< 3	< 3
	3/11/2020	N/A	< 3	N/A	N/A	N/A
	8/19/2020	< 3	< 3	< 3	< 3	N/A
	8/19/2020	N/A	N/A	N/A	< 3	N/A
	3/23/2021	< 3	< 3	< 3	< 3	< 3
	3/23/2021	< 3	N/A	N/A	N/A	N/A
	9/16/2021	< 3	< 3	< 3	< 3	N/A
	9/16/2021	N/A	< 3	N/A	N/A	N/A
	5/10/2022	< 3	< 3	< 3	< 3	N/A
	5/10/2022	N/A	N/A	< 3	N/A	N/A
	9/28/2022	< 3	< 3	< 3	< 3	N/A
	9/28/2022	N/A	N/A	N/A	< 3	N/A
	3/7/2023	< 3	< 3	< 3	< 3	N/A
	3/7/2023	N/A	N/A	N/A	< 3	N/A
	9/26/2023	< 3	< 3	< 3	< 3	N/A
	9/26/2023	< 3	N/A	N/A	N/A	N/A
	5/29/2024	< 3	< 3	< 3	< 3	< 3
	5/29/2024	N/A	< 3	N/A	N/A	N/A
	10/23/2024	< 3	< 3	< 3	< 3	N/A
	10/23/2024	N/A	< 3	N/A	N/A	N/A
Chloromethane, ug/L (CAS NO - 74-87-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 3	N/A	< 3	N/A	< 3
	10/12/2015	< 3	N/A	< 3	N/A	< 3
	4/12/2016	< 3	N/A	< 3	N/A	< 3
	4/12/2016	0.388*	N/A	N/A	N/A	N/A
	6/21/2016	< 3	N/A	N/A	N/A	N/A
	9/23/2016	< 3	N/A	< 3	N/A	N/A
	9/23/2016	< 3	N/A	N/A	N/A	N/A
	3/21/2017	< 3	< 3	< 3	N/A	N/A
	3/21/2017	N/A	N/A	< 3	N/A	N/A
	7/24/2017	< 3	< 3	< 3	N/A	N/A
	7/24/2017	< 3	N/A	N/A	N/A	N/A
	5/15/2018	< 3	< 3	< 3	N/A	N/A
	5/15/2018	< 3	N/A	N/A	N/A	N/A
	8/22/2018	< 3	< 3	< 3	N/A	N/A
8/22/2018	< 3	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-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	5/29/2019	< 3	< 3	< 3	< 3	N/A
	5/29/2019	N/A	N/A	< 3	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 3	N/A
	9/19/2019	< 3	< 3	< 3	N/A	N/A
	9/19/2019	< 3	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 3	N/A
	1/23/2020	N/A	N/A	N/A	< 3	N/A
	3/11/2020	< 3	< 3	< 3	< 3	< 3
	3/11/2020	N/A	< 3	N/A	N/A	N/A
	8/19/2020	< 3	< 3	< 3	< 3	N/A
	8/19/2020	N/A	N/A	N/A	< 3	N/A
	3/23/2021	< 3	< 3	< 3	< 3	< 3
	3/23/2021	< 3	N/A	N/A	N/A	N/A
	9/16/2021	< 3	< 3	< 3	< 3	N/A
	9/16/2021	N/A	< 3	N/A	N/A	N/A
	5/10/2022	< 3	< 3	< 3	< 3	N/A
	5/10/2022	N/A	N/A	< 3	N/A	N/A
	9/28/2022	< 3	< 3	< 3	< 3	N/A
	9/28/2022	N/A	N/A	N/A	< 3	N/A
	3/7/2023	< 3	< 3	< 3	< 3	N/A
	3/7/2023	N/A	N/A	N/A	< 3	N/A
	9/26/2023	< 3	< 3	< 3	< 3	N/A
	9/26/2023	< 3	N/A	N/A	N/A	N/A
	5/29/2024	< 3	< 3	< 3	< 3	< 3
	5/29/2024	N/A	< 3	N/A	N/A	N/A
	10/23/2024	< 3	< 3	< 3	< 3	N/A
	10/23/2024	N/A	< 3	N/A	N/A	N/A
	cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	2/21/2008	< 5	N/A	N/A	N/A
4/17/2008		< 5	< 5	N/A	N/A	N/A
6/19/2008		< 5	< 5	N/A	N/A	N/A
8/7/2008		< 5	< 5	N/A	N/A	N/A
10/1/2008		< 5	< 5	N/A	N/A	N/A
12/2/2008		< 5	< 5	N/A	N/A	N/A
4/15/2009		< 5	< 5	N/A	N/A	N/A
10/19/2009		< 5	< 5	< 5	N/A	N/A
5/20/2010		< 5	< 5	< 5	N/A	N/A
10/1/2010		< 5	< 5	< 5	N/A	N/A
4/29/2011		< 5	< 5	< 5	N/A	N/A
9/28/2011		< 5	< 5	< 5	N/A	N/A
4/26/2012		< 1	< 1	< 1	N/A	N/A
10/24/2012		< 1	< 1	< 1	N/A	N/A
5/7/2013		< 1	< 1	< 1	N/A	N/A
10/18/2013		< 1	< 1	< 1	N/A	N/A
3/25/2014		< 1	< 1	< 1	N/A	N/A
9/30/2014		< 1	< 1	< 1	N/A	N/A
4/15/2015		< 1	N/A	< 1	N/A	< 1
10/12/2015		< 1	N/A	< 1	N/A	< 1
4/12/2016		< 1	N/A	< 1	N/A	< 1
4/12/2016		< 1	N/A	N/A	N/A	N/A
6/21/2016		< 1	N/A	N/A	N/A	N/A
9/23/2016		< 1	N/A	< 1	N/A	N/A
9/23/2016		< 1	N/A	N/A	N/A	N/A
3/21/2017		< 1	< 1	< 1	N/A	N/A
3/21/2017		N/A	N/A	< 1	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 5	N/A	< 5	N/A	< 5
	10/12/2015	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	N/A	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	< 5	N/A	< 5	N/A	N/A
	9/23/2016	< 5	N/A	N/A	N/A	N/A
	3/21/2017	< 5	< 5	< 5	N/A	N/A
	3/21/2017	N/A	N/A	< 5	N/A	N/A
	7/24/2017	< 5	< 5	< 5	N/A	N/A
	7/24/2017	< 5	N/A	N/A	N/A	N/A
	5/15/2018	< 5	< 5	< 5	N/A	N/A
	5/15/2018	< 5	N/A	N/A	N/A	N/A
	8/22/2018	< 5	< 5	< 5	N/A	N/A
	8/22/2018	< 5	N/A	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG	
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	5/29/2019	< 5	< 5	< 5	< 5	N/A	
	5/29/2019	N/A	N/A	< 5	N/A	N/A	
	8/1/2019	N/A	N/A	N/A	< 5	N/A	
	9/19/2019	< 5	< 5	< 5	N/A	N/A	
	9/19/2019	< 5	N/A	N/A	N/A	N/A	
	10/10/2019	N/A	N/A	N/A	< 5	N/A	
	1/23/2020	N/A	N/A	N/A	< 5	N/A	
	3/11/2020	< 5	< 5	< 5	< 5	< 5	
	3/11/2020	N/A	< 5	N/A	N/A	N/A	
	8/19/2020	< 5	< 5	< 5	< 5	N/A	
	8/19/2020	N/A	N/A	N/A	< 5	N/A	
	3/23/2021	< 5	< 5	< 5	< 5	< 5	
	3/23/2021	< 5	N/A	N/A	N/A	N/A	
	9/16/2021	< 5	< 5	< 5	< 5	N/A	
	9/16/2021	N/A	< 5	N/A	N/A	N/A	
	5/10/2022	< 5	< 5	< 5	< 5	N/A	
	5/10/2022	N/A	N/A	< 5	N/A	N/A	
	9/28/2022	< 5	< 5	< 5	< 5	N/A	
	9/28/2022	N/A	N/A	N/A	< 5	N/A	
	3/7/2023	< 5	< 5	< 5	< 5	N/A	
	3/7/2023	N/A	N/A	N/A	< 5	N/A	
	9/26/2023	< 5	< 5	< 5	< 5	N/A	
	9/26/2023	< 5	N/A	N/A	N/A	N/A	
	5/29/2024	< 5	< 5	< 5	< 5	< 5	
	5/29/2024	N/A	< 5	N/A	N/A	N/A	
	10/23/2024	< 5	< 5	< 5	< 5	N/A	
	10/23/2024	N/A	< 5	N/A	N/A	N/A	
	Ethylbenzene, ug/L (CAS NO - 100-41-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
		4/17/2008	< 5	< 5	N/A	N/A	N/A
		6/19/2008	< 5	< 5	N/A	N/A	N/A
8/7/2008		< 5	< 5	N/A	N/A	N/A	
10/1/2008		< 5	< 5	N/A	N/A	N/A	
12/2/2008		< 5	< 5	N/A	N/A	N/A	
4/15/2009		< 5	< 5	N/A	N/A	N/A	
10/19/2009		< 5	< 5	< 5	N/A	N/A	
5/20/2010		< 5	< 5	< 5	N/A	N/A	
10/1/2010		< 5	< 5	< 5	N/A	N/A	
4/29/2011		< 5	< 5	< 5	N/A	N/A	
9/28/2011		< 5	< 5	< 5	N/A	N/A	
4/26/2012		< 1	< 1	< 1	N/A	N/A	
10/24/2012		< 1	< 1	< 1	N/A	N/A	
5/7/2013		< 1	< 1	< 1	N/A	N/A	
10/18/2013		< 1	< 1	< 1	N/A	N/A	
3/25/2014		< 1	< 1	< 1	N/A	N/A	
9/30/2014		< 1	< 1	< 1	N/A	N/A	
4/15/2015		< 1	N/A	< 1	N/A	< 1	
10/12/2015		< 1	N/A	< 1	N/A	< 1	
4/12/2016		< 1	N/A	< 1	N/A	< 1	
4/12/2016		< 1	N/A	N/A	N/A	N/A	
6/21/2016		< 1	N/A	N/A	N/A	N/A	
9/23/2016		< 1	N/A	< 1	N/A	N/A	
9/23/2016		< 1	N/A	N/A	N/A	N/A	
3/21/2017		< 1	< 1	< 1	N/A	N/A	
3/21/2017		N/A	N/A	< 1	N/A	N/A	

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Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Ethylbenzene, ug/L (CAS NO - 100-41-4)	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	0.388*	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	0.357*	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
10/23/2024	N/A	< 1	N/A	N/A	N/A	
Iodomethane, ug/L (CAS NO - 74-88-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10

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Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Iodomethane, ug/L (CAS NO - 74-88-4)	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
	9/16/2021	N/A	< 10	N/A	N/A	N/A
	5/10/2022	< 10	< 10	< 10	< 10	N/A
	5/10/2022	N/A	N/A	< 10	N/A	N/A
	9/28/2022	< 10	< 10	< 10	< 10	N/A
	9/28/2022	N/A	N/A	N/A	< 10	N/A
	3/7/2023	< 10	< 10	< 10	< 10	N/A
	3/7/2023	N/A	N/A	N/A	< 10	N/A
9/26/2023	< 10	< 10	< 10	< 10	N/A	
9/26/2023	< 10	N/A	N/A	N/A	N/A	
5/29/2024	< 10	< 10	< 10	< 10	< 10	
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	
Methylene Bromide, ug/L (CAS NO - 74-95-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Methylene Bromide, ug/L (CAS NO - 74-95-3)	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
9/26/2023	< 1	< 1	< 1	< 1	N/A	
9/26/2023	< 1	N/A	N/A	N/A	N/A	
5/29/2024	< 1	< 1	< 1	< 1	< 1	
5/29/2024	N/A	< 1	N/A	N/A	N/A	
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
Methylene Chloride, ug/L (CAS NO - 75-09-2)	2/21/2008	< 10	N/A	N/A	N/A	N/A
	4/17/2008	< 10	< 10	N/A	N/A	N/A
	6/19/2008	< 10	< 10	N/A	N/A	N/A
	8/7/2008	< 10	< 10	N/A	N/A	N/A
	10/1/2008	< 10	< 10	N/A	N/A	N/A
	12/2/2008	< 10	< 10	N/A	N/A	N/A
	4/15/2009	< 10	< 10	N/A	N/A	N/A
	10/19/2009	< 10	< 10	< 10	N/A	N/A



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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	5/20/2010	< 10	< 10	< 10	N/A	N/A
	10/1/2010	< 10	< 10	< 10	N/A	N/A
	4/29/2011	< 10	< 10	< 10	N/A	N/A
	9/28/2011	< 10	< 10	< 10	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	0.19*	N/A	0.259*	N/A	< 5
	10/12/2015	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	N/A	N/A	N/A
	6/21/2016	0.281*	N/A	N/A	N/A	N/A
	9/23/2016	< 5	N/A	< 5	N/A	N/A
	9/23/2016	< 5	N/A	N/A	N/A	N/A
	3/21/2017	< 5	< 5	< 5	N/A	N/A
	3/21/2017	N/A	N/A	< 5	N/A	N/A
	7/24/2017	0.185*	< 5	< 5	N/A	N/A
	7/24/2017	< 5	N/A	N/A	N/A	N/A
	5/15/2018	< 5	< 5	< 5	N/A	N/A
	5/15/2018	< 5	N/A	N/A	N/A	N/A
	8/22/2018	< 5	< 5	< 5	N/A	N/A
	8/22/2018	< 5	N/A	N/A	N/A	N/A
	5/29/2019	< 5	< 5	< 5	< 5	N/A
	5/29/2019	N/A	N/A	< 5	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 5	N/A
	9/19/2019	< 5	< 5	< 5	N/A	N/A
	9/19/2019	< 5	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 5	N/A
	1/23/2020	N/A	N/A	N/A	< 5	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5
	3/11/2020	N/A	< 5	N/A	N/A	N/A
	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
	9/16/2021	N/A	< 5	N/A	N/A	N/A
5/10/2022	< 5	< 5	< 5	< 5	N/A	
5/10/2022	N/A	N/A	< 5	N/A	N/A	
9/28/2022	< 5	< 5	< 5	< 5	N/A	
9/28/2022	N/A	N/A	N/A	< 5	N/A	
3/7/2023	< 5	< 5	< 5	< 5	N/A	
3/7/2023	N/A	N/A	N/A	< 5	N/A	
9/26/2023	< 5	< 5	< 5	< 5	N/A	
9/26/2023	< 5	N/A	N/A	N/A	N/A	
5/29/2024	< 5	< 5	< 5	< 5	< 5	
5/29/2024	N/A	< 5	N/A	N/A	N/A	
10/23/2024	< 5	< 5	< 5	< 5	N/A	
10/23/2024	N/A	< 5	N/A	N/A	N/A	
Styrene, ug/L (CAS NO - 100-42-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Styrene, ug/L (CAS NO - 100-42-5)	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
5/10/2022	N/A	N/A	< 1	N/A	N/A	
9/28/2022	< 1	< 1	< 1	< 1	N/A	
9/28/2022	N/A	N/A	N/A	< 1	N/A	
3/7/2023	< 1	< 1	< 1	< 1	N/A	
3/7/2023	N/A	N/A	N/A	< 1	N/A	
9/26/2023	< 1	< 1	< 1	< 1	N/A	
9/26/2023	< 1	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Styrene, ug/L (CAS NO - 100-42-5)	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	0.208*	0.2*	N/A	N/A
	3/21/2017	N/A	N/A	0.189*	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
8/19/2020	< 1	< 1	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	
3/23/2021	< 1	< 1	< 1	< 1	< 1	
3/23/2021	< 1	N/A	N/A	N/A	N/A	
9/16/2021	< 1	< 1	< 1	< 1	N/A	
9/16/2021	N/A	< 1	N/A	N/A	N/A	
5/10/2022	< 1	< 1	< 1	< 1	N/A	
5/10/2022	N/A	N/A	< 1	N/A	N/A	

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
Toluene, ug/L (CAS NO - 108-88-3)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	10.4
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	1.26	N/A
3/11/2020	< 1	< 1	< 1	< 1	< 1	
3/11/2020	N/A	< 1	N/A	N/A	N/A	
8/19/2020	< 1	< 1	< 1	< 1	N/A	
8/19/2020	N/A	N/A	N/A	< 1	N/A	

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Toluene, ug/L (CAS NO - 108-88-3)	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
10/23/2024	N/A	< 1	N/A	N/A	N/A	
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
5/29/2019	< 1	< 1	< 1	< 1	N/A	
5/29/2019	N/A	N/A	< 1	N/A	N/A	
8/1/2019	N/A	N/A	N/A	< 1	N/A	
9/19/2019	< 1	< 1	< 1	N/A	N/A	
9/19/2019	< 1	N/A	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
10/23/2024	< 1	< 1	< 1	< 1	N/A	
10/23/2024	N/A	< 1	N/A	N/A	N/A	
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 5	N/A	< 5	N/A	< 5
	10/12/2015	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	< 5	N/A	< 5
	4/12/2016	< 5	N/A	N/A	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	< 5	N/A	< 5	N/A	N/A
	9/23/2016	< 5	N/A	N/A	N/A	N/A
	3/21/2017	< 5	< 5	< 5	N/A	N/A
	3/21/2017	N/A	N/A	< 5	N/A	N/A
	7/24/2017	< 5	< 5	< 5	N/A	N/A
	7/24/2017	< 5	N/A	N/A	N/A	N/A
	5/15/2018	< 5	< 5	< 5	N/A	N/A
5/15/2018	< 5	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-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	8/22/2018	< 5	< 5	< 5	N/A	N/A
	8/22/2018	< 5	N/A	N/A	N/A	N/A
	5/29/2019	< 5	< 5	< 5	< 5	N/A
	5/29/2019	N/A	N/A	< 5	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 5	N/A
	9/19/2019	< 5	< 5	< 5	N/A	N/A
	9/19/2019	< 5	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 5	N/A
	1/23/2020	N/A	N/A	N/A	< 5	N/A
	3/11/2020	< 5	< 5	< 5	< 5	< 5
	3/11/2020	N/A	< 5	N/A	N/A	N/A
	8/19/2020	< 5	< 5	< 5	< 5	N/A
	8/19/2020	N/A	N/A	N/A	< 5	N/A
	3/23/2021	< 5	< 5	< 5	< 5	< 5
	3/23/2021	< 5	N/A	N/A	N/A	N/A
	9/16/2021	< 5	< 5	< 5	< 5	N/A
	9/16/2021	N/A	< 5	N/A	N/A	N/A
	5/10/2022	< 5	< 5	< 5	< 5	N/A
	5/10/2022	N/A	N/A	< 5	N/A	N/A
	9/28/2022	< 5	< 5	< 5	< 5	N/A
	9/28/2022	N/A	N/A	N/A	< 5	N/A
	3/7/2023	< 5	< 5	< 5	< 5	N/A
	3/7/2023	N/A	N/A	N/A	< 5	N/A
	9/26/2023	< 5	< 5	< 5	< 5	N/A
	9/26/2023	< 5	N/A	N/A	N/A	N/A
	5/29/2024	< 5	< 5	< 5	< 5	< 5
	5/29/2024	N/A	< 5	N/A	N/A	N/A
	10/23/2024	< 5	< 5	< 5	< 5	N/A
10/23/2024	N/A	< 5	N/A	N/A	N/A	
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	2/21/2008	< 20	N/A	N/A	N/A	N/A
	4/17/2008	< 20	< 20	N/A	N/A	N/A
	6/19/2008	< 20	< 20	N/A	N/A	N/A
	8/7/2008	< 20	< 20	N/A	N/A	N/A
	10/1/2008	< 20	< 20	N/A	N/A	N/A
	12/2/2008	< 20	< 20	N/A	N/A	N/A
	4/15/2009	< 20	< 20	N/A	N/A	N/A
	10/19/2009	< 20	< 20	< 20	N/A	N/A
	5/20/2010	< 20	< 20	< 20	N/A	N/A
	10/1/2010	< 20	< 20	< 20	N/A	N/A
	4/29/2011	< 20	< 20	< 20	N/A	N/A
	9/28/2011	< 20	< 20	< 20	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
	9/16/2021	N/A	< 10	N/A	N/A	N/A
	5/10/2022	< 10	< 10	< 10	< 10	N/A
	5/10/2022	N/A	N/A	< 10	N/A	N/A
	9/28/2022	< 10	< 10	< 10	< 10	N/A
	9/28/2022	N/A	N/A	N/A	< 10	N/A
	3/7/2023	< 10	< 10	< 10	< 10	N/A
	3/7/2023	N/A	N/A	N/A	< 10	N/A
	9/26/2023	< 10	< 10	< 10	< 10	N/A
	9/26/2023	< 10	N/A	N/A	N/A	N/A
	5/29/2024	< 10	< 10	< 10	< 10	< 10
	5/29/2024	N/A	< 10	N/A	N/A	N/A
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	
Trichloroethene, ug/L (CAS NO - 79-01-6)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1



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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Trichloroethene, ug/L (CAS NO - 79-01-6)	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A
	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
10/23/2024	N/A	< 1	N/A	N/A	N/A	
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A

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## Summary of Groundwater Chemistry

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Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 4	N/A	< 4	N/A	< 4
	10/12/2015	< 4	N/A	< 4	N/A	< 4
	4/12/2016	< 4	N/A	< 4	N/A	< 4
	4/12/2016	< 4	N/A	N/A	N/A	N/A
	6/21/2016	< 4	N/A	N/A	N/A	N/A
	9/23/2016	< 4	N/A	< 4	N/A	N/A
	9/23/2016	< 4	N/A	N/A	N/A	N/A
	3/21/2017	< 4	< 4	< 4	N/A	N/A
	3/21/2017	N/A	N/A	< 4	N/A	N/A
	7/24/2017	< 4	< 4	< 4	N/A	N/A
	7/24/2017	< 4	N/A	N/A	N/A	N/A
	5/15/2018	< 4	< 4	< 4	N/A	N/A
	5/15/2018	< 4	N/A	N/A	N/A	N/A
	8/22/2018	< 4	< 4	< 4	N/A	N/A
	8/22/2018	< 4	N/A	N/A	N/A	N/A
	5/29/2019	< 4	< 4	< 4	< 4	N/A
	5/29/2019	N/A	N/A	< 4	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 4	N/A
	9/19/2019	< 4	< 4	< 4	N/A	N/A
	9/19/2019	< 4	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 4	N/A
	1/23/2020	N/A	N/A	N/A	< 4	N/A
	3/11/2020	< 4	< 4	< 4	< 4	< 4
	3/11/2020	N/A	< 4	N/A	N/A	N/A
	8/19/2020	< 4	< 4	< 4	< 4	N/A
	8/19/2020	N/A	N/A	N/A	< 4	N/A
	3/23/2021	< 4	< 4	< 4	< 4	< 4
	3/23/2021	< 4	N/A	N/A	N/A	N/A
	9/16/2021	< 4	< 4	< 4	< 4	N/A
	9/16/2021	N/A	< 4	N/A	N/A	N/A
	5/10/2022	< 4	< 4	< 4	< 4	N/A
	5/10/2022	N/A	N/A	< 4	N/A	N/A
	9/28/2022	< 4	< 4	< 4	< 4	N/A
	9/28/2022	N/A	N/A	N/A	< 4	N/A
	3/7/2023	< 4	< 4	< 4	< 4	N/A
3/7/2023	N/A	N/A	N/A	< 4	N/A	
9/26/2023	< 4	< 4	< 4	< 4	N/A	
9/26/2023	< 4	N/A	N/A	N/A	N/A	
5/29/2024	< 4	< 4	< 4	< 4	< 4	
5/29/2024	N/A	< 4	N/A	N/A	N/A	
10/23/2024	< 4	< 4	< 4	< 4	N/A	
10/23/2024	N/A	< 4	N/A	N/A	N/A	
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 5	< 5	< 5	N/A	N/A
	10/24/2012	< 5	< 5	< 5	N/A	N/A
	5/7/2013	< 5	< 5	< 5	N/A	N/A
	10/18/2013	< 5	< 5	< 5	N/A	N/A
	3/25/2014	< 5	< 5	< 5	N/A	N/A
	9/30/2014	< 5	< 5	< 5	N/A	N/A
	4/15/2015	< 10	N/A	< 10	N/A	< 10
	10/12/2015	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	< 10	N/A	< 10
	4/12/2016	< 10	N/A	N/A	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	< 10	N/A	< 10	N/A	N/A
	9/23/2016	< 10	N/A	N/A	N/A	N/A
	3/21/2017	< 10	< 10	< 10	N/A	N/A
	3/21/2017	N/A	N/A	< 10	N/A	N/A
	7/24/2017	< 10	< 10	< 10	N/A	N/A
	7/24/2017	< 10	N/A	N/A	N/A	N/A
	5/15/2018	< 10	< 10	< 10	N/A	N/A
	5/15/2018	< 10	N/A	N/A	N/A	N/A
	8/22/2018	< 10	< 10	< 10	N/A	N/A
	8/22/2018	< 10	N/A	N/A	N/A	N/A
	5/29/2019	< 10	< 10	< 10	< 10	N/A
	5/29/2019	N/A	N/A	< 10	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 10	N/A
	9/19/2019	< 10	< 10	< 10	N/A	N/A
	9/19/2019	< 10	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 10	N/A
	1/23/2020	N/A	N/A	N/A	< 10	N/A
	3/11/2020	< 10	< 10	< 10	< 10	< 10
	3/11/2020	N/A	< 10	N/A	N/A	N/A
	8/19/2020	< 10	< 10	< 10	< 10	N/A
	8/19/2020	N/A	N/A	N/A	< 10	N/A
	3/23/2021	< 10	< 10	< 10	< 10	< 10
	3/23/2021	< 10	N/A	N/A	N/A	N/A
	9/16/2021	< 10	< 10	< 10	< 10	N/A
9/16/2021	N/A	< 10	N/A	N/A	N/A	
5/10/2022	< 10	< 10	< 10	< 10	N/A	
5/10/2022	N/A	N/A	< 10	N/A	N/A	
9/28/2022	< 10	< 10	< 10	< 10	N/A	
9/28/2022	N/A	N/A	N/A	< 10	N/A	
3/7/2023	< 10	< 10	< 10	< 10	N/A	
3/7/2023	N/A	N/A	N/A	< 10	N/A	
9/26/2023	< 10	< 10	< 10	< 10	N/A	
9/26/2023	< 10	N/A	N/A	N/A	N/A	
5/29/2024	< 10	< 10	< 10	< 10	< 10	
5/29/2024	N/A	< 10	N/A	N/A	N/A	
10/23/2024	< 10	< 10	< 10	< 10	N/A	
10/23/2024	N/A	< 10	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 1	< 1	< 1	N/A	N/A
	10/24/2012	< 1	< 1	< 1	N/A	N/A
	5/7/2013	< 1	< 1	< 1	N/A	N/A
	10/18/2013	< 1	< 1	< 1	N/A	N/A
	3/25/2014	< 1	< 1	< 1	N/A	N/A
	9/30/2014	< 1	< 1	< 1	N/A	N/A
	4/15/2015	< 1	N/A	< 1	N/A	< 1
	10/12/2015	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	< 1	N/A	< 1
	4/12/2016	< 1	N/A	N/A	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	< 1	N/A	< 1	N/A	N/A
	9/23/2016	< 1	N/A	N/A	N/A	N/A
	3/21/2017	< 1	< 1	< 1	N/A	N/A
	3/21/2017	N/A	N/A	< 1	N/A	N/A
	7/24/2017	< 1	< 1	< 1	N/A	N/A
	7/24/2017	< 1	N/A	N/A	N/A	N/A
	5/15/2018	< 1	< 1	< 1	N/A	N/A
	5/15/2018	< 1	N/A	N/A	N/A	N/A
	8/22/2018	< 1	< 1	< 1	N/A	N/A
	8/22/2018	< 1	N/A	N/A	N/A	N/A
	5/29/2019	< 1	< 1	< 1	< 1	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 1	N/A
	9/19/2019	< 1	< 1	< 1	N/A	N/A
	9/19/2019	< 1	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 1	N/A
	1/23/2020	N/A	N/A	N/A	< 1	N/A
	3/11/2020	< 1	< 1	< 1	< 1	< 1
	3/11/2020	N/A	< 1	N/A	N/A	N/A
	8/19/2020	< 1	< 1	< 1	< 1	N/A
	8/19/2020	N/A	N/A	N/A	< 1	N/A
	3/23/2021	< 1	< 1	< 1	< 1	< 1
	3/23/2021	< 1	N/A	N/A	N/A	N/A
	9/16/2021	< 1	< 1	< 1	< 1	N/A
	9/16/2021	N/A	< 1	N/A	N/A	N/A
	5/10/2022	< 1	< 1	< 1	< 1	N/A
	5/10/2022	N/A	N/A	< 1	N/A	N/A
	9/28/2022	< 1	< 1	< 1	< 1	N/A
	9/28/2022	N/A	N/A	N/A	< 1	N/A
	3/7/2023	< 1	< 1	< 1	< 1	N/A
	3/7/2023	N/A	N/A	N/A	< 1	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	9/26/2023	< 1	< 1	< 1	< 1	N/A
	9/26/2023	< 1	N/A	N/A	N/A	N/A
	5/29/2024	< 1	< 1	< 1	< 1	< 1
	5/29/2024	N/A	< 1	N/A	N/A	N/A
	10/23/2024	< 1	< 1	< 1	< 1	N/A
	10/23/2024	N/A	< 1	N/A	N/A	N/A
Xylenes, total, ug/L (CAS NO - 1330-20-7)	2/21/2008	< 5	N/A	N/A	N/A	N/A
	4/17/2008	< 5	< 5	N/A	N/A	N/A
	6/19/2008	< 5	< 5	N/A	N/A	N/A
	8/7/2008	< 5	< 5	N/A	N/A	N/A
	10/1/2008	< 5	< 5	N/A	N/A	N/A
	12/2/2008	< 5	< 5	N/A	N/A	N/A
	4/15/2009	< 5	< 5	N/A	N/A	N/A
	10/19/2009	< 5	< 5	< 5	N/A	N/A
	5/20/2010	< 5	< 5	< 5	N/A	N/A
	10/1/2010	< 5	< 5	< 5	N/A	N/A
	4/29/2011	< 5	< 5	< 5	N/A	N/A
	9/28/2011	< 5	< 5	< 5	N/A	N/A
	4/26/2012	< 2	< 2	< 2	N/A	N/A
	10/24/2012	< 2	< 2	< 2	N/A	N/A
	5/7/2013	< 2	< 2	< 2	N/A	N/A
	10/18/2013	< 2	< 2	< 2	N/A	N/A
	3/25/2014	< 2	< 2	< 2	N/A	N/A
	9/30/2014	< 2	< 2	< 2	N/A	N/A
	4/15/2015	< 3	N/A	< 3	N/A	< 3
	10/12/2015	< 3	N/A	< 3	N/A	< 3
	4/12/2016	< 3	N/A	< 3	N/A	< 3
	4/12/2016	< 3	N/A	N/A	N/A	N/A
	6/21/2016	< 3	N/A	N/A	N/A	N/A
	9/23/2016	< 3	N/A	< 3	N/A	N/A
	9/23/2016	< 3	N/A	N/A	N/A	N/A
	3/21/2017	< 3	< 3	0.158*	N/A	N/A
	3/21/2017	N/A	N/A	0.187*	N/A	N/A
	7/24/2017	< 3	< 3	< 3	N/A	N/A
	7/24/2017	< 3	N/A	N/A	N/A	N/A
	5/15/2018	< 3	< 3	< 3	N/A	N/A
	5/15/2018	< 3	N/A	N/A	N/A	N/A
	8/22/2018	< 3	< 3	< 3	N/A	N/A
	8/22/2018	< 3	N/A	N/A	N/A	N/A
	5/29/2019	< 3	< 3	< 3	< 3	N/A
	5/29/2019	N/A	N/A	< 3	N/A	N/A
	8/1/2019	N/A	N/A	N/A	< 3	N/A
	9/19/2019	< 3	< 3	< 3	N/A	N/A
	9/19/2019	< 3	N/A	N/A	N/A	N/A
	10/10/2019	N/A	N/A	N/A	< 3	N/A
	1/23/2020	N/A	N/A	N/A	2.25*	N/A
3/11/2020	< 3	< 3	< 3	0.645*	< 3	
3/11/2020	N/A	< 3	N/A	N/A	N/A	
8/19/2020	< 3	< 3	< 3	< 3	N/A	
8/19/2020	N/A	N/A	N/A	< 3	N/A	
3/23/2021	< 3	< 3	< 3	< 3	< 3	
3/23/2021	< 3	N/A	N/A	N/A	N/A	
9/16/2021	< 3	< 3	< 3	< 3	N/A	
9/16/2021	N/A	< 3	N/A	N/A	N/A	

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	5/10/2022	< 3	< 3	< 3	< 3	N/A
	5/10/2022	N/A	N/A	< 3	N/A	N/A
	9/28/2022	< 3	< 3	< 3	< 3	N/A
	9/28/2022	N/A	N/A	N/A	< 3	N/A
	3/7/2023	< 3	< 3	< 3	< 3	N/A
	3/7/2023	N/A	N/A	N/A	< 3	N/A
	9/26/2023	< 3	< 3	< 3	< 3	N/A
	9/26/2023	< 3	N/A	N/A	N/A	N/A
	5/29/2024	< 3	< 3	< 3	< 3	< 3
	5/29/2024	N/A	< 3	N/A	N/A	N/A
	10/23/2024	< 3	< 3	< 3	< 3	N/A
	10/23/2024	N/A	< 3	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

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	10/12/2015	N/A	N/A	< 1	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1	N/A	N/A
	3/21/2017	< 1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1	N/A	N/A
	5/10/2022	< 1	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	10/12/2015	N/A	N/A	< 5	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 5	N/A	N/A
	3/21/2017	< 5	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 5	N/A	N/A
	5/10/2022	< 5	N/A	N/A	N/A	N/A
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	10/12/2015	N/A	N/A	< 1	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1	N/A	N/A
	3/21/2017	< 1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1	N/A	N/A
	5/10/2022	< 1	N/A	N/A	N/A	N/A
1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	10/12/2015	N/A	N/A	< 1	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1	N/A	N/A
	3/21/2017	< 1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1	N/A	N/A
	5/10/2022	< 1	N/A	N/A	N/A	N/A
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

Cherokee County Solid Waste Commission - 18-SDP-01-75P

Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	10/12/2015	N/A	N/A	< 4	N/A	N/A
	6/21/2016	< 4	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 4	N/A	N/A
	3/21/2017	< 4	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 4	N/A	N/A
	5/10/2022	< 4	N/A	N/A	N/A	N/A
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	10/12/2015	N/A	N/A	< 1.06	N/A	N/A
	6/21/2016	< 1.04	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1.13	N/A	N/A
	3/21/2017	< 1.1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1.08	N/A	N/A
	5/10/2022	< 0.15	N/A	N/A	N/A	N/A
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	10/12/2015	N/A	N/A	< 1.06	N/A	N/A
	6/21/2016	< 1.04	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1.13	N/A	N/A
	3/21/2017	< 1.1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1.08	N/A	N/A
	5/10/2022	< 0.0501	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,4-D [2C], ug/L (CAS NO - 94-75-7)	10/12/2015	N/A	N/A	< 1.06	N/A	N/A
	6/21/2016	< 1.04	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1.13	N/A	N/A
	3/21/2017	< 1.1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1.08	N/A	N/A
	5/10/2022	< 0.601	N/A	N/A	N/A	N/A
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A



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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	10/12/2015	N/A	N/A	< 20.6	N/A	N/A
	6/21/2016	< 20	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 20.8	N/A	N/A
	3/21/2017	< 21.7	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 21.5	N/A	N/A
	5/10/2022	< 20	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
2-Methylphenol, ug/L (CAS NO - 95-48-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Naphthylamine, ug/L (CAS NO - 91-59-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	10/12/2015	N/A	N/A	< 51.5	N/A	N/A
	6/21/2016	< 50	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 52.1	N/A	N/A
	3/21/2017	< 54.3	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	0.315*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
3-Chloropropene, ug/L (CAS NO - 107-05-1)	10/12/2015	N/A	N/A	< 2	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 2	N/A	N/A
	3/21/2017	< 2	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 2	N/A	N/A
	5/10/2022	< 2	N/A	N/A	N/A	N/A
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4,4`-DDD, ug/L (CAS NO - 72-54-8)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	0.00838*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
4,4`-DDE, ug/L (CAS NO - 72-55-9)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
4,4`-DDT, ug/L (CAS NO - 50-29-3)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
4-Nitrophenol, ug/L (CAS NO - 100-02-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Acenaphthene, ug/L (CAS NO - 83-32-9)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Acenaphthylene, ug/L (CAS NO - 208-96-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Acetonitrile, ug/L (CAS NO - 75-05-8)	10/12/2015	N/A	N/A	< 10000	N/A	N/A
	6/21/2016	< 10000	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10000	N/A	N/A
	3/21/2017	< 10000	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10000	N/A	N/A
	5/10/2022	< 10000	N/A	N/A	N/A	N/A
Acetophenone, ug/L (CAS NO - 98-86-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Acrolein, ug/L (CAS NO - 107-02-8)	10/12/2015	N/A	N/A	< 10	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10	N/A	N/A
	3/21/2017	< 10	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Aldrin, ug/L (CAS NO - 309-00-2)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Anthracene, ug/L (CAS NO - 120-12-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	0.266*	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	0.484*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Alpha-BHC, ug/L (CAS NO - 319-84-6)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Beta-BHC, ug/L (CAS NO - 319-85-7)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	0.00608*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Delta-BHC, ug/L (CAS NO - 319-86-8)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	10/12/2015	N/A	N/A	8.73*	N/A	N/A
	6/21/2016	4.94*	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	0.995*	N/A	N/A
	3/21/2017	2.03*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	10/12/2015	N/A	N/A	1.8*	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Chlordane, ug/L (CAS NO - 57-74-9)	10/12/2015	N/A	N/A	< 2.04	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.5	N/A	N/A
	3/21/2017	< 2.2	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 2.13	N/A	N/A
	5/10/2022	< 2	N/A	N/A	N/A	N/A
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Chloroprene, ug/L (CAS NO - 126-99-8)	10/12/2015	N/A	N/A	< 1	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 1	N/A	N/A
	3/21/2017	< 1	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 1	N/A	N/A
	5/10/2022	< 1	N/A	N/A	N/A	N/A
Chrysene, ug/L (CAS NO - 218-01-9)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Cyanide, mg/L (CAS NO - 57-12-5)	10/12/2015	N/A	N/A	< 0.01	N/A	N/A
	6/21/2016	< 0.01	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.01	N/A	N/A
	3/21/2017	< 0.01	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.01	N/A	N/A
	5/10/2022	< 0.01	N/A	N/A	N/A	N/A
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dibenzofuran, ug/L (CAS NO - 132-64-9)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	10/12/2015	N/A	N/A	< 3	N/A	N/A
	6/21/2016	< 3	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 3	N/A	N/A
	3/21/2017	< 3	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 3	N/A	N/A
	5/10/2022	< 3	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Dieldrin, ug/L (CAS NO - 60-57-1)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dimethoate, ug/L (CAS NO - 60-51-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	10/12/2015	N/A	N/A	< 20.6	N/A	N/A
	6/21/2016	< 20	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 20.8	N/A	N/A
	3/21/2017	< 21.7	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 21.5	N/A	N/A
	5/10/2022	< 20	N/A	N/A	N/A	N/A
Dinoseb, ug/L (CAS NO - 88-85-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Diphenylamine, ug/L (CAS NO - 122-39-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A



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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Disulfoton, ug/L (CAS NO - 298-04-4)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Endosulfan I, ug/L (CAS NO - 959-98-8)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Endosulfan II, ug/L (CAS NO - 33213-65-9)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Endrin, ug/L (CAS NO - 72-20-8)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	10/12/2015	N/A	N/A	0.195	N/A	N/A
	3/2/2016	N/A	N/A	0.304	N/A	N/A
	4/12/2016	N/A	N/A	0.339	N/A	N/A
	6/21/2016	< 0.032	N/A	0.251	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	< 0.0356	N/A	N/A
	7/24/2017	0.0194*	N/A	N/A	N/A	N/A
	9/20/2017	N/A	N/A	< 0.034	N/A	N/A
	5/15/2018	N/A	N/A	< 0.0333	N/A	N/A
	8/22/2018	N/A	N/A	< 0.0337	N/A	N/A
	5/29/2019	N/A	N/A	< 0.0337	N/A	N/A
	9/19/2019	N/A	N/A	< 0.0337	N/A	N/A
	3/11/2020	N/A	N/A	< 0.0344	N/A	N/A
	8/19/2020	N/A	N/A	< 0.0337	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
9/16/2021	N/A	N/A	< 0.0337	N/A	N/A	
5/10/2022	< 0.064	N/A	< 0.064	N/A	N/A	
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	10/12/2015	N/A	N/A	< 2	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 2	N/A	N/A
	3/21/2017	< 2	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 2	N/A	N/A
	5/10/2022	< 2	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Famphur, ug/L (CAS NO - 52-85-7)	10/12/2015	N/A	N/A	< 20.6	N/A	N/A
	6/21/2016	< 20	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 20.8	N/A	N/A
	3/21/2017	< 21.7	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Fluoranthene, ug/L (CAS NO - 206-44-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Fluorene, ug/L (CAS NO - 86-73-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Heptachlor, ug/L (CAS NO - 76-44-8)	10/12/2015	N/A	N/A	0.00572*	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	0.00647*	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	10/12/2015	N/A	N/A	< 20.6	N/A	N/A
	6/21/2016	< 20	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 20.8	N/A	N/A
	3/21/2017	< 21.7	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Hexachloroethane, ug/L (CAS NO - 67-72-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Isobutanol, mg/L (CAS NO - 78-83-1)	10/12/2015	N/A	N/A	< 10	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10	N/A	N/A
	3/21/2017	< 10	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Isodrin, ug/L (CAS NO - 465-73-6)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Isophorone, ug/L (CAS NO - 78-59-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Isosafrole, ug/L (CAS NO - 120-58-1)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Kepone, ug/L (CAS NO - 143-50-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Methacrylonitrile, ug/L (CAS NO - 126-98-7)	10/12/2015	N/A	N/A	< 10	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10	N/A	N/A
	3/21/2017	< 10	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
<b>Methapyrilene, ug/L (CAS NO - 91-80-5)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>Methoxychlor, ug/L (CAS NO - 72-43-5)</b>	10/12/2015	N/A	N/A	< 0.0327	N/A	N/A
	6/21/2016	< 0.032	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.168	N/A	N/A
	3/21/2017	< 0.0352	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.034	N/A	N/A
	5/10/2022	< 0.064	N/A	N/A	N/A	N/A
<b>Methyl Methacrylate, ug/L (CAS NO - 80-62-6)</b>	10/12/2015	N/A	N/A	< 2	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 2	N/A	N/A
	3/21/2017	< 2	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 2	N/A	N/A
	5/10/2022	< 2	N/A	N/A	N/A	N/A
<b>Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>Naphthalene, ug/L (CAS NO - 91-20-3)</b>	10/12/2015	N/A	N/A	< 5	N/A	N/A
	6/21/2016	< 5	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 5	N/A	N/A
	3/21/2017	< 5	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 5	N/A	N/A
	5/10/2022	< 5	N/A	N/A	N/A	N/A
<b>Nitrobenzene, ug/L (CAS NO - 98-95-3)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
<b>N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>O-Toluidine, ug/L (CAS NO - 95-53-4)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>Parathion-Ethyl, ug/L (CAS NO - 56-38-2)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
<b>Parathion-Methyl, ug/L (CAS NO - 298-00-0)</b>	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
PCB-1016, ug/L (CAS NO - 12674-11-2)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1221, ug/L (CAS NO - 11104-28-2)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1232, ug/L (CAS NO - 11141-16-5)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1242, ug/L (CAS NO - 53469-21-9)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1248, ug/L (CAS NO - 12672-29-6)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1254, ug/L (CAS NO - 11097-69-1)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
PCB-1260, ug/L (CAS NO - 11096-82-5)	10/12/2015	N/A	N/A	< 0.8	N/A	N/A
	6/21/2016	< 0.8	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 0.833	N/A	N/A
	3/21/2017	< 0.87	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 0.851	N/A	N/A
	5/10/2022	< 0.8	N/A	N/A	N/A	N/A
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Phenacetin, ug/L (CAS NO - 62-44-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Phenanthrene, ug/L (CAS NO - 85-01-8)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Phenol, ug/L (CAS NO - 108-95-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Phorate, ug/L (CAS NO - 298-02-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Pronamide, ug/L (CAS NO - 23950-58-5)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Propionitrile, ug/L (CAS NO - 107-12-0)	10/12/2015	N/A	N/A	< 10	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10	N/A	N/A
	3/21/2017	< 10	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Pyrene, ug/L (CAS NO - 129-00-0)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Safrole, ug/L (CAS NO - 94-59-7)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A

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## Summary of Groundwater Chemistry

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Other Constituents	Sample Date	MW-16 DNG	MW-27 DNG	MW-35 DNG	MW-42R DNG	GWD-2 DNG
Sulfide, mg/L (CAS NO - 18496-25-8)	10/12/2015	N/A	N/A	< 1	N/A	N/A
	6/21/2016	< 1	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	11.3	N/A	N/A
	12/12/2016	N/A	N/A	6.64	N/A	N/A
	3/21/2017	< 1	N/A	N/A	N/A	N/A
	9/20/2017	N/A	N/A	< 1	N/A	N/A
	2/14/2018	N/A	N/A	< 1	N/A	N/A
	5/15/2018	N/A	N/A	< 1.42	N/A	N/A
	8/22/2018	N/A	N/A	< 1	N/A	N/A
	5/29/2019	N/A	N/A	< 1	N/A	N/A
	9/19/2019	N/A	N/A	< 1	N/A	N/A
	3/11/2020	N/A	N/A	< 1	N/A	N/A
	8/19/2020	N/A	N/A	10.4	N/A	N/A
	3/23/2021	N/A	N/A	< 10	N/A	N/A
	9/16/2021	N/A	N/A	< 1	N/A	N/A
	5/10/2022	< 1	N/A	< 1	N/A	N/A
9/28/2022	N/A	N/A	< 1	N/A	N/A	
3/7/2023	N/A	N/A	< 1	N/A	N/A	
9/26/2023	N/A	N/A	< 1	N/A	N/A	
Thionazin, ug/L (CAS NO - 297-97-2)	10/12/2015	N/A	N/A	< 10.3	N/A	N/A
	6/21/2016	< 10	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.4	N/A	N/A
	3/21/2017	< 10.9	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 10.8	N/A	N/A
	5/10/2022	< 10	N/A	N/A	N/A	N/A
Toxaphene, ug/L (CAS NO - 8001-35-2)	10/12/2015	N/A	N/A	< 2.04	N/A	N/A
	6/21/2016	< 2	N/A	N/A	N/A	N/A
	9/23/2016	N/A	N/A	< 10.5	N/A	N/A
	3/21/2017	< 2.2	N/A	N/A	N/A	N/A
	3/23/2021	N/A	N/A	< 2.13	N/A	N/A
	5/10/2022	< 2	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.



Appendix D  
Statistical Method and Output

## Statistical Method and Output

### Purpose

The purpose of this document is to provide the statistical evaluation of groundwater analytical data collected from the groundwater monitoring networks of both the Closed municipal solid waste landfill (MSWLF) unit and the Open MSWLF unit at the Cherokee County Sanitary Landfill (Landfill).

### Diagnostic and Exploratory Evaluations and Tests of Assumptions

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

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

### Management of Non-Detect Data

Non-detect values in the dataset are managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data are non-detect, simple substitution is used, where non-detect values are 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 are non-detect, the Kaplan-Meier estimator is used to define the distribution for the dataset. If non-detects comprise greater than 50% of the available data, non-parametric statistical methods are used.

### Management of Outliers

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

### Management of Data (ND data < 75%)

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

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

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

### Management of Data (ND data $\geq$ 75%)

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

- Single detection  $\geq$  the PQL:
  - If  $\geq 50\%$  of the background dataset has detections  $\geq$  the method detection limit (MDL), any value  $\geq$  two times the PQL of background is considered an outlier.
  - If  $< 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  the PQL of background is considered an outlier.
- Two or more detections  $\geq$  the PQL:
  - If  $\geq 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  three times the PQL of background is considered an outlier.
  - If  $< 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  two times the PQL of background is considered an outlier.

Confirmed outliers, if any, are shown in the Summary of Groundwater Chemistry included in the Annual Water Quality Report.

#### ***Management of Data (ND data $\geq 75\%$ )***

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

- Single detection  $\geq$  the PQL:
  - If  $\geq 50\%$  of the background dataset has detections  $\geq$  the method detection limit (MDL), any value  $\geq$  two times the PQL of background is considered an outlier.
  - If  $< 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  the PQL of background is considered an outlier.
- Two or more detections  $\geq$  the PQL:
  - If  $\geq 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  three times the PQL of background is considered an outlier.
  - If  $< 50\%$  of the background dataset has detections  $\geq$  the MDL, any value  $\geq$  two times the PQL of background is considered an outlier.

Confirmed outliers, if any, are shown in the Summary of Groundwater Chemistry included in the Annual Water Quality Report.

#### ***Detection Monitoring Statistical Program***

##### **Closed MSWLF Unit**

The detection monitoring statistical program for the Closed MSWLF unit 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 historical detections in background. Prediction limits are established using the process below. Data from the most recent sampling event is compared to the prediction limits for the determination of SSIs.

##### ***Interwell Prediction Limits with Retesting***

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric

interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).

- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-2 retesting scheme 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 is used for constituents not detected in the associated background data set. If a constituent is detected in the compliance dataset that has not been historically detected in the background dataset, that constituent must be retested before the next regularly scheduled sampling event. If the retesting results confirm the original detection with a quantifiable detection, the SSI is confirmed, and the monitoring point must be placed into the assessment monitoring program.

### **Open MSWLF Unit**

The detection monitoring statistical program for the Open MSWLF unit is defined by Iowa Administrative Code (IAC) 567-113.10(4)“g.” Intrawell prediction limits with retesting were selected as the appropriate statistical method for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historical detections in the background dataset. Monitoring well MW-15C in the Closed MSWLF unit is also evaluated with intrawell prediction limits. Prediction limits are established using the process below. Data from the most recent sampling event is compared to the prediction limits for the determination of SSIs.

### **Intrawell Prediction Limits with Retesting**

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If an SSI above the prediction limit is 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 or the discharge treated with the leachate for groundwater underdrain discharge points. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

### **Updating the Background Dataset for Intrawell Prediction Limits**

If no SSI is confirmed for any two-year period, the intrawell background dataset will be updated using the following procedure:

- Test for normality (normal distribution) of the dataset either outright or through a transformation using Ladder of Powers:
  - Shapiro-Wilk test
- Test for statistically significant trends:
  - Mann-Kendall/Sen's Slope trend test

If an increasing trend is detected, the monitoring point will be placed into the assessment monitoring program or the discharge treated with the leachate for groundwater underdrain discharge points.

- If the dataset has a normal distribution and no trend is present, conduct a two-sample Welch's t-test at a 0.01 significance level to compare current background to the most recent two years of detection monitoring data.

If Welch's t-test test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.

- If the dataset does not have a normal distribution and no trend is present, conduct a two-sample non-parametric Wilcoxon rank-sum test (also known as the Mann-Whitney test) at a 0.01 significance level to compare current background to the most recent two years of detection monitoring data.

If the Wilcoxon rank-sum test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.

- If the Welch's t-test and the Wilcoxon rank-sum test are not significant, the most recent two years of detection monitoring data will be added to the intrawell background dataset.
- Establish prediction limits based on the updated intrawell background dataset.

The process will repeat every two years in which an SSI is not confirmed.

### **Double Quantification Method**

The quasi-statistical "double quantification" method is used for constituents not detected in the associated background data set. If a constituent is detected in the compliance dataset that has not been historically detected in the background dataset, that constituent must be retested before the next regularly scheduled sampling event. If the retesting results confirm the original detection with a quantifiable detection, the SSI is confirmed, and the monitoring point must be placed into the assessment monitoring program.

### **Assessment Monitoring/Corrective Action Statistical Program**

#### **Closed and Open MSWLF Units**

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/corrective action statistical evaluations are 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/ corrective action statistical evaluation are established using the process below. Transformation of the distribution is not considered.

#### **Confidence Intervals or Confidence Bands**

- A parametric confidence interval around a normal mean is calculated if the dataset has a normal distribution and no statistically significant trend is present.

- A non-parametric confidence interval around a median is calculated if the dataset does not have a normal distribution and no statistically significant trend is present.
- Non-parametric confidence bands around a Theil-Sen trend line are calculated if the dataset has a statistically significant trend.

If the lower confidence limit or any part of the lower confidence band, as appropriate, exceeds the GWPS, then the monitoring point is declared out of compliance, and an assessment of corrective measures (ACM) is required. An ACM for the Closed MSWLF unit was approved in the revised permit dated March 31, 2021 (Doc #100117).

**Statistical Software Output**

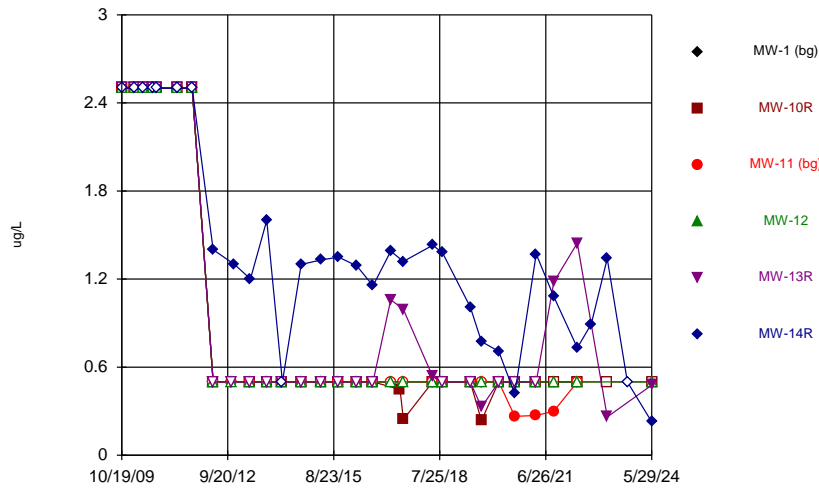
Sanitas™ statistical software was used to perform the statistical evaluations. The statistical outputs for the 1<sup>st</sup> and 2<sup>nd</sup> 2024 statistical evaluations are included in Attachments A and B of this appendix, respectively.

**Attachment A**  
**1<sup>st</sup> 2024 Statistical Evaluation Output**

## **Time Series Plots – Closed MSWLF Unit**

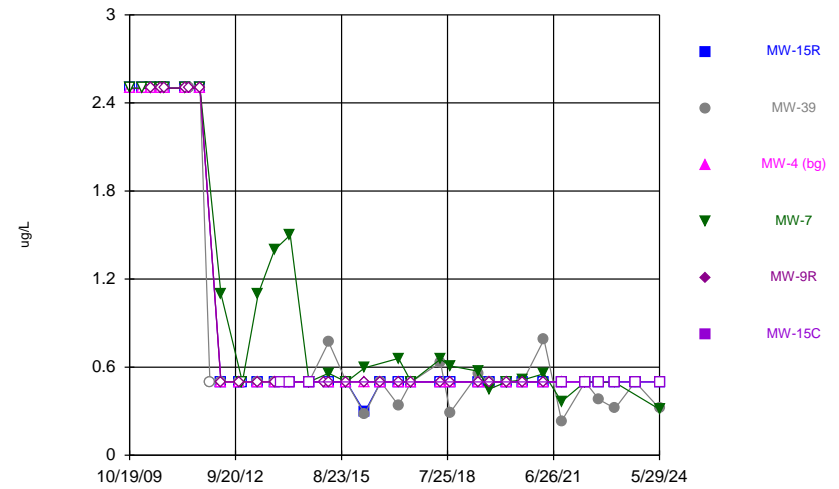


Time Series



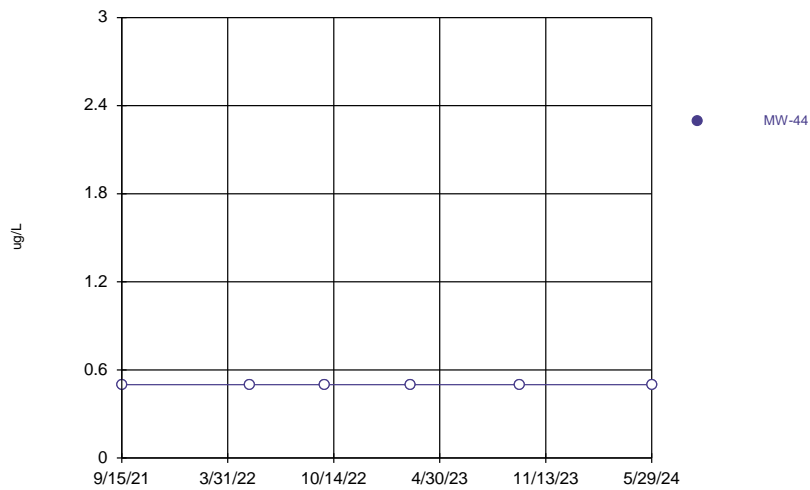
Constituent: 1,1-Dichloroethane Analysis Run 9/12/2024 2:01 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



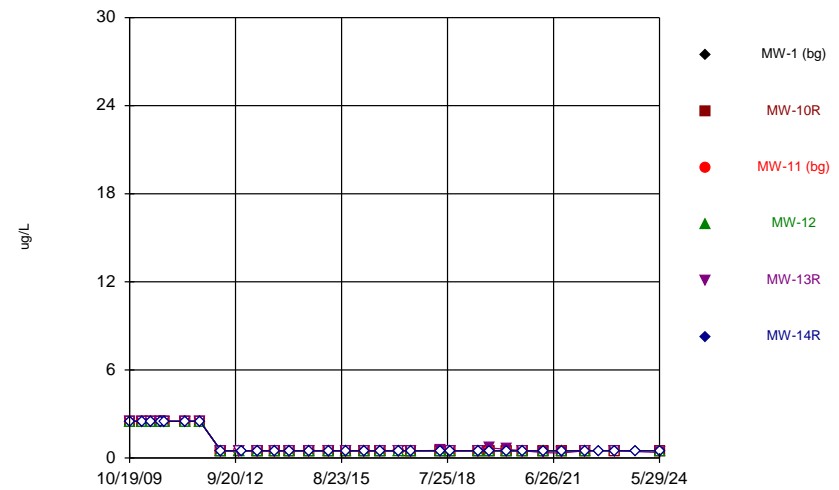
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



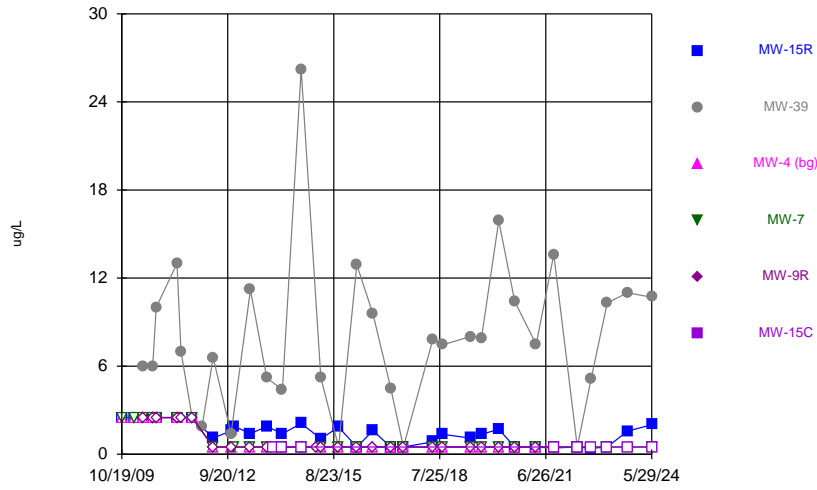
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



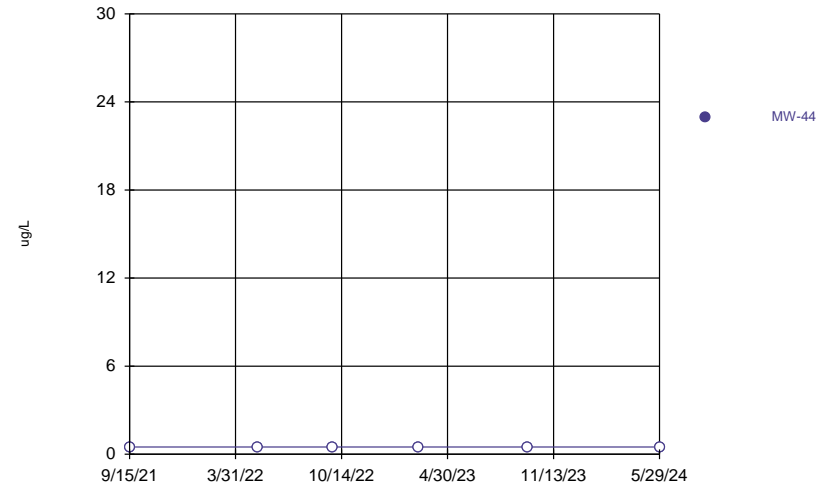
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



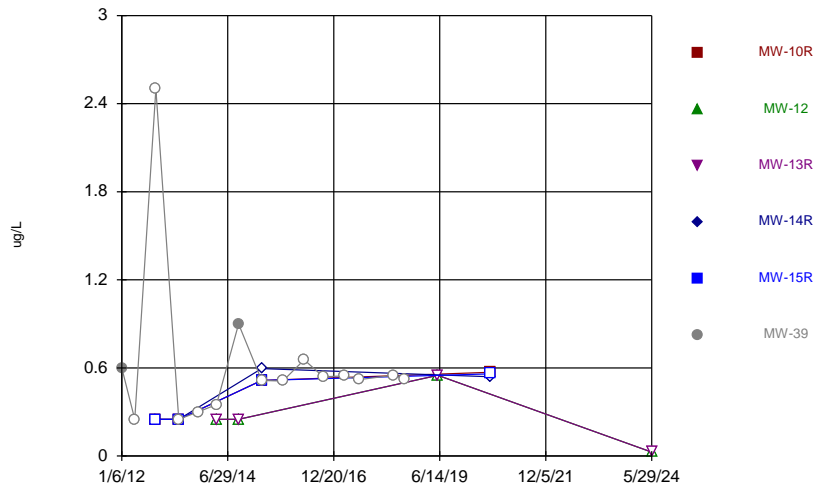
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



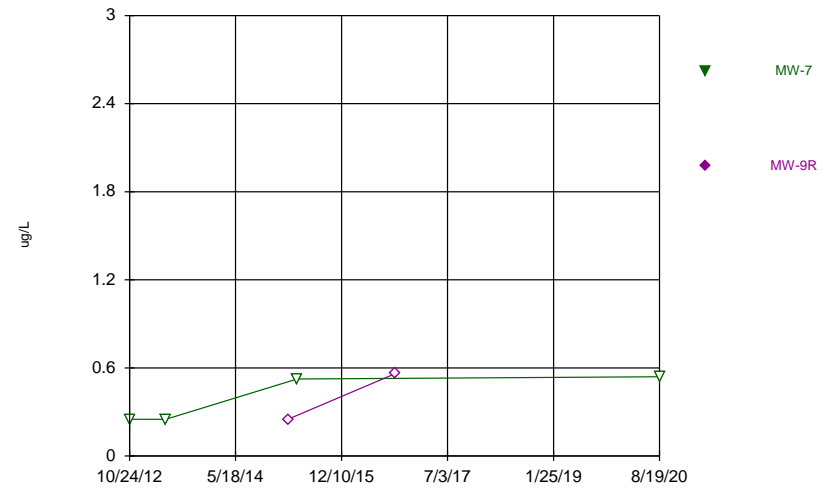
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



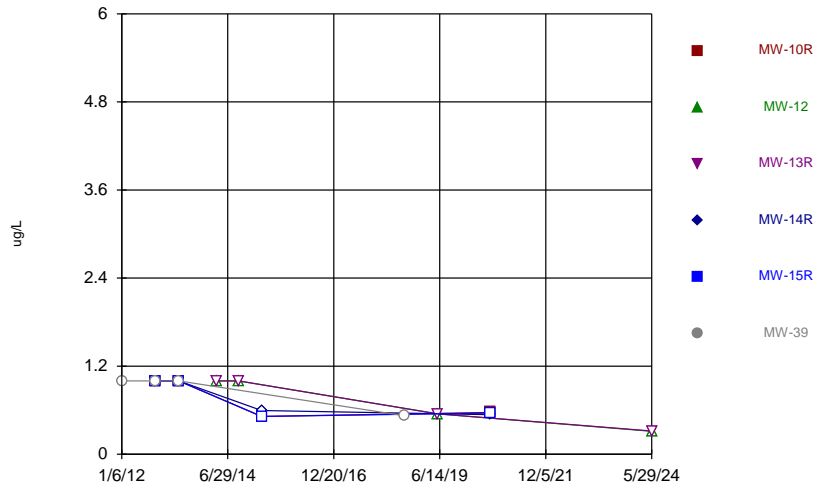
Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 9/12/2024 2:02 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



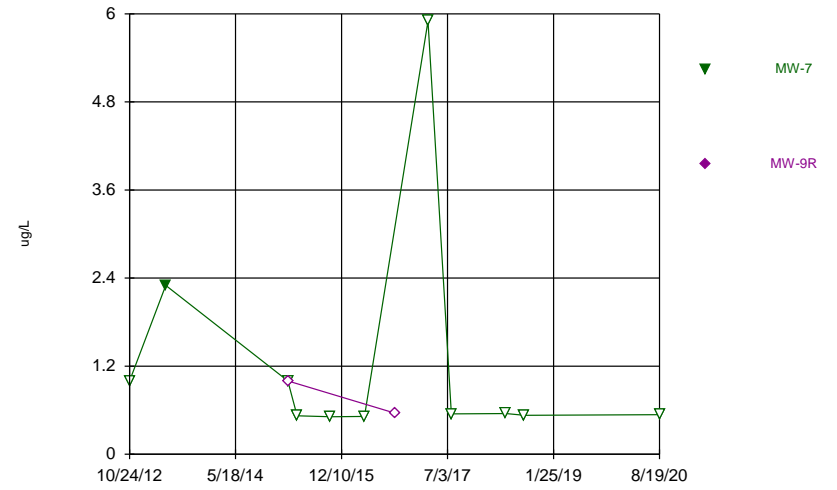
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Time Series



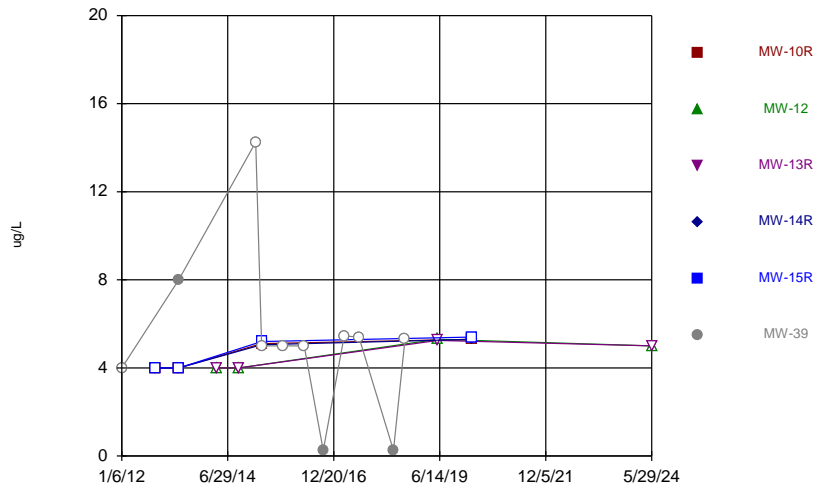
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Time Series



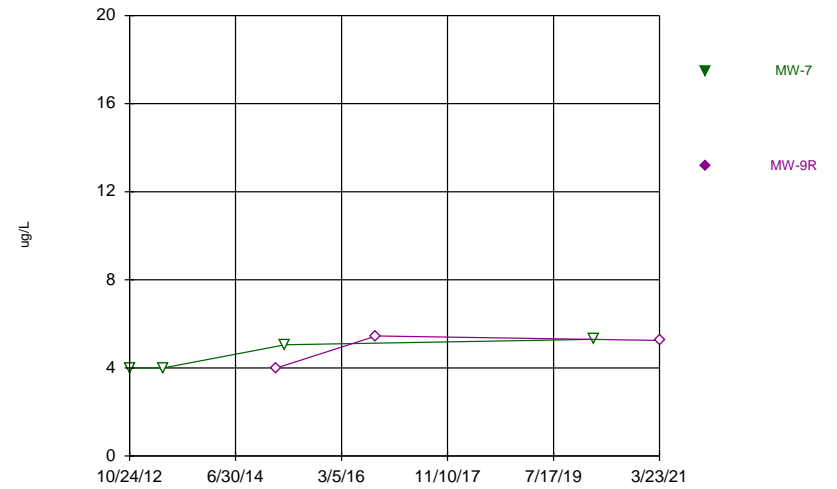
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



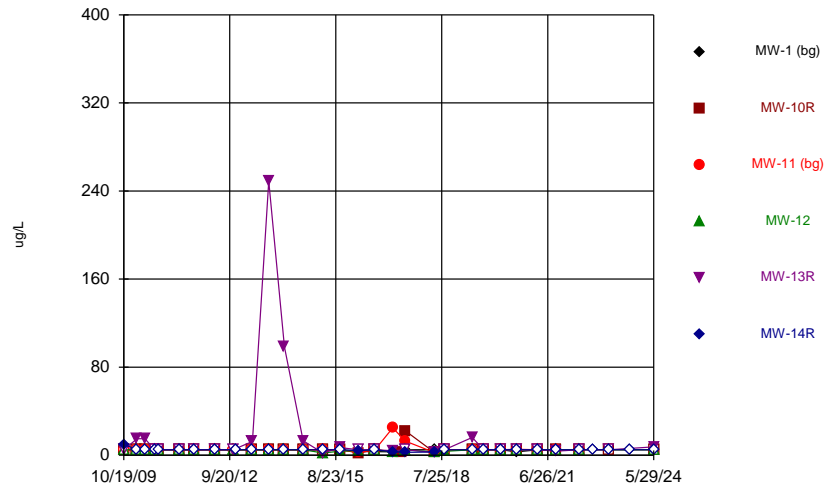
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



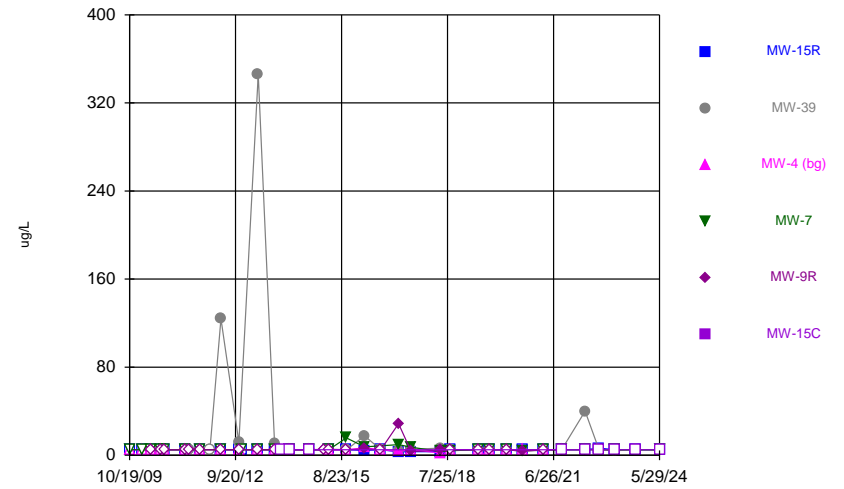
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



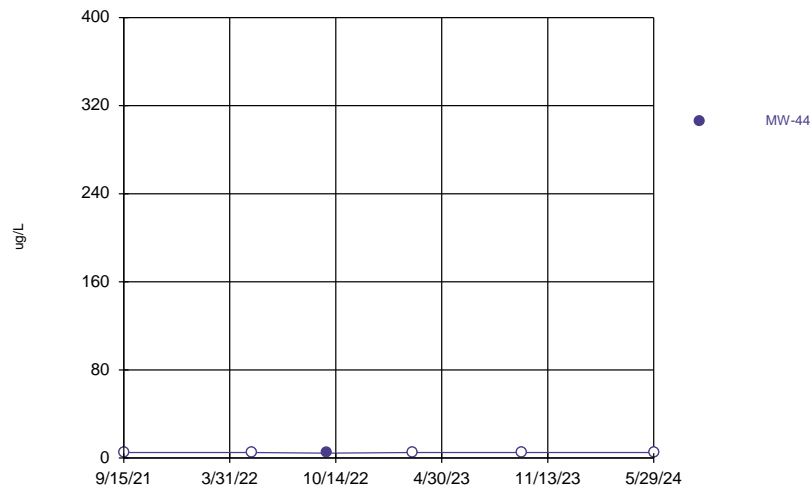
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



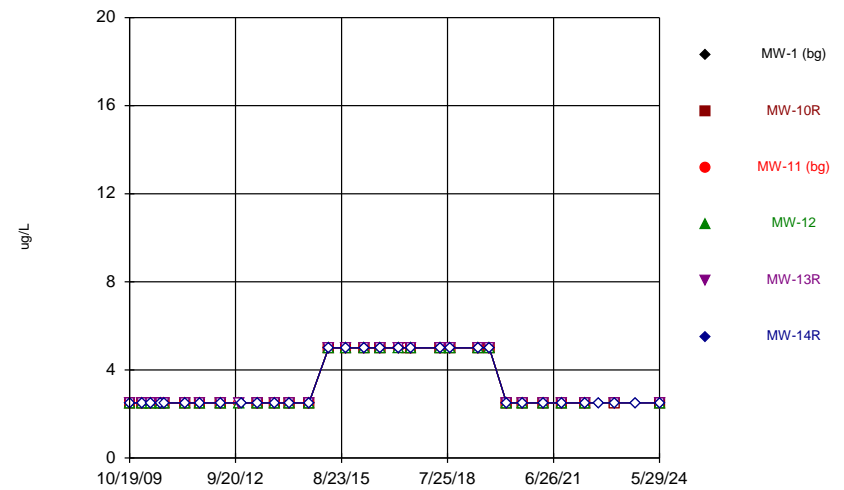
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



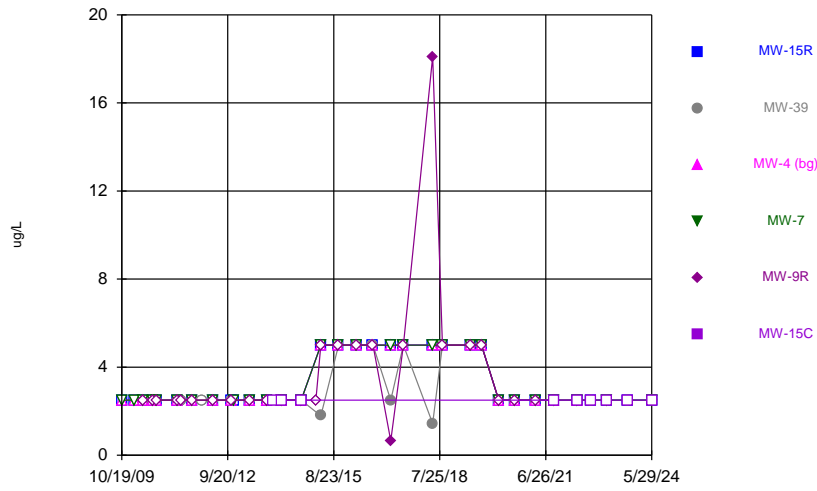
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Time Series



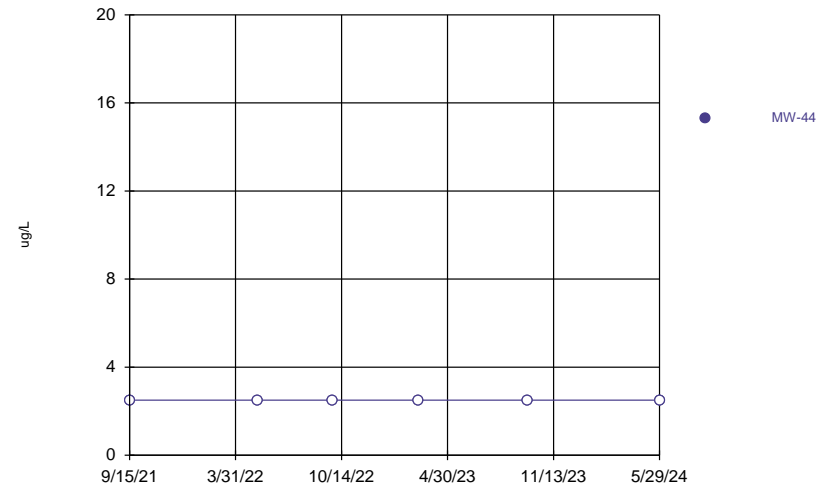
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



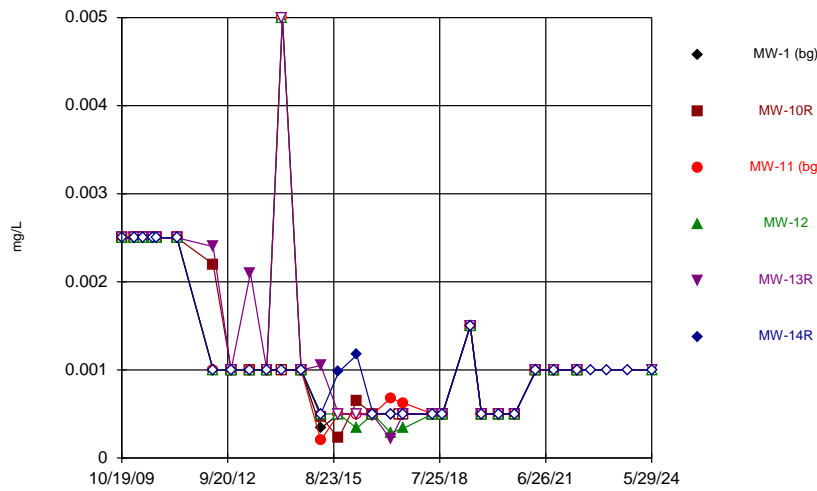
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Time Series



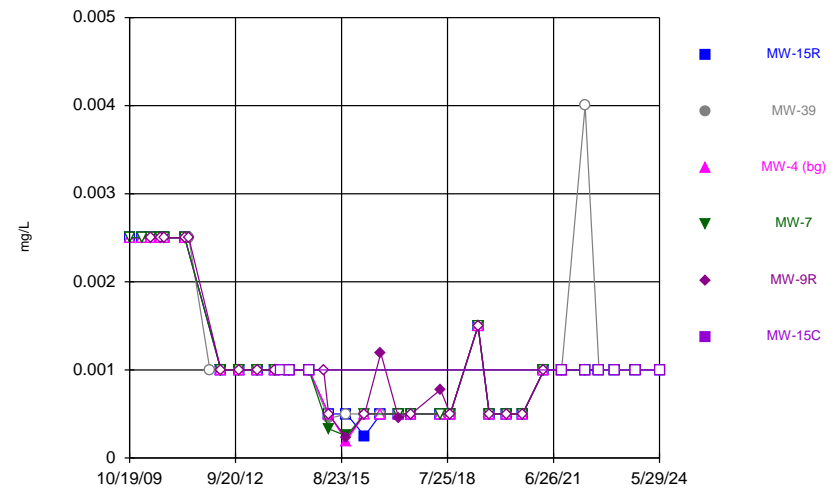
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Time Series



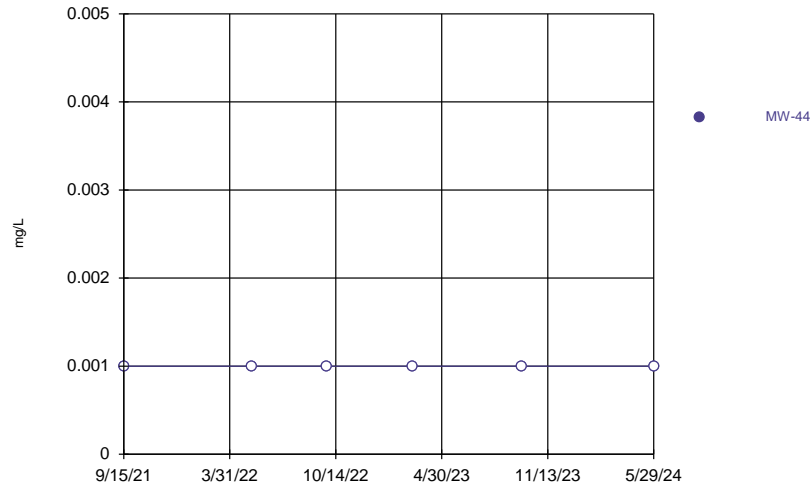
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 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



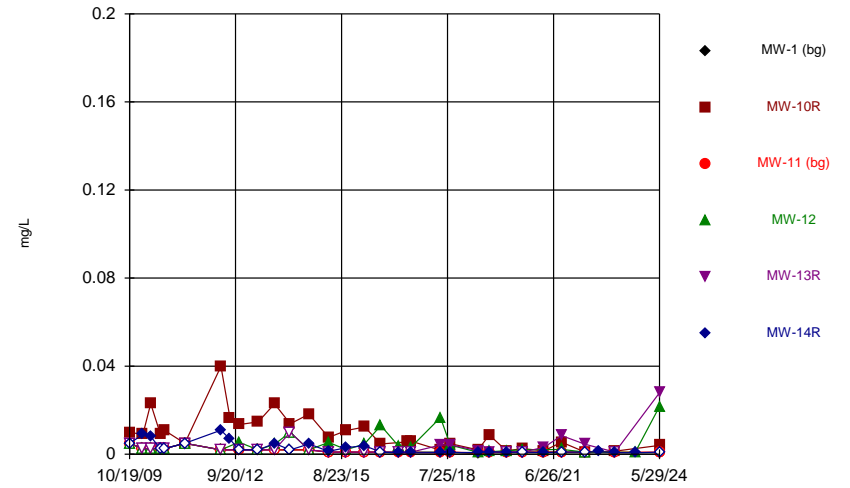
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### Time Series



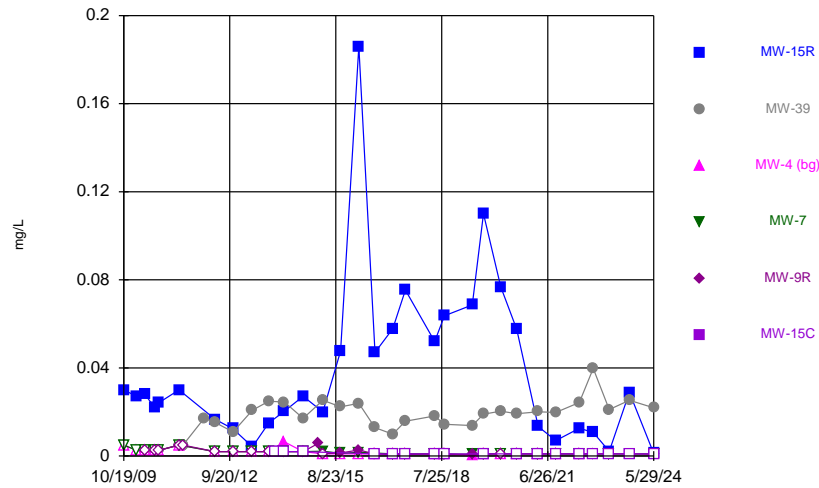
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### Time Series



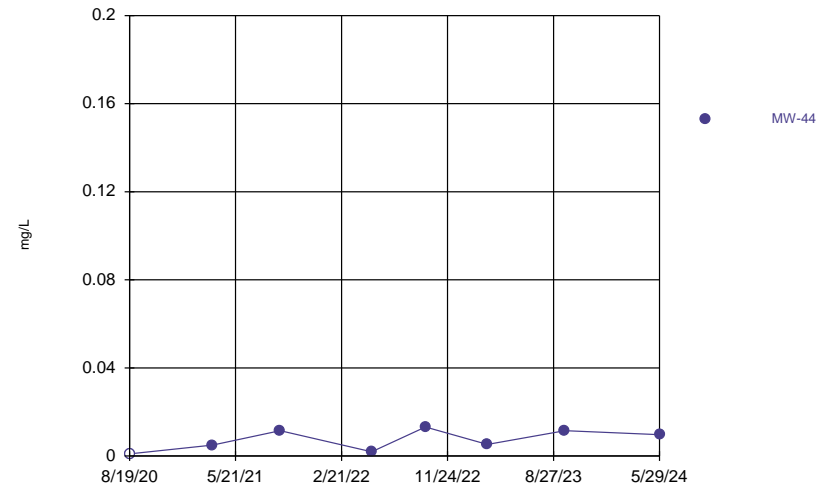
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



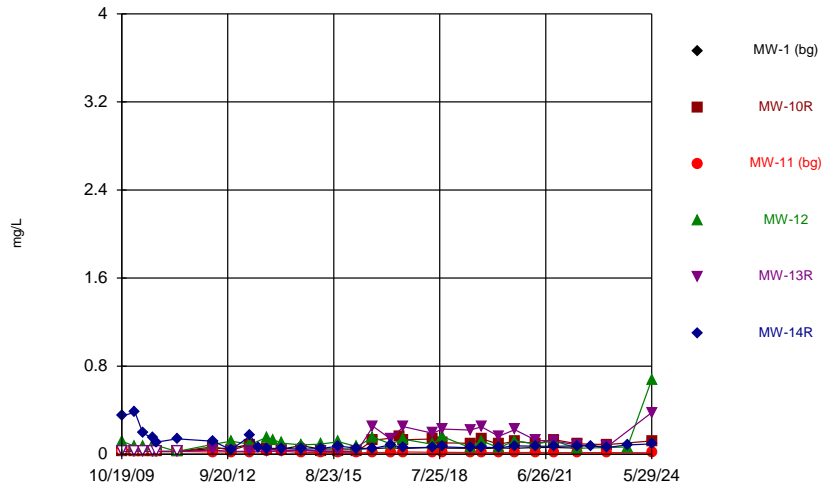
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### Time Series



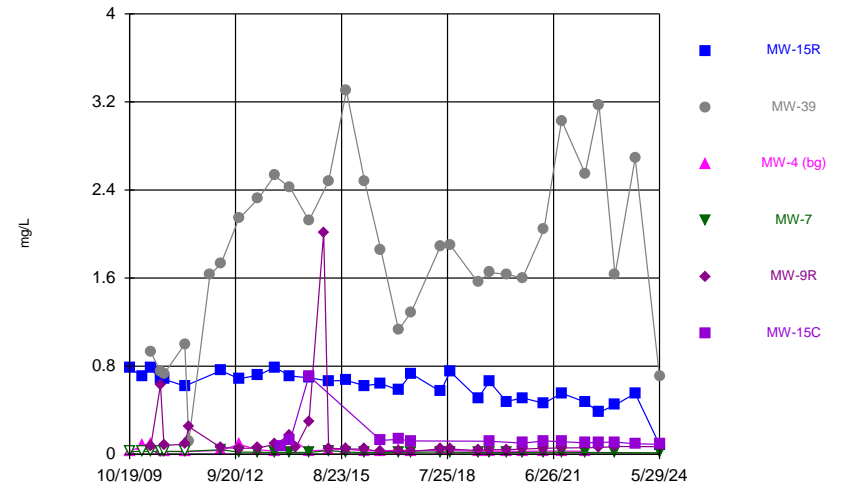
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Time Series



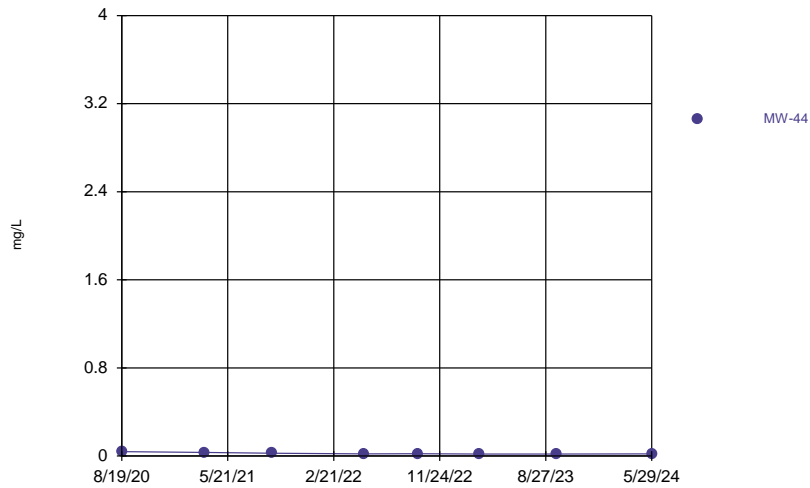
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



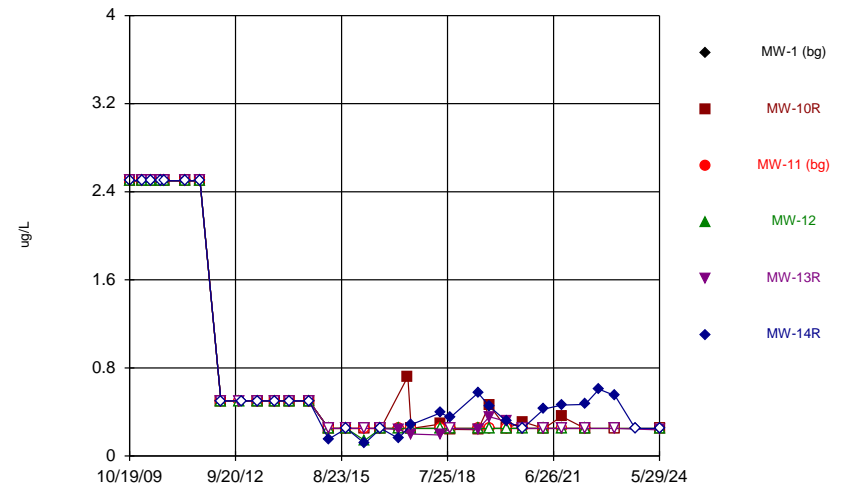
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Time Series



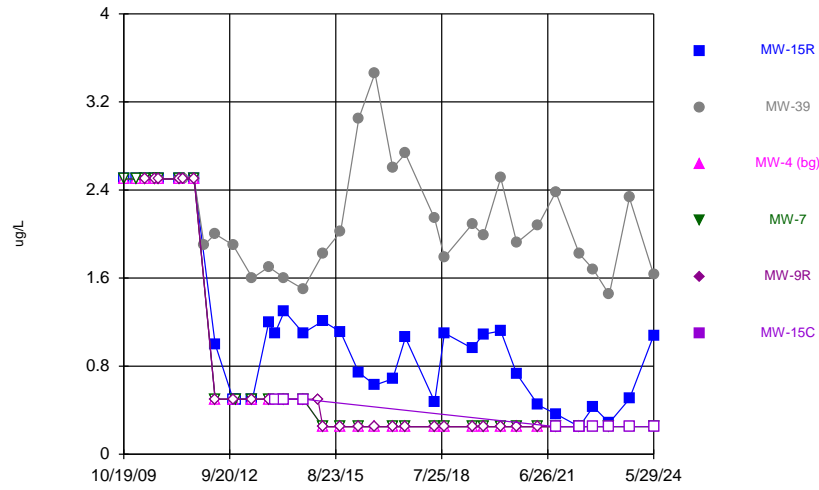
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Time Series



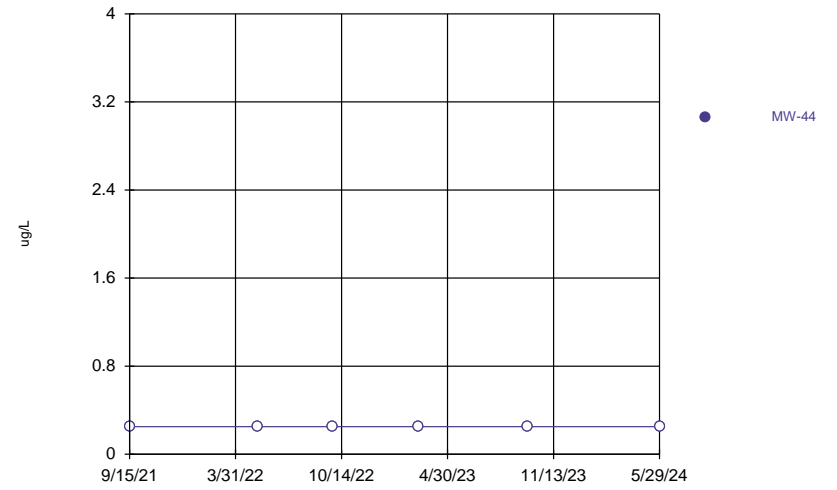
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Time Series



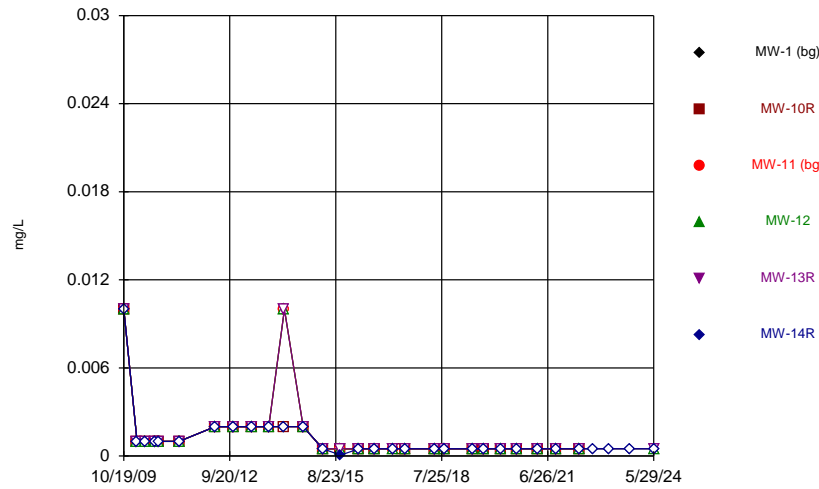
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Time Series



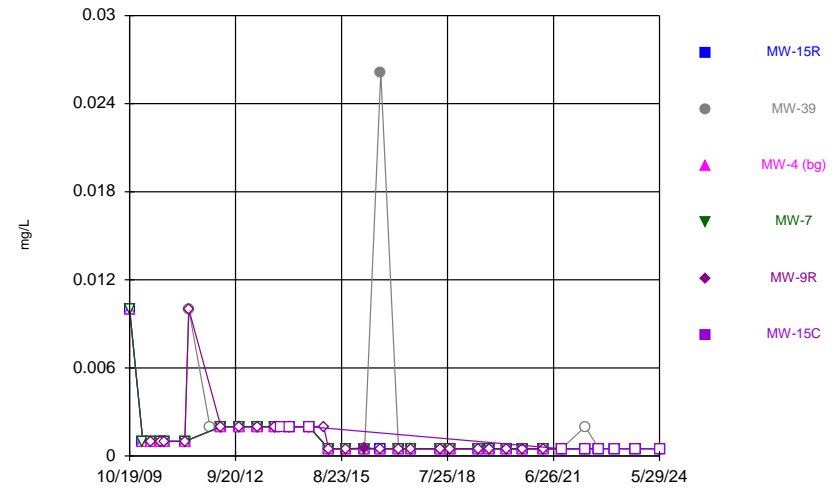
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



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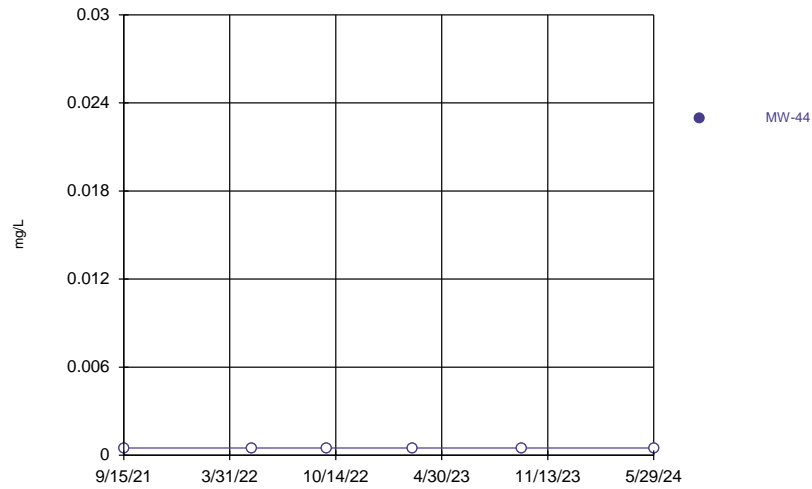
Time Series



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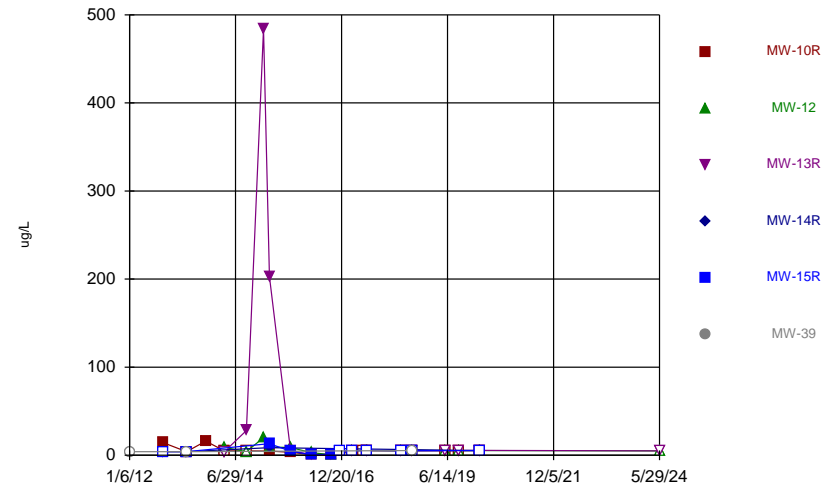


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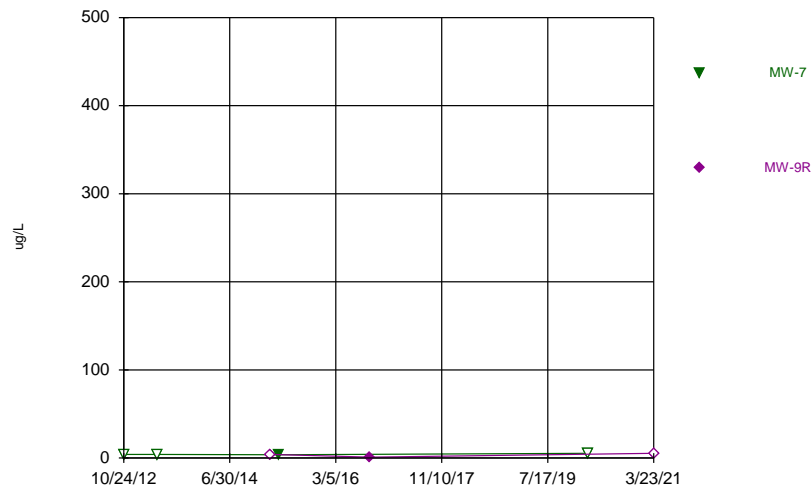
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### Time Series



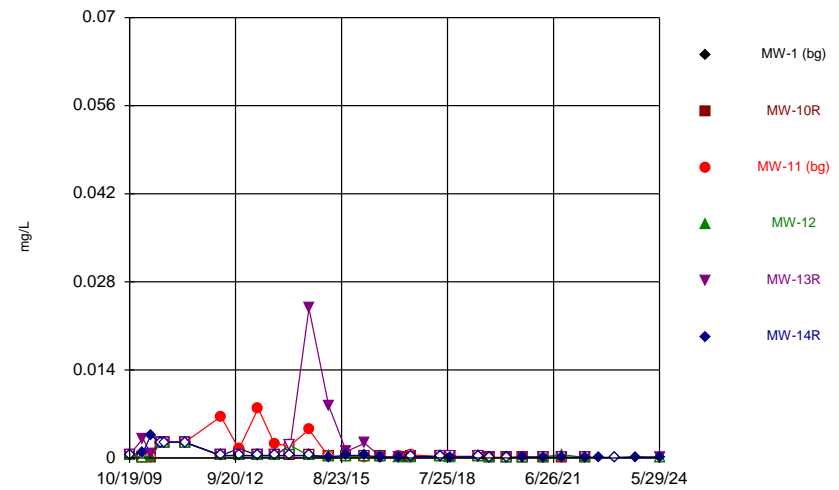
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



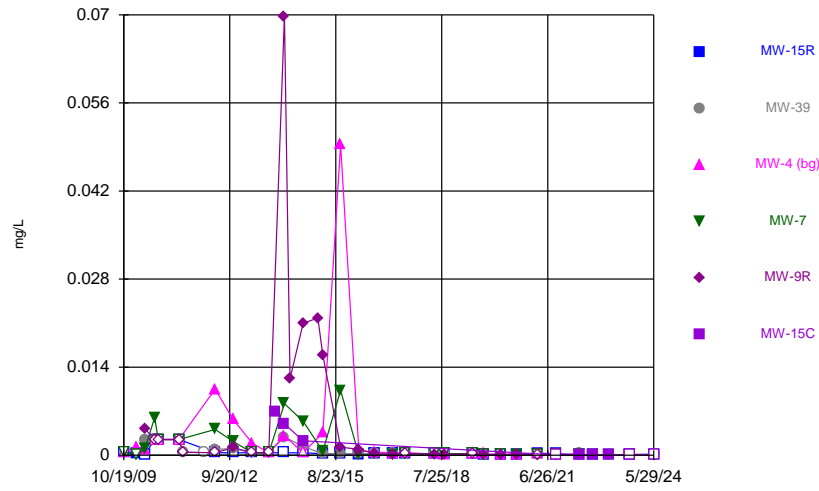
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



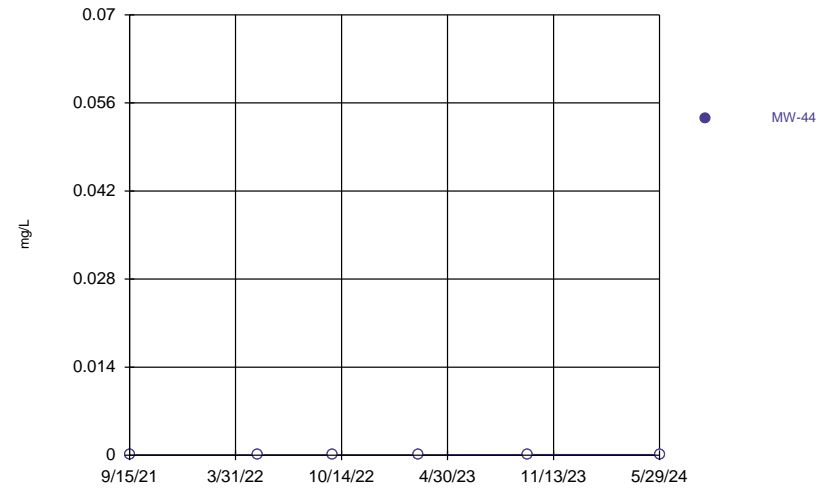
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



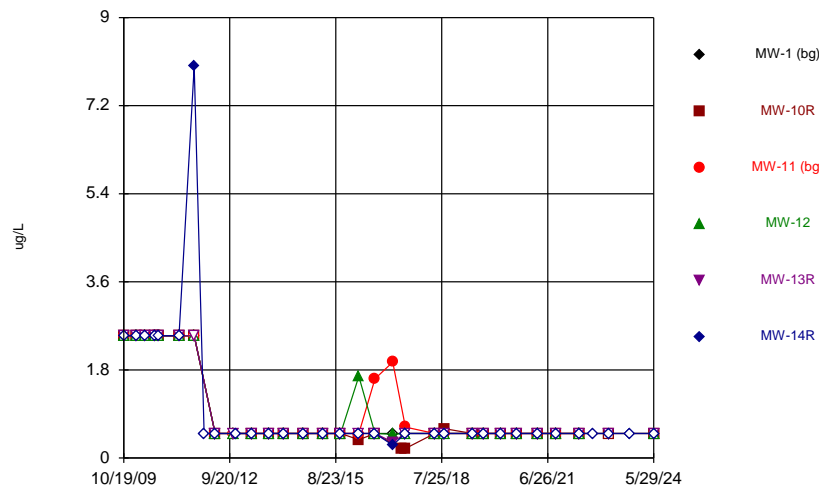
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Time Series



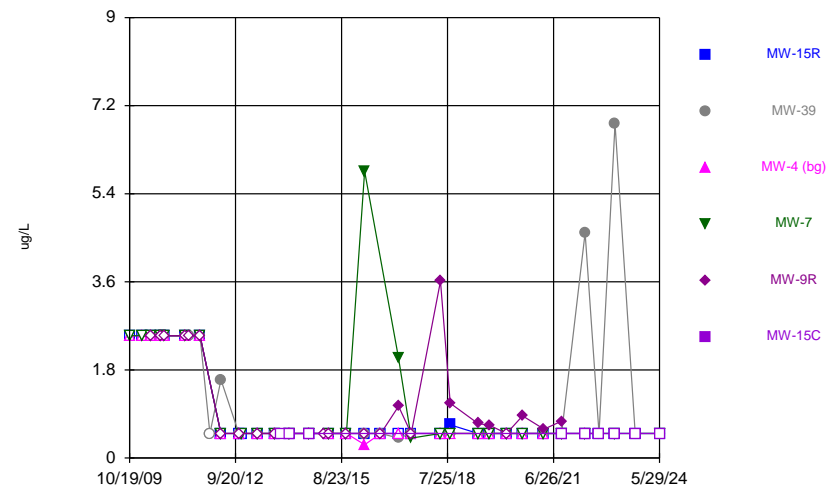
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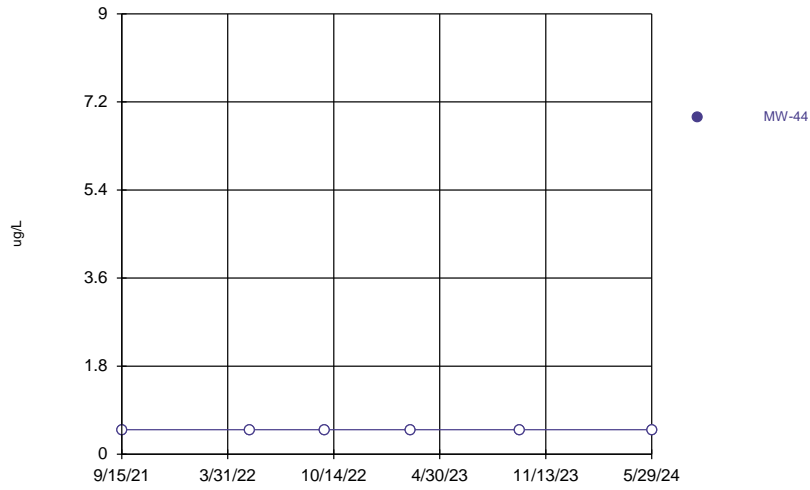
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Time Series



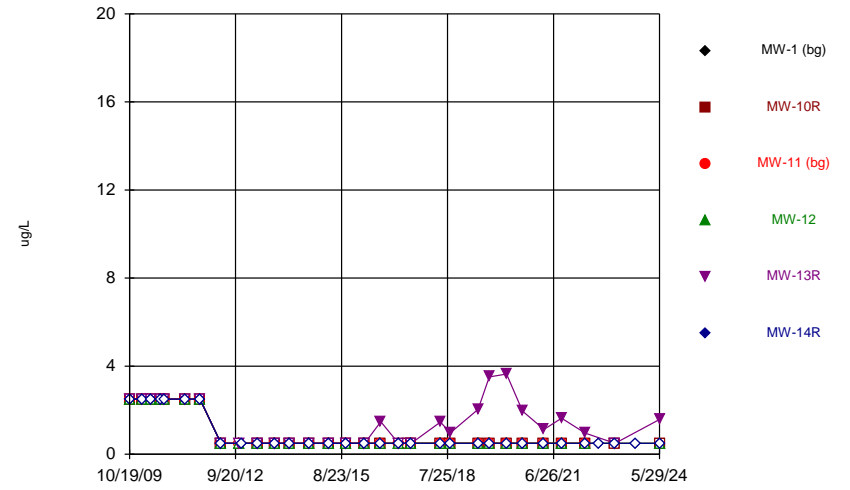
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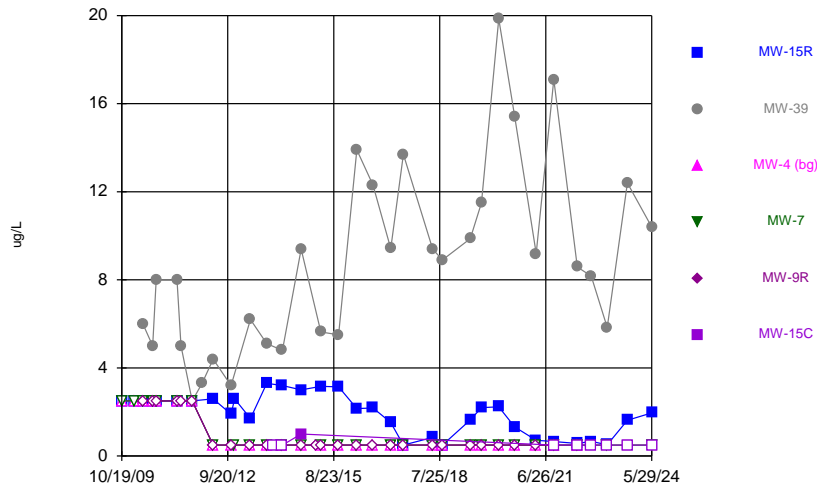
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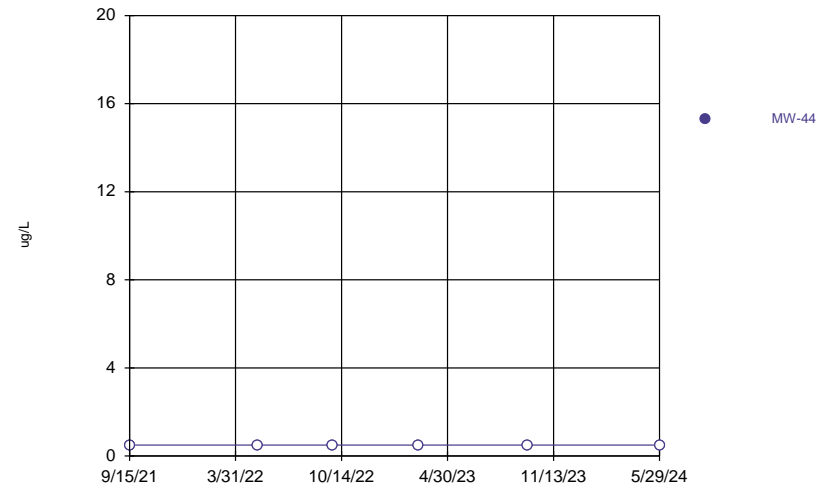
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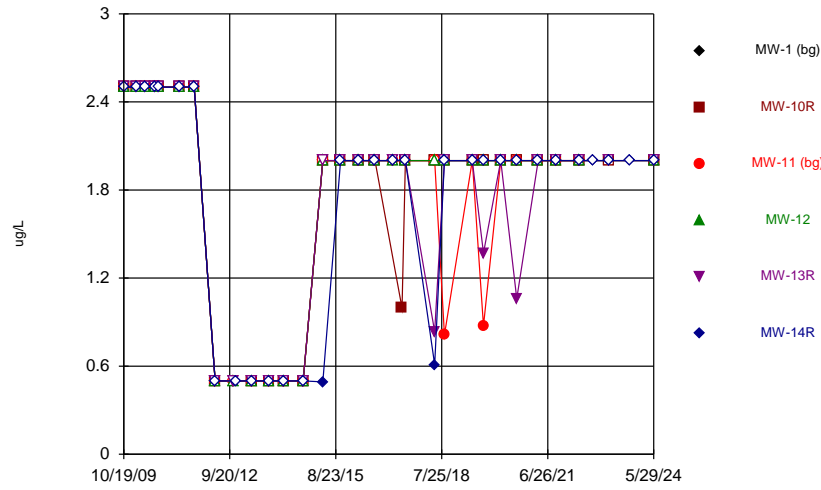
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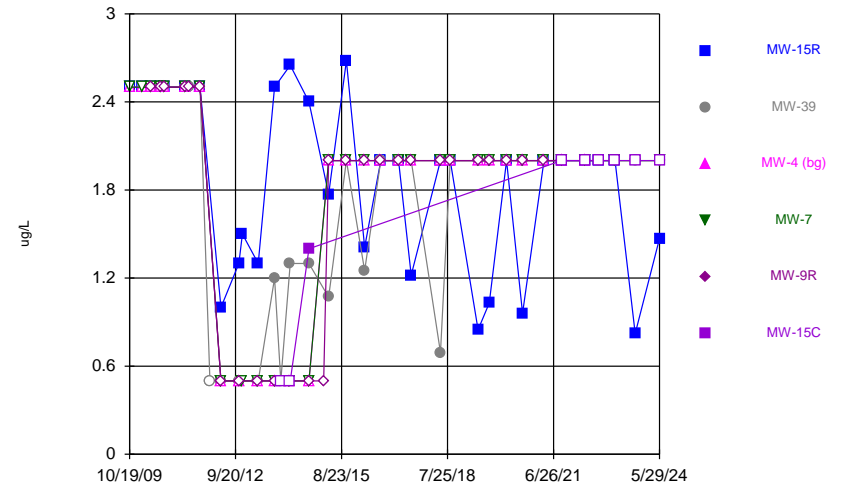
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Time Series



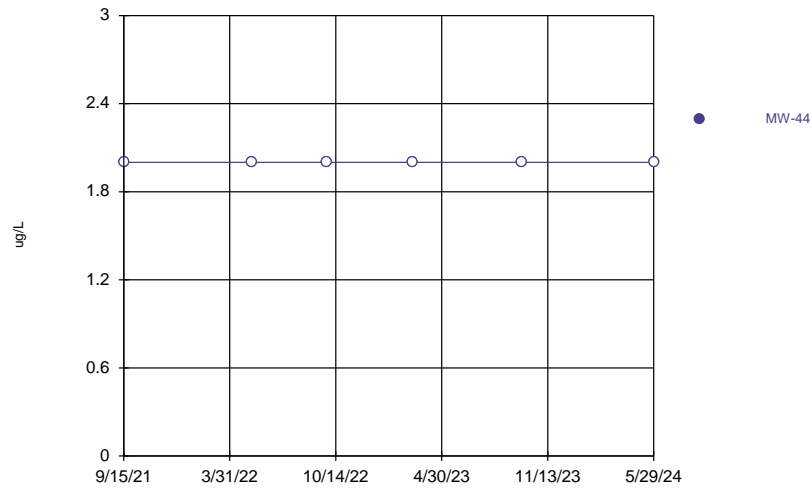
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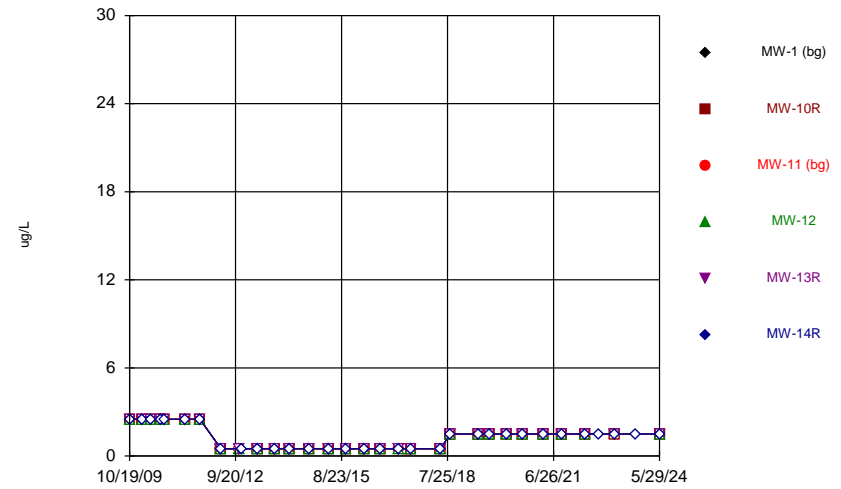
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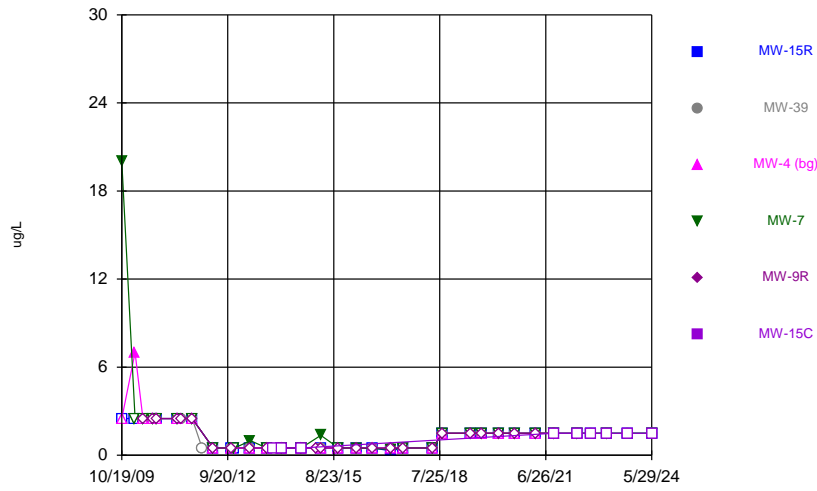
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Time Series



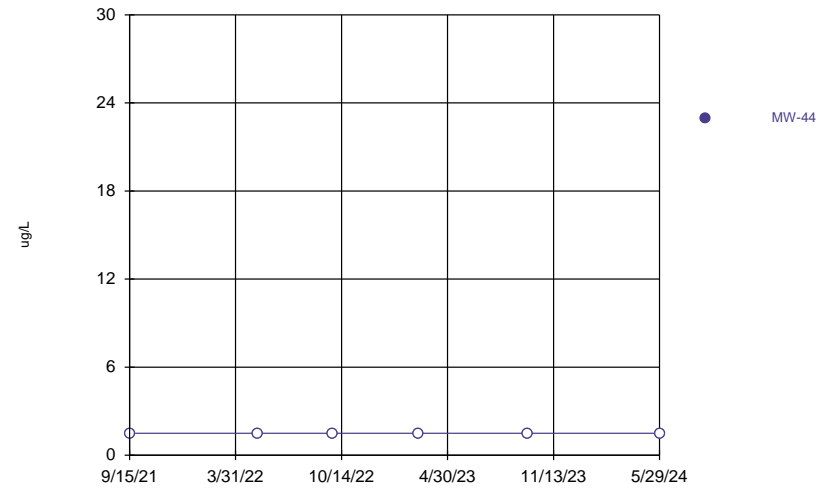
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Time Series



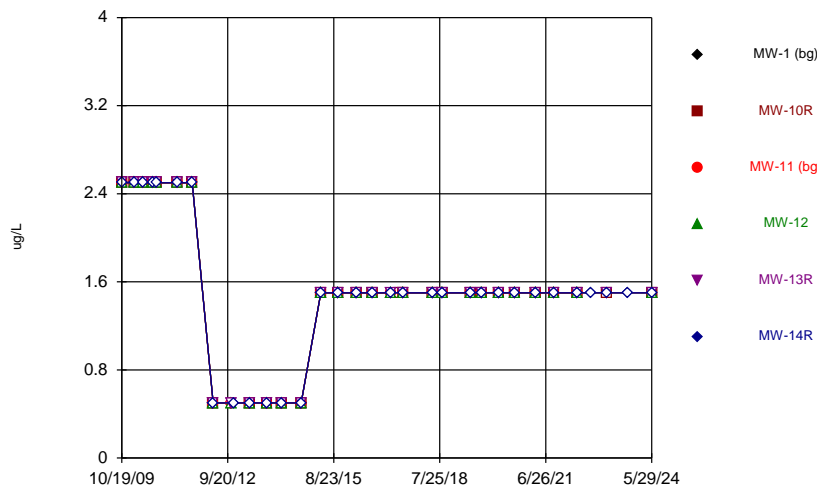
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Time Series



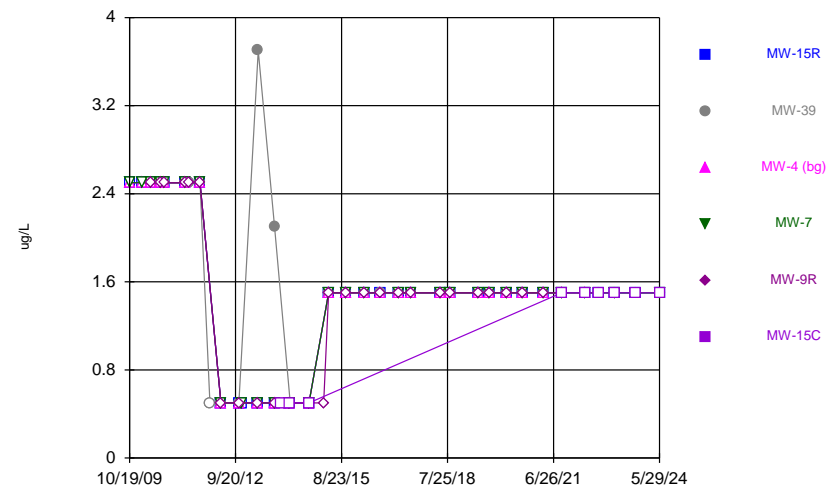
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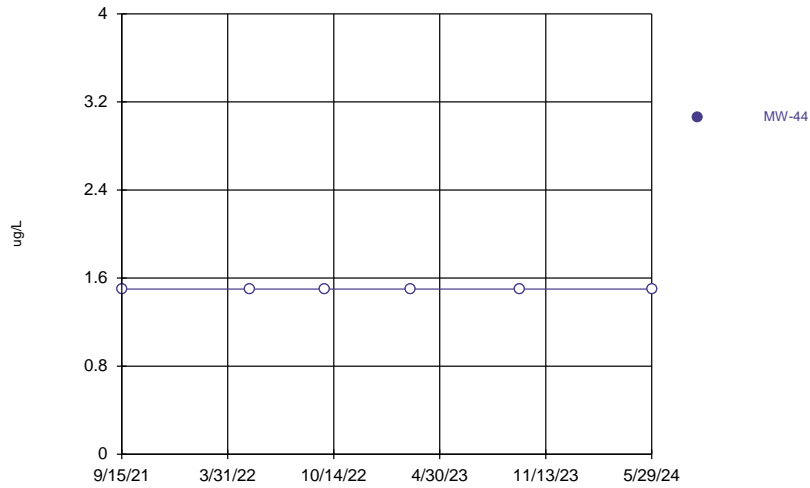
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Time Series



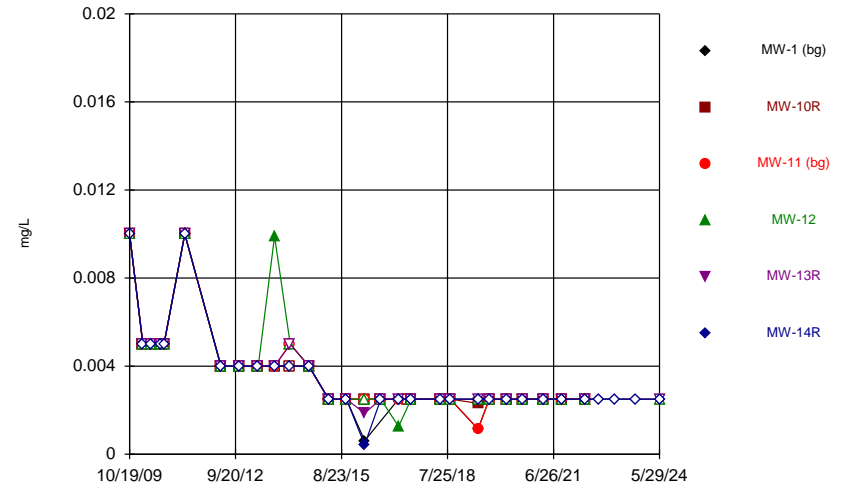
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



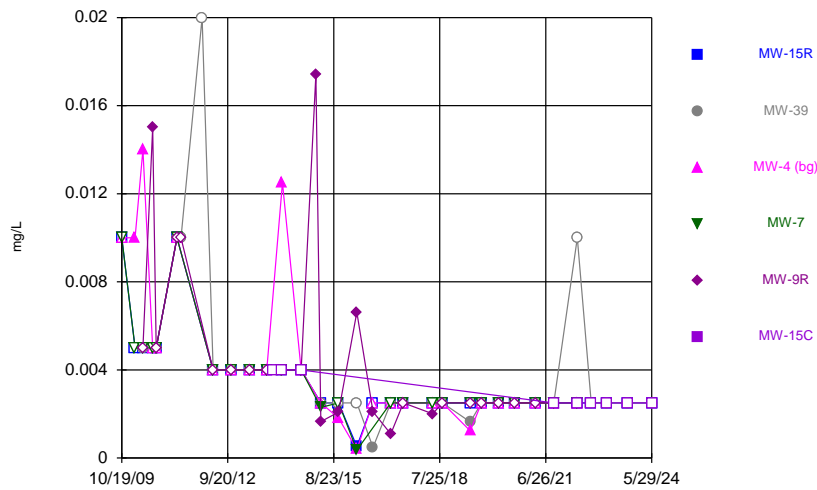
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### Time Series



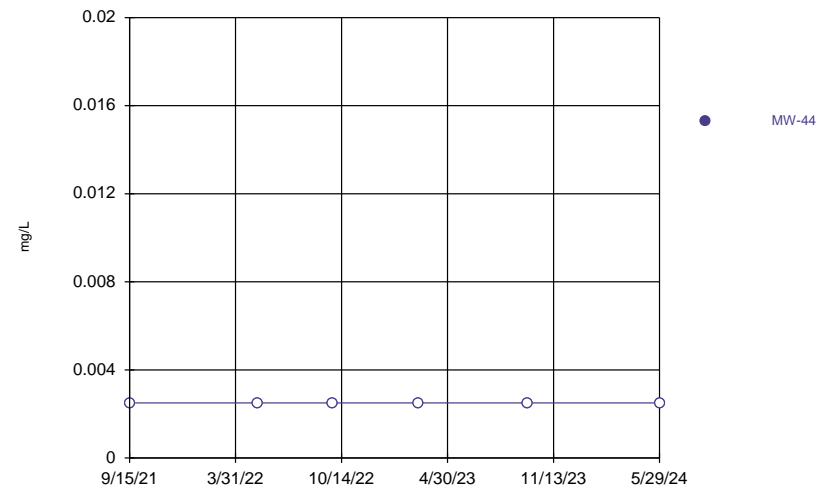
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



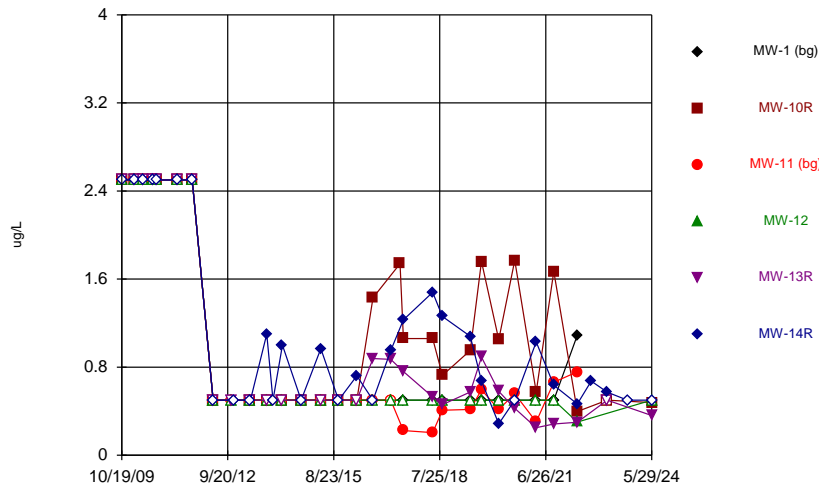
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



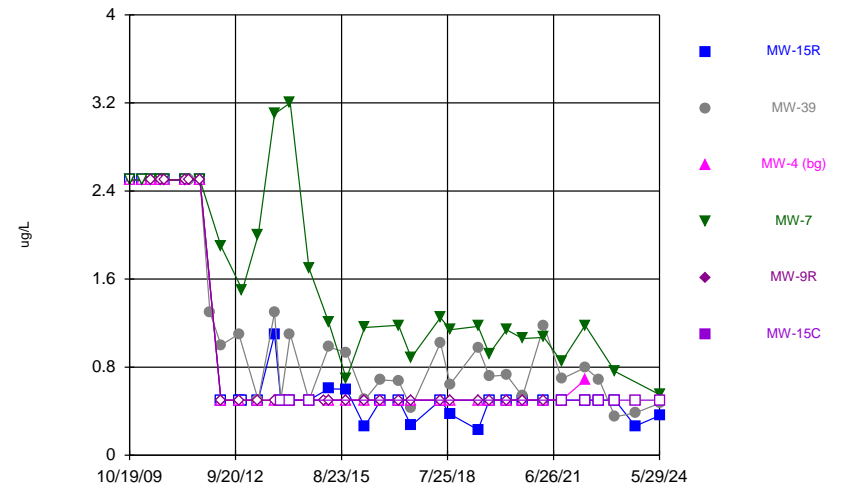
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



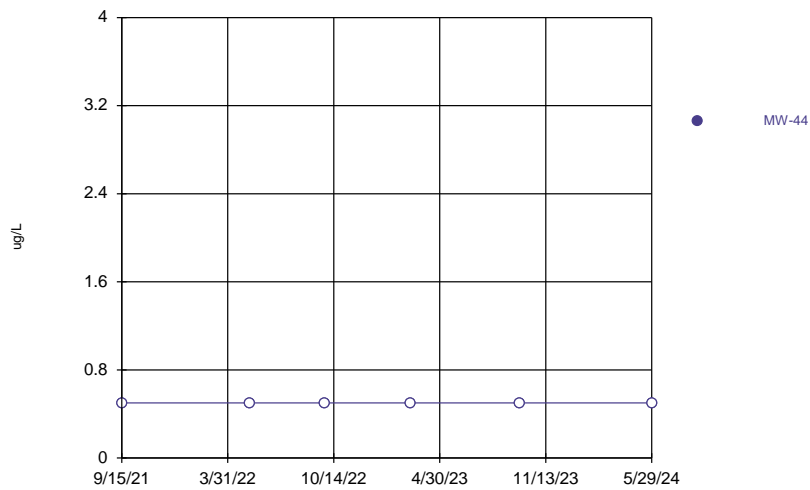
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



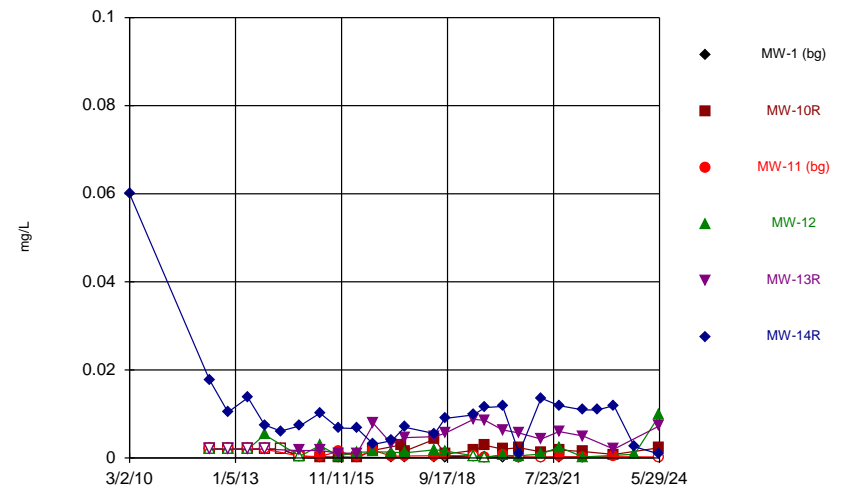
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



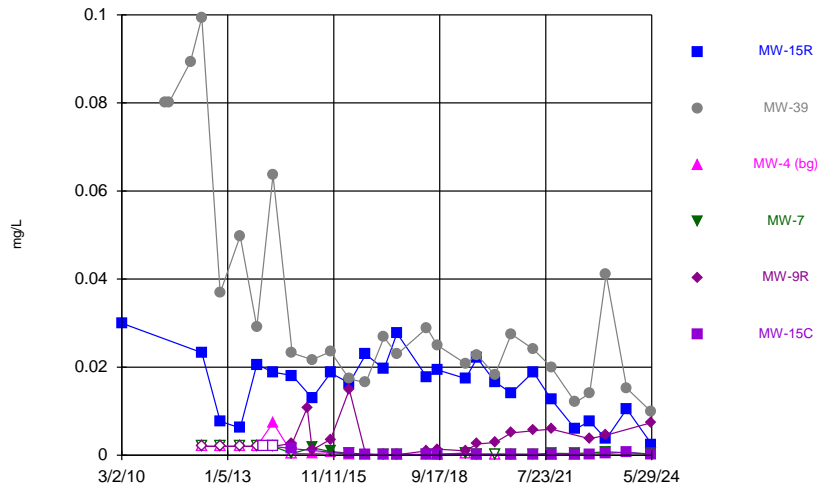
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



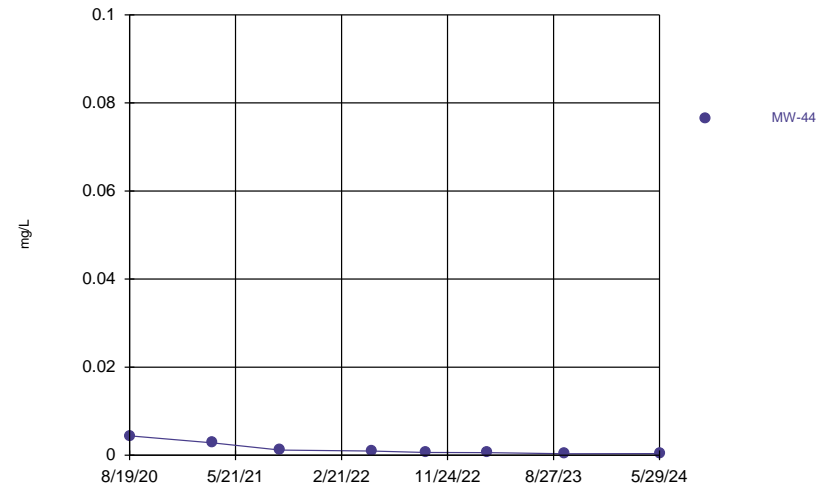
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



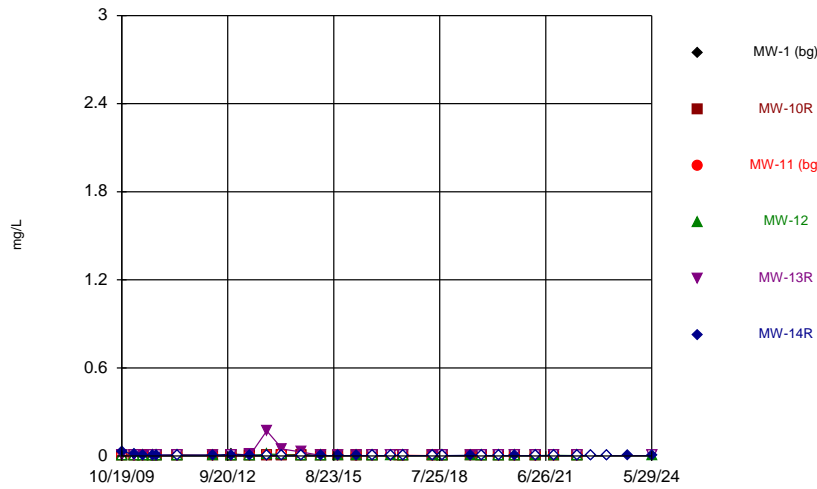
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



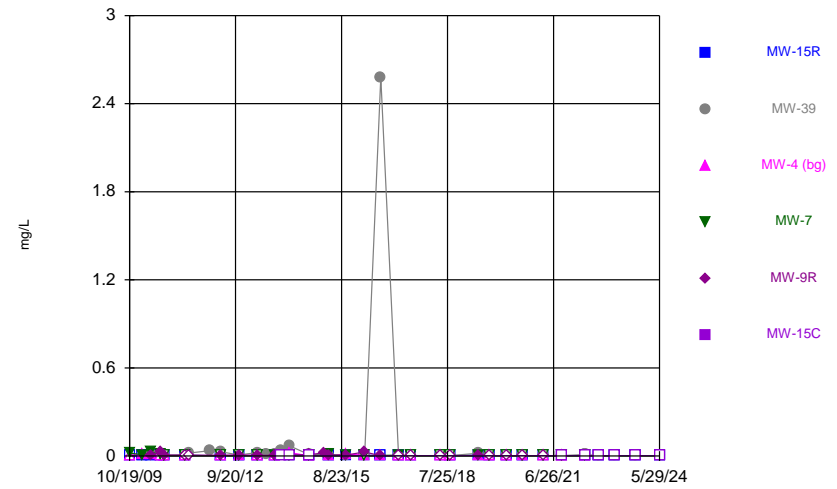
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



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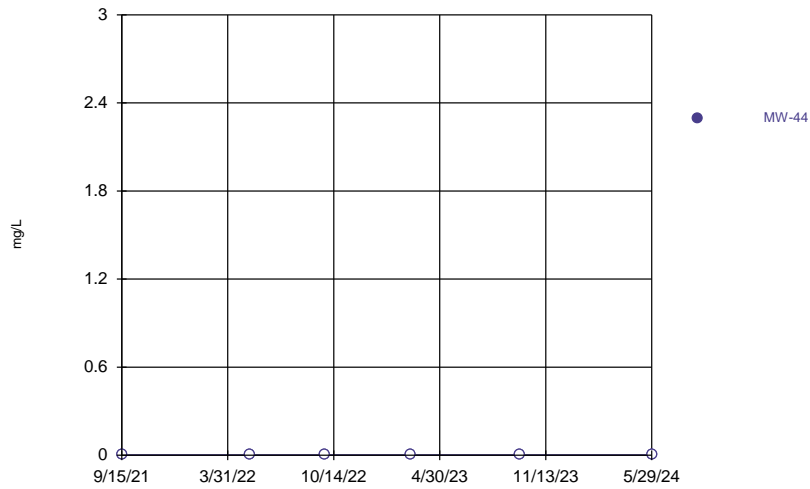
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

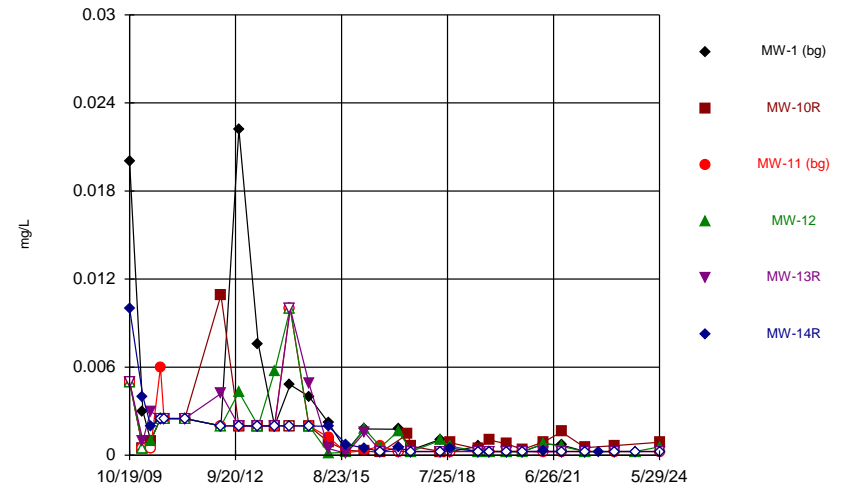


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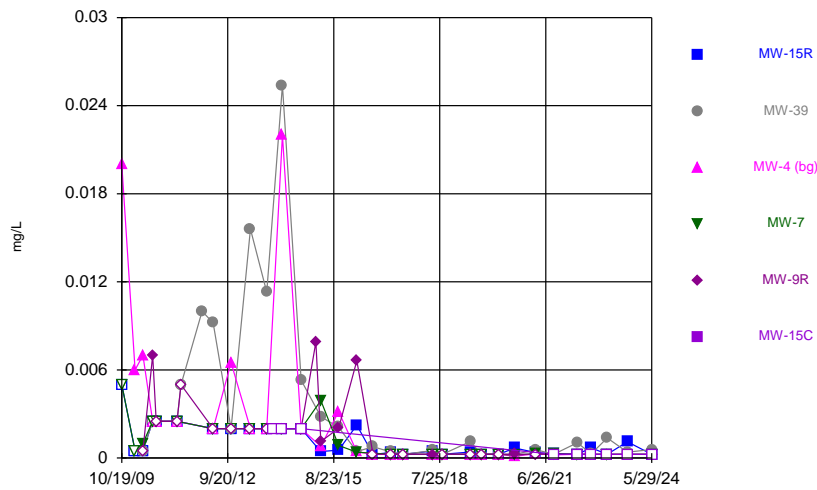
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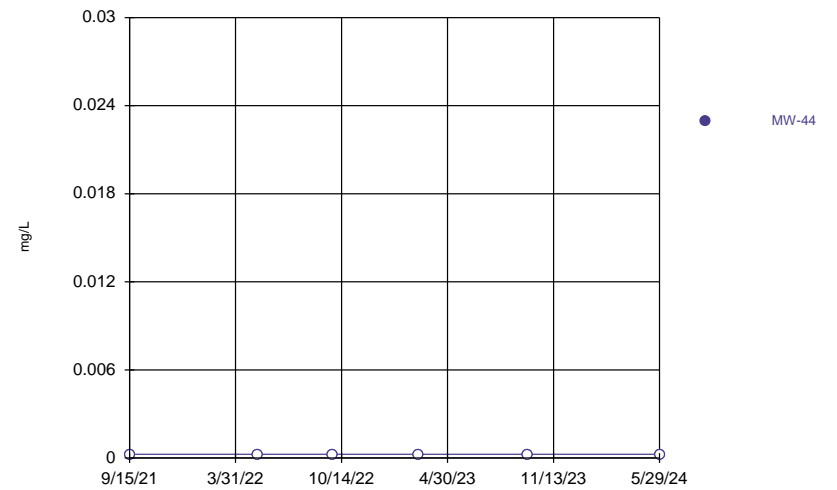
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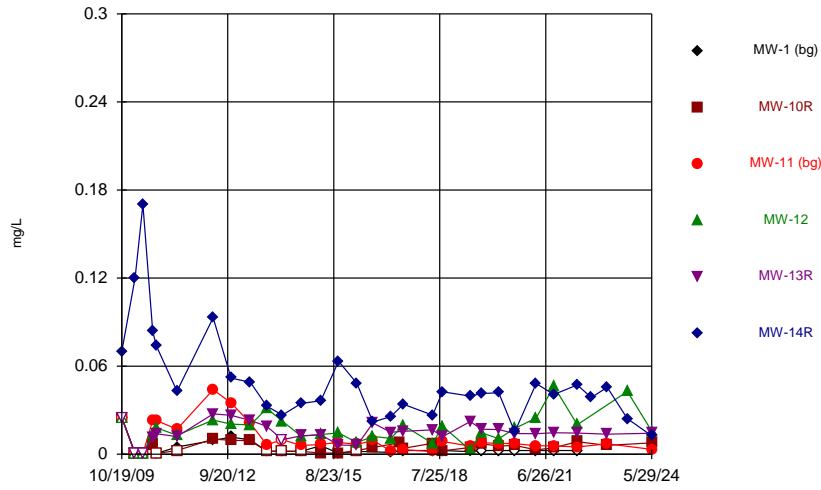
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



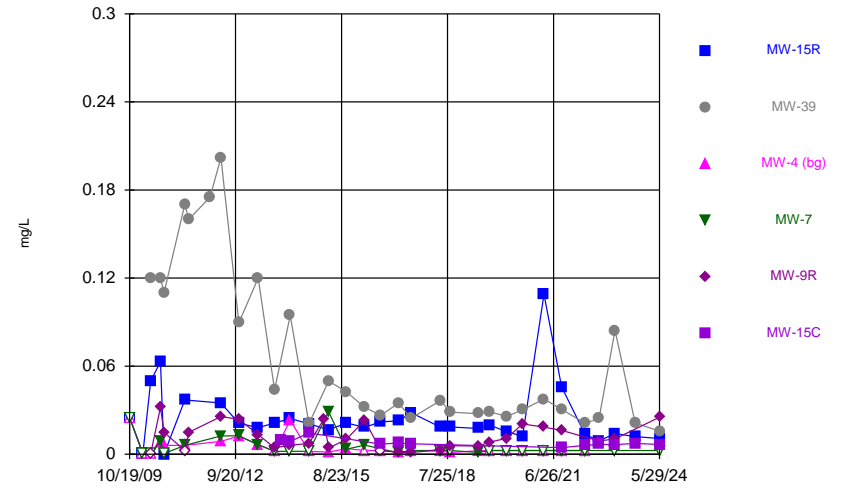
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



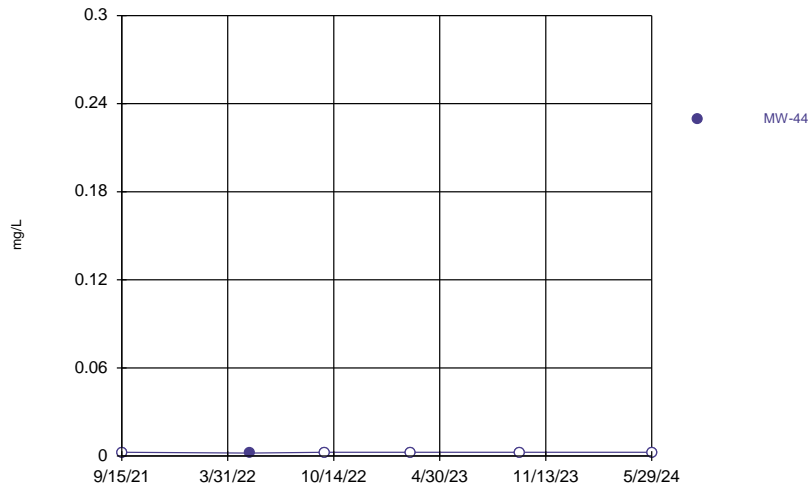
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



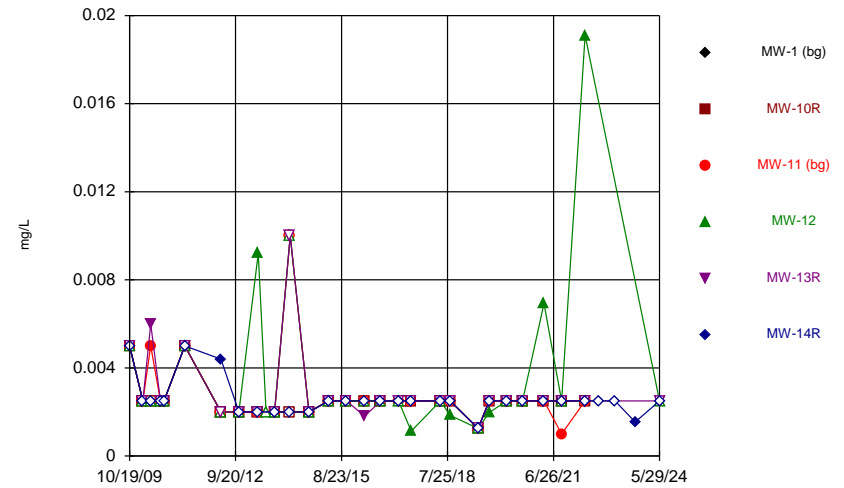
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



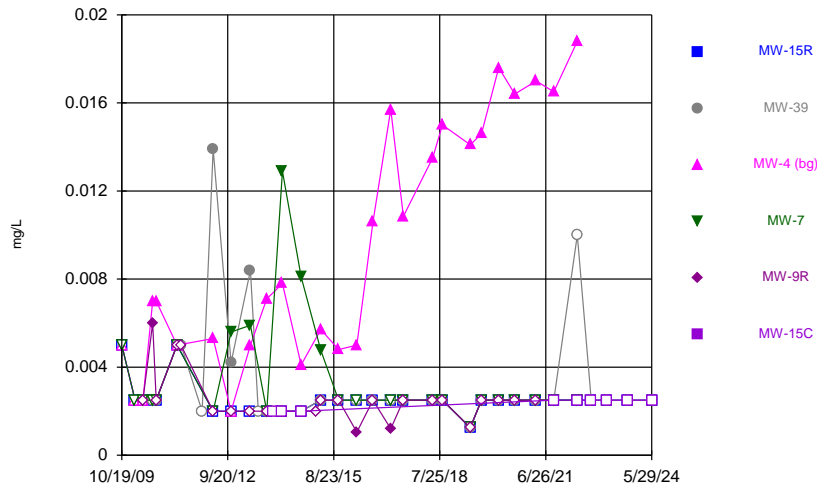
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



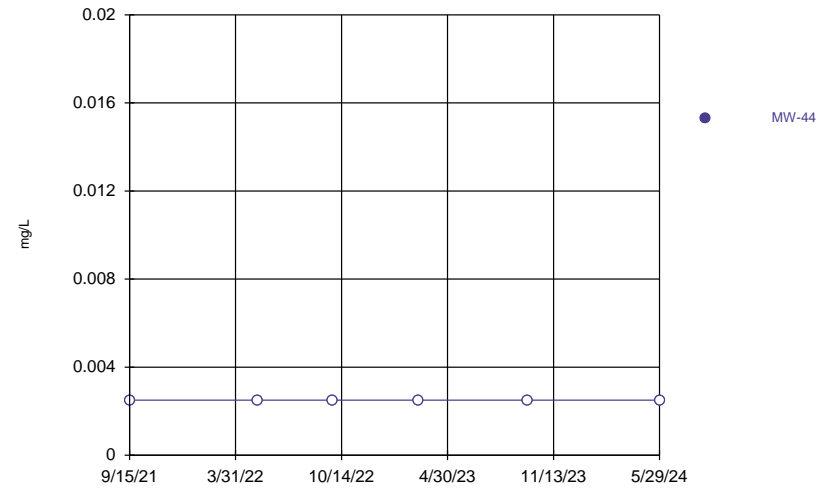
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



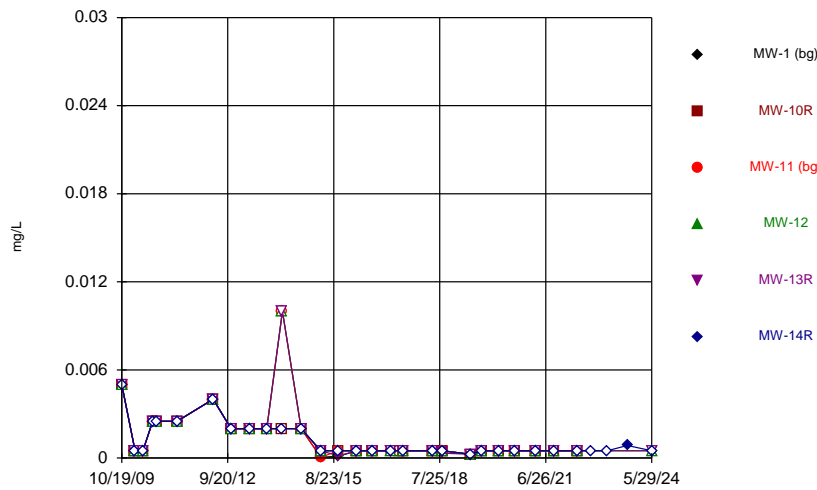
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



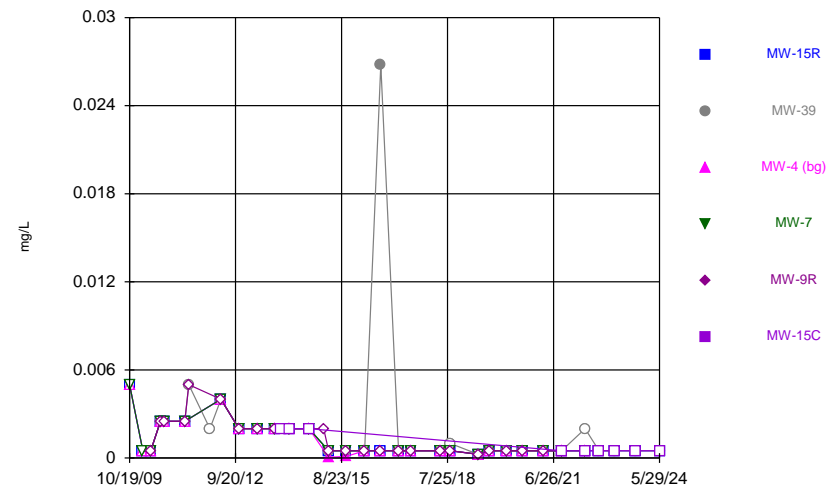
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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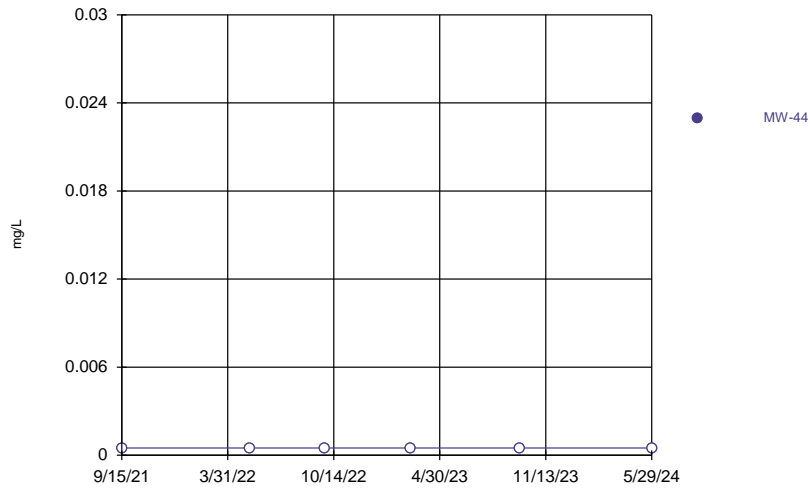
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



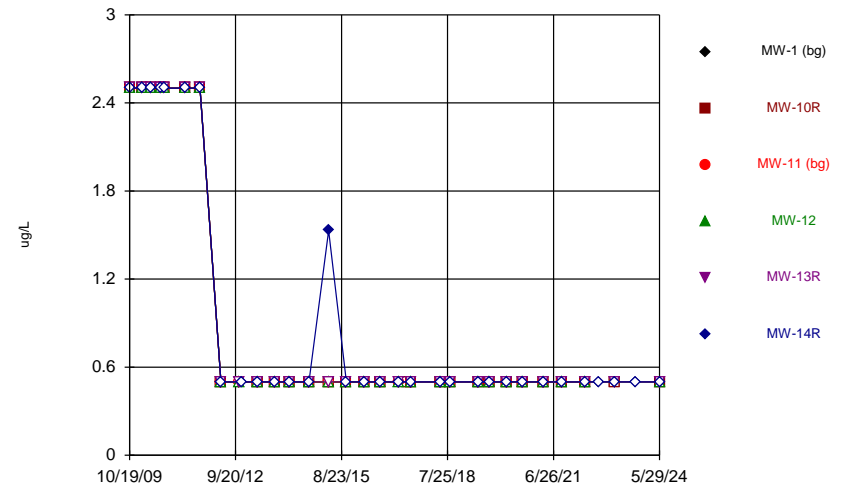
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### Time Series



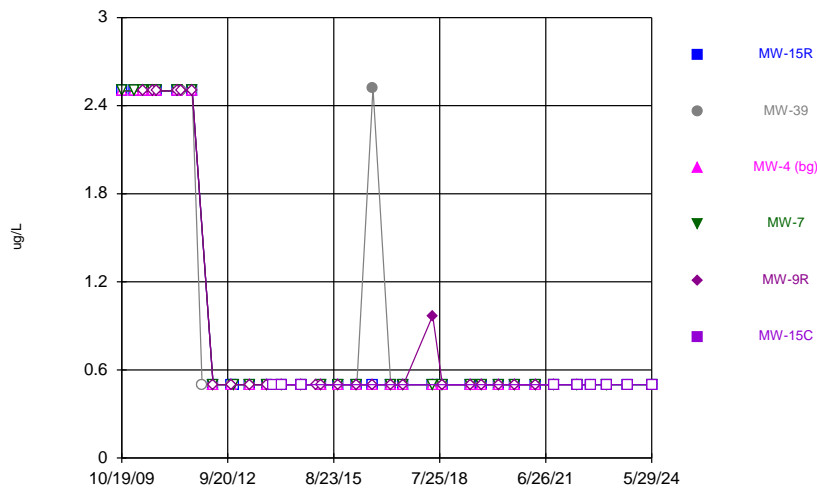
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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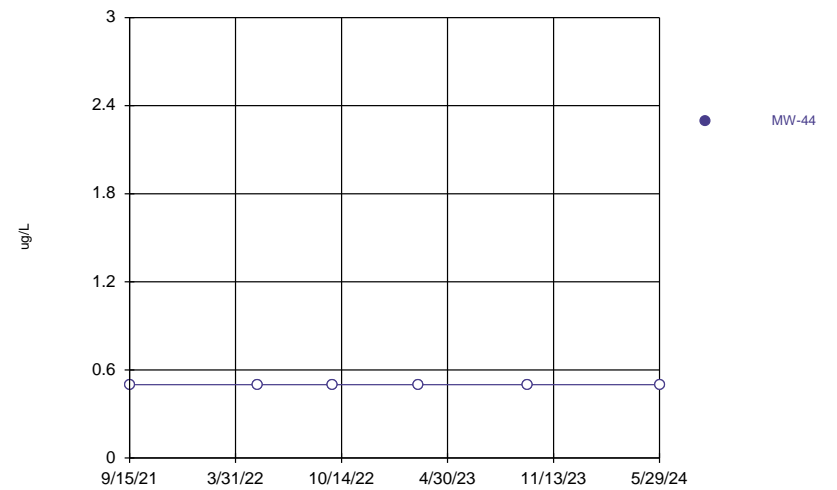
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



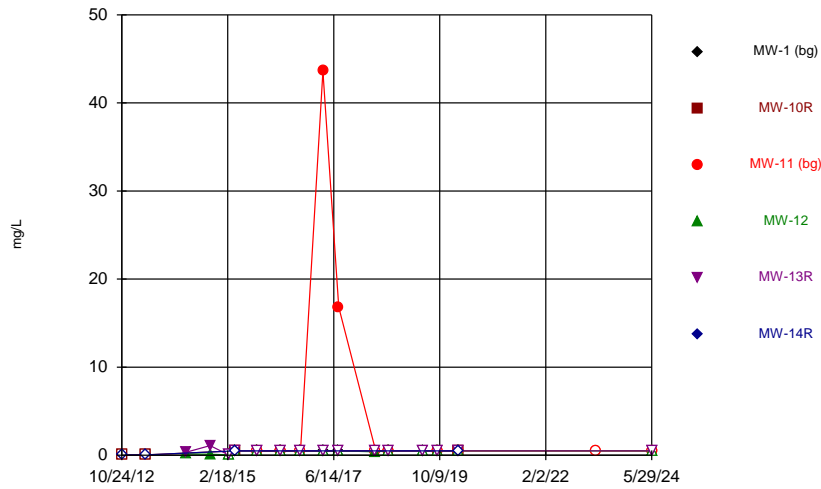
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



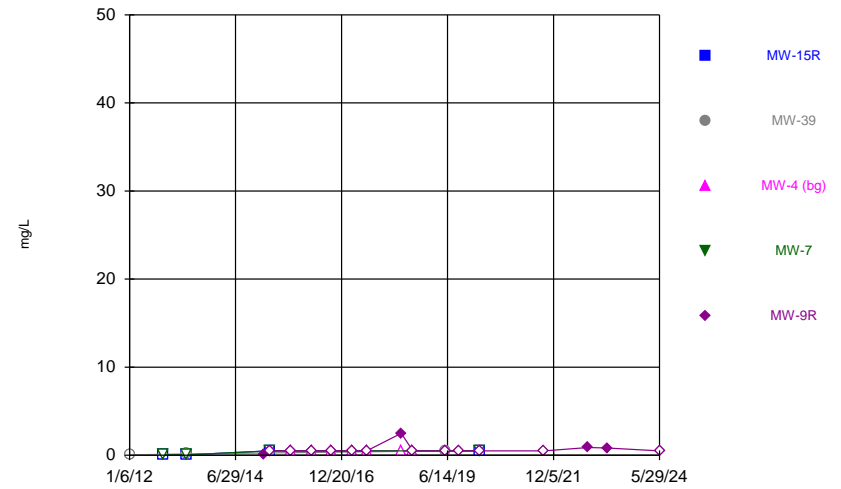
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



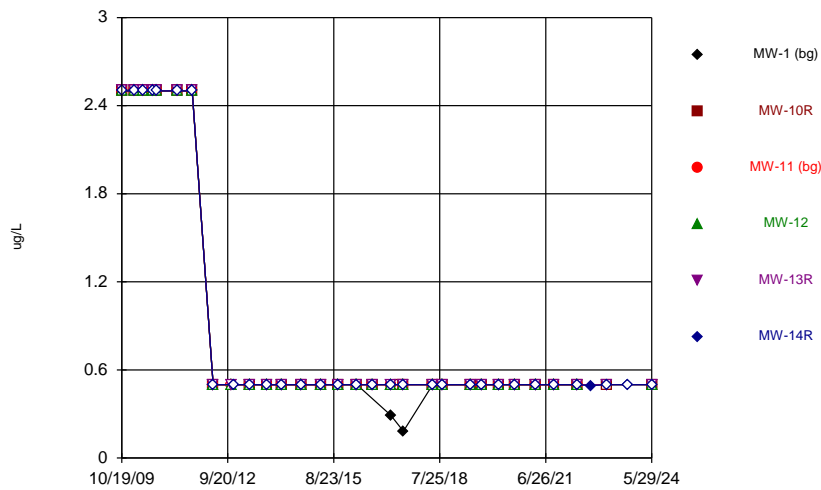
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



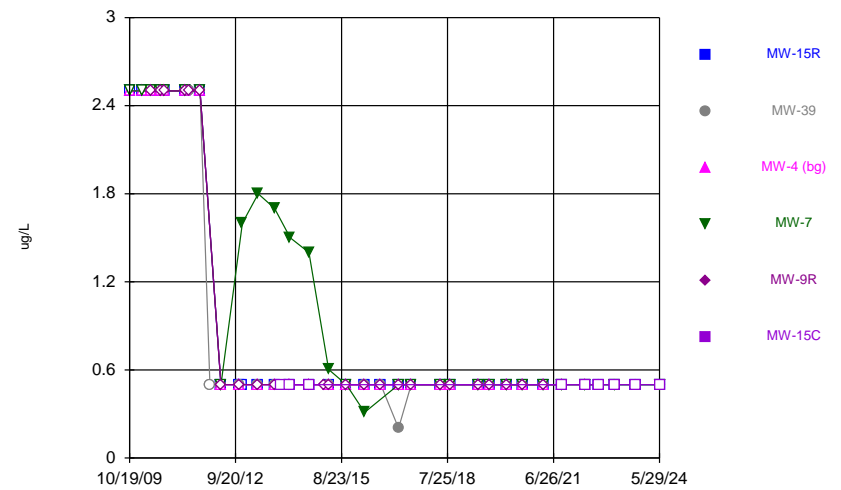
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



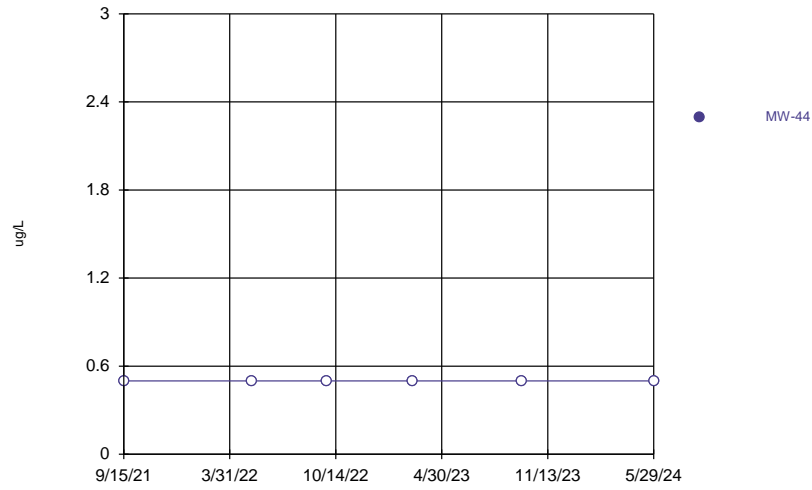
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



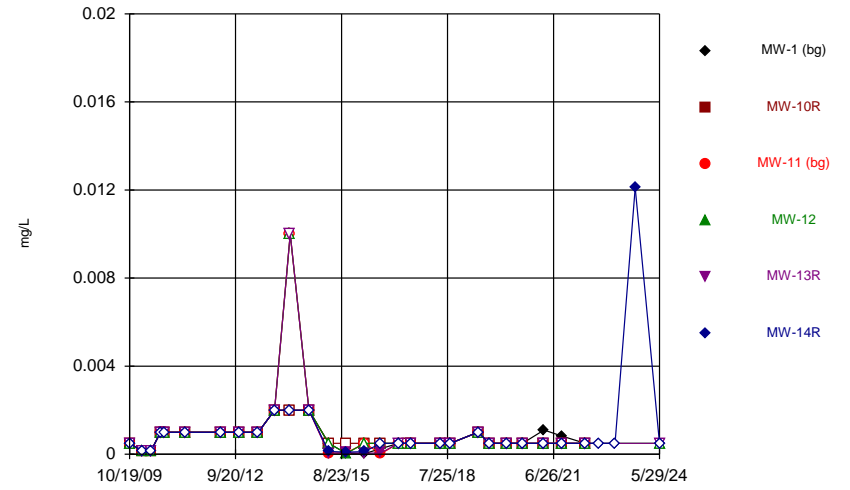
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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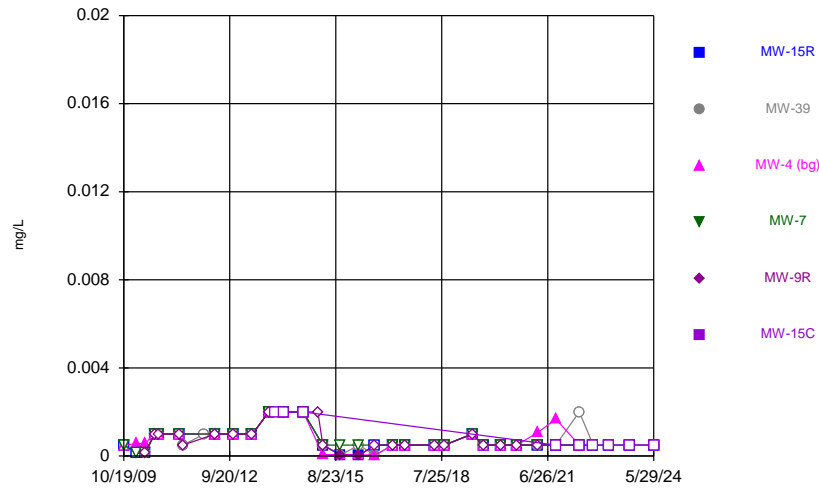
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



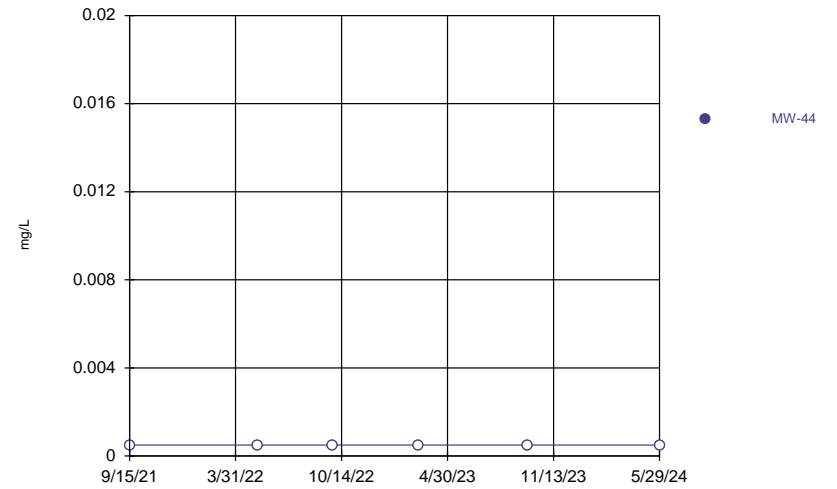
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



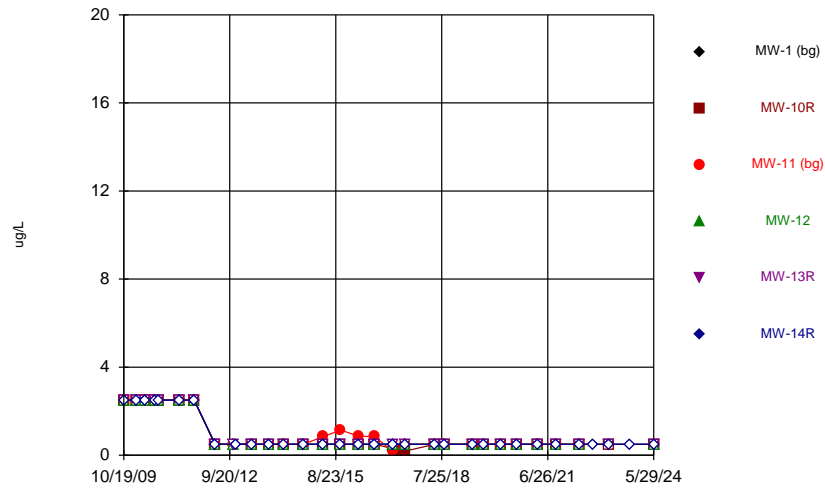
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### Time Series



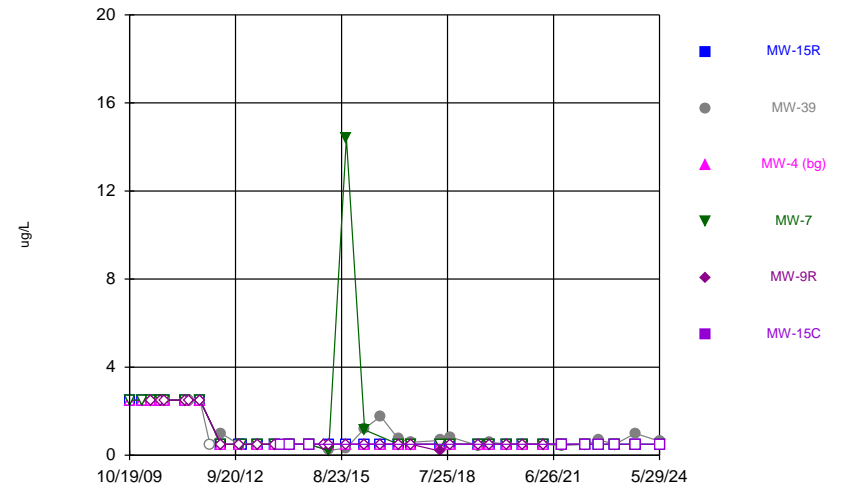
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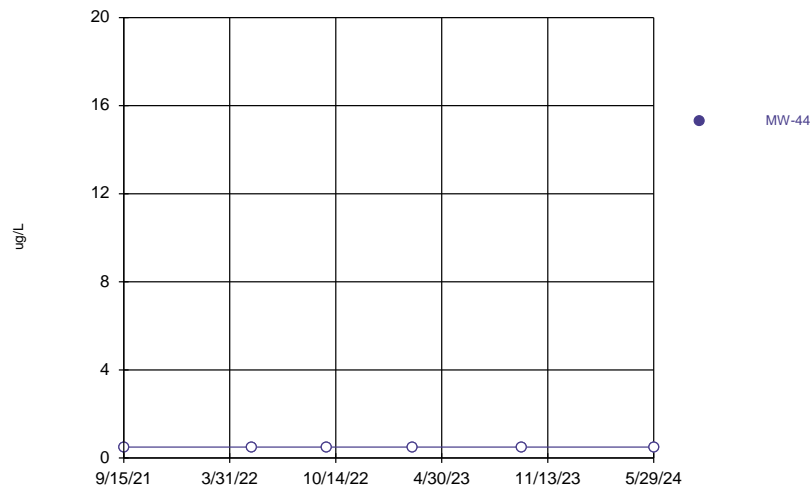
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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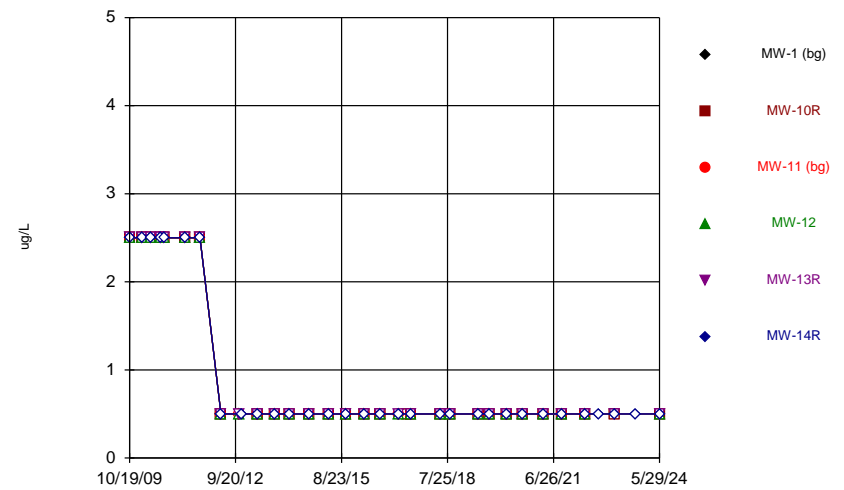
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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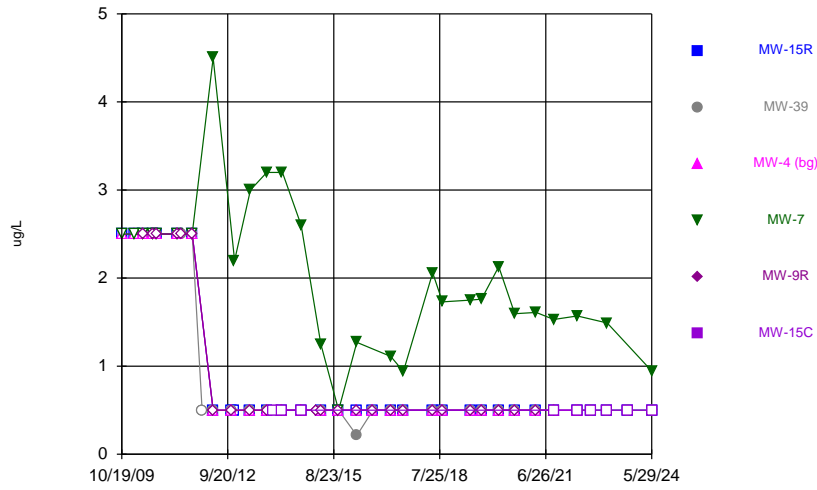
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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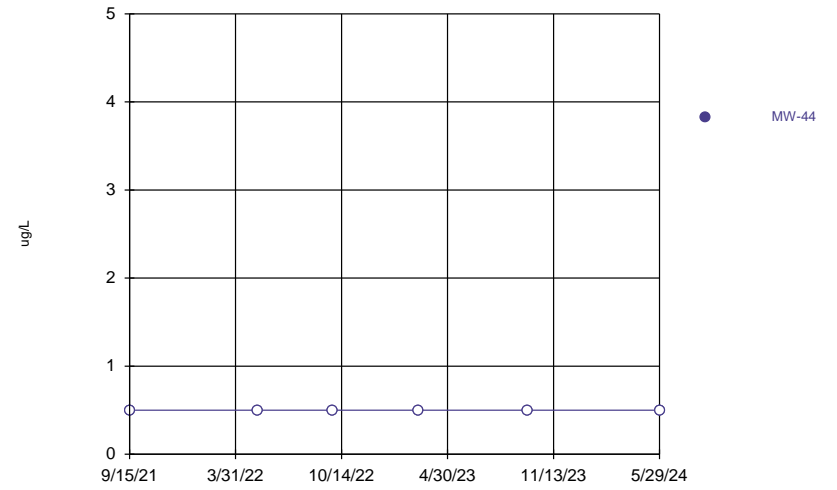
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Time Series



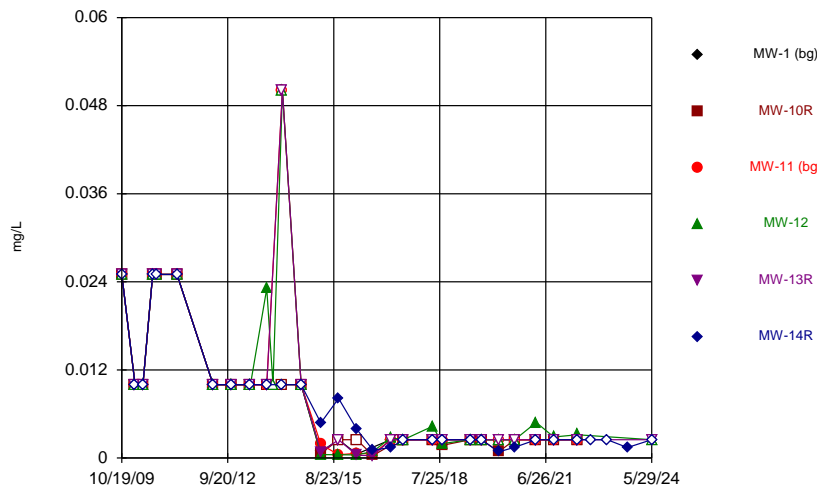
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Time Series



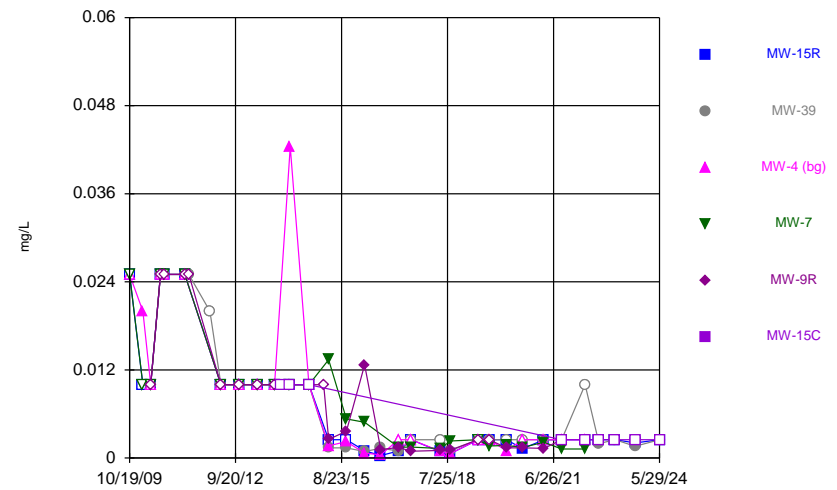
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

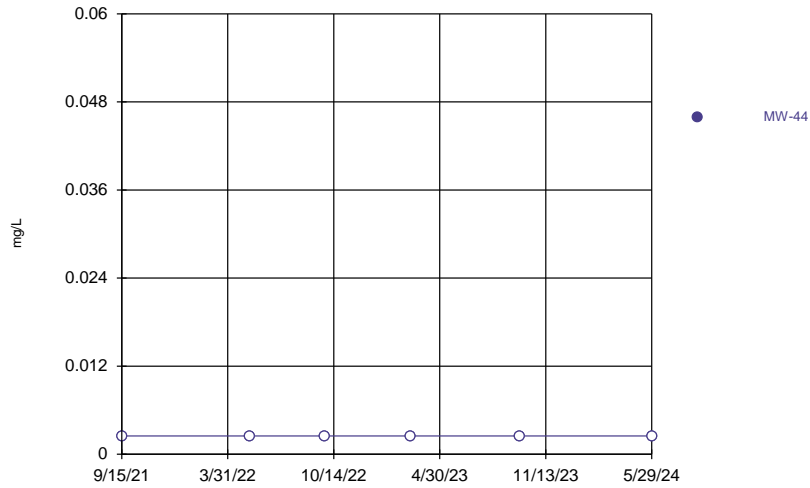
Time Series



Constituent: Vanadium Analysis Run 9/12/2024 2:03 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

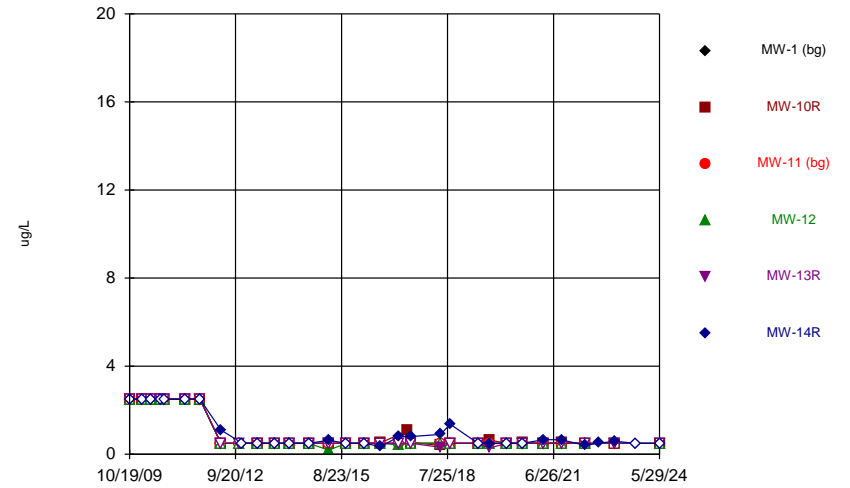


### Time Series



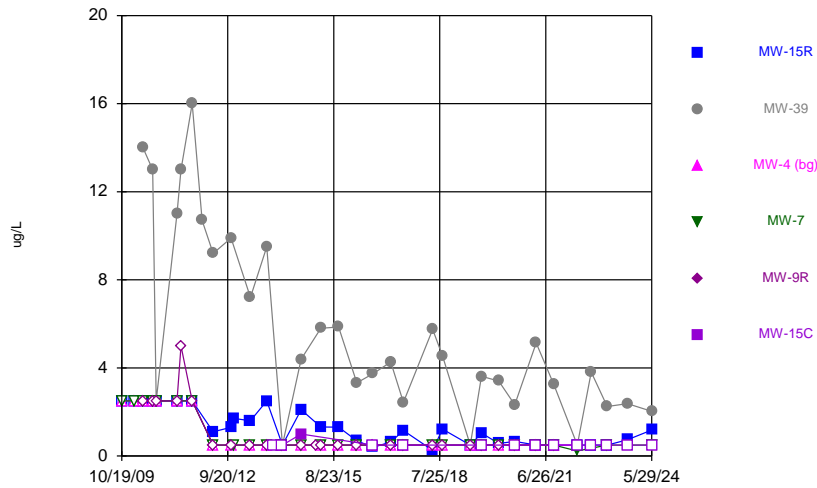
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

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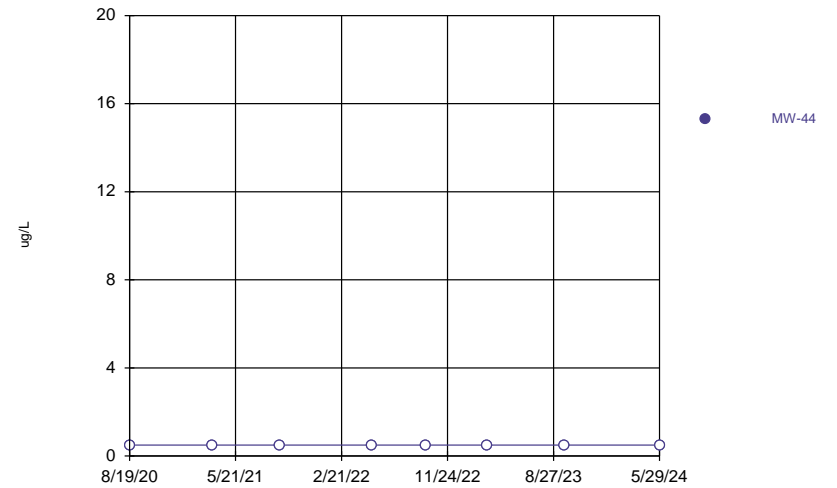
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



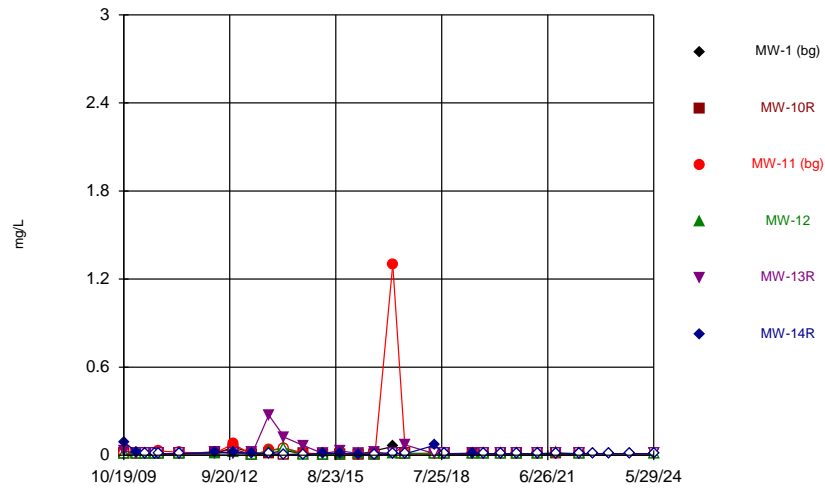
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### Time Series



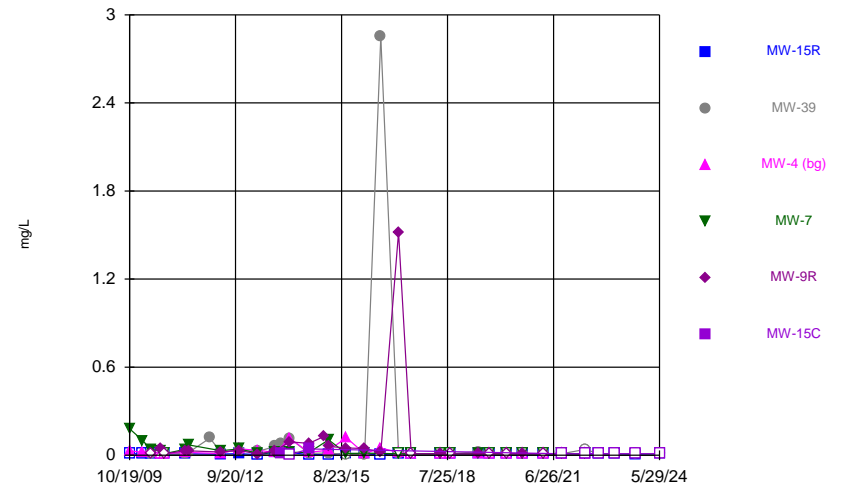
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



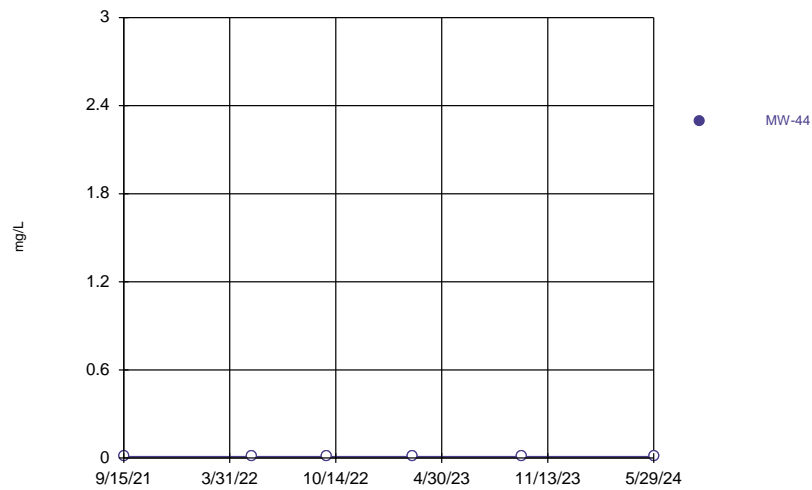
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

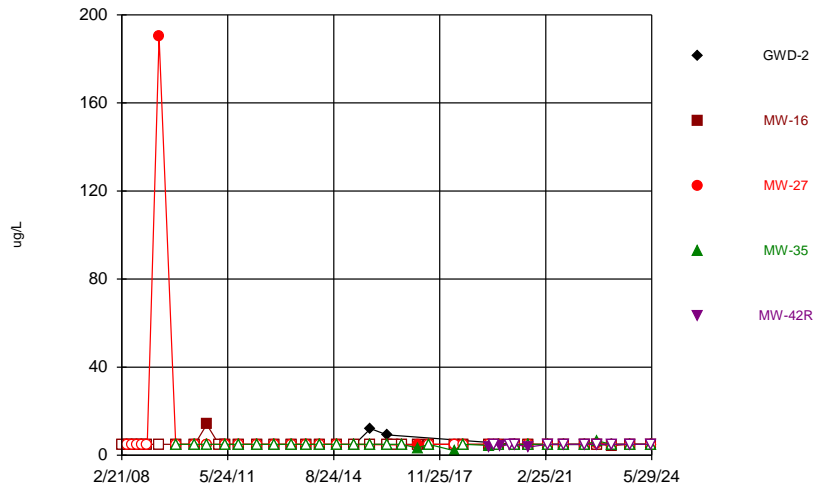
### Time Series



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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

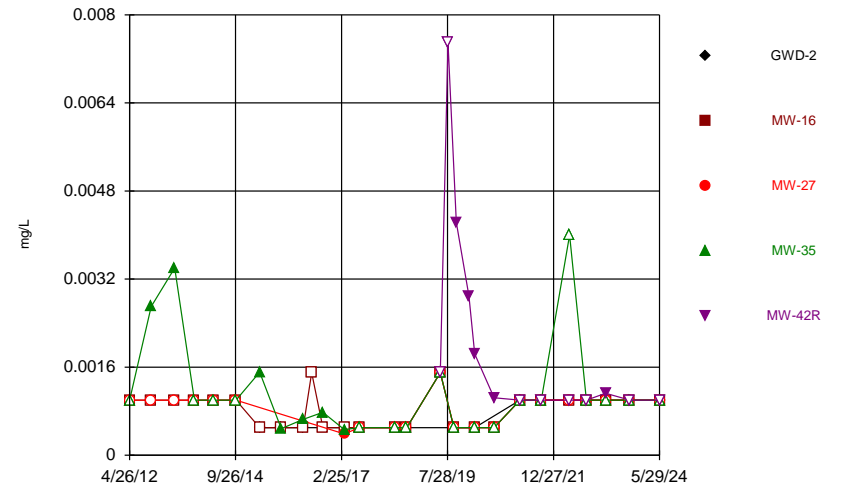
## **Time Series Plots – Open MSWLF Unit**

Time Series



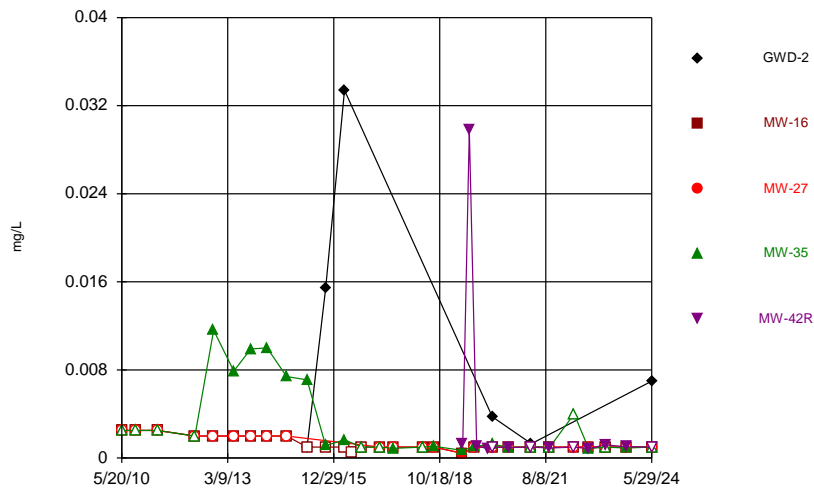
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



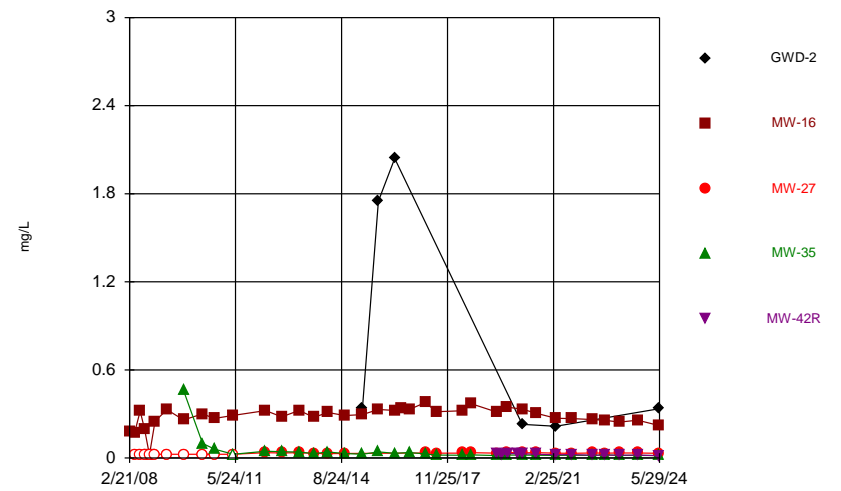
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



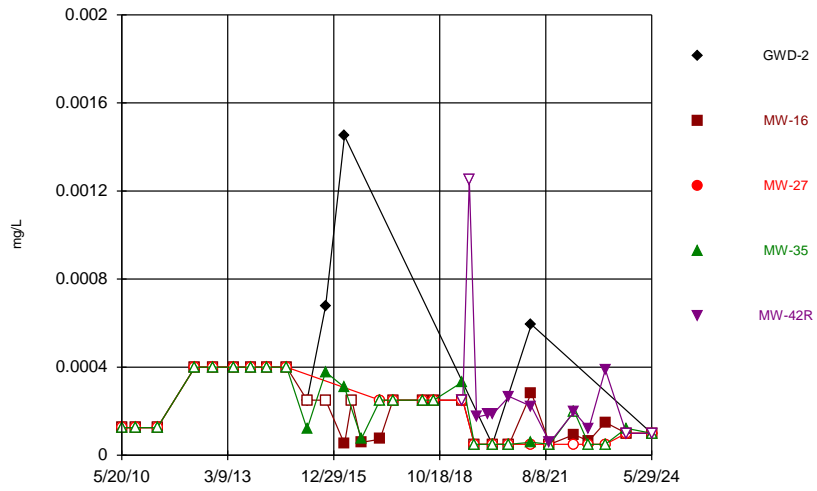
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



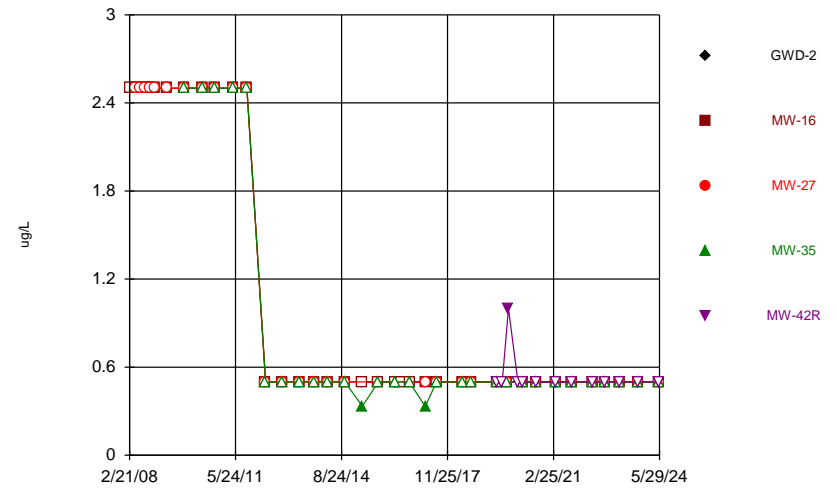
Constituent: Barium Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



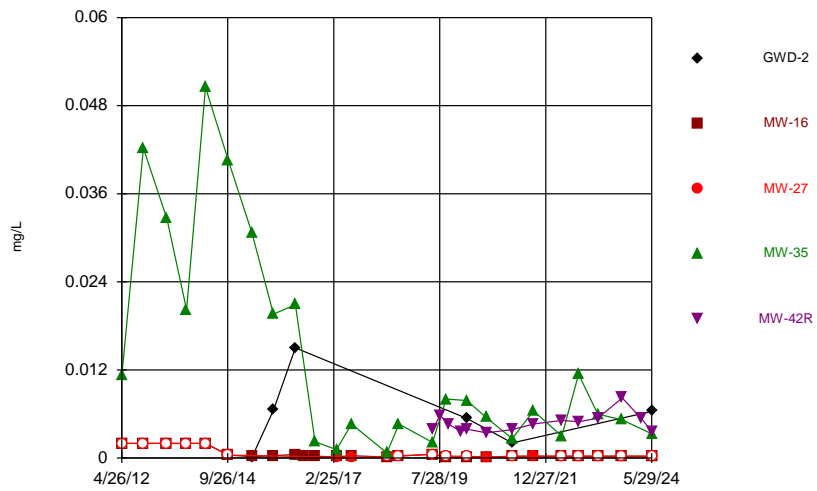
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



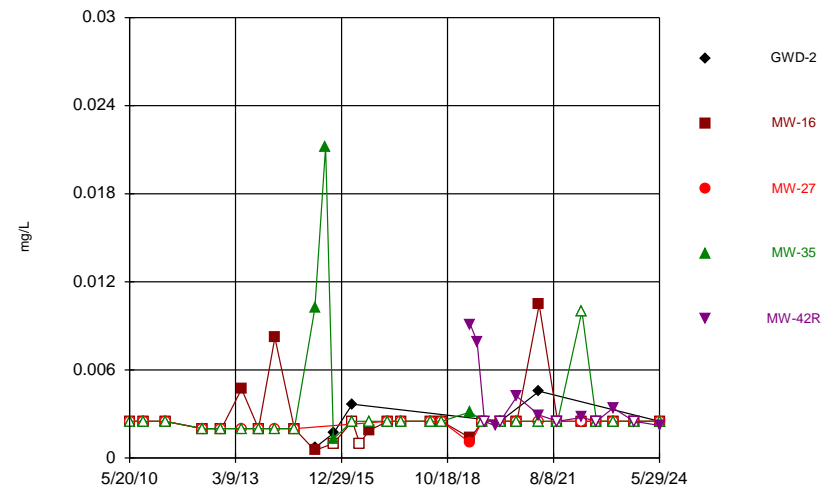
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



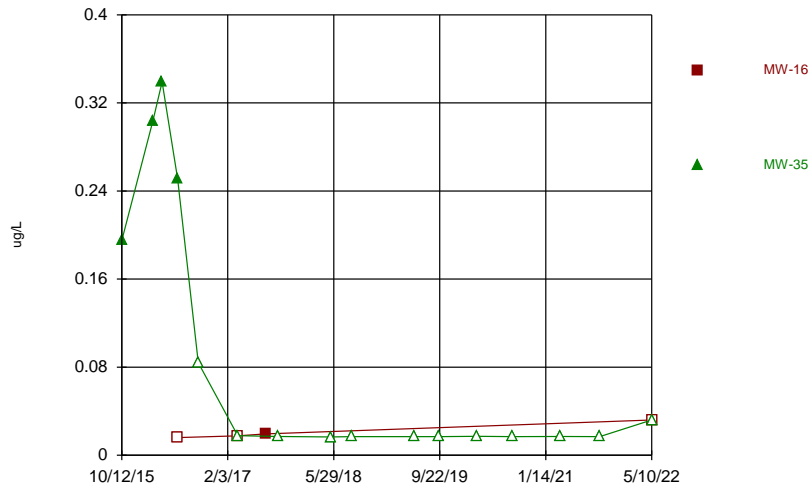
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Time Series



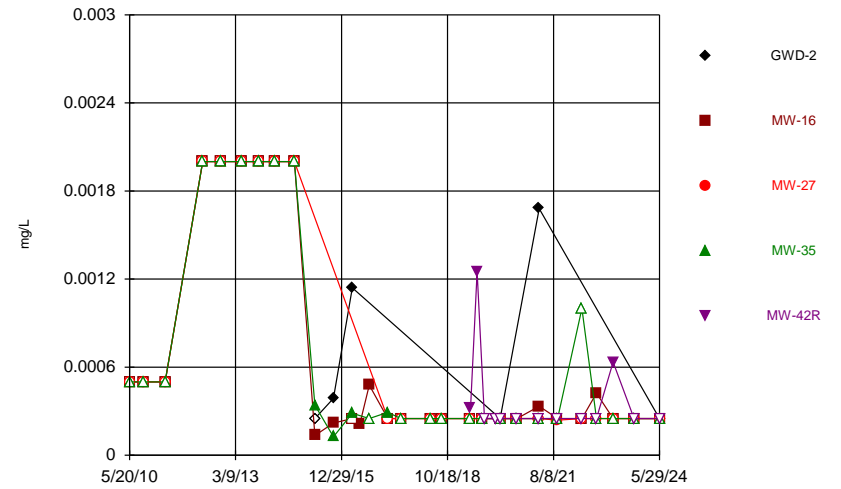
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



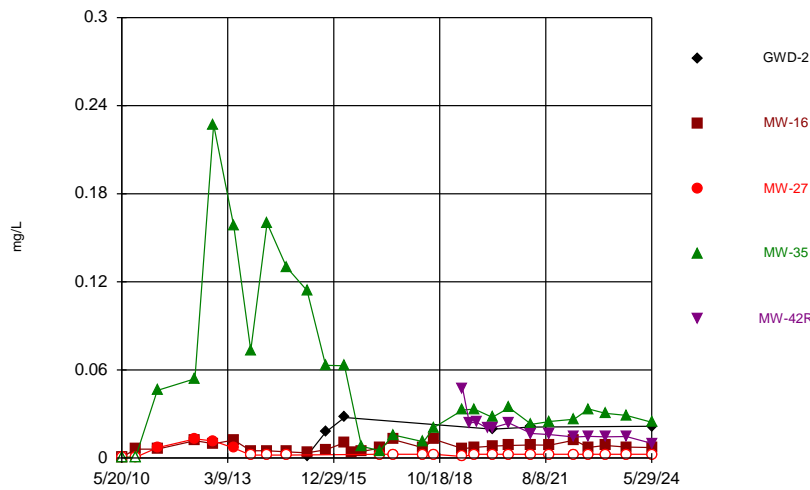
Constituent: Endrin aldehyde Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



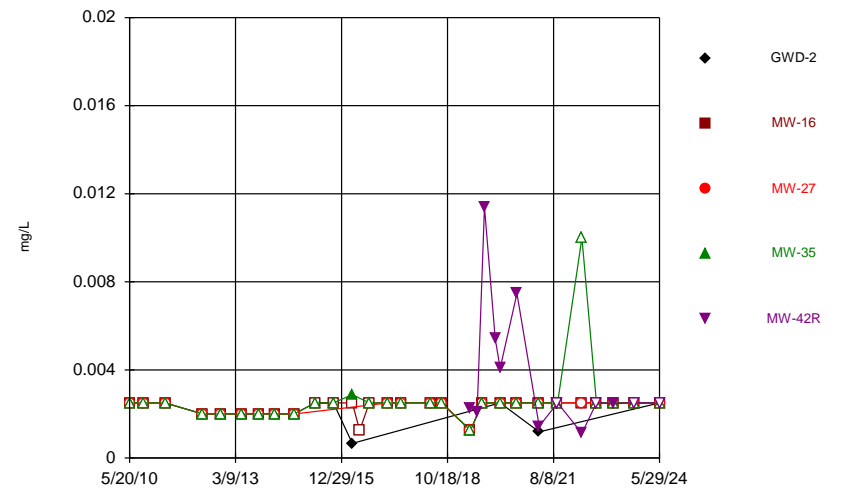
Constituent: Lead Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



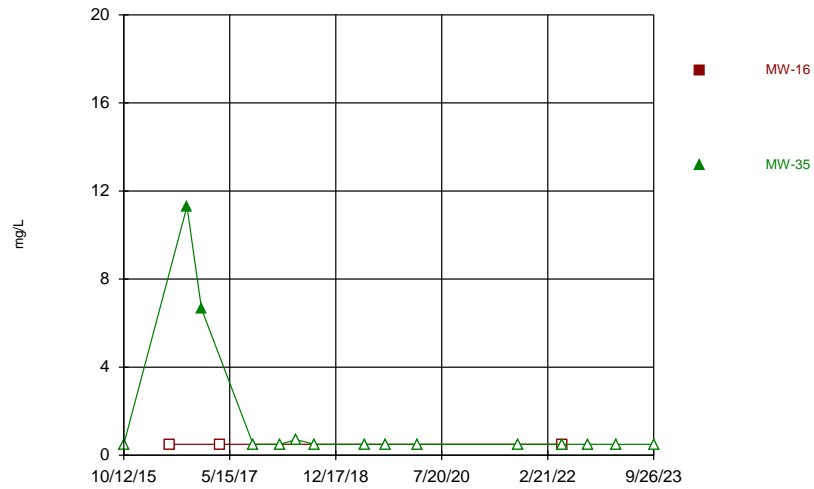
Constituent: Nickel Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



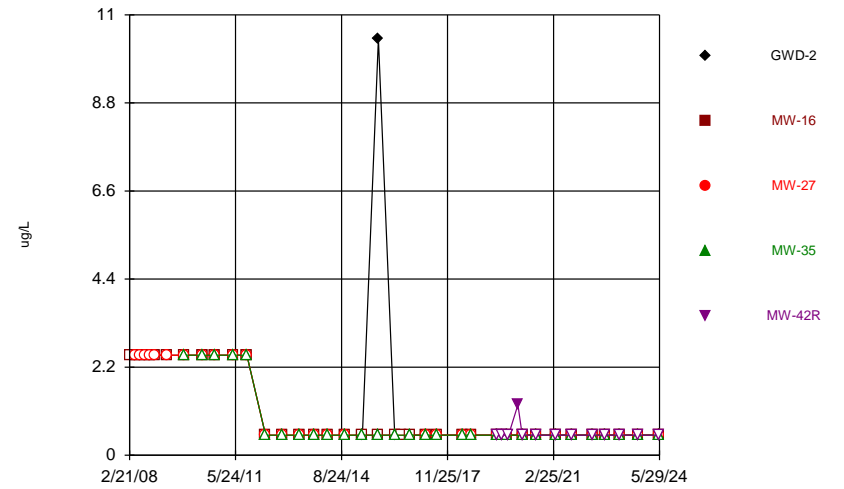
Constituent: Selenium Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



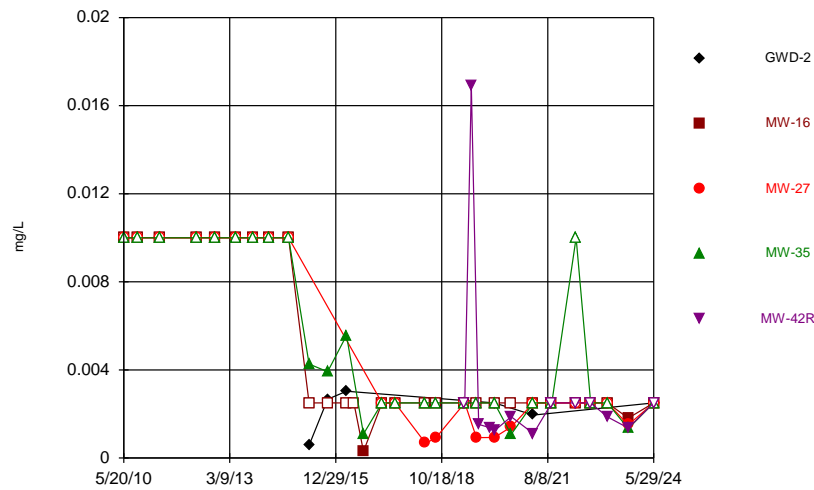
Constituent: Sulfide Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



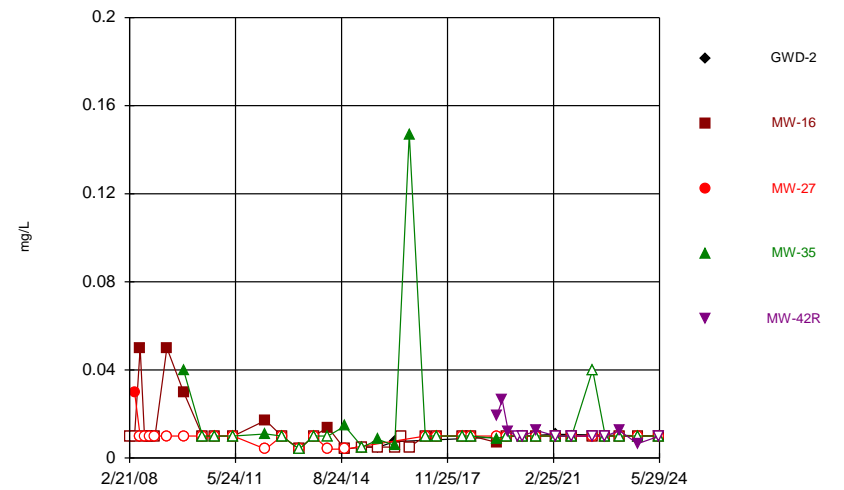
Constituent: Toluene Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



Constituent: Vanadium Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



Constituent: Zinc Analysis Run 9/4/2024 12:54 PM View: 2024SSN - Time Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

**Outlier Test Summary Table and Graphs – Closed MSWLF Unit**

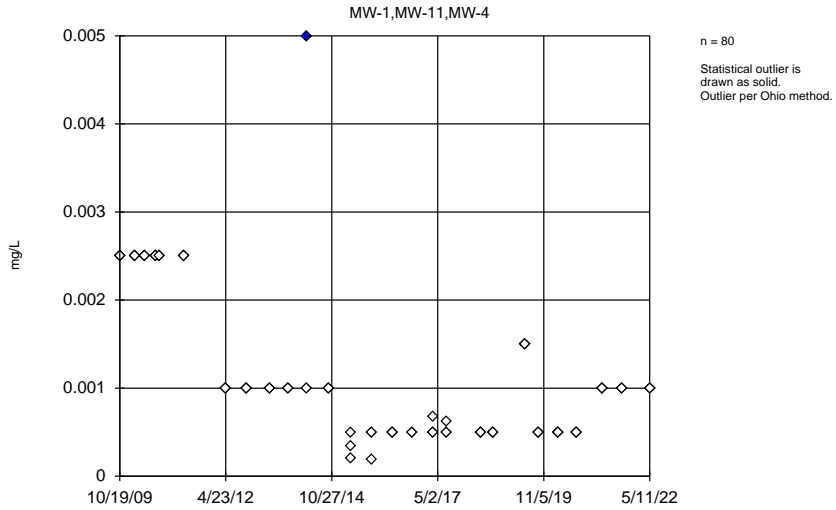


# Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 9/12/2024, 2:57 PM

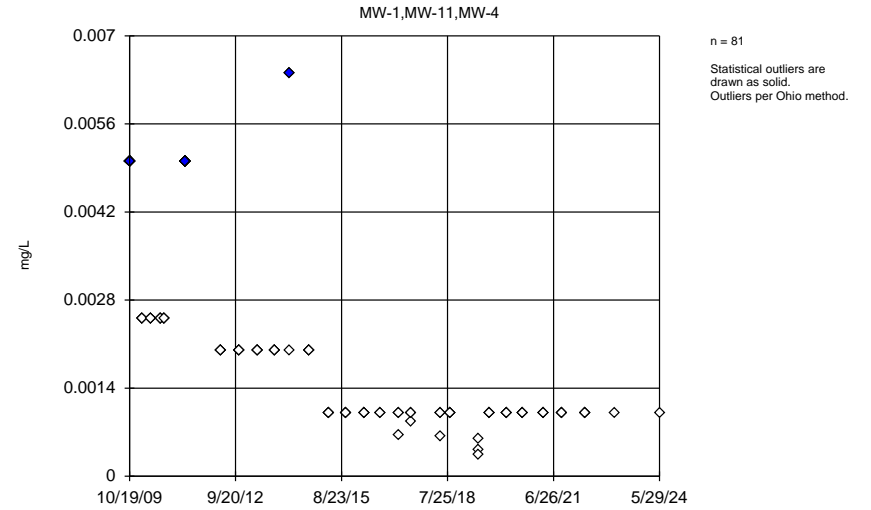
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-1,MW-11,MW-4	Yes	0.005	n/a w/combined bg	OH	NaN	80	0.0012	0.0008913	n/a
Arsenic (mg/L)	MW-1,MW-11,MW-4	Yes	0.0064,0.005,0.005	n/a w/combined bg	OH	NaN	81	0.001752	0.001243	n/a
Barium (mg/L)	MW-11,MW-1,MW-4	No	n/a	n/a w/combined bg	EPA/OH	0.05	82	0.03684	0.02306	ShapiroFrancia
Cadmium (mg/L)	MW-1,MW-11,MW-4	Yes	0.0066,0.0079,0.0105,0.0494	n/a w/combined bg	NP (nrm)/OH	NaN	80	0.001727	0.005707	ShapiroFrancia
Chromium (mg/L)	MW-1,MW-11,MW-4	Yes	0.014,0.0125,0.01,0.01,0.01	n/a w/combined bg	OH	NaN	80	0.00396	0.002695	n/a
Cobalt (mg/L)	MW-1,MW-11,MW-4	Yes	0.0074	n/a w/combined bg	NP (nrm)/OH	NaN	63	0.0007968	0.001114	ShapiroFrancia
Copper (mg/L)	MW-1,MW-11,MW-4	Yes	0.005,0.005,0.005,0.0133,0.0068,0.0051,0.0111,0.0	n/a w/combined bg	NP (nrm)/OH	NaN	80	0.003762	0.00356	ShapiroFrancia
Lead (mg/L)	MW-1,MW-11,MW-4	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	82	0.002582	0.004646	ShapiroFrancia
Nickel (mg/L)	MW-11,MW-4,MW-1	No	n/a	n/a w/combined bg	EPA/OH	0.05	82	0.006801	0.008193	ShapiroFrancia
Selenium (mg/L)	MW-1,MW-11,MW-4	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	80	0.004993	0.004639	ShapiroFrancia
Silver (mg/L)	MW-1,MW-11,MW-4	Yes	0.01,0.005,0.004,0.0025,0.0025,0.0025	n/a w/combined bg	OH	NaN	80	0.001371	0.001574	n/a
Thallium (mg/L)	MW-1,MW-11,MW-4	Yes	0.01,0.002,0.002	n/a w/combined bg	OH	NaN	80	0.0008656	0.001166	n/a
Vanadium (mg/L)	MW-1,MW-11,MW-4	Yes	0.05,0.0424	n/a w/combined bg	OH	NaN	80	0.008904	0.01017	n/a
Zinc (mg/L)	MW-1,MW-11,MW-4	Yes	0.0551,0.0598,0.0772,0.05,1.3,0.113,0.119	n/a w/combined bg	NP (nrm)/OH	NaN	80	0.03498	0.1447	ShapiroFrancia

Ohio EPA 0715 Outlier Algorithm, Pooled Background



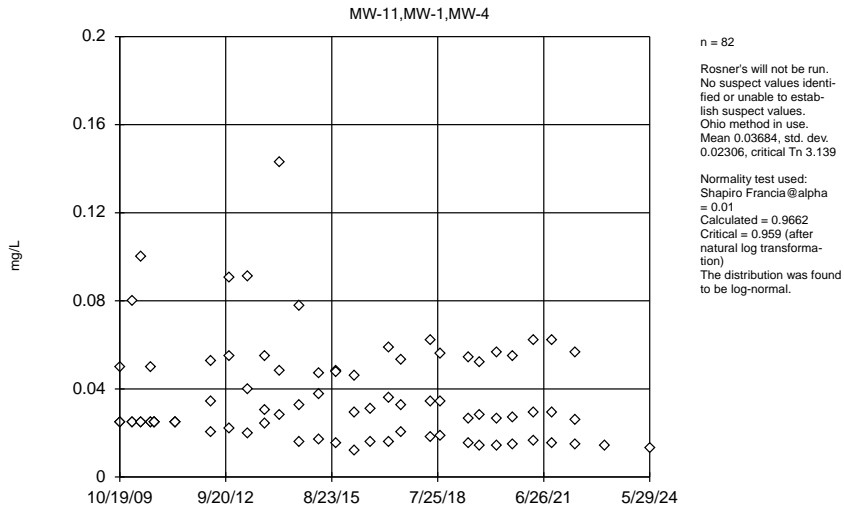
Constituent: Antimony Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background



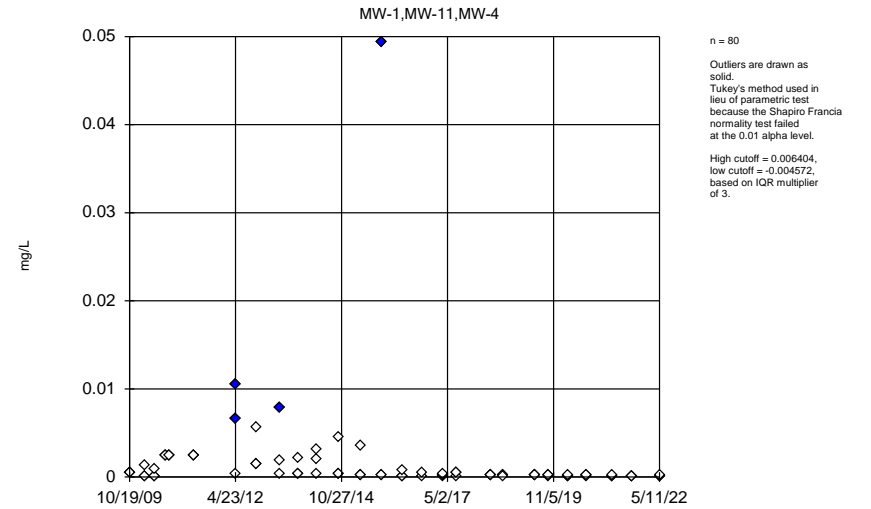
Constituent: Arsenic Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Rosner's Test)



Constituent: Barium Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

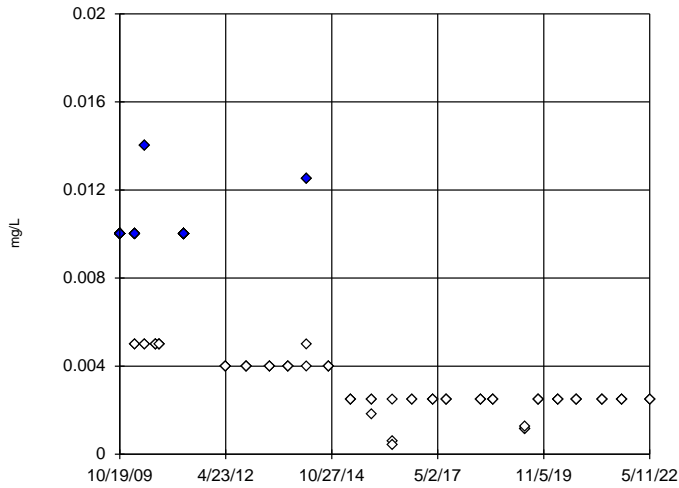
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



Constituent: Cadmium Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-1,MW-11,MW-4

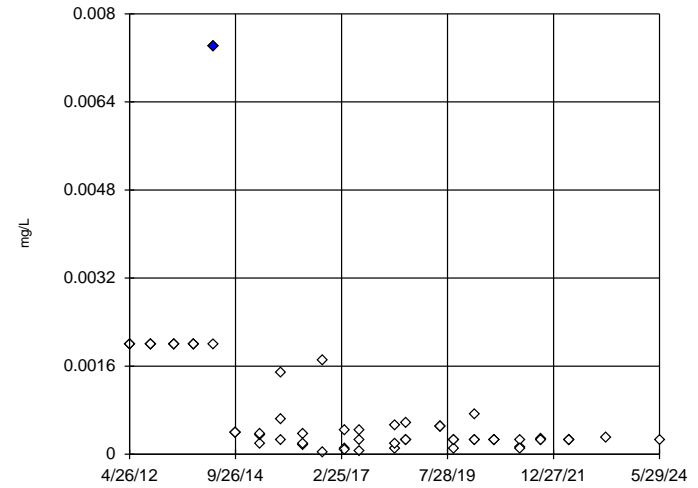


n = 80  
 Statistical outliers are drawn as solid.  
 Outliers per Ohio method.

Constituent: Chromium Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-1,MW-11,MW-4

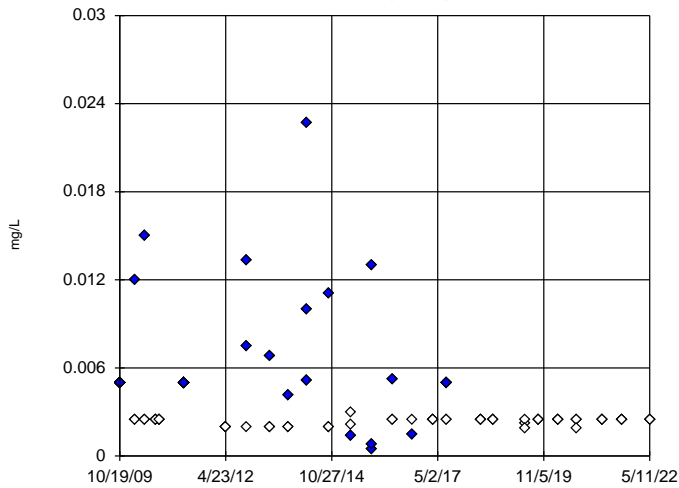


n = 63  
 Outlier is drawn as solid.  
 Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.  
 High cutoff = 0.00521, low cutoff = -0.00347, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-1,MW-11,MW-4

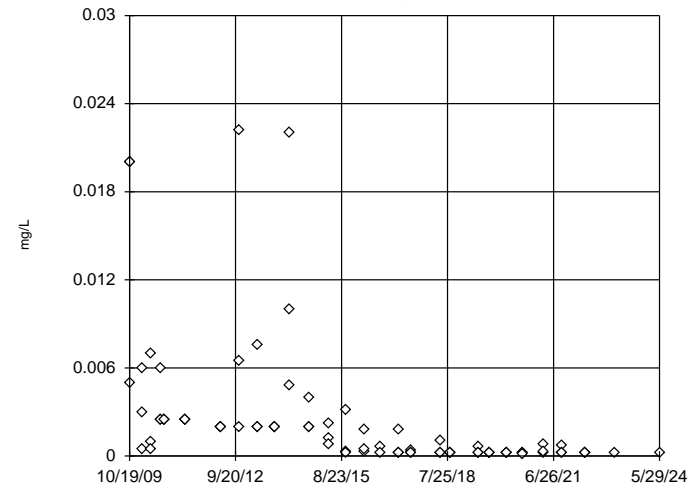


n = 80  
 Outliers are drawn as solid.  
 Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.  
 High cutoff = 0.0034, low cutoff = 0.001825, based on IQR multiplier of 3.

Constituent: Copper Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

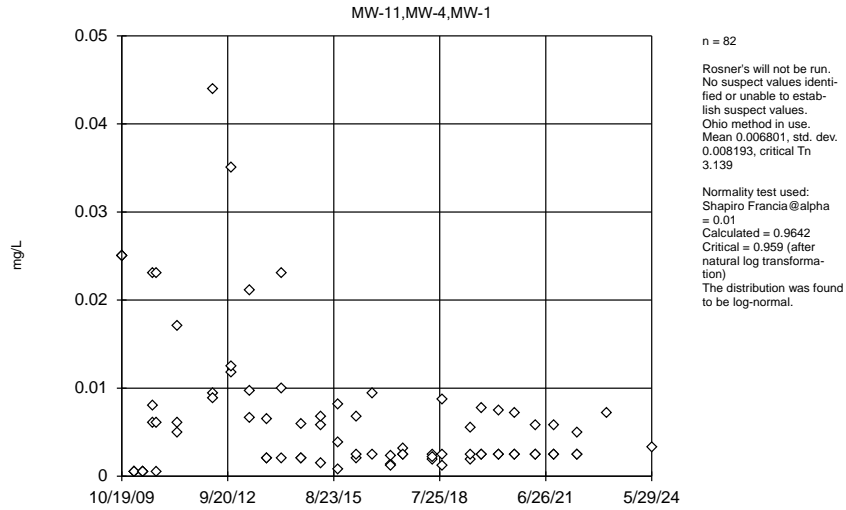
MW-1,MW-11,MW-4



n = 82  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.  
 The results were invalidated, because both the lower and upper quartiles represent reporting limits.

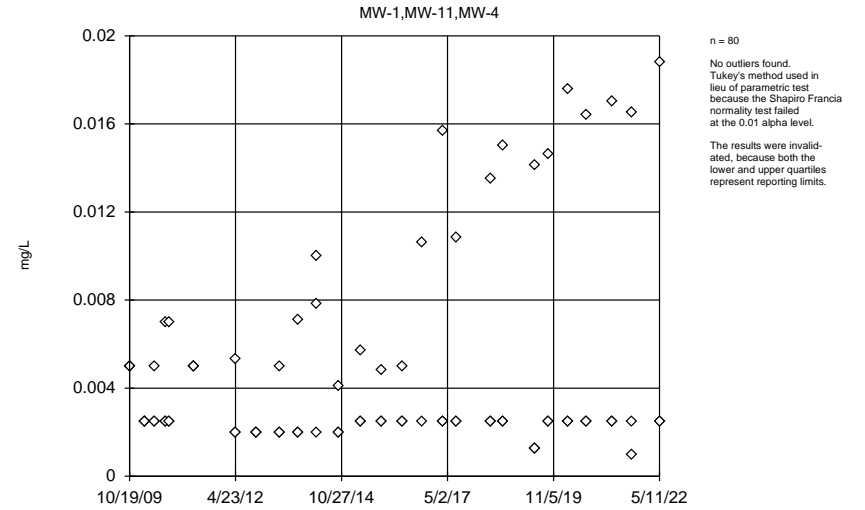
Constituent: Lead Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### EPA Screening (suspected outliers for Rosner's Test)



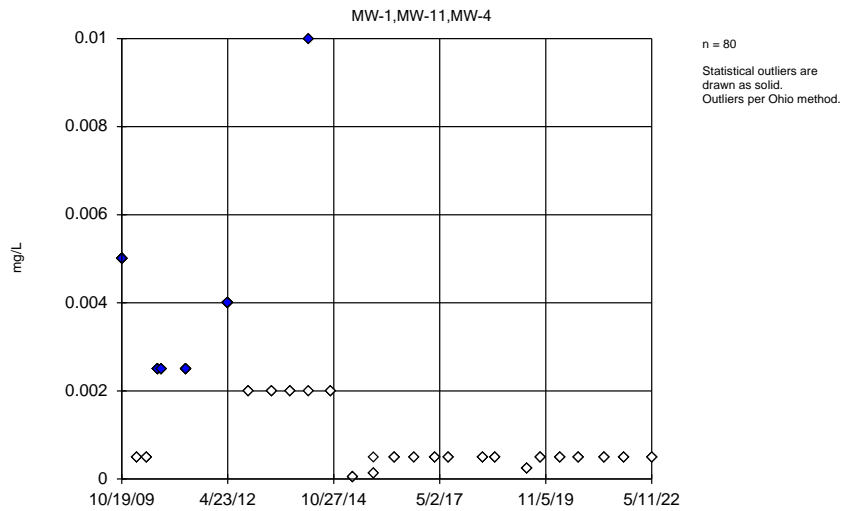
Constituent: Nickel Analysis Run 9/12/2024 2:40 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



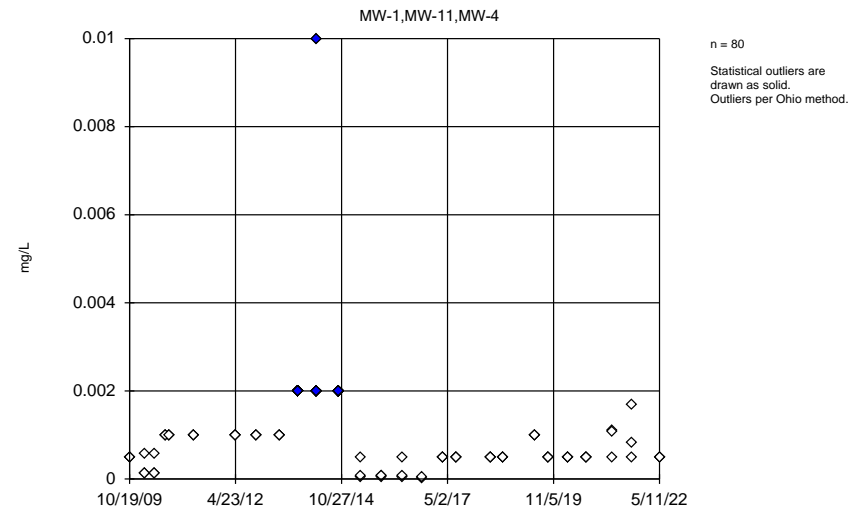
Constituent: Selenium Analysis Run 9/12/2024 2:41 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background



Constituent: Silver Analysis Run 9/12/2024 2:41 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

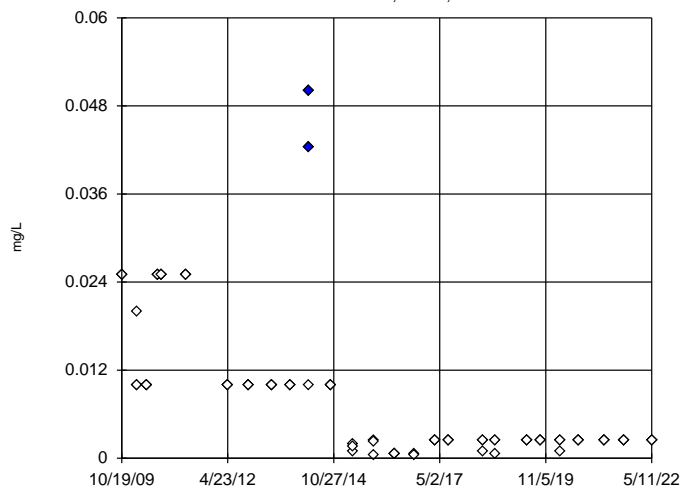
### Ohio EPA 0715 Outlier Algorithm, Pooled Background



Constituent: Thallium Analysis Run 9/12/2024 2:41 PM View: 2024SSN - BG Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background

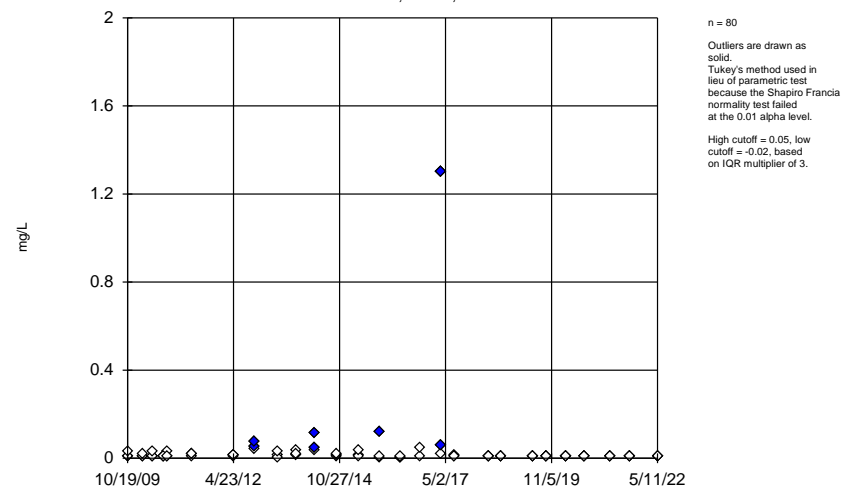
MW-1,MW-11,MW-4



Constituent: Vanadium Analysis Run 9/12/2024 2:41 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-1,MW-11,MW-4



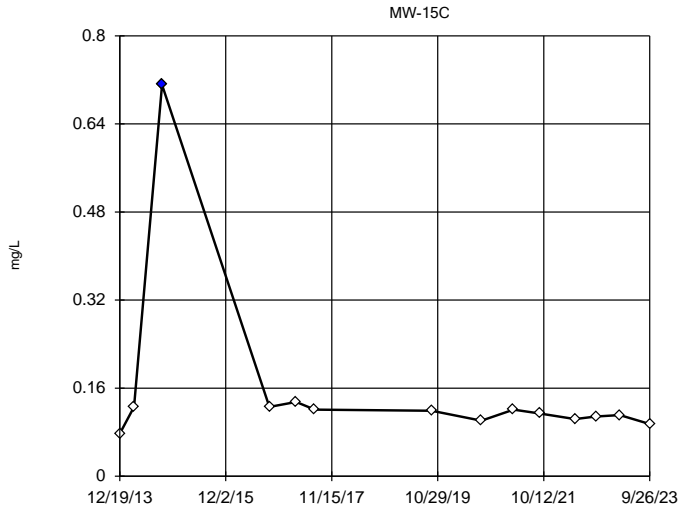
Constituent: Zinc Analysis Run 9/12/2024 2:41 PM View: 2024SSN - BG Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

# Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 9/12/2024, 5:34 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>
<b>Barium (mg/L)</b>	<b>MW-15C</b>	<b>Yes</b>	<b>0.711</b>	<b>9/30/2014</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>14</b>	<b>0.155</b>	<b>0.1607</b>	<b>ShapiroWilk</b>
Cadmium (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	8	0.001839	0.002733	ShapiroWilk
Cobalt (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	17	0.0005391	0.0006417	ShapiroWilk
Nickel (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	11	0.007845	0.002621	ShapiroWilk
<b>Zinc (mg/L)</b>	<b>MW-15C</b>	<b>Yes</b>	<b>0.0426</b>	<b>9/30/2014</b>	<b>OH</b>	<b>NaN</b>	<b>8</b>	<b>0.01342</b>	<b>0.01199</b>	<b>n/a</b>

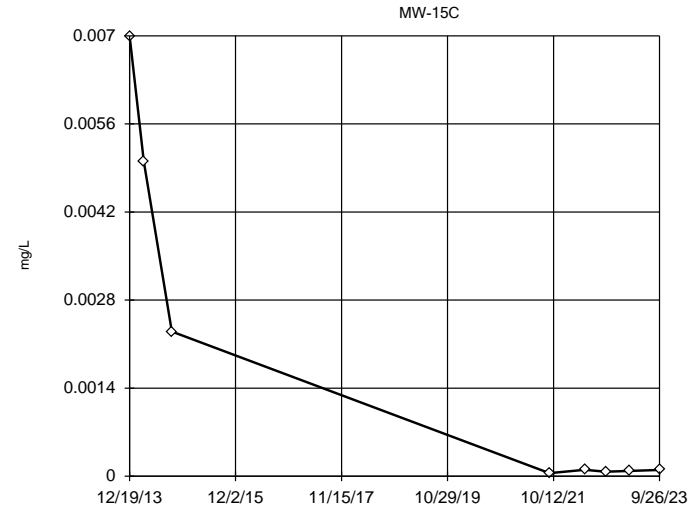
Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



n = 14  
 Statistical outlier is drawn as solid.  
 Testing for 1 high and 1 low outliers.  
 Mean = 0.155,  
 Std. Dev. = 0.1607,  
 0.711: c = 0.959  
 tab1 = 0.641  
 0.0774: c = 0.4856  
 tab1 = 0.641  
 Alpha = 0.01.  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.981  
 Critical = 0.805  
 The distribution, after removal of suspect value, was found to be normally distributed.

Constituent: Barium Analysis Run 9/12/2024 5:31 PM View: 2024SSN MW-15C BG Update  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

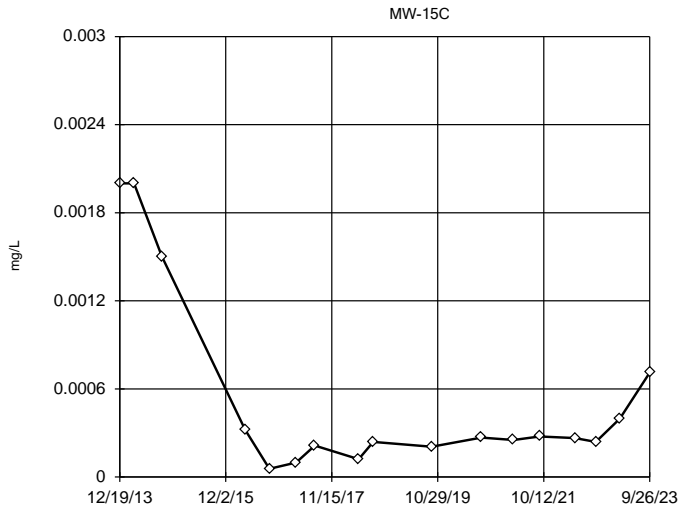
EPA Screening (suspected outliers for Dixon's Test)



n = 8  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.001839, std. dev. 0.002733, critical Tn 2.032  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.7789  
 Critical = 0.749 (after natural log transformation)  
 The distribution was found to be log-normal.

Constituent: Cadmium Analysis Run 9/12/2024 5:31 PM View: 2024SSN MW-15C BG Update  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

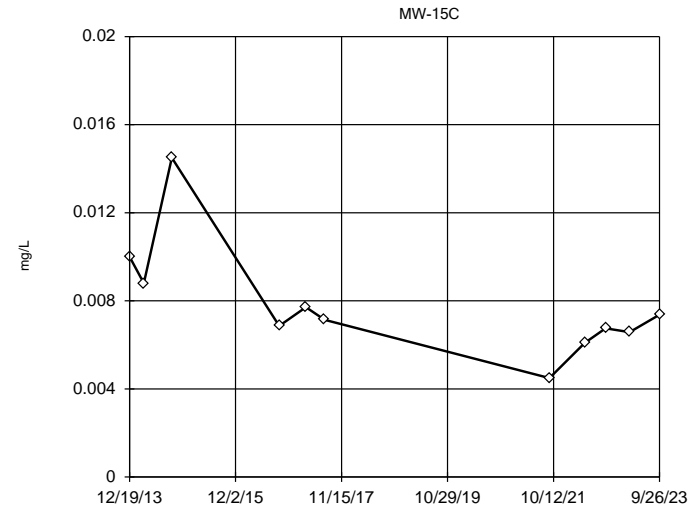
EPA Screening (suspected outliers for Dixon's Test)



n = 17  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.0005391, std. dev. 0.0006417, critical Tn 2.475  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.9059  
 Critical = 0.851 (after natural log transformation)  
 The distribution was found to be log-normal.

Constituent: Cobalt Analysis Run 9/12/2024 5:31 PM View: 2024SSN MW-15C BG Update  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Dixon's Test)

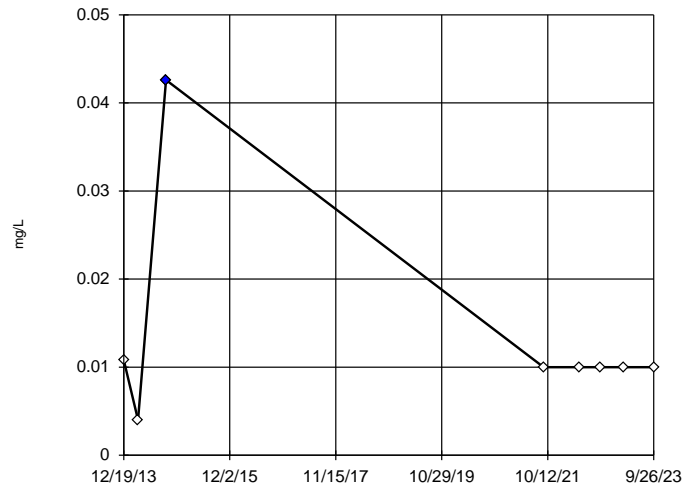


n = 11  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.007845, std. dev. 0.002621, critical Tn 2.234  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.8358  
 Critical = 0.792  
 The distribution was found to be normally distributed.

Constituent: Nickel Analysis Run 9/12/2024 5:31 PM View: 2024SSN MW-15C BG Update  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm

MW-15C



n = 8  
Statistical outlier is drawn as solid.  
Outlier per Ohio method.  
  
Normality test used:  
Shapiro Wilk @ alpha = 0.01  
Calculated = 0.8358  
Critical = 0.792  
The distribution, after removal of suspect value, was found to be normally distributed.

Constituent: Zinc Analysis Run 9/12/2024 5:31 PM View: 2024SSN MW-15C BG Update  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master



# Outlier Analysis

Cherokee County Sanitary Landfill

Client: SCS Engineers

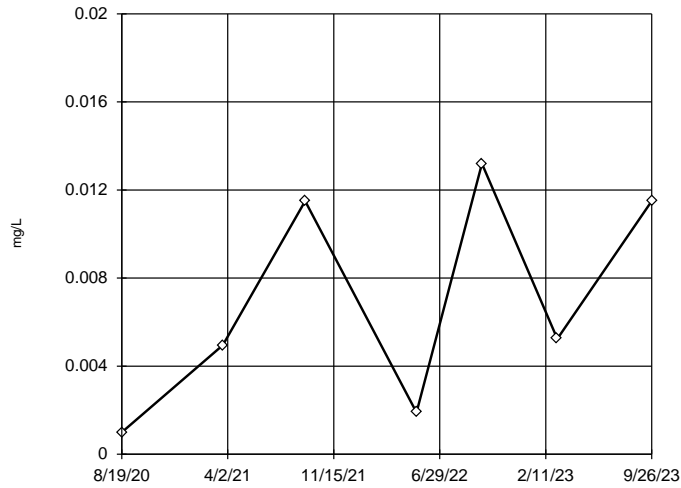
Data: Sanitas CHRKE Closed Master

Printed 9/13/2024, 12:24 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>
Arsenic (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.007041	0.004971	ShapiroWilk
Barium (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.025	0.008163	ShapiroWilk
Cobalt (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.001564	0.001503	ShapiroWilk
Nickel (mg/L)	MW-44	No	n/a	n/a	OH	NaN	5	0.002402	0.0002191	n/a

### EPA Screening (suspected outliers for Dixon's Test)

MW-44

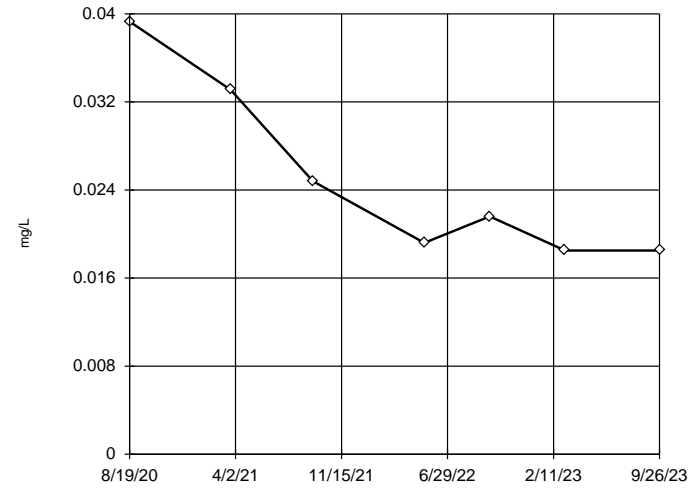


n = 7  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.007041, std. dev. 0.004971, critical Tn 1.938  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.8816  
 Critical = 0.73  
 The distribution was found to be normally distributed.

Constituent: Arsenic Analysis Run 9/13/2024 12:22 PM View: 2024SSN MW-44 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-44

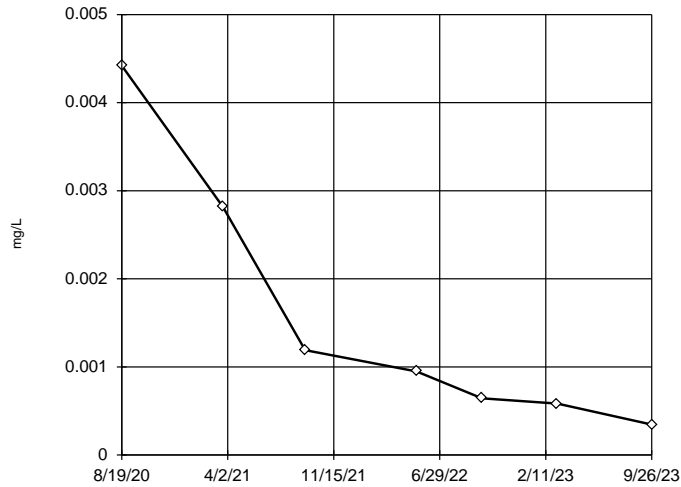


n = 7  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.025, std. dev. 0.008163, critical Tn 1.938  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.8261  
 Critical = 0.73  
 The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 9/13/2024 12:22 PM View: 2024SSN MW-44 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-44

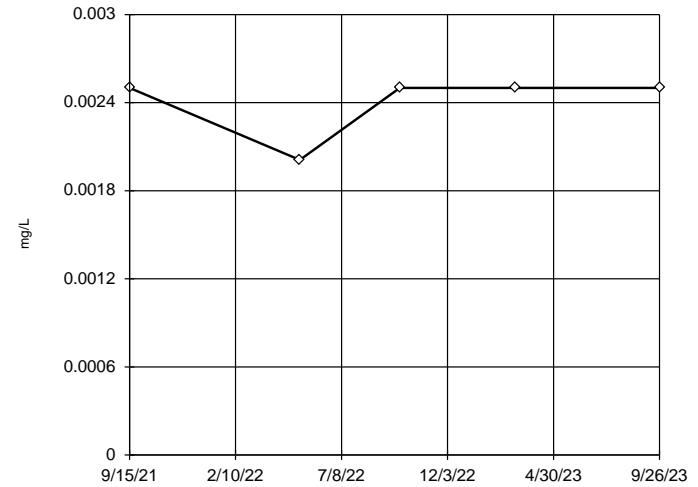


n = 7  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.001564, std. dev. 0.001503, critical Tn 1.938  
 Normality test used:  
 Shapiro Wilk @alpha = 0.01  
 Calculated = 0.8011  
 Critical = 0.73  
 The distribution was found to be normally distributed.

Constituent: Cobalt Analysis Run 9/13/2024 12:22 PM View: 2024SSN MW-44 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm

MW-44



n = 5  
 No statistical outliers.

Constituent: Nickel Analysis Run 9/13/2024 12:22 PM View: 2024SSN MW-44 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

**Outlier Test Summary Table and Graphs – Open MSWLF Unit**

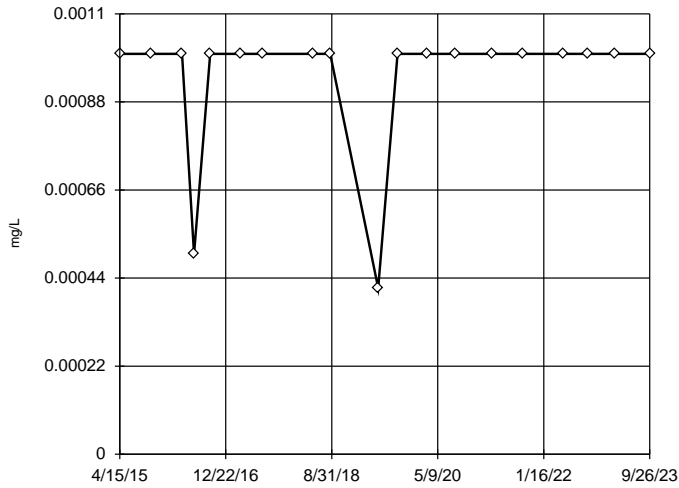
# BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/23/2024, 4:16 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>
Arsenic (mg/L)	MW-16	No	n/a	n/a	OH	NaN	19	0.0009429	0.0001716	n/a
Barium (mg/L)	MW-16	No	n/a	n/a	EPA/OH	0.05	19	0.3083	0.03886	ShapiroWilk
Beryllium (mg/L)	MW-16	No	n/a	n/a	OH	NaN	19	0.0004881	0.00005196	n/a
Cadmium (mg/L)	MW-16	No	n/a	n/a	NP (nrm)/OH	NaN	19	0.0001486	0.00009572	ShapiroWilk
Cobalt (mg/L)	MW-16	No	n/a	n/a	EPA/OH	0.05	19	0.0002472	0.0001096	ShapiroWilk
<b>Copper (mg/L)</b>	<b>MW-16</b>	<b>Yes</b>	<b>0.01045</b>	<b>3/23/2021</b>	<b>OH</b>	<b>NaN</b>	<b>19</b>	<b>0.002564</b>	<b>0.002017</b>	<b>n/a</b>
Lead (mg/L)	MW-16	No	n/a	n/a	NP (nrm)/OH	NaN	19	0.0002657	0.00007454	ShapiroWilk
Nickel (mg/L)	MW-16	No	n/a	n/a	EPA/OH	0.05	19	0.007898	0.002671	ShapiroWilk
Silver (mg/L)	MW-16	No	n/a	n/a	OH	NaN	19	0.0004869	0.0001015	n/a
<b>Thallium (mg/L)</b>	<b>MW-16</b>	<b>Yes</b>	<b>0.001,0.001</b>	<b>6/21/2016,5/29/2019</b>	<b>OH</b>	<b>NaN</b>	<b>19</b>	<b>0.0005278</b>	<b>0.0001982</b>	<b>n/a</b>
Vanadium (mg/L)	MW-16	No	n/a	n/a	OH	NaN	19	0.002348	0.000521	n/a
Zinc (mg/L)	MW-16	No	n/a	n/a	OH	NaN	19	0.008794	0.00212	n/a

### Ohio EPA 0715 Outlier Algorithm

MW-16

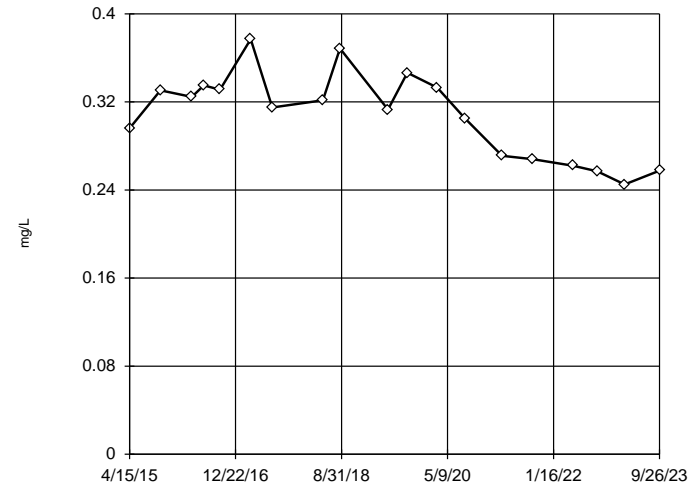


n = 19  
No statistical outliers.

Constituent: Arsenic Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-16

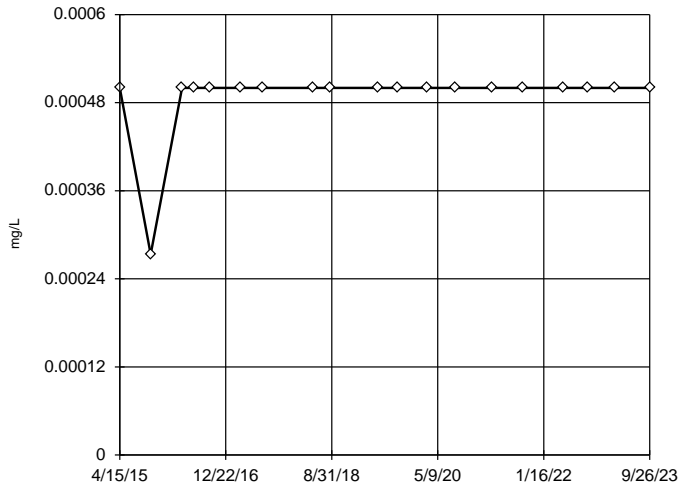


n = 19  
Dixon's will not be run. No suspect values identified or unable to establish suspect values. Ohio method in use. Mean 0.3083, std. dev. 0.03886, critical Tn 2.532  
Normality test used: Shapiro Wilk @alpha = 0.01 Calculated = 0.9453 Critical = 0.963 The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-16

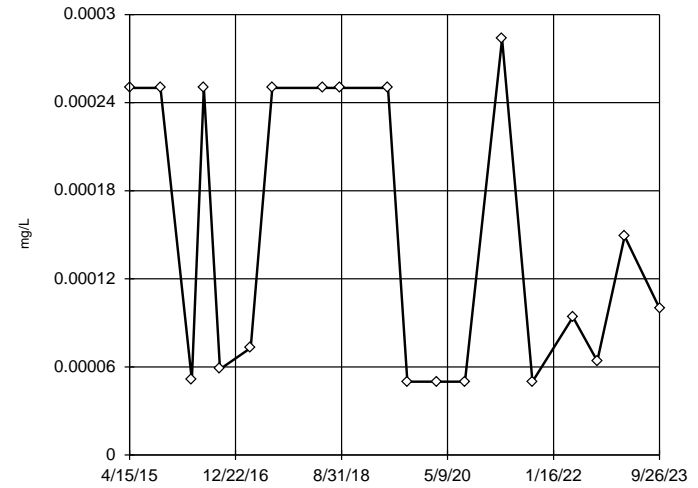


n = 19  
No statistical outliers.

Constituent: Beryllium Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

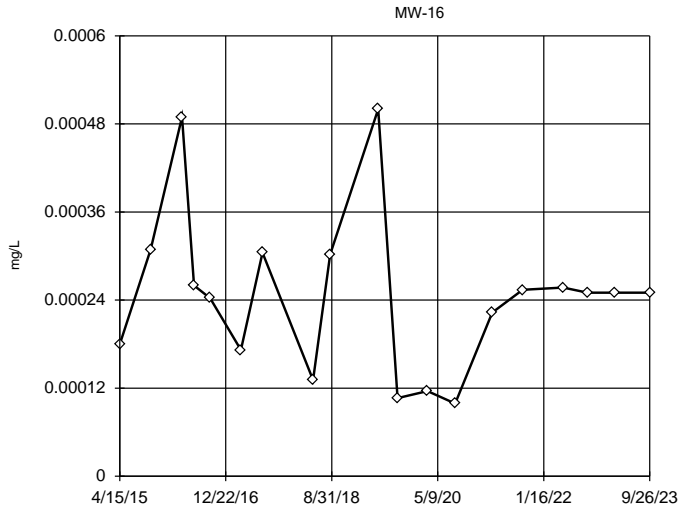
MW-16



n = 19  
No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
High cutoff = 0.000847, low cutoff = -0.000546, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

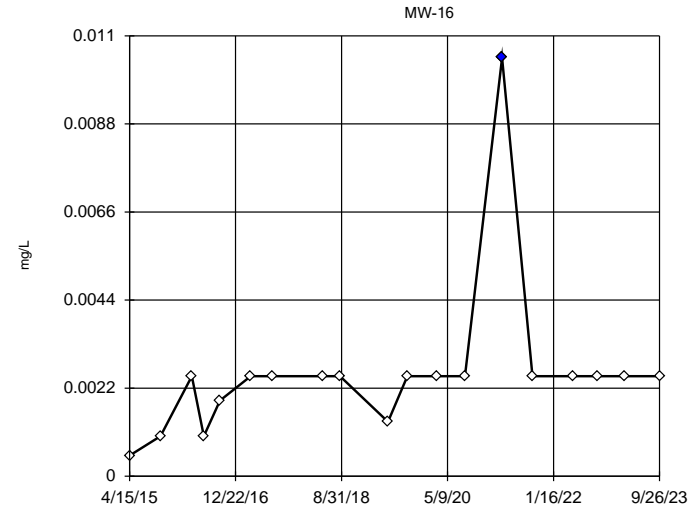
EPA Screening (suspected outliers for Dixon's Test)



n = 19  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.0002472, std. dev. 0.0001096, critical Tn 2.532  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.8834  
 Critical = 0.863  
 The distribution was found to be normally distributed.

Constituent: Cobalt Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

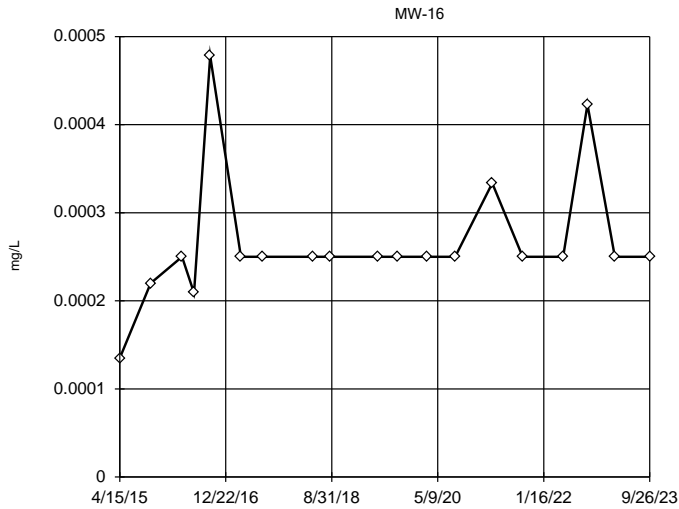
Ohio EPA 0715 Outlier Algorithm



n = 19  
 Statistical outlier is drawn as solid.  
 Outlier per Ohio method.

Constituent: Copper Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

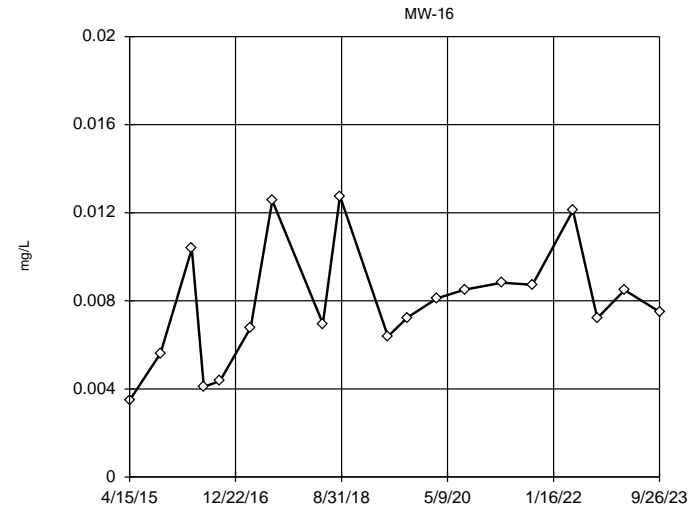
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



n = 19  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)

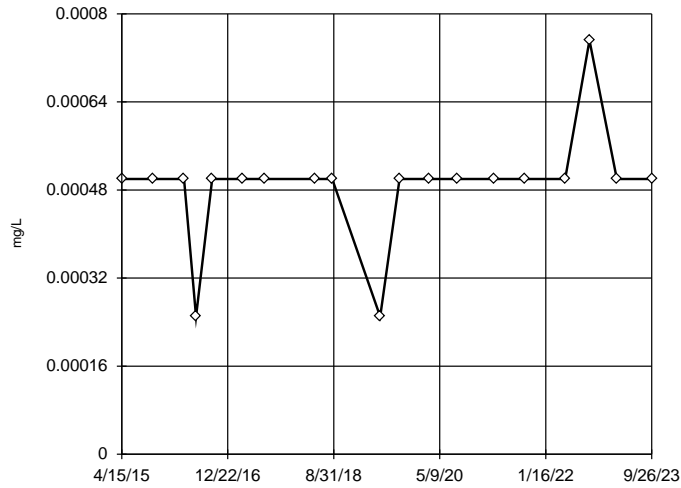


n = 19  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.007898, std. dev. 0.002671, critical Tn 2.532  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.9501  
 Critical = 0.863  
 The distribution was found to be normally distributed.

Constituent: Nickel Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-16

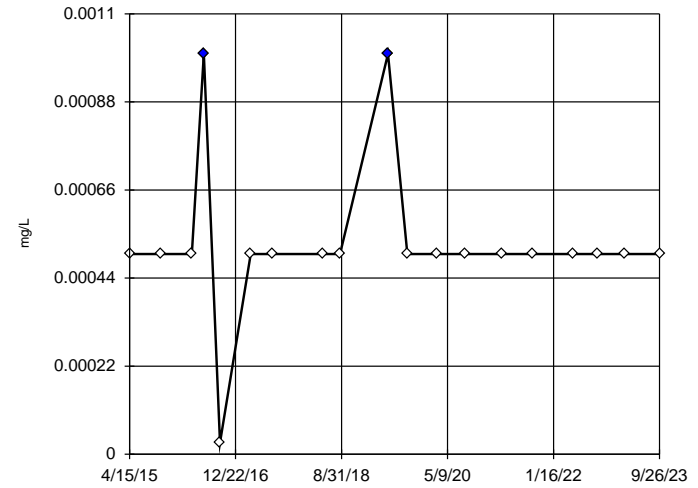


n = 19  
No statistical outliers.

Constituent: Silver Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-16

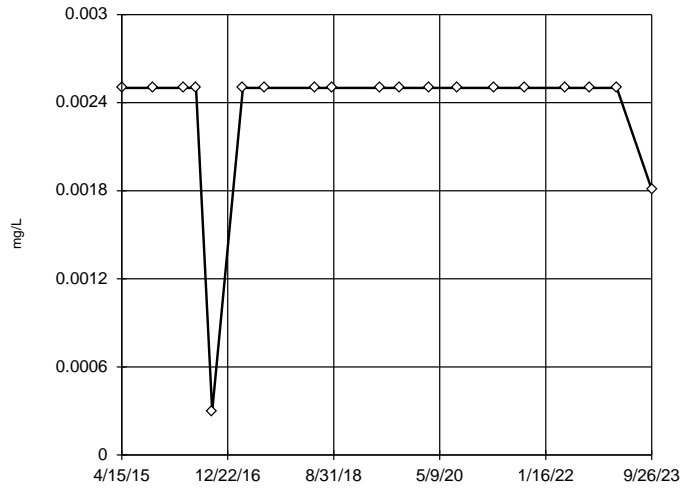


n = 19  
Statistical outlier is drawn as solid. Outlier per Ohio method.

Constituent: Thallium Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-16

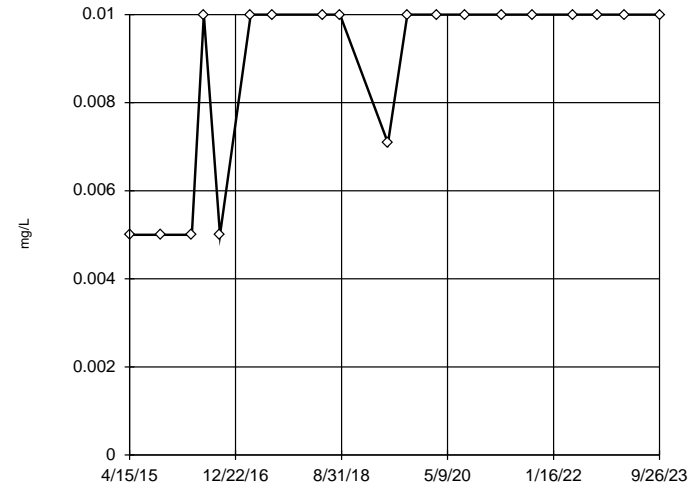


n = 19  
No statistical outliers.

Constituent: Vanadium Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-16



n = 19  
No statistical outliers.

Constituent: Zinc Analysis Run 9/23/2024 4:13 PM View: 2024SSN MW-16 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

# BG Outlier Analysis

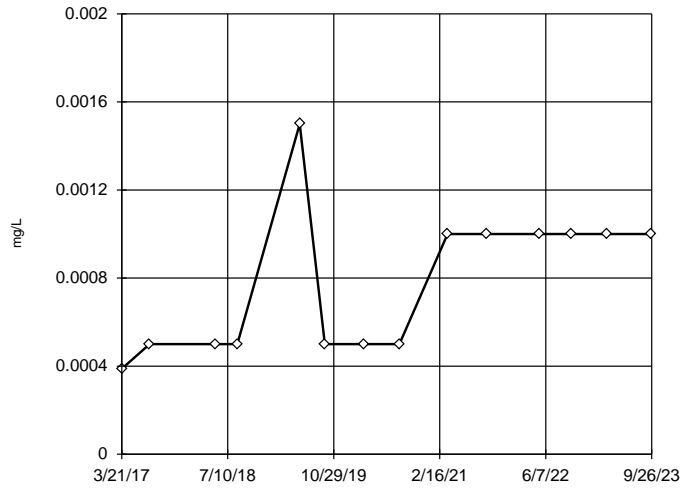
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/23/2024, 4:57 PM

<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>
Antimony (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0007777	0.000332	n/a
Arsenic (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0009589	0.0001537	n/a
Barium (mg/L)	MW-27	No	n/a	n/a	EPA/OH	0.05	14	0.0342	0.001669	ShapiroWilk
Chromium (mg/L)	MW-27	No	n/a	n/a	OH	NaN	15	0.002435	0.0009349	n/a
<b>Cobalt (mg/L)</b>	<b>MW-27</b>	<b>Yes</b>	<b>0.0005</b>	<b>5/29/2019</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>14</b>	<b>0.0002355</b>	<b>0.0001007</b>	<b>ShapiroWilk</b>
Copper (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.002394	0.0003955	n/a
Lead (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0002492	0.00000294	n/a
Vanadium (mg/L)	MW-27	No	n/a	n/a	NP (nrm)/OH	NaN	14	0.001883	0.0007664	ShapiroWilk



### Ohio EPA 0715 Outlier Algorithm

MW-27

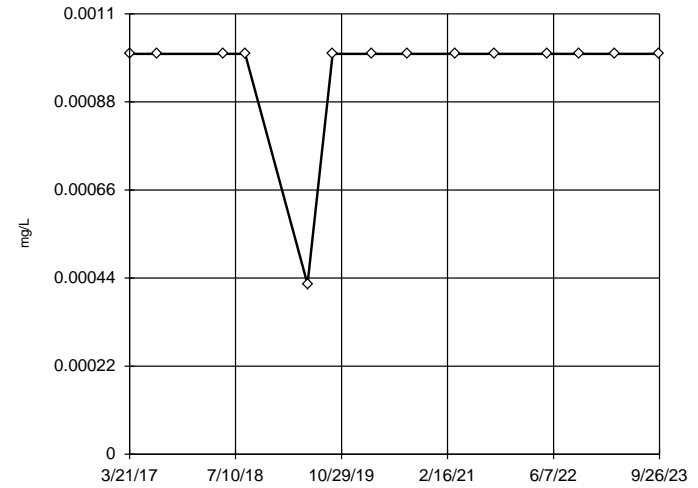


n = 14  
No statistical outliers.

Constituent: Antimony Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

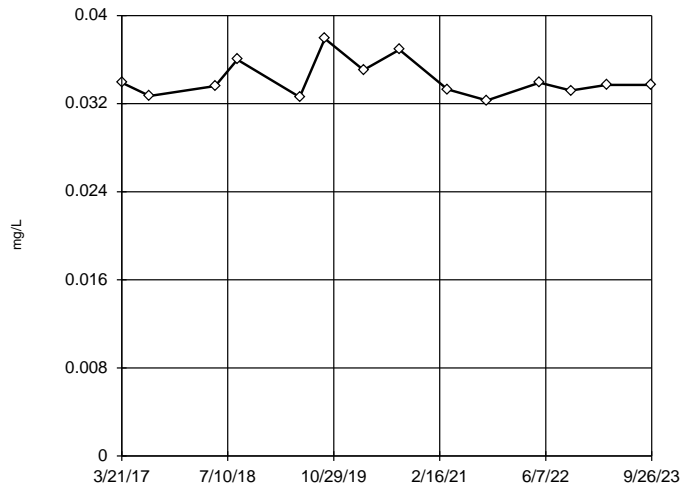


n = 14  
No statistical outliers.

Constituent: Arsenic Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-27

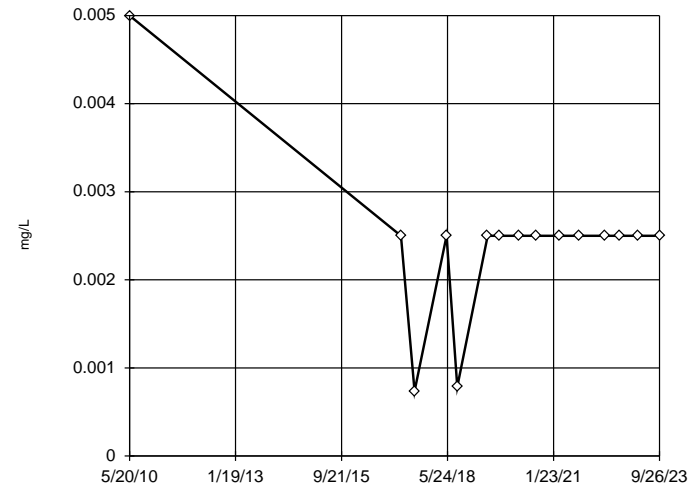


n = 14  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.0342, std. dev. 0.001669, critical Tn 2.371  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.9687  
Critical = 0.925  
The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

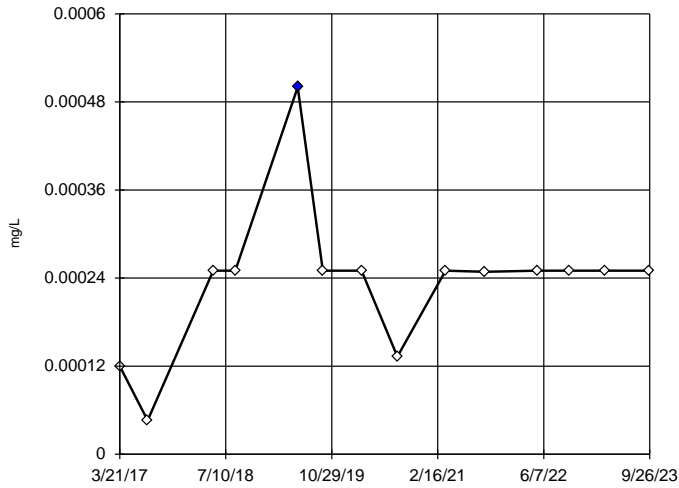


n = 15  
No statistical outliers.

Constituent: Chromium Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-27

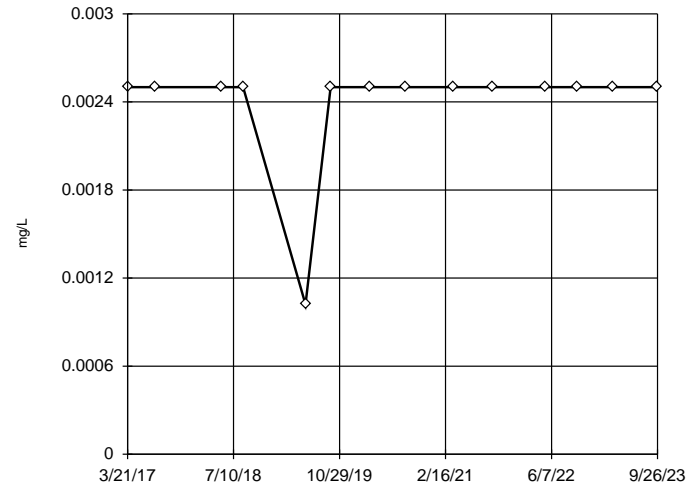


n = 14  
 Outlier is drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.0004278, low cutoff = 0.000013, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

MW-27

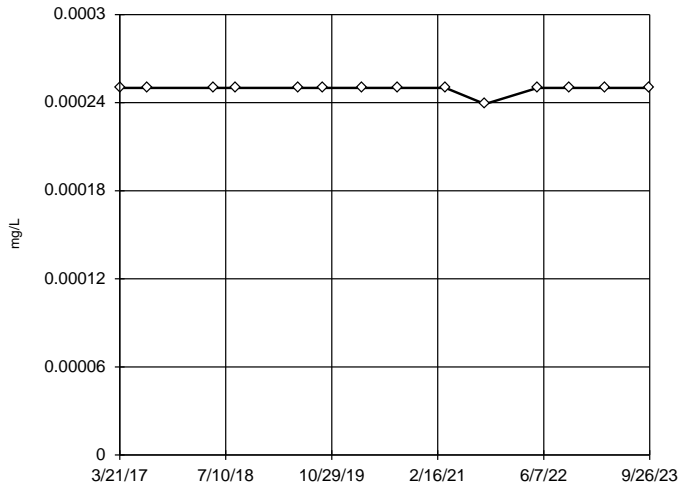


n = 14  
 No statistical outliers.

Constituent: Copper Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

MW-27

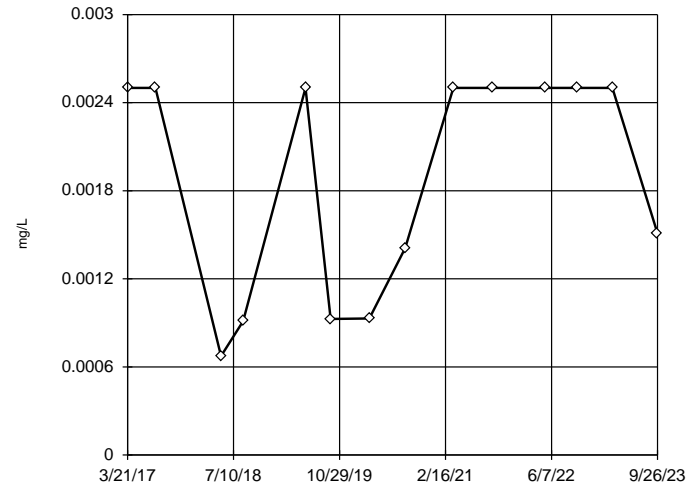


n = 14  
 No statistical outliers.

Constituent: Lead Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-27



n = 14  
 No outliers found. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.007214, low cutoff = -0.003786, based on IQR multiplier of 3.

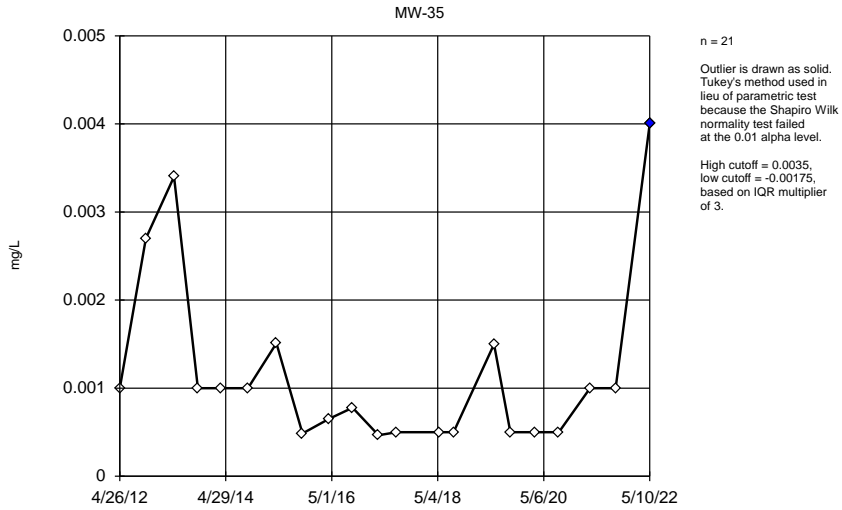
Constituent: Vanadium Analysis Run 9/23/2024 4:56 PM View: 2024SSN MW-27 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

# Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/19/2024, 3:00 PM

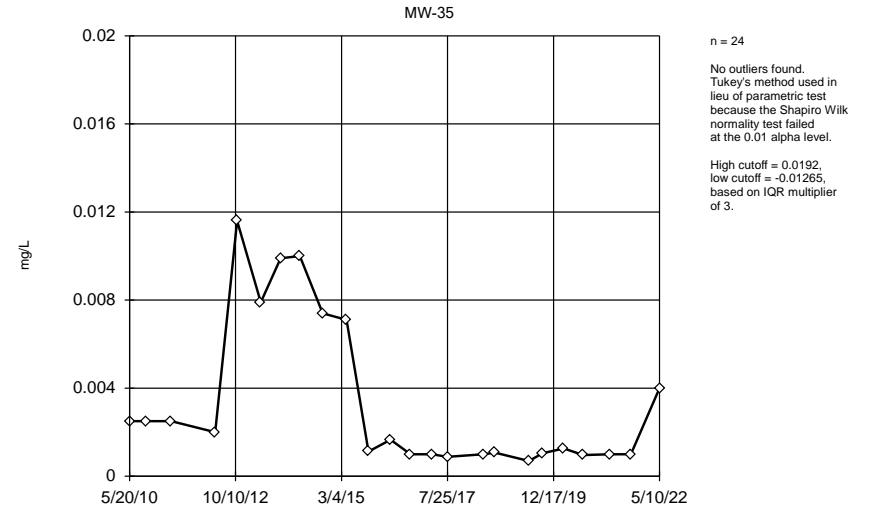
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Normality Test</u>
<b>Antimony (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.004</b>	<b>5/10/2022</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>21</b>	<b>0.001166</b>	<b>0.000995</b>	<b>ShapiroWilk</b>
Arsenic (mg/L)	MW-35	No	n/a	n/a	NP (nrm)/OH	NaN	24	0.003379	0.003489	ShapiroWilk
<b>Barium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.46</b>	<b>10/19/2009</b>	<b>Rosner/OH</b>	<b>0.01</b>	<b>25</b>	<b>0.04929</b>	<b>0.08744</b>	<b>ShapiroWilk</b>
Cadmium (mg/L)	MW-35	No	n/a	n/a	OH	NaN	24	0.000227	0.0001387	n/a
<b>Chromium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.01</b>	<b>5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>24</b>	<b>0.003423</b>	<b>0.001773</b>	<b>n/a</b>
Cobalt (mg/L)	MW-35	No	n/a	n/a	EPA/OH	0.05	21	0.01511	0.01551	ShapiroWilk
<b>Copper (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.0212,0.0102,0.01</b>	<b>7/28/2015,4/15/2015,5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>25</b>	<b>0.003714</b>	<b>0.004241</b>	<b>n/a</b>
<b>Lead (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.002,0.002,0.002,0.002,0.002,0.002,0.001</b>	<b>4/26/2012,10/24/2012,5/7/2013,10/18/2013,3/25/201</b>	<b>OH</b>	<b>NaN</b>	<b>24</b>	<b>0.0007519</b>	<b>0.0007549</b>	<b>n/a</b>
<b>Nickel (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.227</b>	<b>10/24/2012</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>24</b>	<b>0.05633</b>	<b>0.05935</b>	<b>ShapiroWilk</b>
<b>Selenium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.01</b>	<b>5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>24</b>	<b>0.002651</b>	<b>0.0016</b>	<b>n/a</b>
<b>Thallium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.002,0.002,0.002,0.002</b>	<b>10/18/2013,3/25/2014,9/30/2014,5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>24</b>	<b>0.0007368</b>	<b>0.0006446</b>	<b>n/a</b>
<b>Vanadium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01</b>	<b>5/20/2010,10/1/2010,4/29/2011,4/26/2012,10/24/201</b>	<b>OH</b>	<b>NaN</b>	<b>24</b>	<b>0.005767</b>	<b>0.003758</b>	<b>n/a</b>
Zinc (mg/L)	MW-35	No	n/a	n/a	NP (nrm)/OH	NaN	25	0.01737	0.02837	ShapiroWilk

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



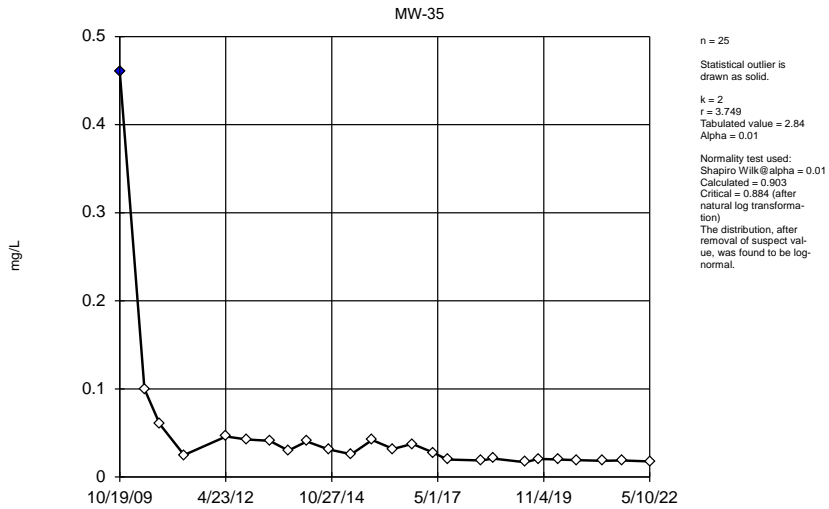
Constituent: Antimony Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



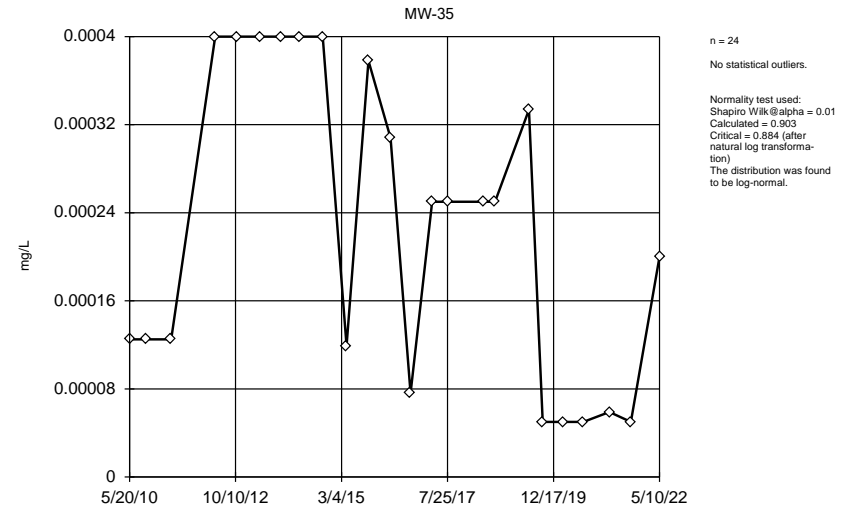
Constituent: Arsenic Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Rosner's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Barium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

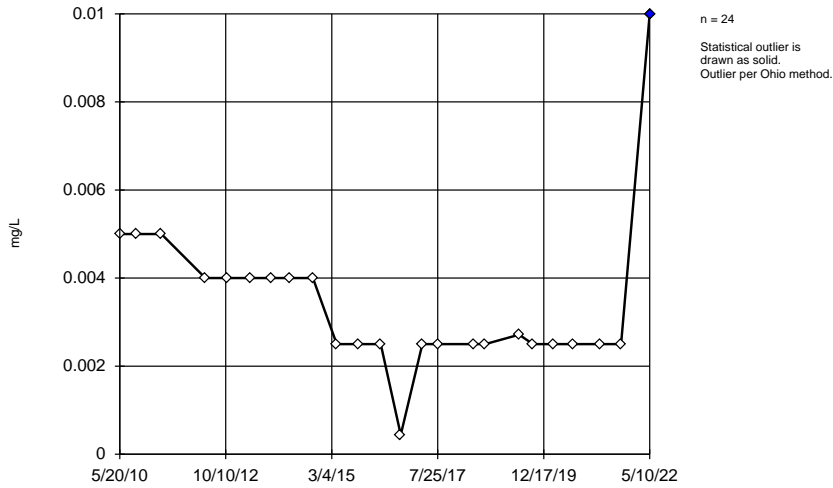
Ohio EPA 0715 Outlier Algorithm



Constituent: Cadmium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

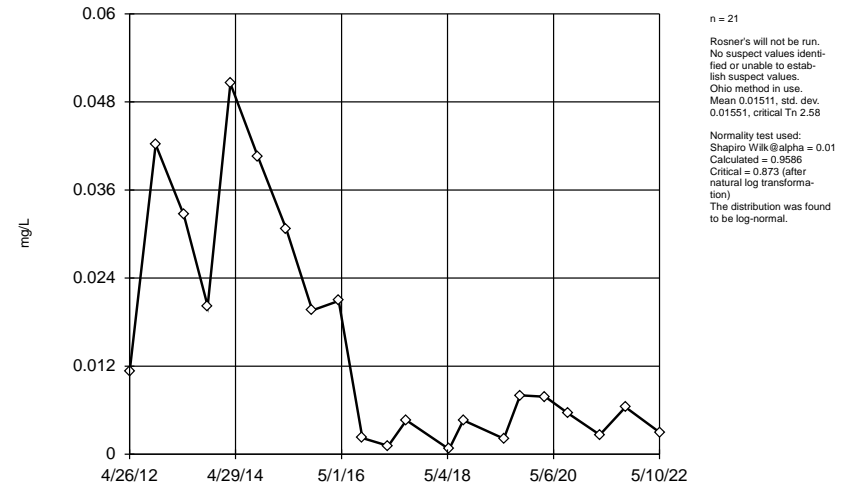
MW-35



Constituent: Chromium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Rosner's Test)

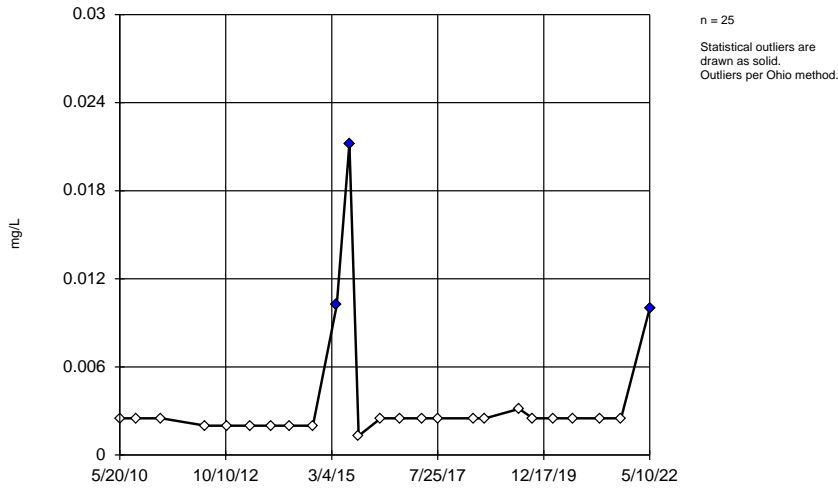
MW-35



Constituent: Cobalt Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

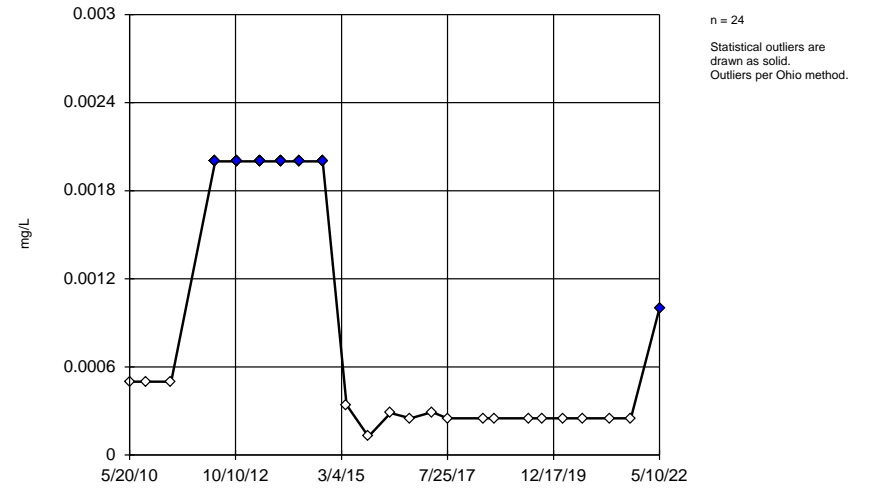
MW-35



Constituent: Copper Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

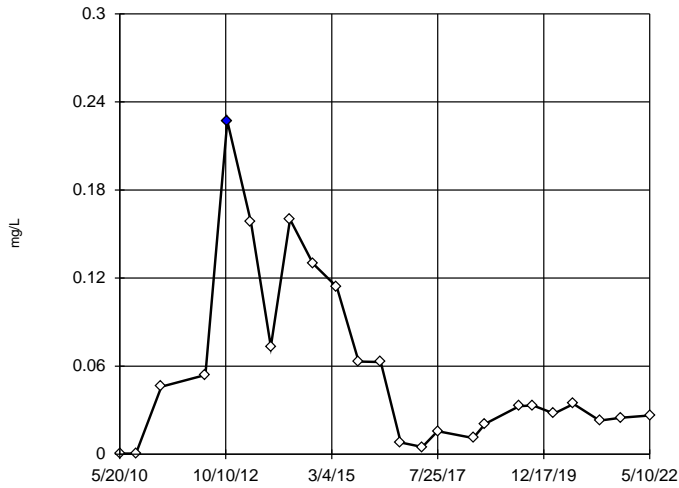
MW-35



Constituent: Lead Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-35

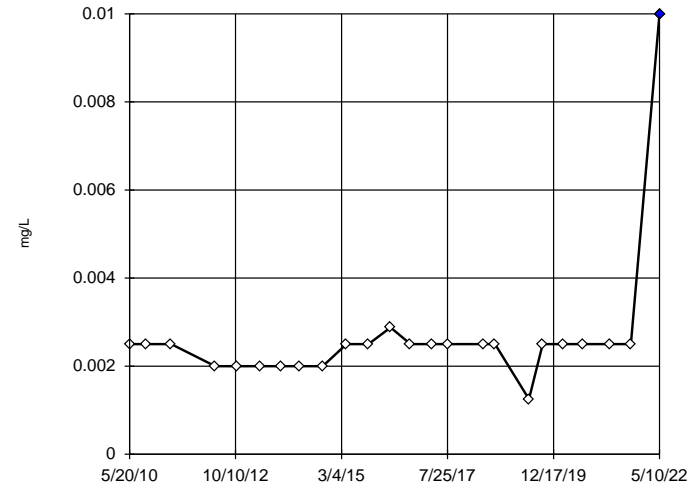


n = 24  
 Outlier is drawn as solid.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.2181,  
 low cutoff = -0.1316,  
 based on IQR multiplier of 3.

Constituent: Nickel Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

MW-35

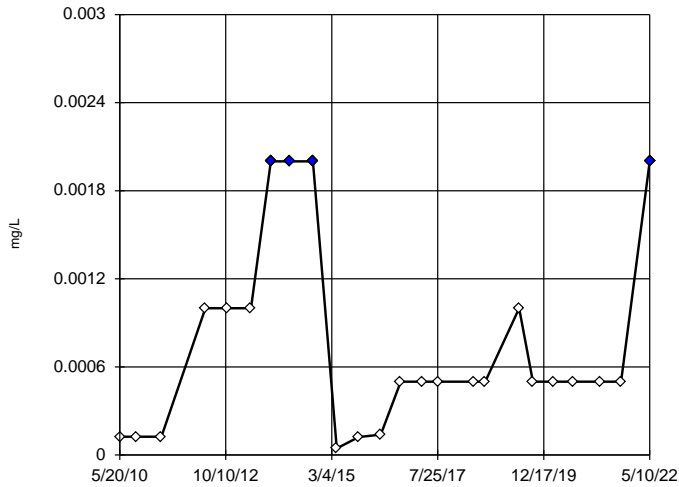


n = 24  
 Statistical outlier is drawn as solid.  
 Outlier per Ohio method.

Constituent: Selenium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

MW-35

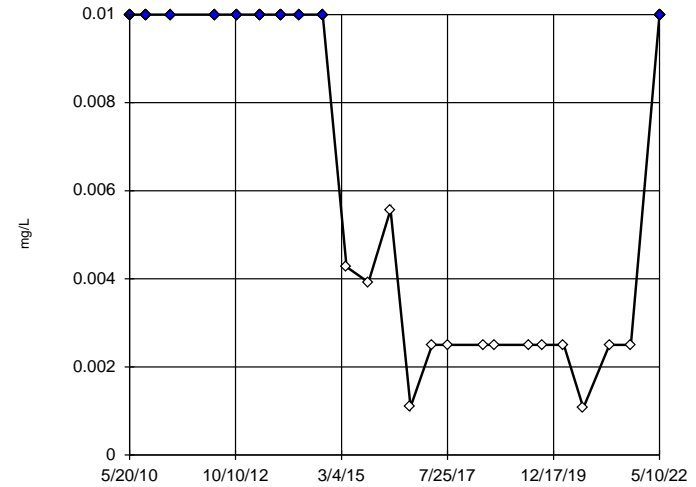


n = 24  
 Statistical outliers are drawn as solid.  
 Outliers per Ohio method.

Constituent: Thallium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

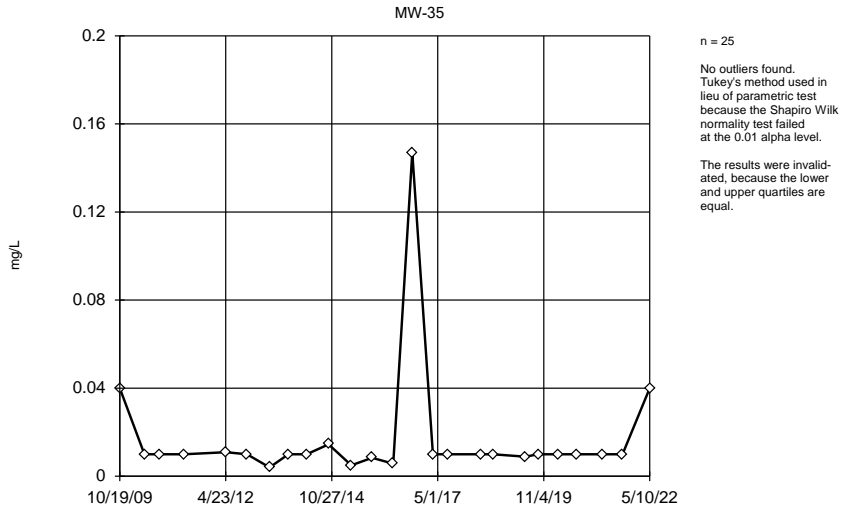
MW-35



n = 24  
 Statistical outliers are drawn as solid.  
 Outliers per Ohio method.

Constituent: Vanadium Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGOulier  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



Constituent: Zinc Analysis Run 9/19/2024 2:55 PM View: 2024SSN - MW-35 BGO outlier  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

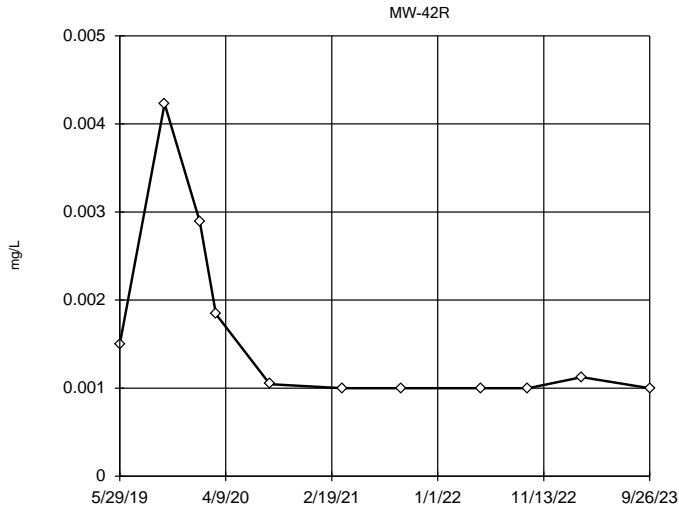
# Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/23/2024, 3:24 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>
Antimony (mg/L)	MW-42R	No	n/a	n/a	NP (nrm)/OH	NaN	11	0.001603	0.001048	ShapiroWilk
Arsenic (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.001016	0.0001351	ShapiroWilk
Barium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.02443	0.004789	ShapiroWilk
Beryllium (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.0004976	0.000007830/a	
Cadmium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.000195	0.00008983	ShapiroWilk
Chromium (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.002398	0.0003377	n/a
Cobalt (mg/L)	MW-42R	No	n/a	n/a	Dixon/OH	0.01	12	0.004744	0.001288	ShapiroWilk
<b>Copper (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.00419,0.00905</b>	<b>8/19/2020,5/29/2019</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>11</b>	<b>0.003365</b>	<b>0.001967</b>	<b>ShapiroWilk</b>
Lead (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.0002916	0.000116	n/a
<b>Nickel (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.0469</b>	<b>5/29/2019</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>11</b>	<b>0.02061</b>	<b>0.009487</b>	<b>ShapiroWilk</b>
Selenium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.003925	0.003093	ShapiroWilk
<b>Thallium (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.001</b>	<b>5/29/2019</b>	<b>OH</b>	<b>NaN</b>	<b>11</b>	<b>0.0005608</b>	<b>0.0001542</b>	<b>n/a</b>
Vanadium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.00185	0.0005645	ShapiroWilk
Zinc (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.01111	0.003106	ShapiroWilk



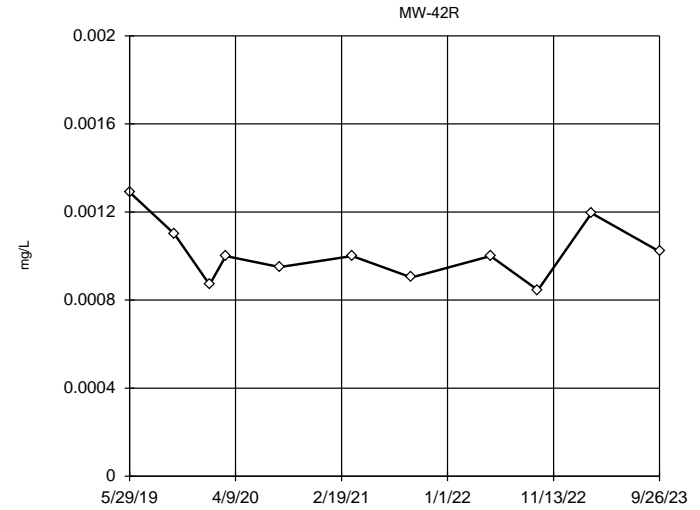
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



n = 11  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.00436, low cutoff = -0.00152, based on IQR multiplier of 3.

Constituent: Antimony Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

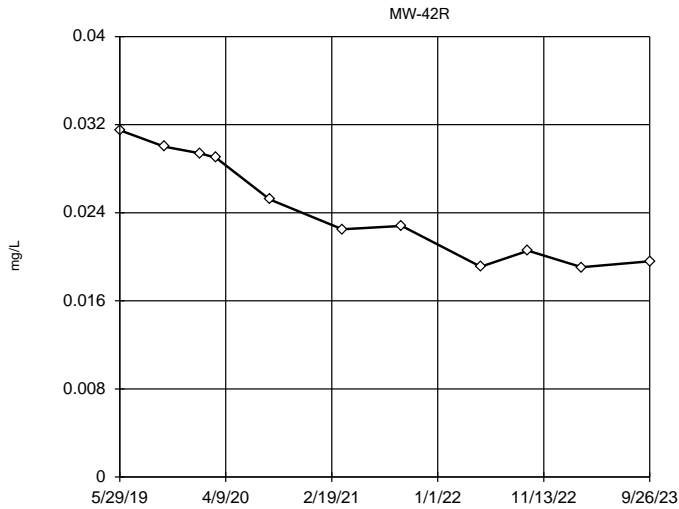
EPA Screening (suspected outliers for Dixon's Test)



n = 11  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.001016, std. dev. 0.0001351, critical Tn 2.234  
 Normality test used: Shapiro Wilk @alpha = 0.01  
 Calculated = 0.9268  
 Critical = 0.792  
 The distribution was found to be normally distributed.

Constituent: Arsenic Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

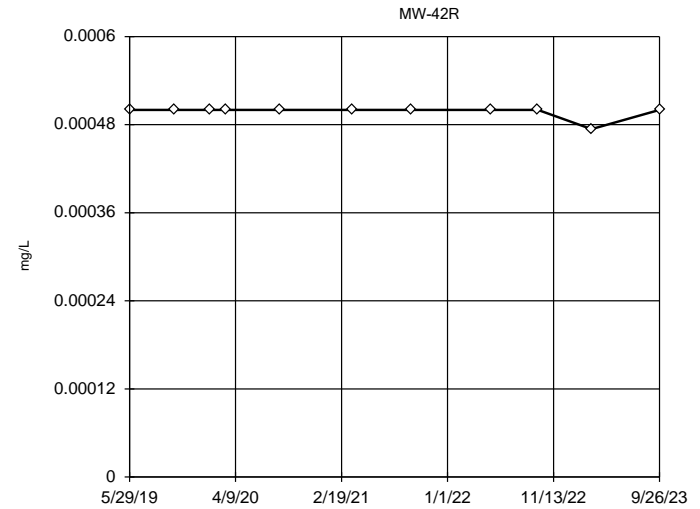
EPA Screening (suspected outliers for Dixon's Test)



n = 11  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.02443, std. dev. 0.004789, critical Tn 2.234  
 Normality test used: Shapiro Wilk @alpha = 0.01  
 Calculated = 0.8789  
 Critical = 0.792  
 The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

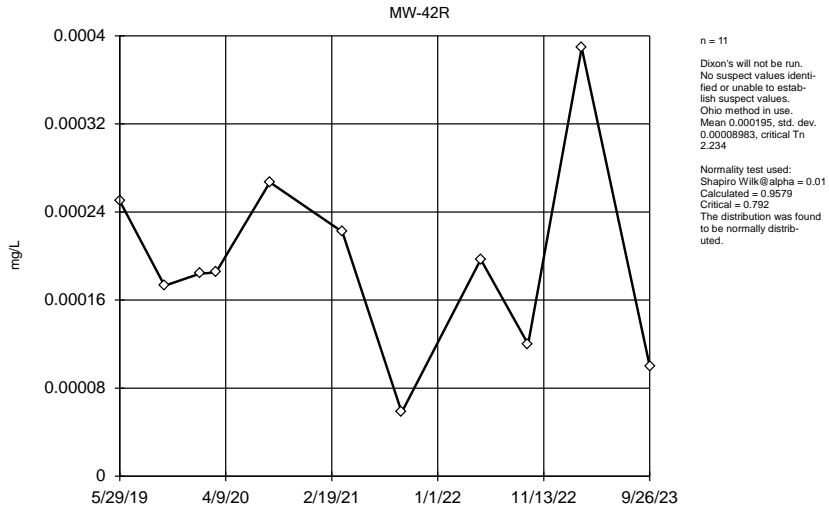
Ohio EPA 0715 Outlier Algorithm



n = 11  
 No statistical outliers.

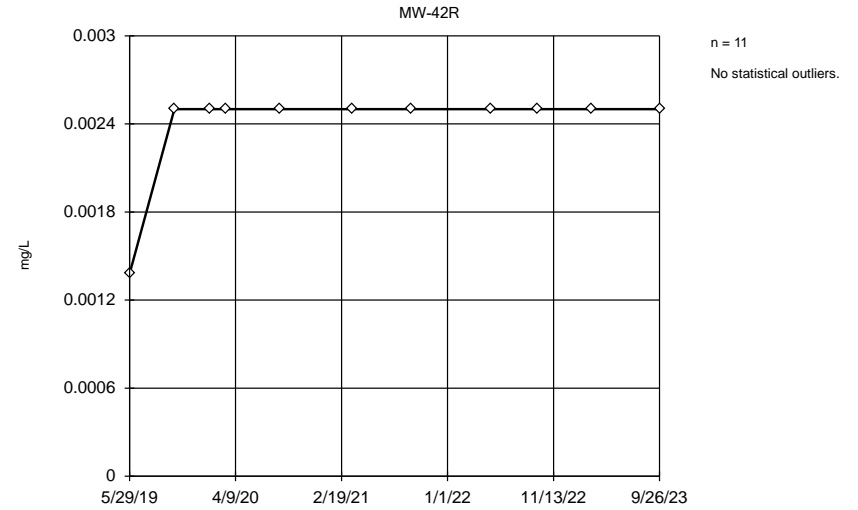
Constituent: Beryllium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



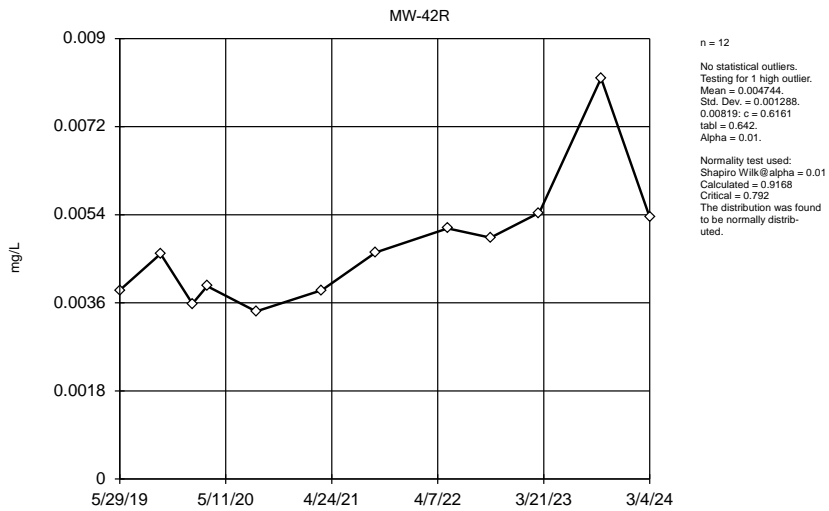
Constituent: Cadmium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm



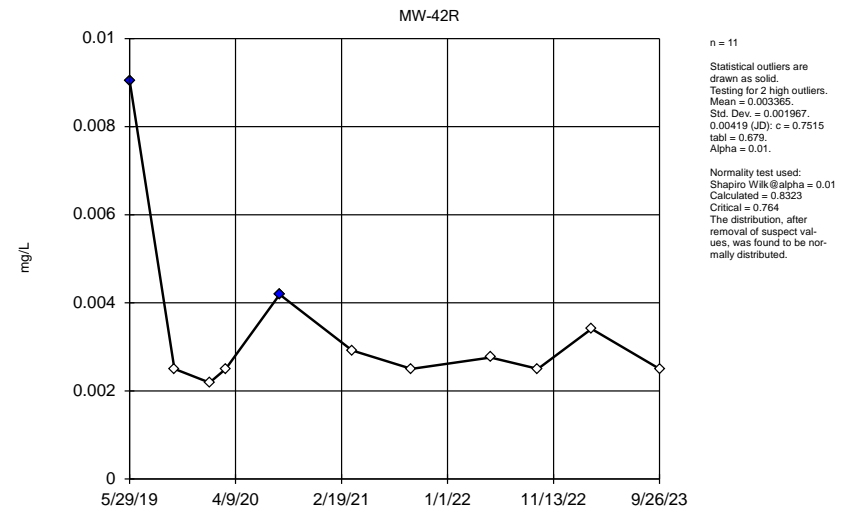
Constituent: Chromium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Cobalt Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

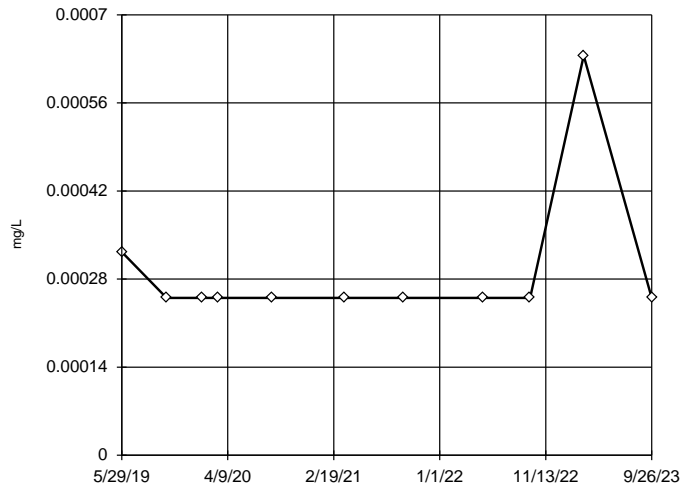
Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Copper Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-42R

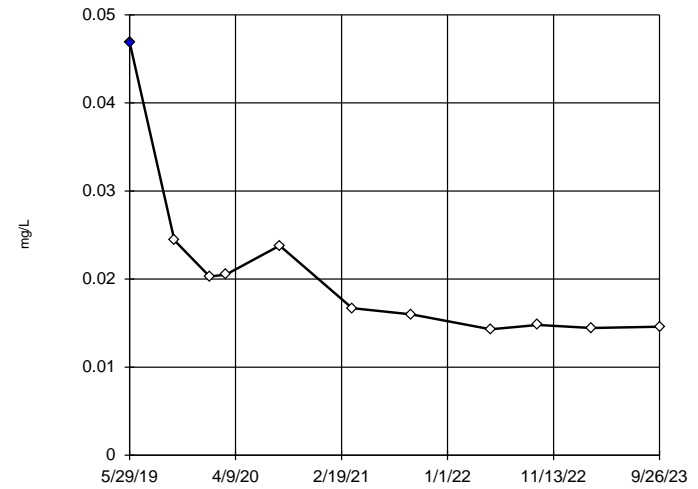


n = 11  
No statistical outliers.

Constituent: Lead Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

MW-42R

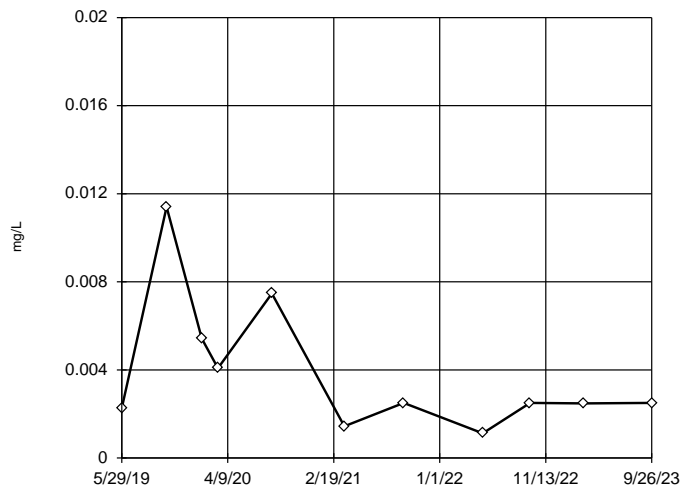


n = 11  
Statistical outlier is drawn as solid.  
Testing for 1 high outlier.  
Mean = 0.02061.  
Std. Dev. = 0.009487.  
0.0469; c = 0.7119  
tab1 = 0.679.  
Alpha = 0.01.  
  
Normality test used:  
Shapiro Wilk @alpha = 0.01  
Calculated = 0.8395  
Critical = 0.781  
The distribution, after removal of suspect value, was found to be normally distributed.

Constituent: Nickel Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-42R

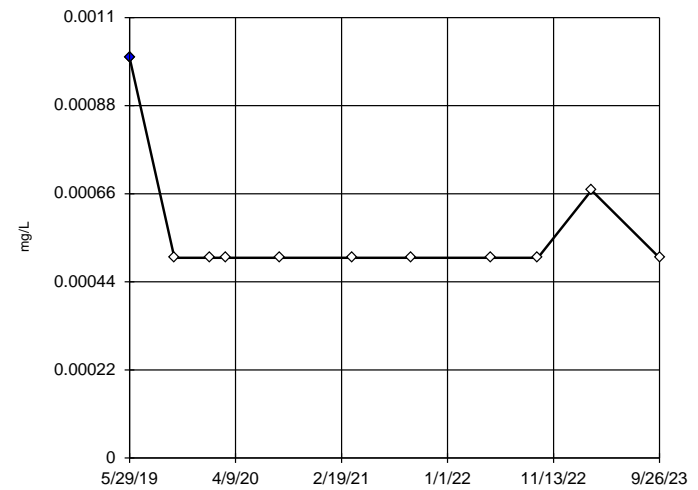


n = 11  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.003925, std. dev. 0.003093, critical Tn 2.234  
  
Normality test used:  
Shapiro Wilk @alpha = 0.01  
Calculated = 0.9368  
Critical = 0.792 (after natural log transformation)  
The distribution was found to be log-normal.

Constituent: Selenium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-42R

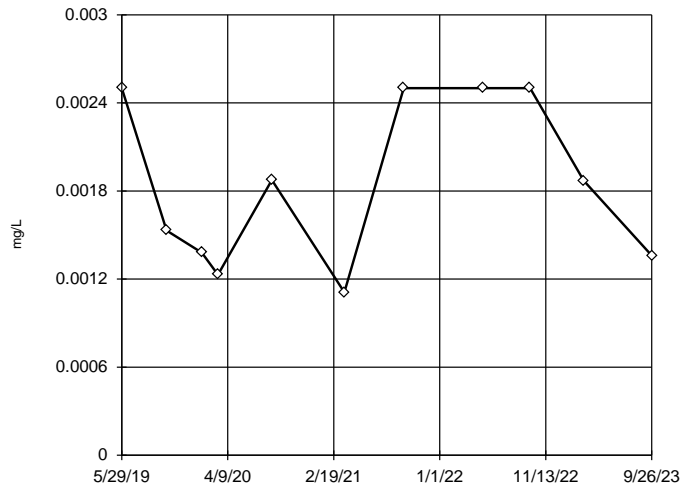


n = 11  
Statistical outlier is drawn as solid.  
Outlier per Ohio method.

Constituent: Thallium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)

MW-42R

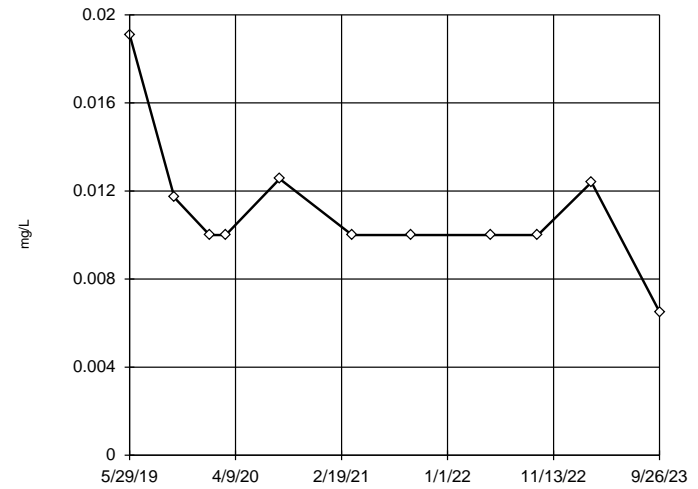


n = 11  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.00185, std. dev. 0.0005645, critical Tn 2.234  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.8453  
 Critical = 0.792  
 The distribution was found to be normally distributed.

Constituent: Vanadium Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)

MW-42R



n = 11  
 Dixon's will not be run.  
 No suspect values identified or unable to establish suspect values.  
 Ohio method in use.  
 Mean 0.01111, std. dev. 0.003106, critical Tn 2.234  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.8443  
 Critical = 0.792 (after natural log transformation)  
 The distribution was found to be log-normal.

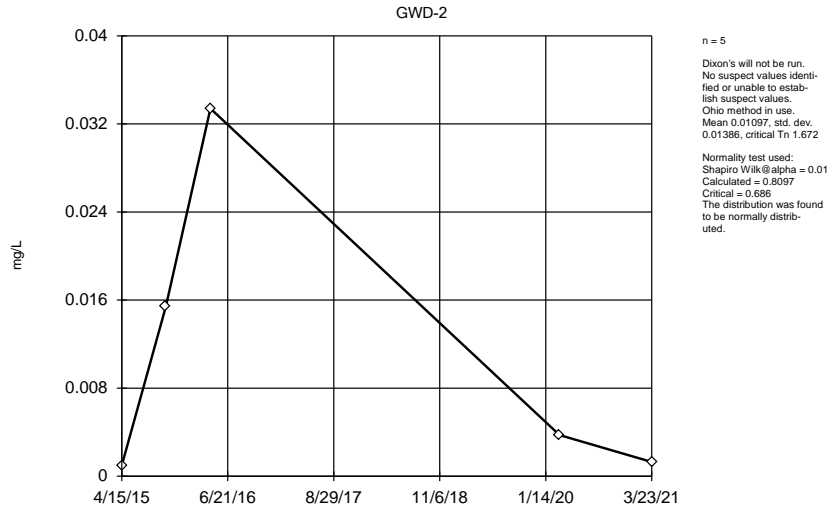
Constituent: Zinc Analysis Run 9/23/2024 3:23 PM View: 2024SSN MW-42R BGupdate  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

# BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/4/2024, 2:20 PM

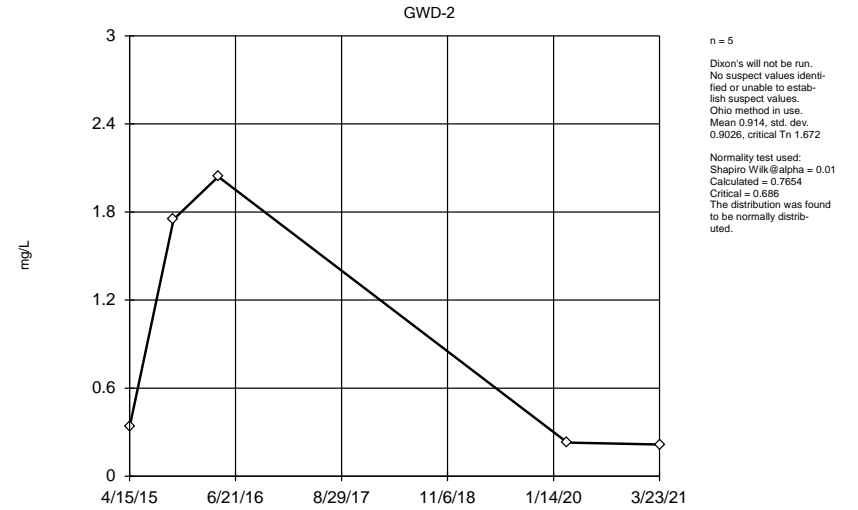
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Normality Test</u>
Arsenic (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.01097	0.01386	ShapiroWilk
Barium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.914	0.9026	ShapiroWilk
Beryllium (mg/L)	GWD-2	No	n/a	n/a	OH	NaN 5	0.0004152	0.0001896	n/a
Cadmium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.0006044	0.000537	ShapiroWilk
Chromium (mg/L)	GWD-2	No	n/a	n/a	OH	NaN 5	0.002162	0.0007562	n/a
Cobalt (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01 5	0.005806	0.00575	ShapiroWilk
Copper (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.002621	0.001532	ShapiroWilk
Lead (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.0007414	0.0006419	ShapiroWilk
Nickel (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01 5	0.01751	0.009664	ShapiroWilk
Selenium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.00187	0.0008824	ShapiroWilk
Vanadium (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01 5	0.002145	0.0009602	ShapiroWilk
Zinc (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05 5	0.007648	0.002717	ShapiroWilk

EPA Screening (suspected outliers for Dixon's Test)



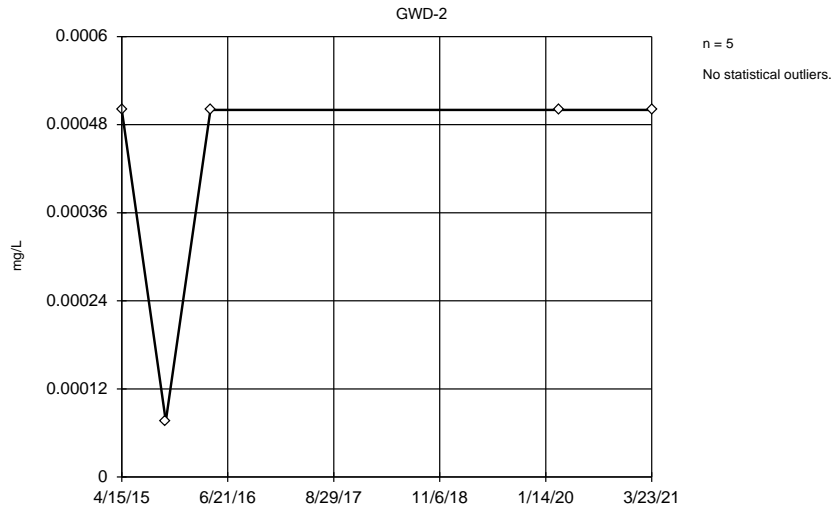
Constituent: Arsenic Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



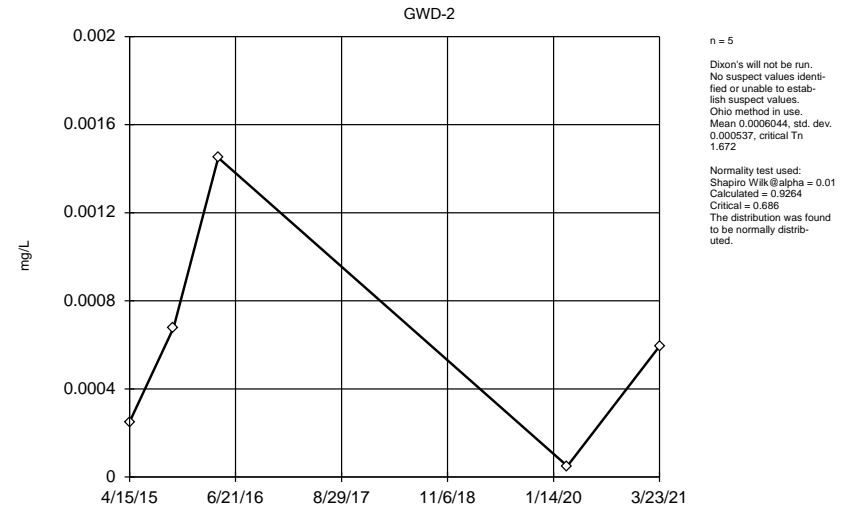
Constituent: Barium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm



Constituent: Beryllium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

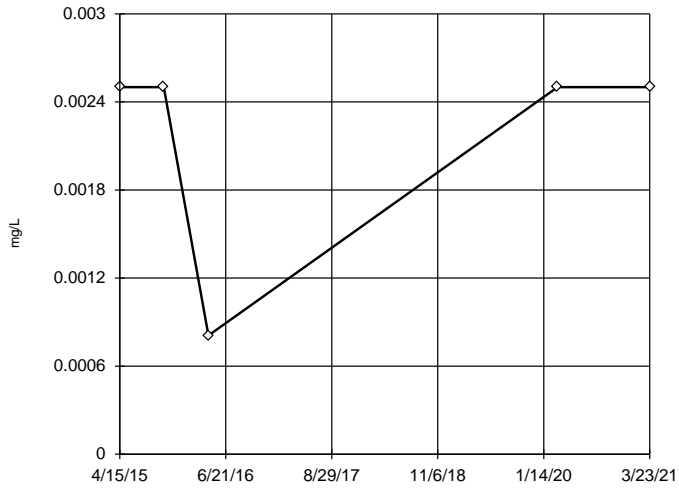
EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cadmium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

GWD-2

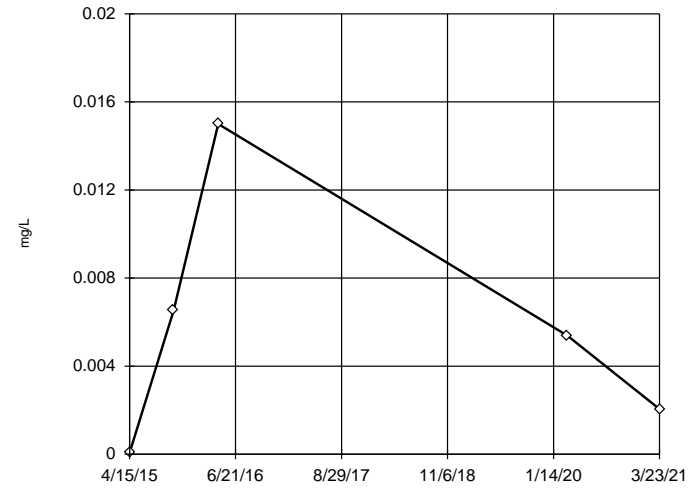


n = 5  
No statistical outliers.

Constituent: Chromium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

GWD-2

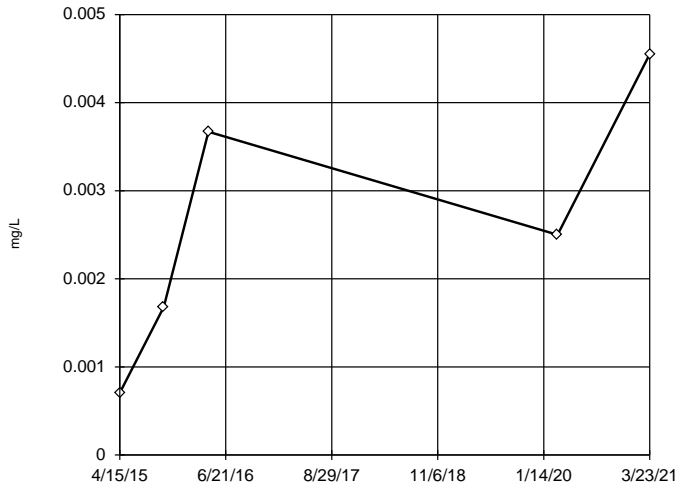


n = 5  
No statistical outliers.  
Testing for 1 low outlier.  
Mean = 0.005806,  
Std. Dev. = 0.00575,  
6.6E-05 (L); c = 0.1327  
tbl = 0.78,  
Alpha = 0.01.  
Normality test used:  
Shapiro Wilk @alpha = 0.01  
Calculated = 0.9068  
Critical = 0.687  
The distribution was found  
to be normally distrib-  
uted.

Constituent: Cobalt Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

GWD-2

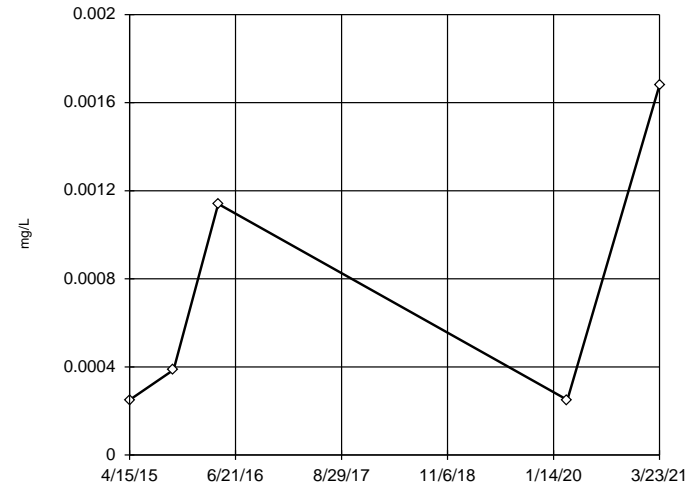


n = 5  
Dixon's will not be run.  
No suspect values identi-  
fied or unable to estab-  
lish suspect values.  
Ohio method in use.  
Mean 0.002621, std. dev.  
0.001532, critical Tn  
1.672  
Normality test used:  
Shapiro Wilk @alpha = 0.01  
Calculated = 0.981  
Critical = 0.686  
The distribution was found  
to be normally distrib-  
uted.

Constituent: Copper Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

GWD-2

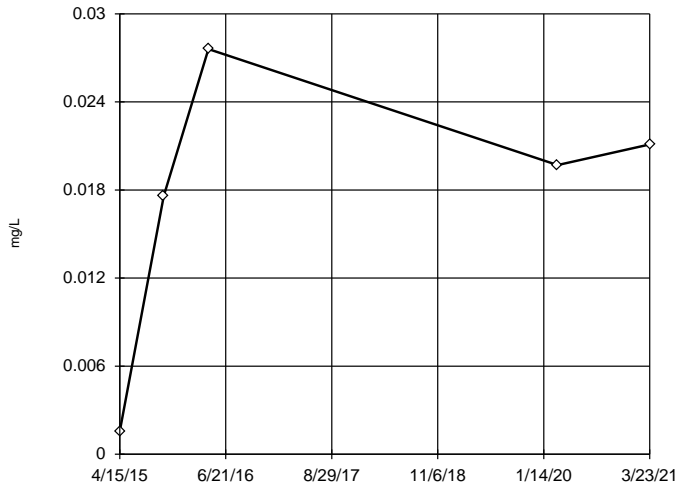


n = 5  
Dixon's will not be run.  
No suspect values identi-  
fied or unable to estab-  
lish suspect values.  
Ohio method in use.  
Mean 0.0007414, std. dev.  
0.0006419, critical Tn  
1.672  
Normality test used:  
Shapiro Wilk @alpha = 0.01  
Calculated = 0.8236  
Critical = 0.686  
The distribution was found  
to be normally distrib-  
uted.

Constituent: Lead Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

GWD-2

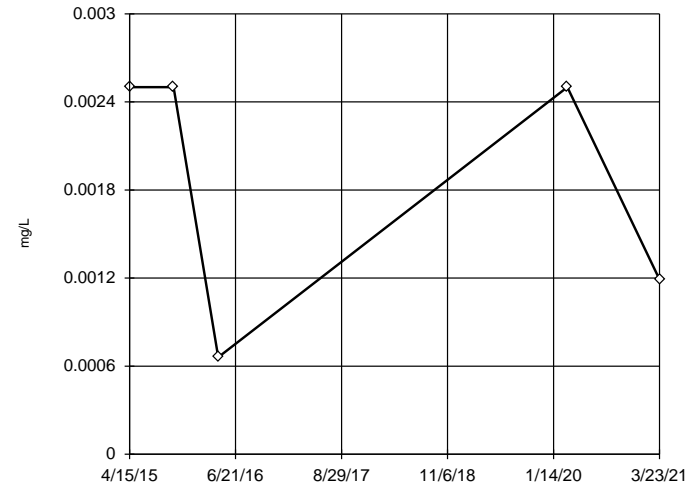


n = 5  
 No statistical outliers.  
 Testing for 1 low outlier.  
 Mean = 0.01751.  
 Std. Dev. = 0.009664.  
 0.00157 (J); c = 0.6158  
 tab1 = 0.78.  
 Alpha = 0.01.  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.9048  
 Critical = 0.687  
 The distribution was found  
 to be normally distrib-  
 uted.

Constituent: Nickel Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)

GWD-2

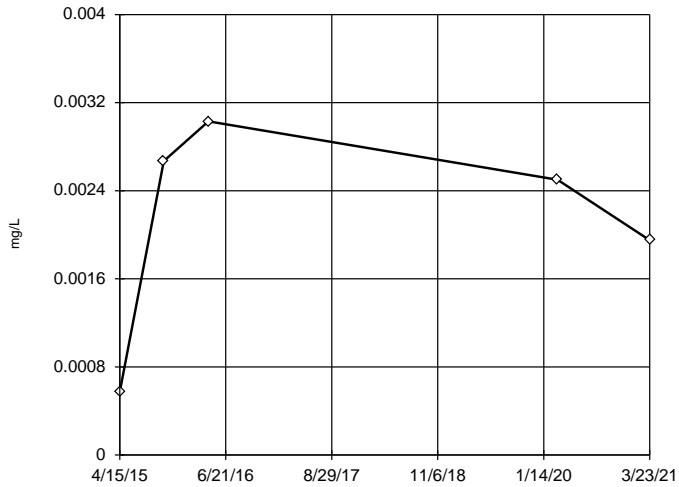


n = 5  
 Dixon's will not be run.  
 No suspect values identi-  
 fied or unable to estab-  
 lish suspect values.  
 Ohio method in use.  
 Mean 0.00187, std. dev.  
 0.0008824, critical Tn  
 1.672  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.7597  
 Critical = 0.686  
 The distribution was found  
 to be normally distrib-  
 uted.

Constituent: Selenium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

GWD-2

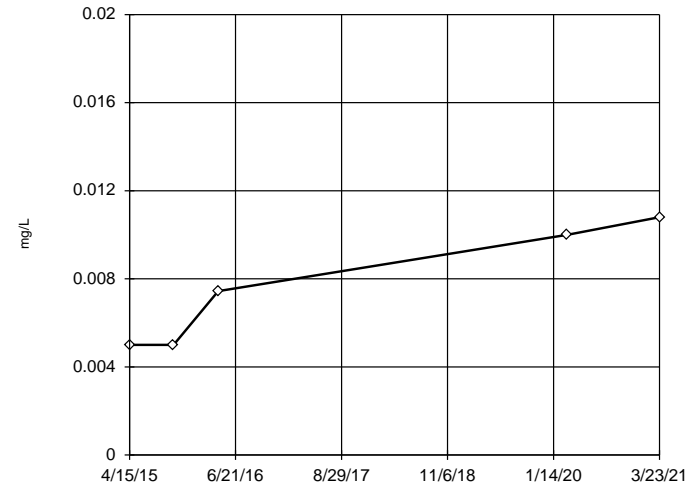


n = 5  
 No statistical outliers.  
 Testing for 1 low outlier.  
 Mean = 0.002145.  
 Std. Dev. = 0.0009602.  
 0.000575 (J); c = 0.5601  
 tab1 = 0.78.  
 Alpha = 0.01.  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.979  
 Critical = 0.687  
 The distribution was found  
 to be normally distrib-  
 uted.

Constituent: Vanadium Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)

GWD-2



n = 5  
 Dixon's will not be run.  
 No suspect values identi-  
 fied or unable to estab-  
 lish suspect values.  
 Ohio method in use.  
 Mean 0.007648, std. dev.  
 0.002717, critical Tn  
 1.672  
 Normality test used:  
 Shapiro Wilk @ alpha = 0.01  
 Calculated = 0.8673  
 Critical = 0.686  
 The distribution was found  
 to be normally distrib-  
 uted.

Constituent: Zinc Analysis Run 9/4/2024 2:00 PM View: 2024SSN - GWD-2 BG  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master



**Intrawell Prediction Limits Summary Table and Graphs –  
Open MSWLF Unit**

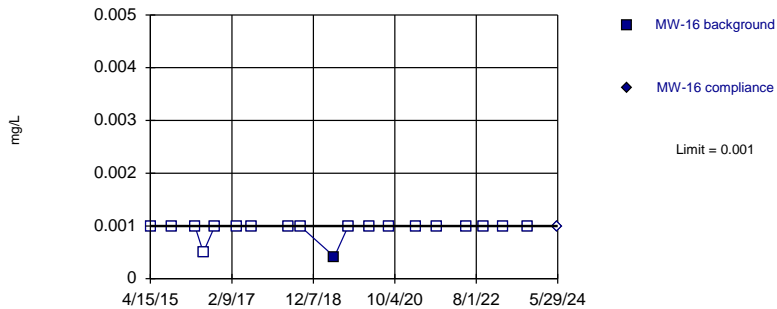
# Intrawell Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/23/2024, 5:11 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 (mg/L)	MW-16	0.001	n/a	5/29/2024	0.001ND	No	19	n/a	n/a	n/a	94.74	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Barium (mg/L)	MW-16	0.3962	n/a	5/29/2024	0.221	No	19	n/a	0.3083	0.03886	0	None	No	0.0008776	Param Intra 1 of 2
Beryllium (mg/L)	MW-16	0.0005	n/a	5/29/2024	0.0005ND	No	19	n/a	n/a	n/a	94.74	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	MW-16	0.0002835	n/a	5/29/2024	0.0001ND	No	19	n/a	n/a	n/a	63.16	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-16	0.0004544	n/a	5/29/2024	0.00025ND	No	19	n/a	0.0002298	0.0000992921.05	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2	
Copper (mg/L)	MW-16	0.01045	n/a	5/29/2024	0.0025ND	No	19	n/a	n/a	n/a	78.95	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Lead (mg/L)	MW-16	0.000478	n/a	5/29/2024	0.00025ND	No	19	n/a	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	MW-16	0.01394	n/a	5/29/2024	0.00716	No	19	n/a	0.007898	0.002671	0	None	No	0.0008776	Param Intra 1 of 2
Silver (mg/L)	MW-16	0.000752	n/a	5/29/2024	0.0005ND	No	19	n/a	n/a	n/a	94.74	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Thallium (mg/L)	MW-16	0.001	n/a	5/29/2024	0.0005ND	No	19	n/a	n/a	n/a	94.74	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-16	0.0025	n/a	5/29/2024	0.0025ND	No	19	n/a	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	MW-16	0.01	n/a	5/29/2024	0.01ND	No	19	n/a	n/a	n/a	94.74	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

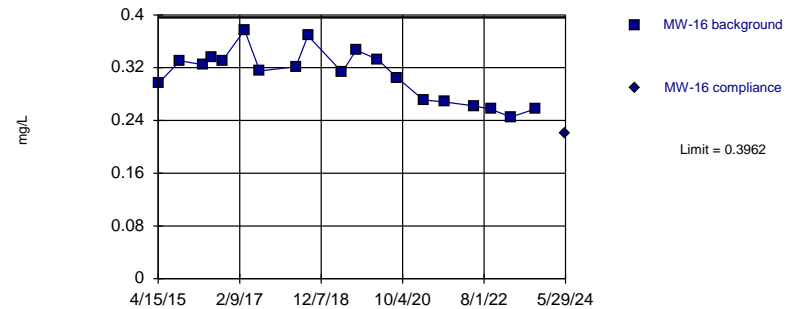


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

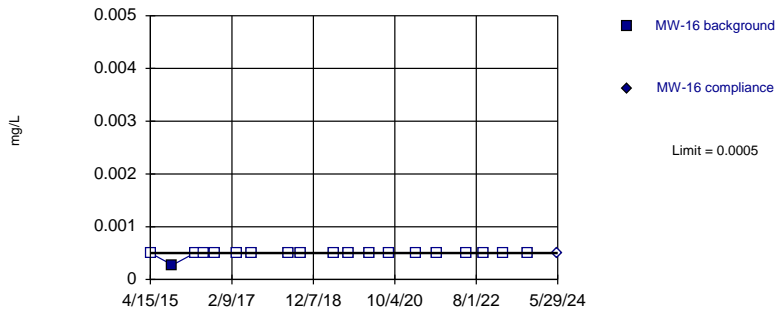


Background Data Summary: Mean=0.3083, Std. Dev.=0.03886, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9453, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Barium Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

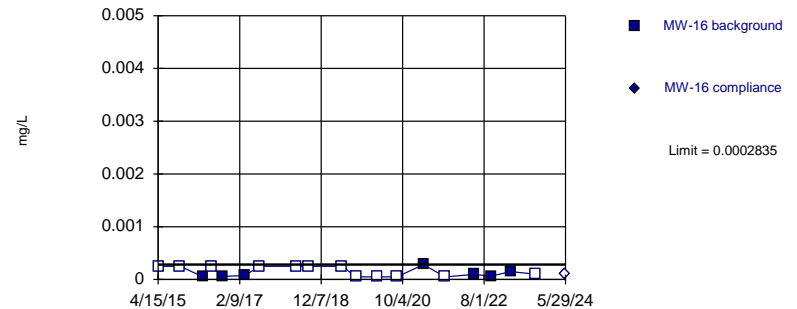


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Beryllium Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

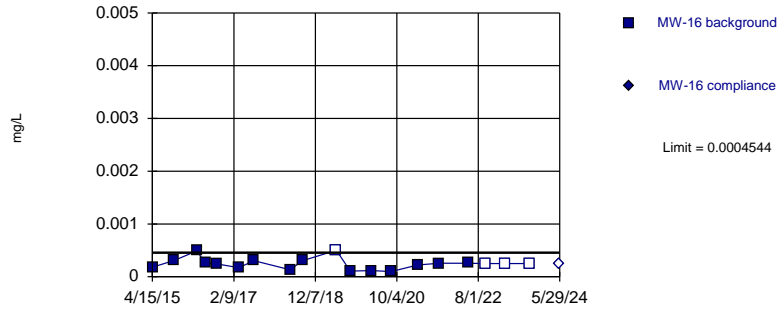


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 63.16% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Cadmium Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

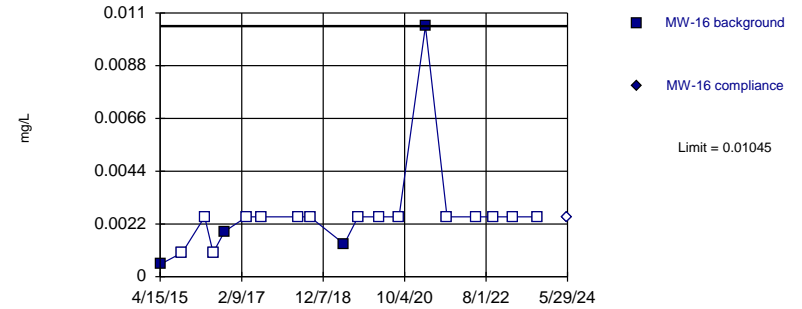


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0002298, Std. Dev.=0.00009929, n=19, 21.05% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8834, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Cobalt Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

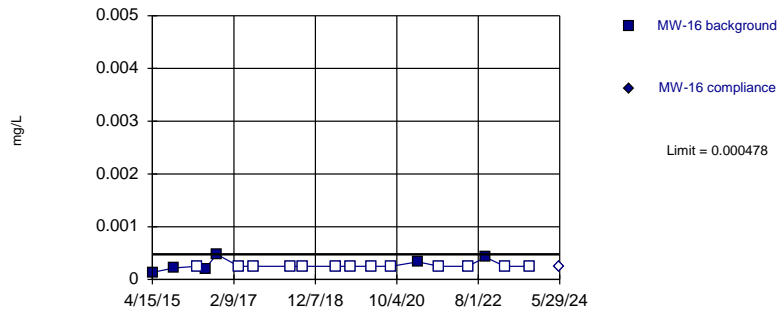


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 78.95% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Copper Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

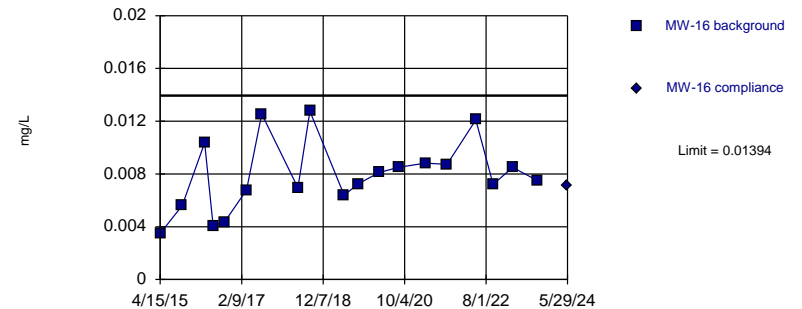


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Lead Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

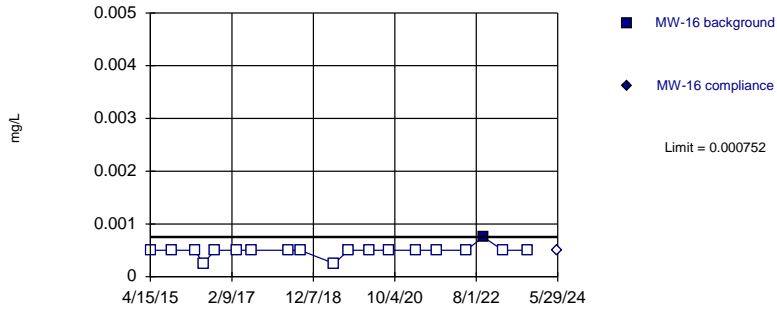


Background Data Summary: Mean=0.007898, Std. Dev.=0.002671, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Nickel Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

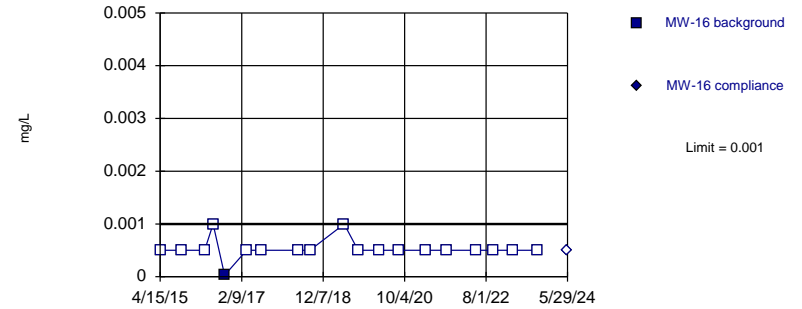


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Silver Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

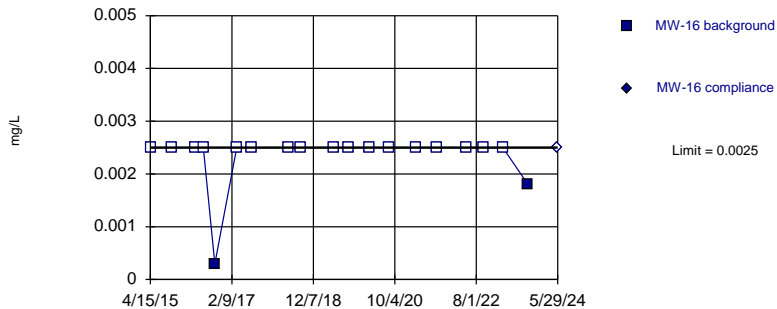


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

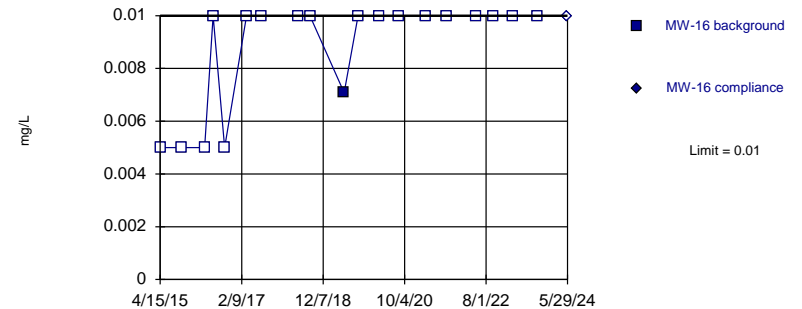


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Vanadium Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Zinc Analysis Run 9/23/2024 5:10 PM View: 2024SSN MW-16 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

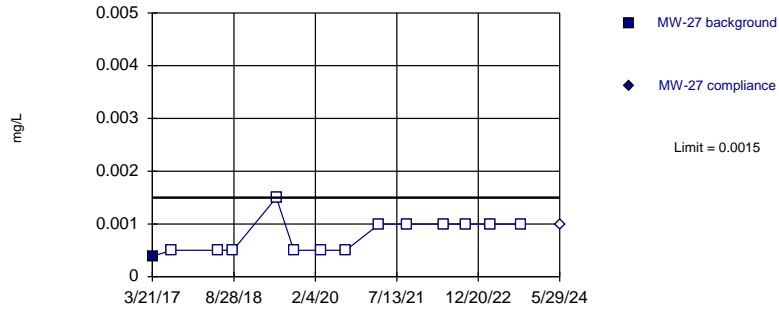
# Intrawell Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/23/2024, 5:09 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>
Antimony (mg/L)	MW-27	0.0015	n/a	5/29/2024	0.001ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	MW-27	0.001	n/a	5/29/2024	0.001ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Barium (mg/L)	MW-27	0.03802	n/a	5/29/2024	0.0319	No	14	n/a	0.0342	0.001669	0	None	No	0.001316	Param Intra 1 of 2
Chromium (mg/L)	MW-27	0.0025	n/a	5/29/2024	0.0025ND	No	14	n/a	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-27	0.0005	n/a	5/29/2024	0.00025ND	No	14	n/a	n/a	n/a	71.43	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Copper (mg/L)	MW-27	0.0025	n/a	5/29/2024	0.0025ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Lead (mg/L)	MW-27	0.00025	n/a	5/29/2024	0.00025ND	No	14	n/a	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-27	0.0025	n/a	5/29/2024	0.0025ND	No	14	n/a	n/a	n/a	57.14	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

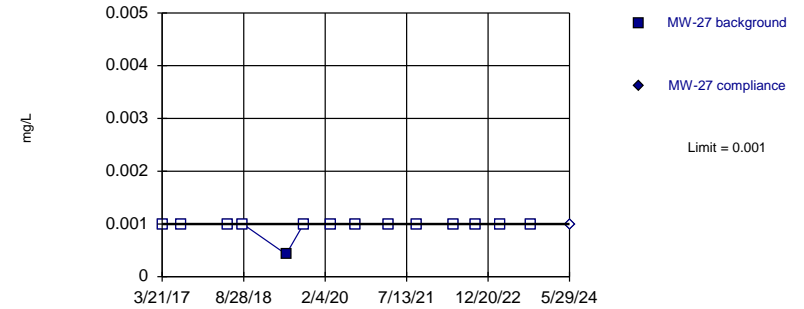


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Antimony Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

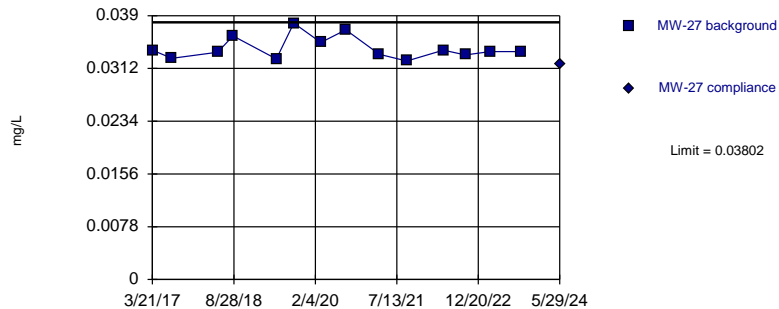


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Arsenic Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

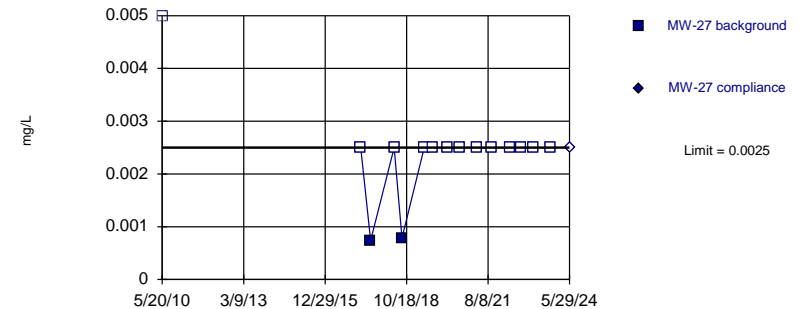


Background Data Summary: Mean=0.0342, Std. Dev.=0.001669, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8687, critical = 0.825. Kappa = 2.289 (c=8, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001316.

Constituent: Barium Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

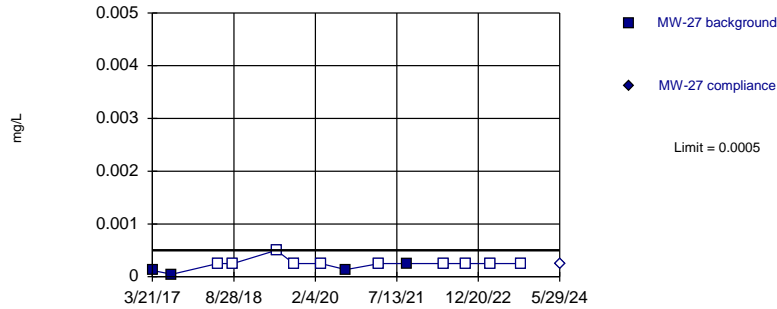


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Chromium Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

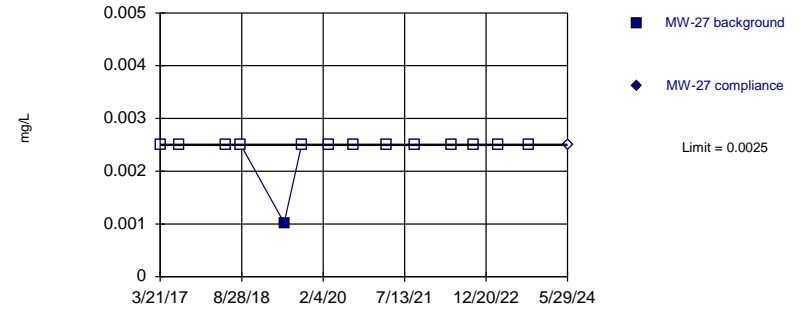


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Cobalt Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

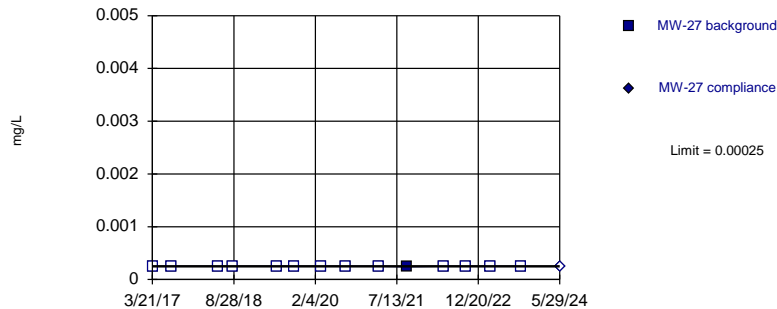


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Copper Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

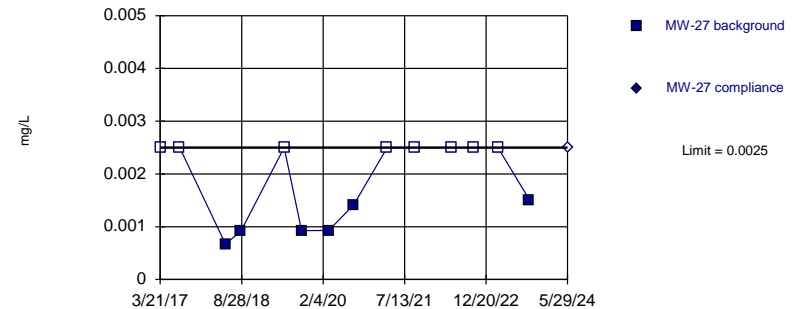


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Lead Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Vanadium Analysis Run 9/23/2024 5:08 PM View: 2024SSN MW-27 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master



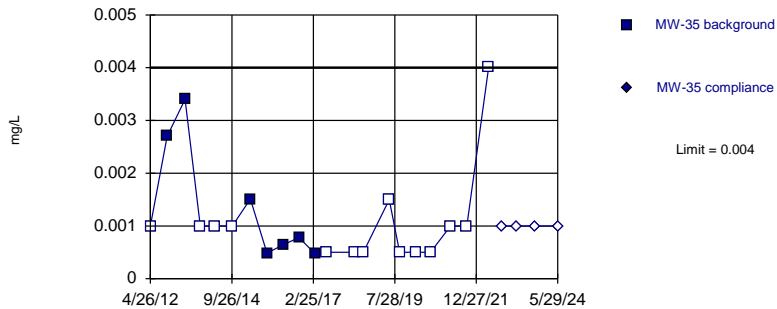
# Intrawell Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/19/2024, 3:10 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>
Antimony (mg/L)	MW-35	0.004	n/a	5/29/2024	0.001ND	No	21	n/a	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	MW-35	0.0116	n/a	5/29/2024	0.001ND	No	24	n/a	n/a	n/a	41.67	n/a	n/a	0.003124	NP Intra (normality) 1 of 2
Barium (mg/L)	MW-35	0.46	n/a	5/29/2024	0.017	No	25	n/a	n/a	n/a	4	n/a	n/a	0.002832	NP Intra (normality) 1 of 2
Cadmium (mg/L)	MW-35	0.0004	n/a	5/29/2024	0.0001ND	No	24	n/a	n/a	n/a	75	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Chromium (mg/L)	MW-35	0.01	n/a	5/29/2024	0.0025ND	No	24	n/a	n/a	n/a	91.67	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-35	0.06042	n/a	5/29/2024	0.00329	No	21	n/a	0.107	0.06198	0	None	sqrt(x)	0.0008101	Param Intra 1 of 2
Copper (mg/L)	MW-35	0.0212	n/a	5/29/2024	0.0025ND	No	25	n/a	n/a	n/a	84	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Lead (mg/L)	MW-35	0.002	n/a	5/29/2024	0.00025ND	No	24	n/a	n/a	n/a	83.33	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	MW-35	0.2191	n/a	5/29/2024	0.0243	No	24	n/a	0.2065	0.1194	8.333	None	sqrt(x)	0.0008101	Param Intra 1 of 2
Selenium (mg/L)	MW-35	0.01	n/a	5/29/2024	0.0025ND	No	24	n/a	n/a	n/a	95.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Thallium (mg/L)	MW-35	0.002	n/a	5/29/2024	0.0005ND	No	24	n/a	n/a	n/a	87.5	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-35	0.01	n/a	5/29/2024	0.0025ND	No	24	n/a	n/a	n/a	79.17	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Zinc (mg/L)	MW-35	0.147	n/a	5/29/2024	0.01ND	No	25	n/a	n/a	n/a	72	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

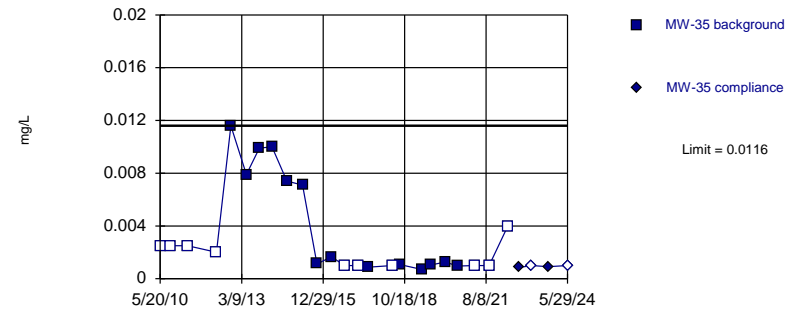


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Antimony Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

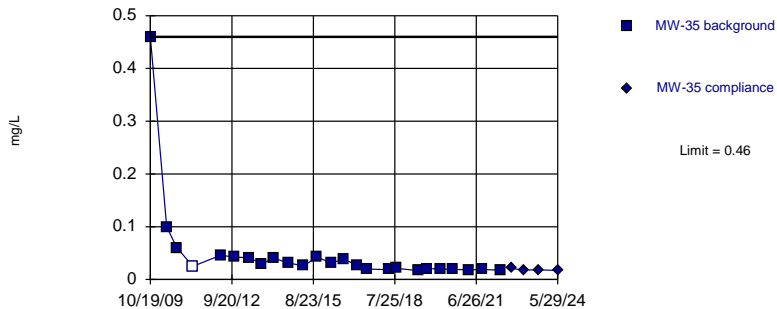


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 24 background values. 41.67% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Arsenic Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

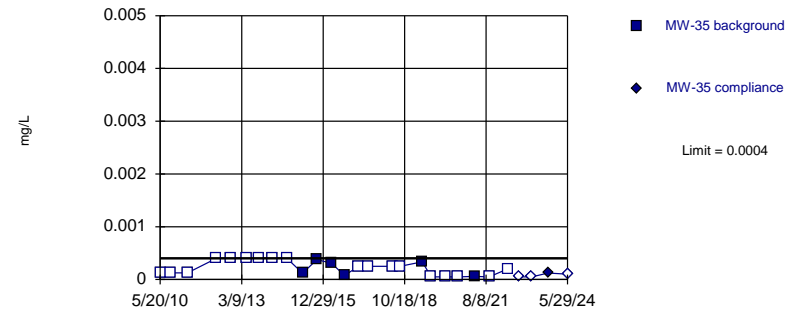


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 25 background values. 4% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Barium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

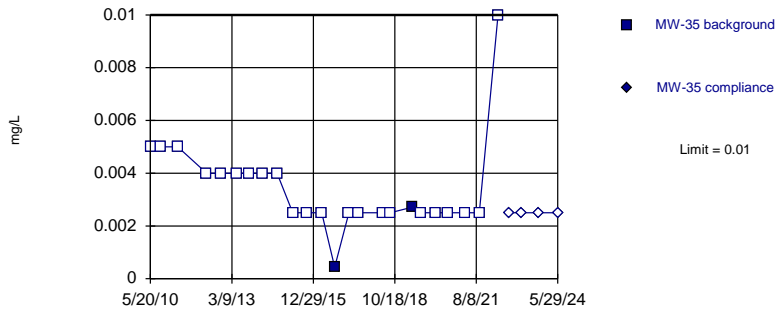


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 75% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Cadmium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

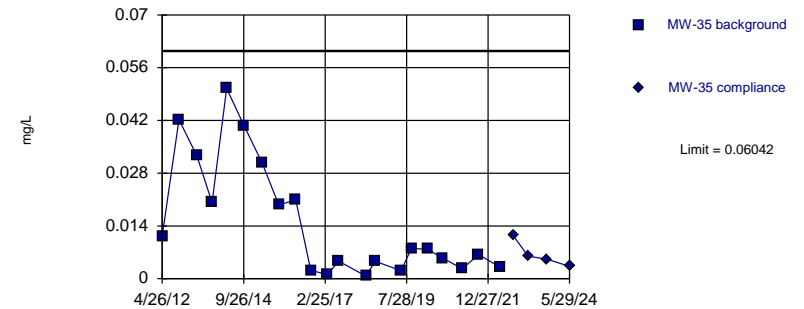


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Chromium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Parametric

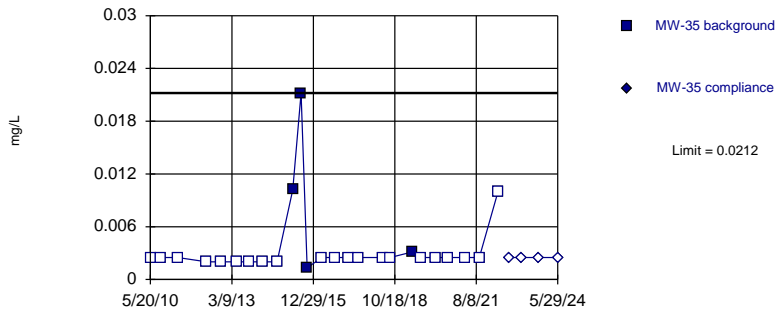


Background Data Summary (based on square root transformation): Mean=0.107, Std. Dev.=0.06198, n=21.  
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9152, critical = 0.873. Kappa = 2.239 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008101.

Constituent: Cobalt Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

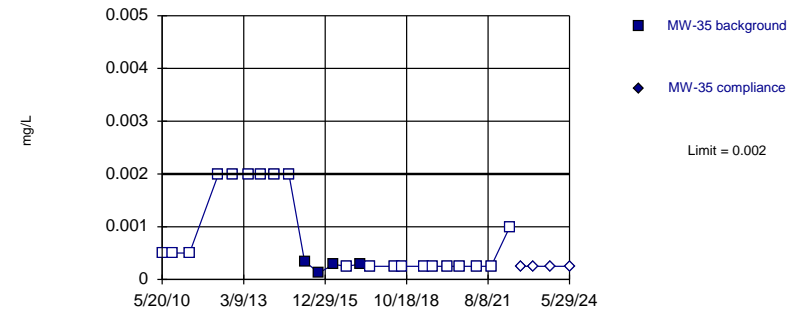


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 84% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Copper Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric



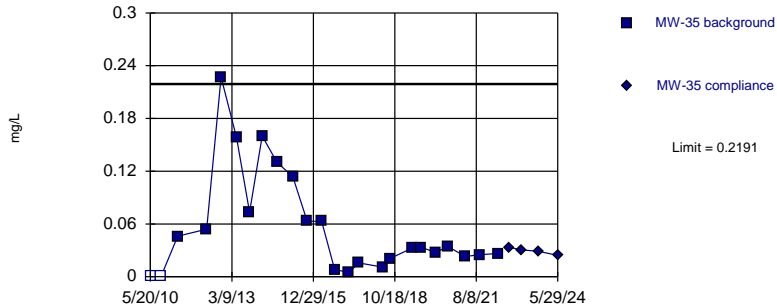
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Lead Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit

Intrawell Parametric



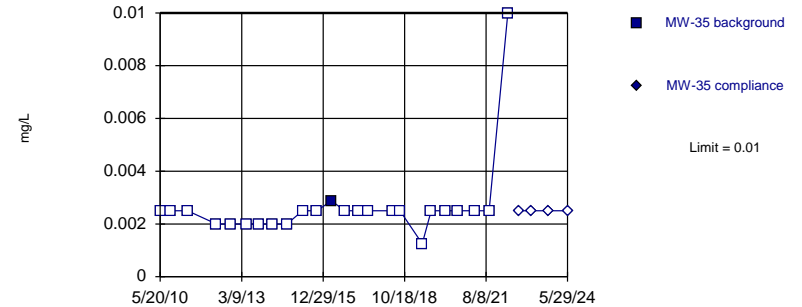
Background Data Summary (based on square root transformation): Mean=0.2065, Std. Dev.=0.1194, n=24, 8.333% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.953, critical = 0.884. Kappa = 2.19 (c=13, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008101.

Constituent: Nickel Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit

Intrawell Non-parametric



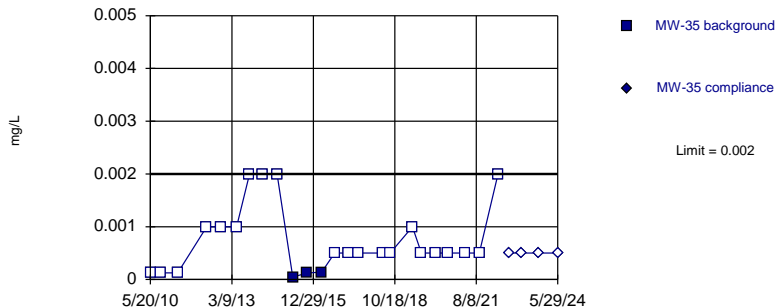
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Selenium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit

Intrawell Non-parametric



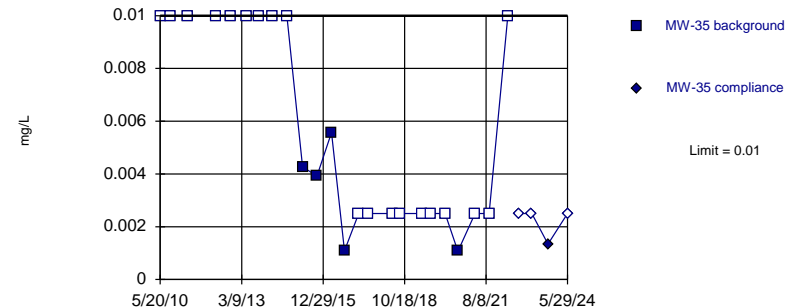
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Thallium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit

Intrawell Non-parametric

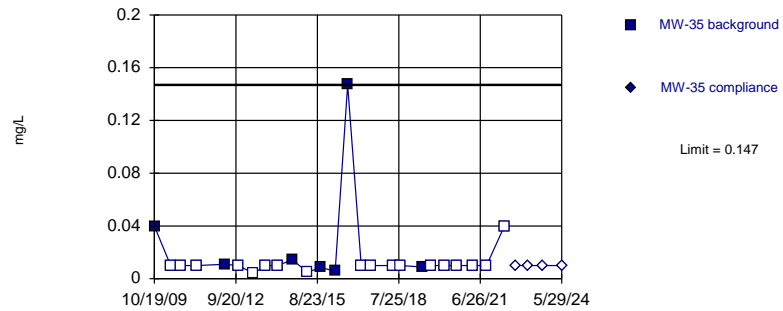


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 79.17% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Vanadium Analysis Run 9/19/2024 3:09 PM View: 2024SSN - MW-35 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 72% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

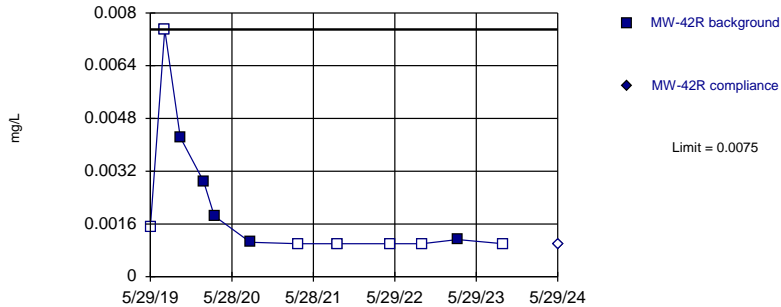
# Intrawell Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/20/2024, 5:58 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>
Antimony (mg/L)	MW-42R	0.0075	n/a	5/29/2024	0.001ND	No	12	n/a	n/a	n/a	58.33	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	MW-42R	0.0298	n/a	5/29/2024	0.001ND	No	12	n/a	n/a	n/a	25	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Barium (mg/L)	MW-42R	0.03633	n/a	5/29/2024	0.0158	No	12	n/a	0.02443	0.004566	0	None	No	0.0007523	Param Intra 1 of 2
Beryllium (mg/L)	MW-42R	0.0005	n/a	5/29/2024	0.0005ND	No	12	n/a	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	MW-42R	0.0005066	n/a	5/29/2024	0.0001ND	No	12	n/a	0.05664	0.008857	25	Kaplan-Meier	x^(1/3)	0.0007523	Param Intra 1 of 2
Chromium (mg/L)	MW-42R	0.0125	n/a	5/29/2024	0.0025ND	No	12	n/a	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-42R	0.008068	n/a	5/29/2024	0.00365	No	13	n/a	0.004827	0.001269	0	None	No	0.0007523	Param Intra 1 of 2
Copper (mg/L)	MW-42R	0.00905	n/a	5/29/2024	0.00222J	No	12	n/a	n/a	n/a	41.67	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Lead (mg/L)	MW-42R	0.00125	n/a	5/29/2024	0.00025ND	No	12	n/a	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Nickel (mg/L)	MW-42R	0.04831	n/a	5/29/2024	0.01	No	12	n/a	-3.931	0.3459	0	None	ln(x)	0.0007523	Param Intra 1 of 2
Selenium (mg/L)	MW-42R	0.01269	n/a	5/29/2024	0.0025ND	No	12	n/a	0.05703	0.02135	25	Kaplan-Meier	sqrt(x)	0.0007523	Param Intra 1 of 2
Thallium (mg/L)	MW-42R	0.005	n/a	5/29/2024	0.0005ND	No	12	n/a	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-42R	0.0169	n/a	5/29/2024	0.0025ND	No	12	n/a	n/a	n/a	33.33	n/a	n/a	0.01077	NP Intra (normality) 1 of 2
Zinc (mg/L)	MW-42R	0.03136	n/a	5/29/2024	0.01ND	No	12	n/a	0.2347	0.03095	50	Kaplan-Meier	x^(1/3)	0.0007523	Param Intra 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

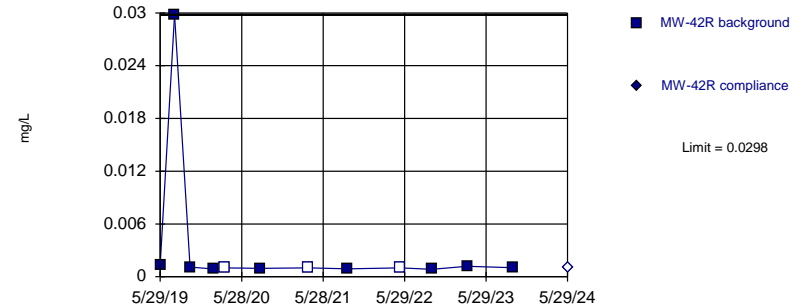


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 58.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Antimony Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

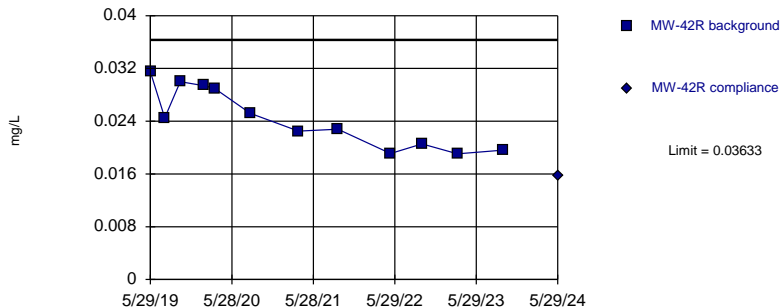


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 25% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Arsenic Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

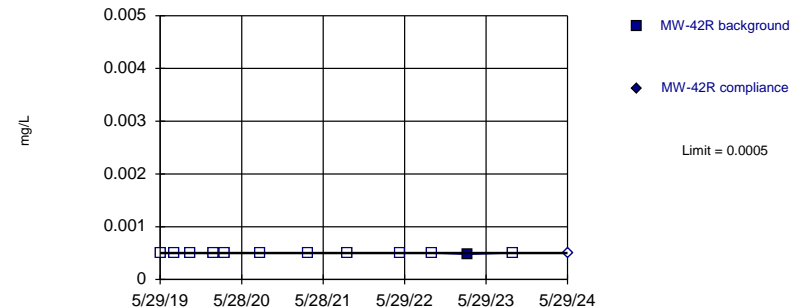


Background Data Summary: Mean=0.02443, Std. Dev.=0.004566, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9019, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Barium Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



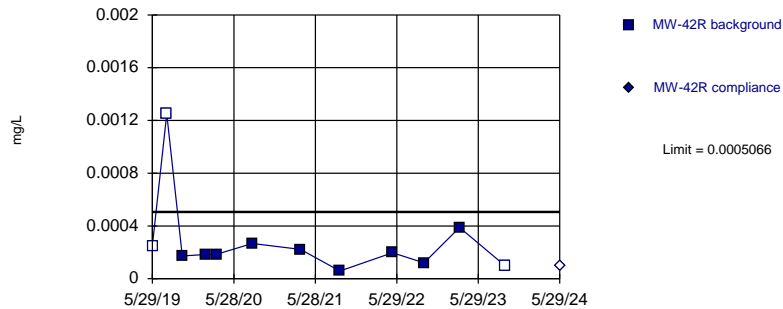
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Beryllium Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



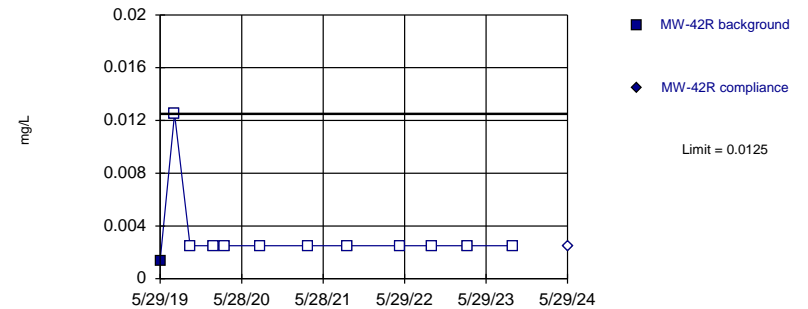
Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.05664, Std. Dev.=0.008857, n=12, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8202, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Cadmium Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Non-parametric



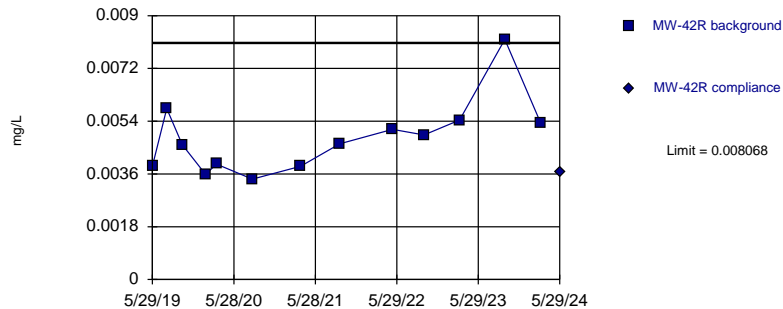
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Chromium Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



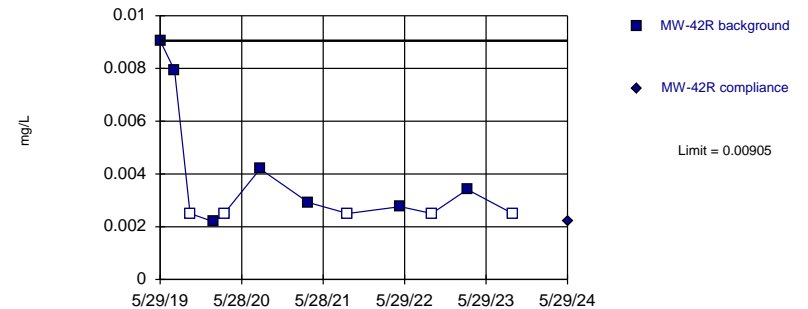
Background Data Summary: Mean=0.004827, Std. Dev.=0.001269, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8631, critical = 0.814. Kappa = 2.554 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Cobalt Analysis Run 9/20/2024 5:55 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Non-parametric



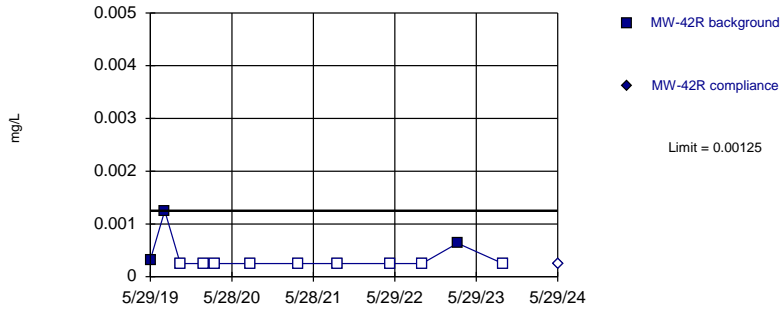
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 41.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Copper Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master



Within Limit

Prediction Limit  
Intrawell Non-parametric

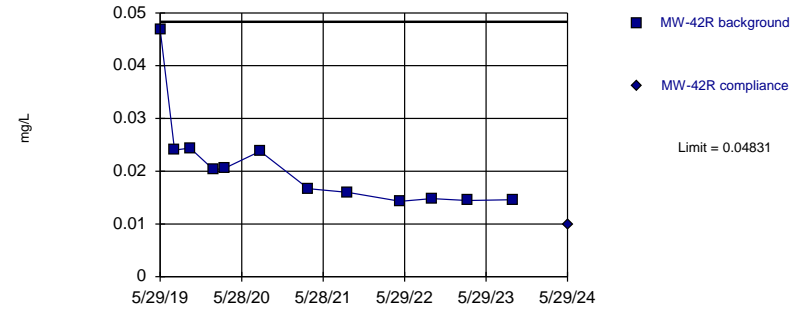


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Lead Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

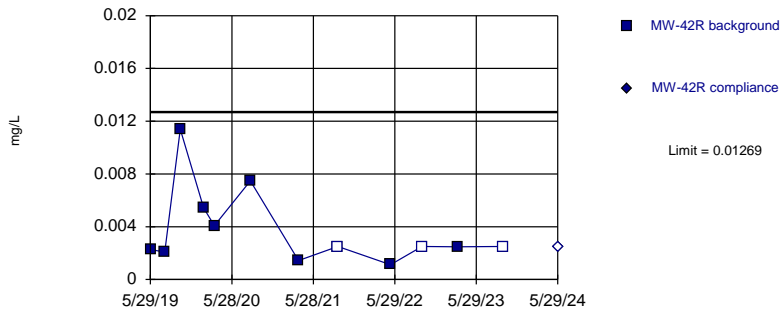


Background Data Summary (based on natural log transformation): Mean=-3.931, Std. Dev.=0.3459, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8302, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Nickel Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

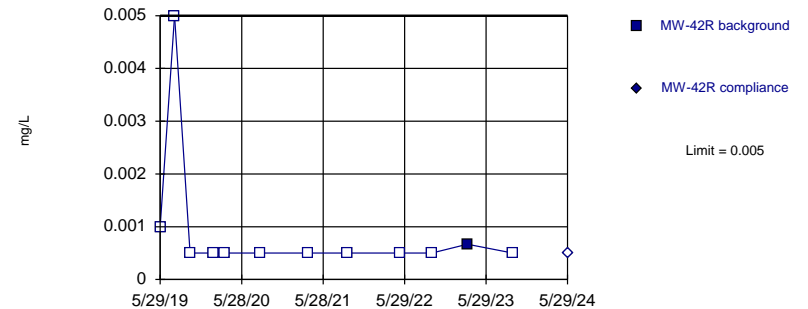


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05703, Std. Dev.=0.02135, n=12, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8578, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Selenium Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

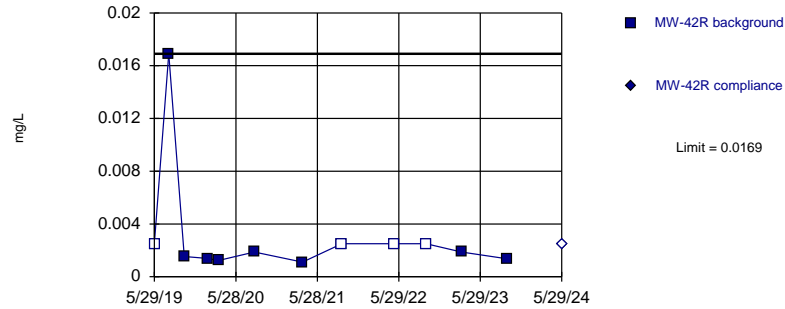


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
 Intrawell Non-parametric

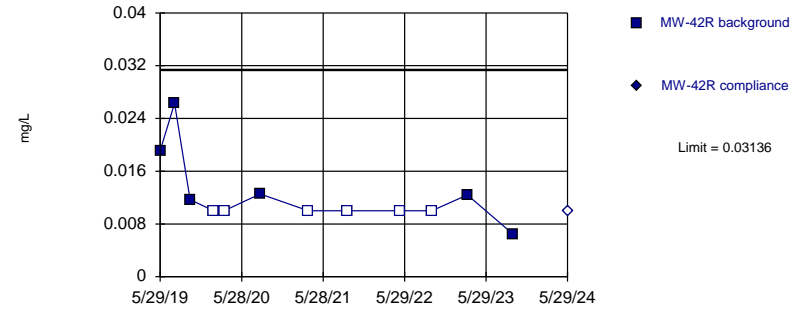


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Vanadium Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
 Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.2347, Std. Dev.=0.03095, n=12, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.807, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Zinc Analysis Run 9/20/2024 5:56 PM View: 2024SSN MW-42R IntraPL  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

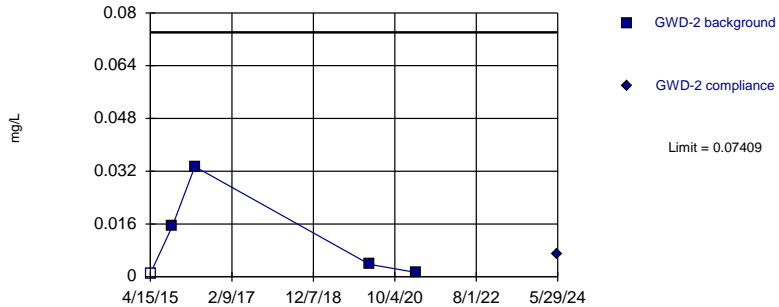
# Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 9/4/2024, 3:15 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 (mg/L)	GWD-2	0.07409	n/a	5/29/2024	0.00698	No	5	n/a	0.01103	0.01235	20	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2
Barium (mg/L)	GWD-2	5.524	n/a	5/29/2024	0.336	No	5	n/a	0.914	0.9026	0	None	No	0.0008776	Param Intra 1 of 2
Beryllium (mg/L)	GWD-2	0.0005	n/a	5/29/2024	0.0005ND	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWD-2	0.003115	n/a	5/29/2024	0.0001ND	No	5	n/a	0.0005844	0.0004955	40	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2
Chromium (mg/L)	GWD-2	0.0025	n/a	5/29/2024	0.0025ND	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWD-2	0.03518	n/a	5/29/2024	0.00636	No	5	n/a	0.005806	0.00575	0	None	No	0.0008776	Param Intra 1 of 2
Copper (mg/L)	GWD-2	0.01047	n/a	5/29/2024	0.0025ND	No	5	n/a	0.002652	0.001531	20	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2
Lead (mg/L)	GWD-2	0.003501	n/a	5/29/2024	0.00025ND	No	5	n/a	0.0007962	0.0005295	40	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2
Nickel (mg/L)	GWD-2	0.06688	n/a	5/29/2024	0.0216	No	5	n/a	0.01751	0.009664	0	None	No	0.0008776	Param Intra 1 of 2
Selenium (mg/L)	GWD-2	0.0025	n/a	5/29/2024	0.0025ND	No	5	n/a	n/a	n/a	60	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWD-2	0.006855	n/a	5/29/2024	0.0025ND	No	5	n/a	0.002056	0.0009395	20	Kaplan-Meier	No	0.0008776	Param Intra 1 of 2
Zinc (mg/L)	GWD-2	0.0108	n/a	5/29/2024	0.01ND	No	5	n/a	n/a	n/a	60	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Parametric

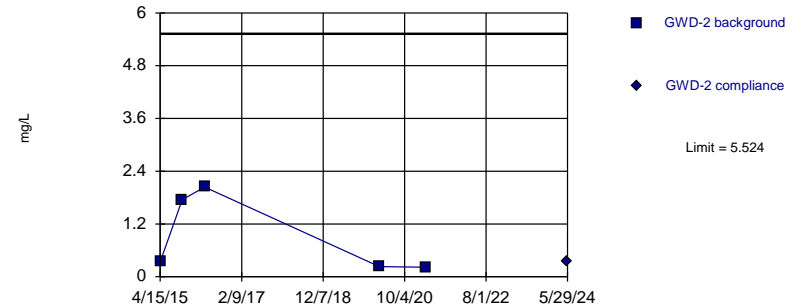


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.01103, Std. Dev.=0.01235, n=5, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8097, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Arsenic Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

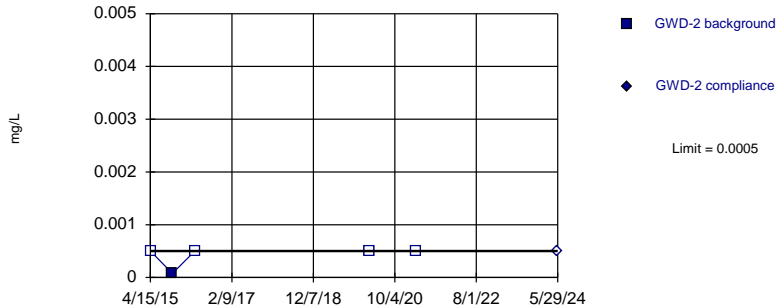


Background Data Summary: Mean=0.914, Std. Dev.=0.9026, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7654, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Barium Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

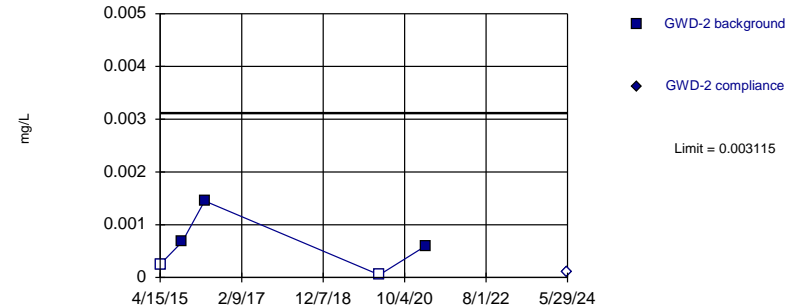


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Beryllium Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

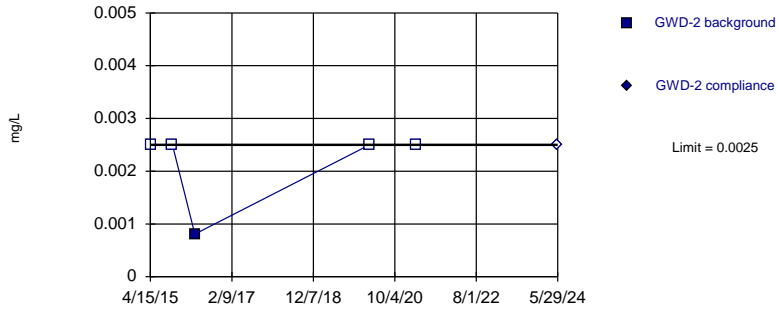


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0005844, Std. Dev.=0.0004955, n=5, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9264, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Cadmium Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

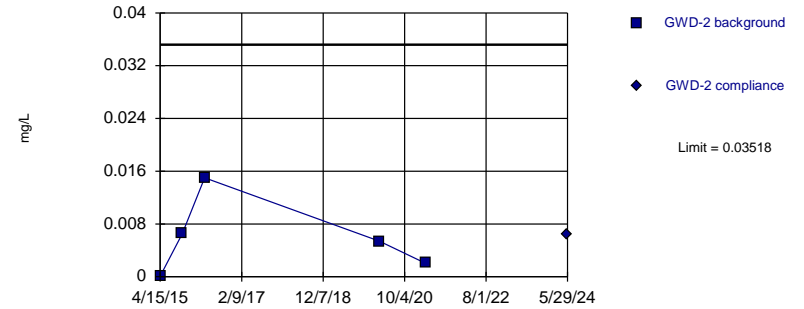


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Chromium Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

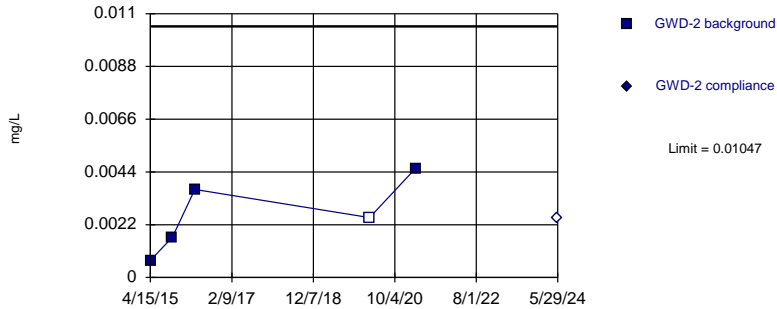


Background Data Summary: Mean=0.005806, Std. Dev.=0.00575, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9154, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Cobalt Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

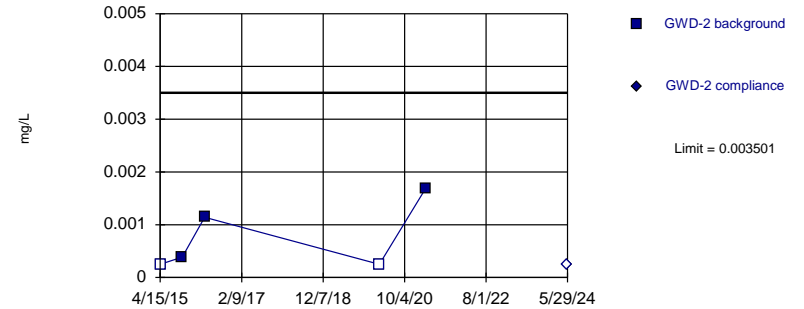


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002652, Std. Dev.=0.001531, n=5, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.981, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Copper Analysis Run 9/4/2024 3:11 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

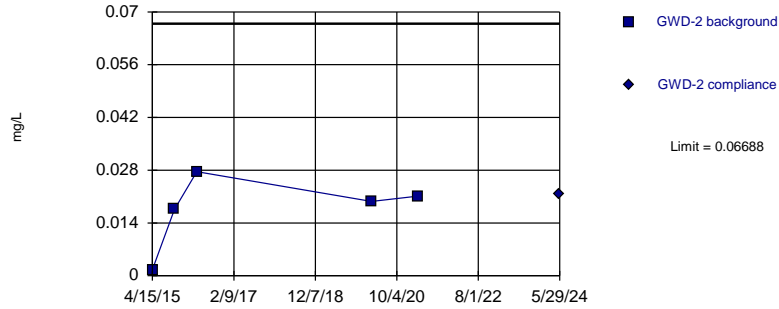


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0007962, Std. Dev.=0.0005295, n=5, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8236, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Lead Analysis Run 9/4/2024 3:12 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

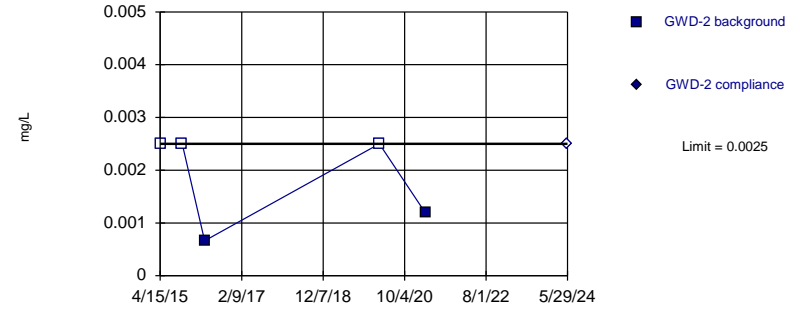


Background Data Summary: Mean=0.01751, Std. Dev.=0.009664, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8812, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Nickel Analysis Run 9/4/2024 3:12 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

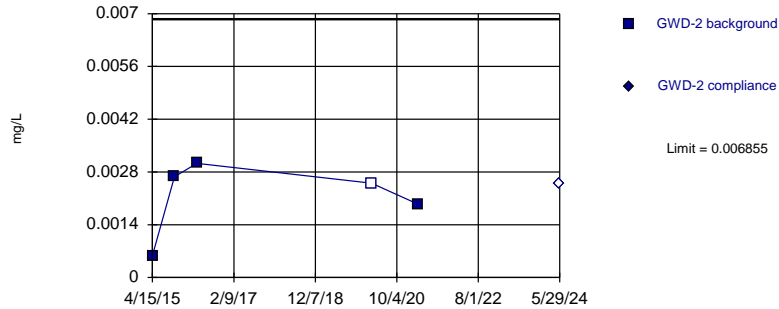


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Selenium Analysis Run 9/4/2024 3:12 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

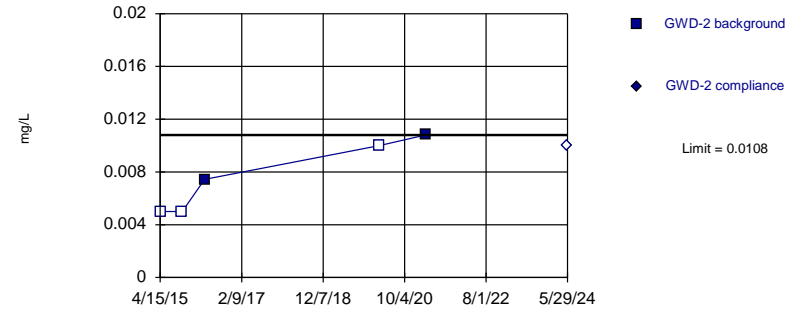


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002056, Std. Dev.=0.0009395, n=5, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8838, critical = 0.686. Kappa = 5.108 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Vanadium Analysis Run 9/4/2024 3:12 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Zinc Analysis Run 9/4/2024 3:12 PM View: 2024SSN - GWD-2 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

**Intrawell Prediction Limits Summary Table and Graphs –  
Closed MSWLF Unit**

# Prediction Limit

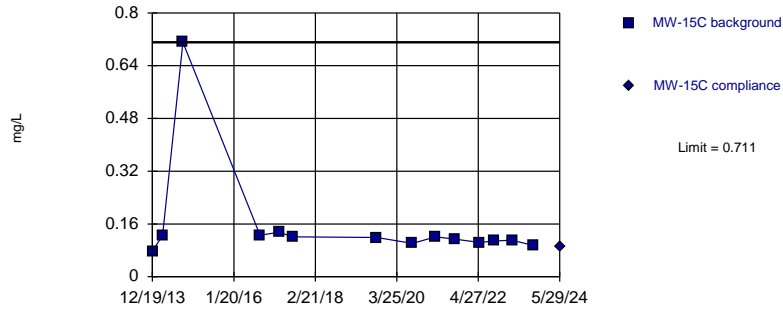
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 9/13/2024, 11:47 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	MW-15C	0.711	n/a	5/29/2024	0.0902	No	14	n/a	n/a	n/a	0	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Cadmium (mg/L)	MW-15C	0.01272	n/a	5/29/2024	0.0001ND	No	8	n/a	0.03102	0.02963	25	Kaplan-Meier	sqrt(x)	0.001504	Param Intra 1 of 2
Cobalt (mg/L)	MW-15C	0.002712	n/a	5/29/2024	0.000172J	No	17	n/a	-8.038	0.9943	11.76	None	ln(x)	0.001504	Param Intra 1 of 2
Nickel (mg/L)	MW-15C	0.01417	n/a	5/29/2024	0.00664	No	11	n/a	0.007845	0.002621	0	None	No	0.001504	Param Intra 1 of 2
Zinc (mg/L)	MW-15C	0.0426	n/a	5/29/2024	0.01ND	No	8	n/a	n/a	n/a	75	n/a	n/a	0.02144	NP Intra (NDs) 1 of 2



Within Limit

Prediction Limit  
Intrawell Non-parametric

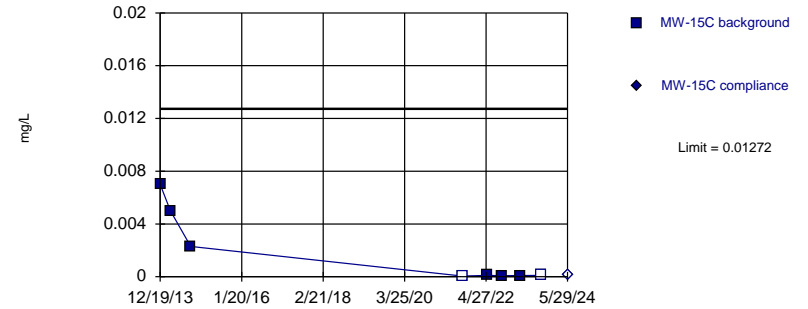


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Barium Analysis Run 9/13/2024 11:46 AM View: 2024SSN MW-15C IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Parametric

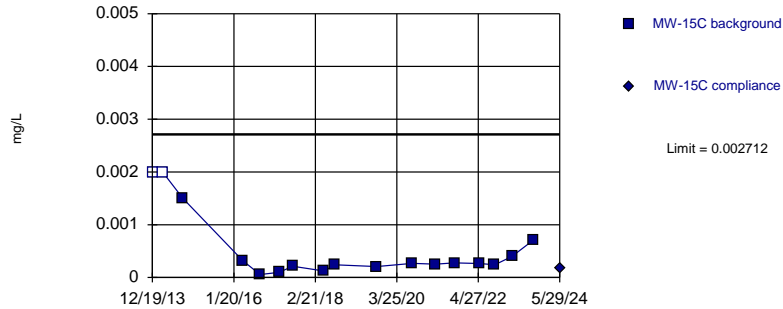


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.03102, Std. Dev.=0.02963, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.75, critical = 0.749. Kappa = 2.76 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Cadmium Analysis Run 9/13/2024 11:46 AM View: 2024SSN MW-15C IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Parametric

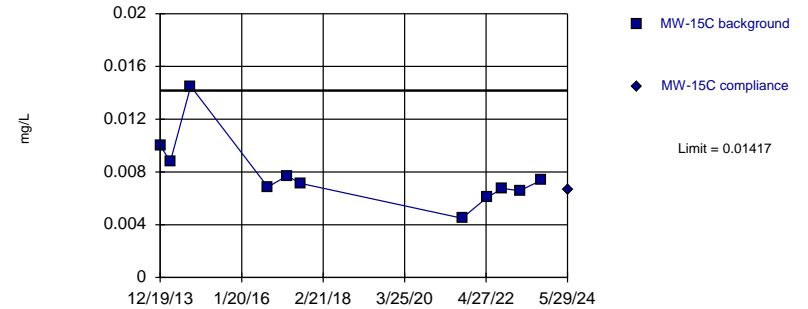


Background Data Summary (based on natural log transformation): Mean=-8.038, Std. Dev.=0.9943, n=17, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.851. Kappa = 2.14 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Cobalt Analysis Run 9/13/2024 11:46 AM View: 2024SSN MW-15C IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Parametric

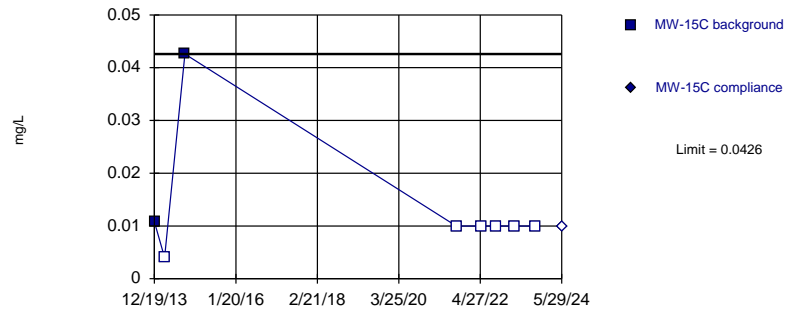


Background Data Summary: Mean=0.007845, Std. Dev.=0.002621, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8358, critical = 0.792. Kappa = 2.413 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Nickel Analysis Run 9/13/2024 11:46 AM View: 2024SSN MW-15C IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Zinc Analysis Run 9/13/2024 11:46 AM View: 2024SSN MW-15C IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

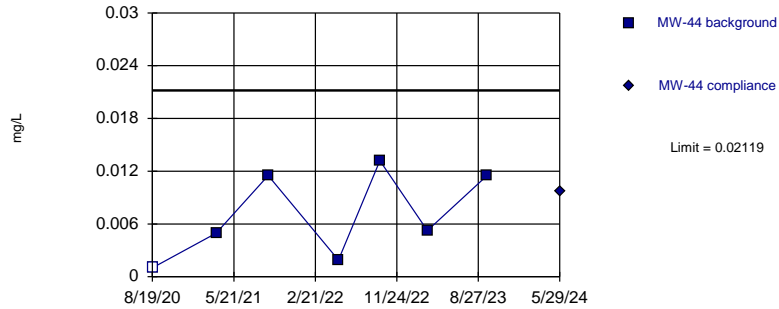
# Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 9/13/2024, 12:30 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 (mg/L)	MW-44	0.02119	n/a	5/29/2024	0.00971	No	7	n/a	0.007041	0.004971	14.29	None	No	0.00188	Param Intra 1 of 2
Barium (mg/L)	MW-44	0.04824	n/a	5/29/2024	0.019	No	7	n/a	0.025	0.008163	0	None	No	0.00188	Param Intra 1 of 2
Cobalt (mg/L)	MW-44	0.005843	n/a	5/29/2024	0.000362J	No	7	n/a	0.001564	0.001503	0	None	No	0.00188	Param Intra 1 of 2
Nickel (mg/L)	MW-44	0.0025	n/a	5/29/2024	0.0025ND	No	5	n/a	n/a	n/a	80	n/a	n/a	0.04755	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Parametric

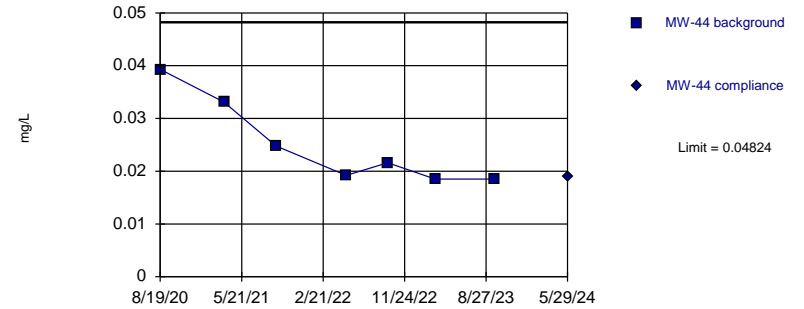


Background Data Summary: Mean=0.007041, Std. Dev.=0.004971, n=7, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8816, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Arsenic Analysis Run 9/13/2024 12:28 PM View: 2024SSN MW-44 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Parametric

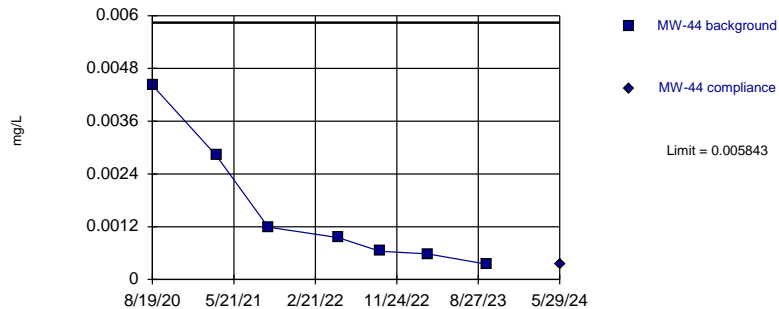


Background Data Summary: Mean=0.025, Std. Dev.=0.008163, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8261, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Barium Analysis Run 9/13/2024 12:28 PM View: 2024SSN MW-44 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Parametric

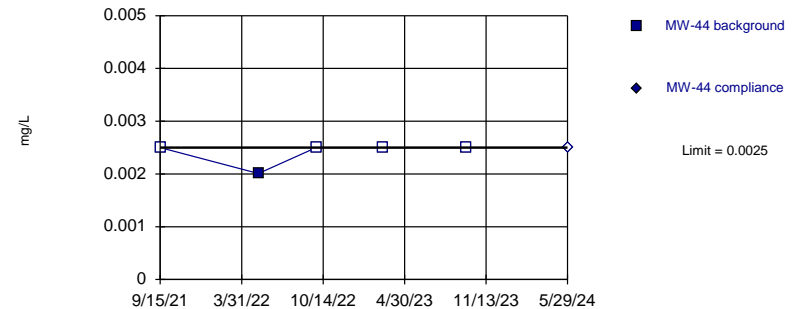


Background Data Summary: Mean=0.001564, Std. Dev.=0.001503, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8011, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Cobalt Analysis Run 9/13/2024 12:28 PM View: 2024SSN MW-44 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Nickel Analysis Run 9/13/2024 12:28 PM View: 2024SSN MW-44 IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

**Interwell Prediction Limits Summary Table and Graphs –  
Closed MSWLF Unit**

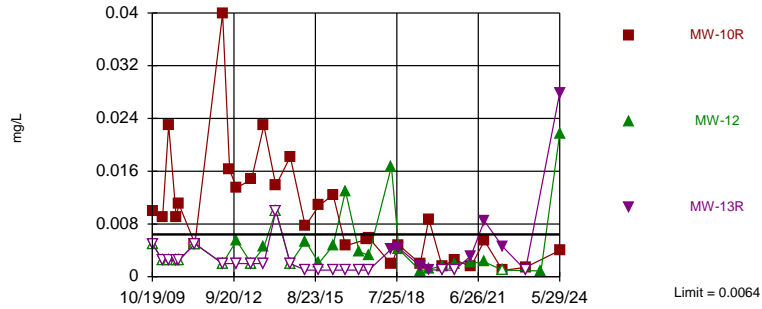
# Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 9/12/2024, 3:56 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-10R	0.0064	n/a	5/29/2024	0.00399	No	81	MW-4,MW-1,MW-11	n/a	n/a	91.36	n/a	n/a	0.0002922	NP Inter (NDs) 1 of 2
<b>Arsenic (mg/L)</b>	<b>MW-12</b>	<b>0.0064</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.0217</b>	<b>Yes</b>	<b>81</b>	<b>MW-4,MW-1,MW-11</b>	<b>n/a</b>	<b>n/a</b>	<b>91.36</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0002922</b>	<b>NP Inter (NDs) 1 of 2</b>
Arsenic (mg/L)	MW-13R	0.0064	n/a	5/29/2024	0.0279J	No	81	MW-4,MW-1,MW-11	n/a	n/a	91.36	n/a	n/a	0.0002922	NP Inter (NDs) 1 of 2
<b>Barium (mg/L)</b>	<b>MW-10R</b>	<b>0.1017</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.121</b>	<b>Yes</b>	<b>82</b>	<b>MW-1,MW-11,MW-4</b>	<b>-3.491</b>	<b>0.5856</b>	<b>17.07</b>	<b>Kaplan-Meier</b>	<b>ln(x)</b>	<b>0.0005374</b>	<b>Param Inter 1 of 2</b>
<b>Barium (mg/L)</b>	<b>MW-12</b>	<b>0.1017</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.678</b>	<b>Yes</b>	<b>82</b>	<b>MW-1,MW-11,MW-4</b>	<b>-3.491</b>	<b>0.5856</b>	<b>17.07</b>	<b>Kaplan-Meier</b>	<b>ln(x)</b>	<b>0.0005374</b>	<b>Param Inter 1 of 2</b>
<b>Barium (mg/L)</b>	<b>MW-13R</b>	<b>0.1017</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.378</b>	<b>Yes</b>	<b>82</b>	<b>MW-1,MW-11,MW-4</b>	<b>-3.491</b>	<b>0.5856</b>	<b>17.07</b>	<b>Kaplan-Meier</b>	<b>ln(x)</b>	<b>0.0005374</b>	<b>Param Inter 1 of 2</b>
Barium (mg/L)	MW-7	0.1017	n/a	5/29/2024	0.014	No	82	MW-1,MW-11,MW-4	-3.491	0.5856	17.07	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2
Barium (mg/L)	MW-9R	0.1017	n/a	5/29/2024	0.0694	No	82	MW-1,MW-11,MW-4	-3.491	0.5856	17.07	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2
Cobalt (mg/L)	MW-10R	0.0074	n/a	5/29/2024	0.00235	No	63	MW-4,MW-1,MW-11	n/a	n/a	57.14	n/a	n/a	0.0004803	NP Inter (NDs) 1 of 2
<b>Cobalt (mg/L)</b>	<b>MW-12</b>	<b>0.0074</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.00975</b>	<b>Yes</b>	<b>63</b>	<b>MW-4,MW-1,MW-11</b>	<b>n/a</b>	<b>n/a</b>	<b>57.14</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0004803</b>	<b>NP Inter (NDs) 1 of 2</b>
Cobalt (mg/L)	MW-13R	0.0074	n/a	5/29/2024	0.00731	No	63	MW-4,MW-1,MW-11	n/a	n/a	57.14	n/a	n/a	0.0004803	NP Inter (NDs) 1 of 2
<b>Cobalt (mg/L)</b>	<b>MW-9R</b>	<b>0.0074</b>	<b>n/a</b>	<b>5/29/2024</b>	<b>0.00741</b>	<b>Yes</b>	<b>63</b>	<b>MW-4,MW-1,MW-11</b>	<b>n/a</b>	<b>n/a</b>	<b>57.14</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0004803</b>	<b>NP Inter (NDs) 1 of 2</b>
Lead (mg/L)	MW-10R	0.0222	n/a	5/29/2024	0.000892	No	82	MW-4,MW-11,MW-1	n/a	n/a	60.98	n/a	n/a	0.0002861	NP Inter (NDs) 1 of 2
Lead (mg/L)	MW-12	0.0222	n/a	5/29/2024	0.000573	No	82	MW-4,MW-11,MW-1	n/a	n/a	60.98	n/a	n/a	0.0002861	NP Inter (NDs) 1 of 2
Nickel (mg/L)	MW-10R	0.02815	n/a	5/29/2024	0.00777	No	82	MW-1,MW-11,MW-4	-5.805	1.086	41.46	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2
Nickel (mg/L)	MW-12	0.02815	n/a	5/29/2024	0.0157	No	82	MW-1,MW-11,MW-4	-5.805	1.086	41.46	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2
Nickel (mg/L)	MW-13R	0.02815	n/a	5/29/2024	0.01435	No	82	MW-1,MW-11,MW-4	-5.805	1.086	41.46	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2
Nickel (mg/L)	MW-9R	0.02815	n/a	5/29/2024	0.0252	No	82	MW-1,MW-11,MW-4	-5.805	1.086	41.46	Kaplan-Meier	ln(x)	0.0005374	Param Inter 1 of 2

Exceeds Limit: MW-12

Prediction Limit  
Interwell Non-parametric

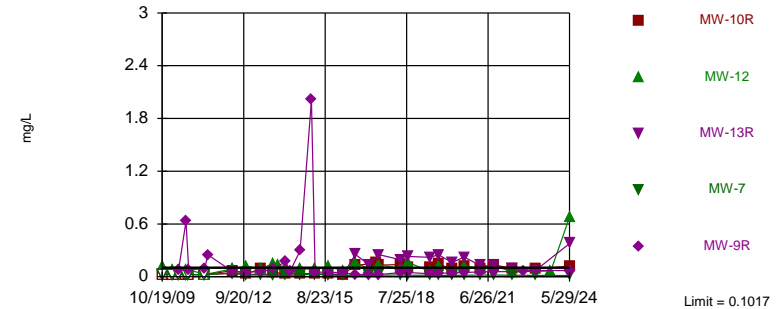


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 81 background values. 91.36% NDs. Annual per-constituent alpha = 0.004083. Individual comparison alpha = 0.0002922 (1 of 2). Comparing 3 points to limit. Assumes 4 future values.

Constituent: Arsenic Analysis Run 9/12/2024 3:54 PM View: 2024SSN - AM InterPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Exceeds Limit: MW-10R, MW-12, MW-13R

Prediction Limit  
Interwell Parametric

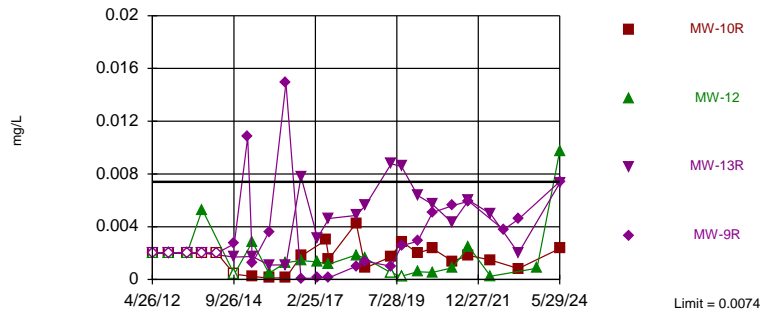


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-3.491, Std. Dev.=0.5856, n=82, 17.07% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9662, critical = 0.959. Kappa = 2.059 (c=14, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756. Individual comparison alpha = 0.0005374. Comparing 5 points to limit. Assumes 2 future values.

Constituent: Barium Analysis Run 9/12/2024 3:54 PM View: 2024SSN - AM InterPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Exceeds Limit: MW-12, MW-9R

Prediction Limit  
Interwell Non-parametric

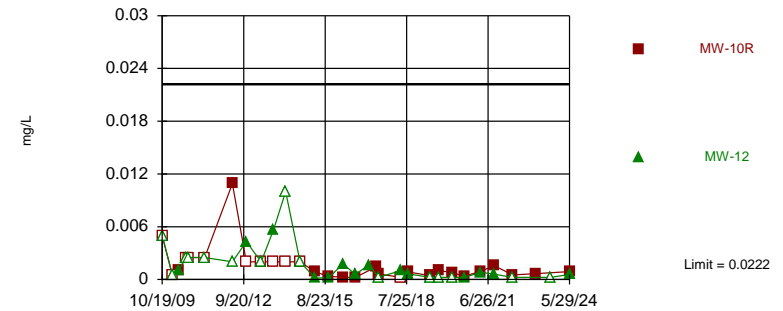


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 63 background values. 57.14% NDs. Annual per-constituent alpha = 0.006703. Individual comparison alpha = 0.0004803 (1 of 2). Comparing 4 points to limit. Assumes 3 future values.

Constituent: Cobalt Analysis Run 9/12/2024 3:54 PM View: 2024SSN - AM InterPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit  
Interwell Non-parametric



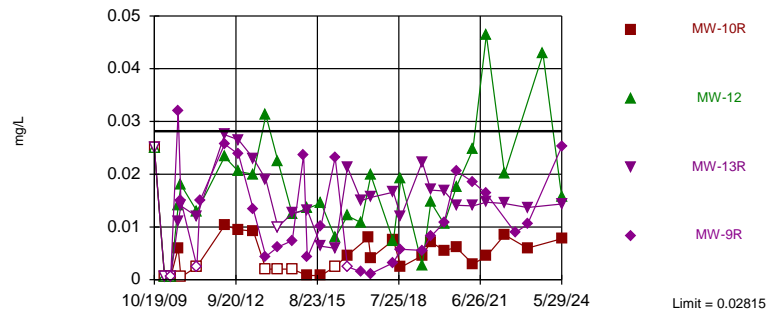
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 82 background values. 60.98% NDs. Annual per-constituent alpha = 0.003998. Individual comparison alpha = 0.0002861 (1 of 2). Comparing 2 points to limit. Assumes 5 future values.

Constituent: Lead Analysis Run 9/12/2024 3:54 PM View: 2024SSN - AM InterPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.805, Std. Dev.=1.086, n=82, 41.46% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9642, critical = 0.959. Kappa = 2.059 (c=14, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.003756. Individual comparison alpha = 0.0005374. Comparing 4 points to limit. Assumes 3 future values.

Constituent: Nickel Analysis Run 9/12/2024 3:54 PM View: 2024SSN - AM InterPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master



**Sen's Slope/Mann-Kendall Summary Table and Graphs –  
Closed MSWLF Unit**

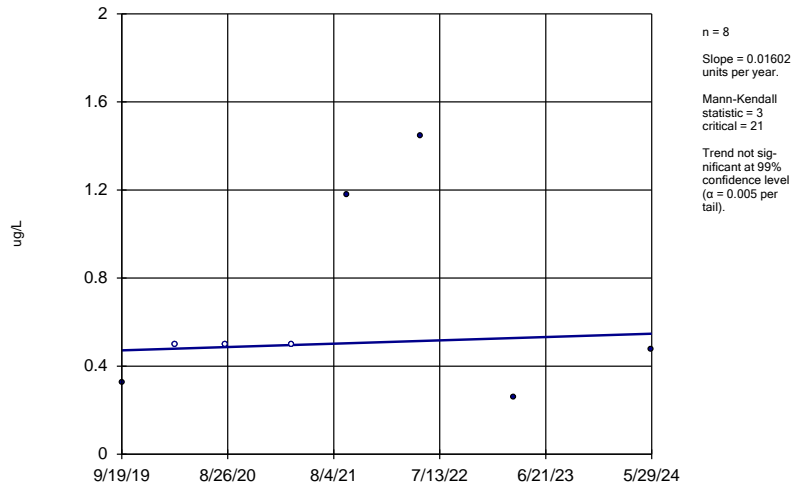
# Trend Test

Cherokee County Sanitary Landfill    Client: SCS Engineers    Data: CHRKE Closed-AM 2024SSN    Printed 9/13/2024, 3:42 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>
1,1-Dichloroethane (ug/L)	MW-13R	0.01602	3	21	No	8	37.5	0.01	NP
Acrylonitrile (ug/L)	MW-9R	-1.315	-19	-21	No	8	87.5	0.01	NP
Arsenic (mg/L)	MW-10R	-0.0003711	-8	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-12	0.0003609	6	21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-13R	0.001858	11	21	No	8	37.5	0.01	NP
Arsenic (mg/L)	MW-44	0.001984	11	21	No	8	12.5	0.01	NP
Barium (mg/L)	MW-7	-0.00002897	-2	-21	No	8	0	0.01	NP
<b>Barium (mg/L)</b>	<b>MW-9R</b>	<b>0.007121</b>	<b>26</b>	<b>21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Barium (mg/L)	MW-10R	-0.004455	-6	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-12	0.0008239	2	21	No	8	0	0.01	NP
Barium (mg/L)	MW-13R	-0.03342	-12	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-15C	-0.0067	-12	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-44	-0.004899	-21	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-9R	-0.00002748	-15	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-12	0.000008663	7	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-15C	-0.00005198	-7	-21	No	8	37.5	0.01	NP
Carbon Disulfide (ug/L)	MW-9R	-0.1678	-12	-21	No	8	12.5	0.01	NP
Chlorobenzene (ug/L)	MW-13R	-0.5744	-18	-21	No	8	12.5	0.01	NP
Chlorobenzene (ug/L)	MW-15C	0	-5	-21	No	8	87.5	0.01	NP
Chloroethane (ug/L)	MW-15C	0	13	21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-7	-0.0946	-10	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-10R	-0.2283	-16	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-7	0.00004231	11	21	No	8	25	0.01	NP
Cobalt (mg/L)	MW-9R	0.0006987	16	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-10R	-0.0004451	-11	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-12	0.0004315	12	21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-13R	-0.001222	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-15C	0.000002855	0	21	No	8	0	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MW-44</b>	<b>-0.0006498</b>	<b>-26</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Copper (mg/L)	MW-7	0	5	21	No	8	87.5	0.01	NP
Copper (mg/L)	MW-10R	0	5	21	No	8	87.5	0.01	NP
Copper (mg/L)	MW-13R	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-10R	-0.00002	-2	-21	No	8	0	0.01	NP
Lead (mg/L)	MW-12	0	4	21	No	8	50	0.01	NP
Nickel (mg/L)	MW-9R	0.00166	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-10R	0.0002952	4	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-12	0.003772	10	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-13R	-0.0004919	-14	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-15C	-0.00005902	-2	-21	No	8	0	0.01	NP
Selenium (mg/L)	MW-12	0.0007979	16	21	No	8	62.5	0.01	NP
Styrene (ug/L)	MW-9R	0	-7	-21	No	8	87.5	0.01	NP
<b>Trichloroethene (ug/L)</b>	<b>MW-7</b>	<b>-0.1407</b>	<b>-22</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Zinc (mg/L)	MW-15C	0	1	21	No	8	87.5	0.01	NP

### Sen's Slope Estimator

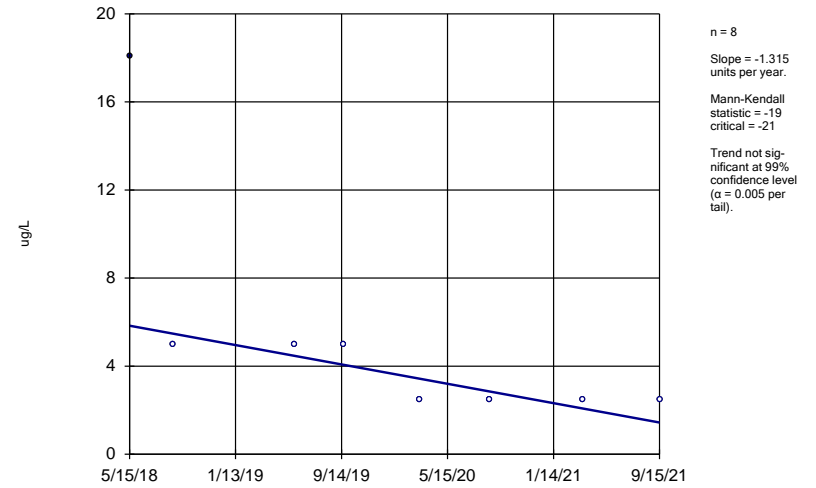
MW-13R



Constituent: 1,1-Dichloroethane Analysis Run 9/13/2024 3:38 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

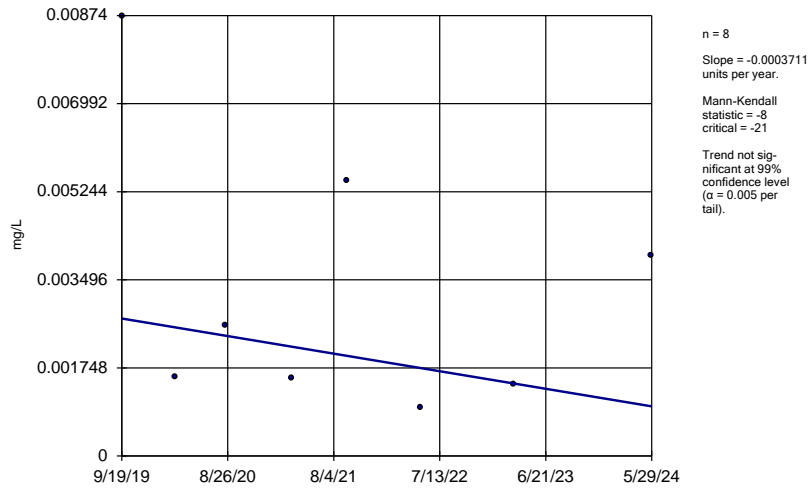
MW-9R



Constituent: Acrylonitrile Analysis Run 9/13/2024 3:38 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

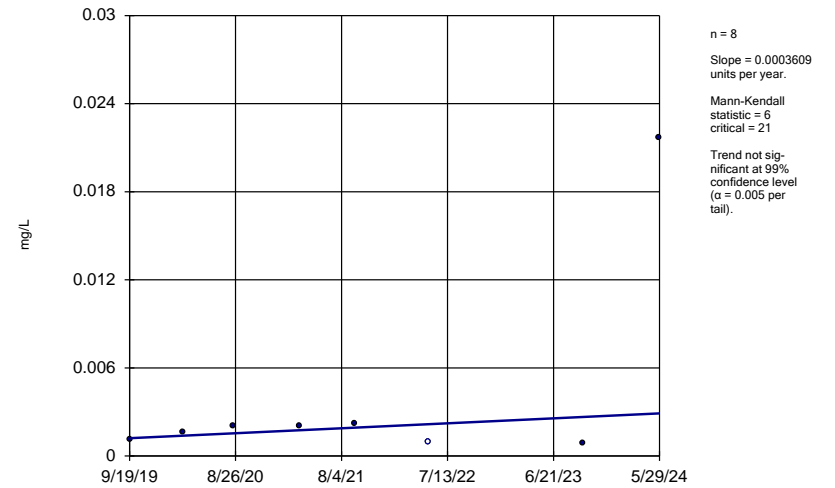
MW-10R



Constituent: Arsenic Analysis Run 9/13/2024 3:38 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

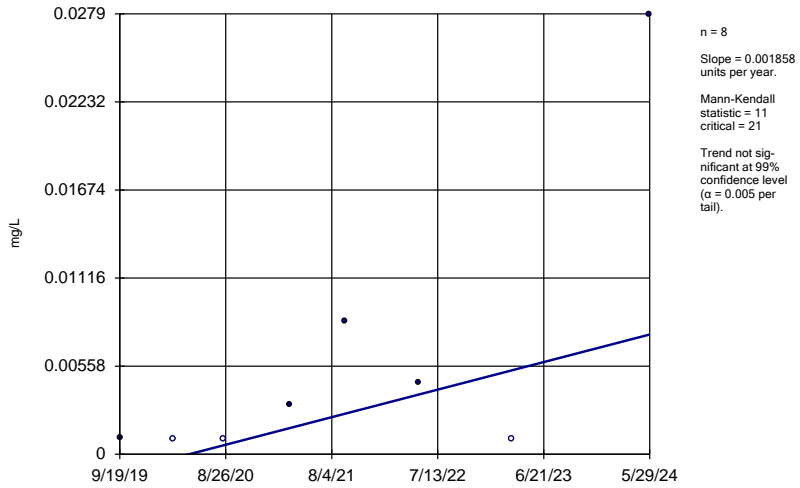
MW-12



Constituent: Arsenic Analysis Run 9/13/2024 3:38 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

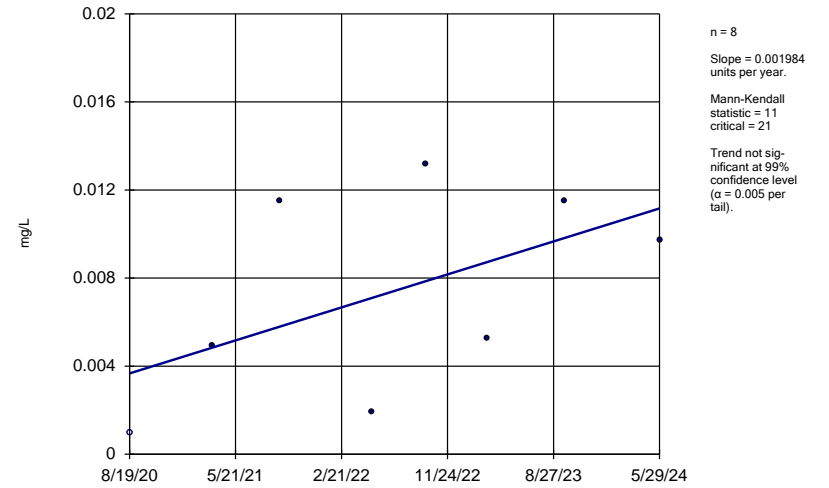
MW-13R



Constituent: Arsenic Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

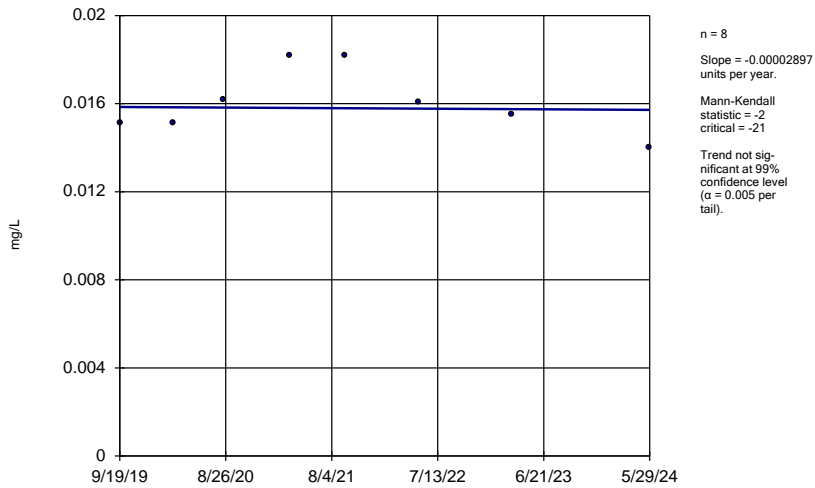
MW-44



Constituent: Arsenic Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

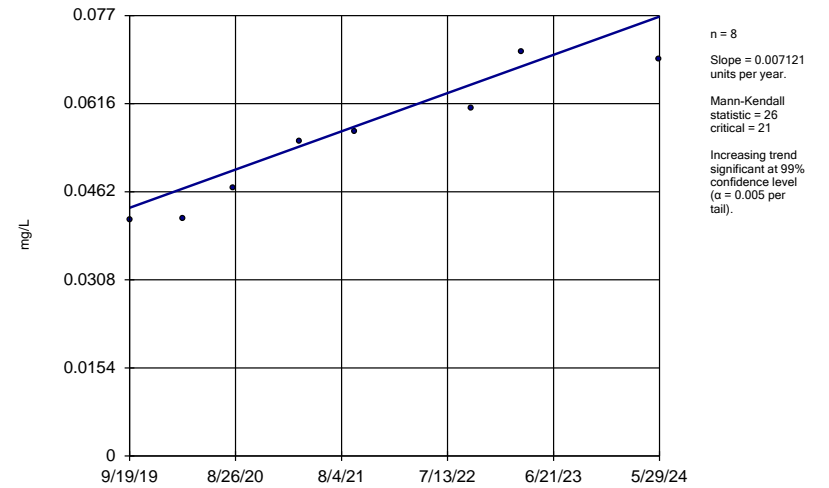
MW-7



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

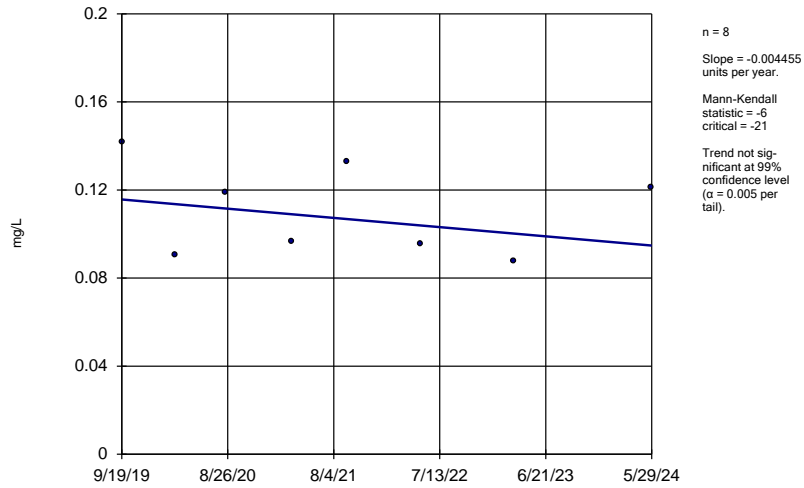
MW-9R



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

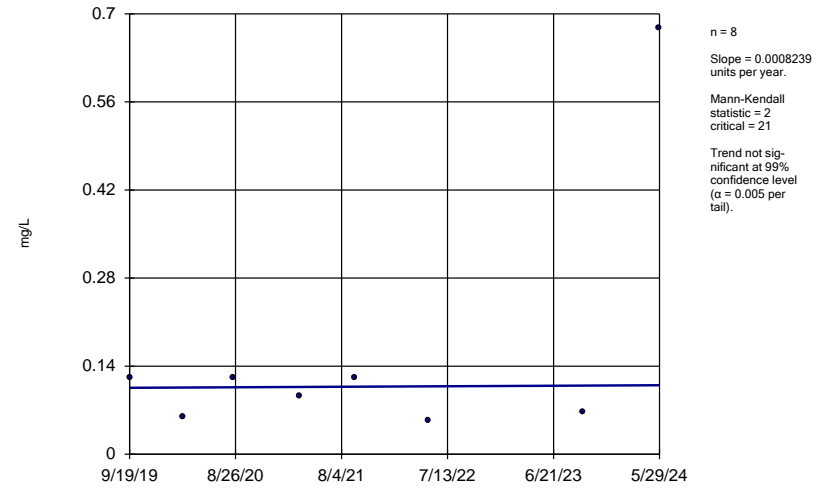
MW-10R



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

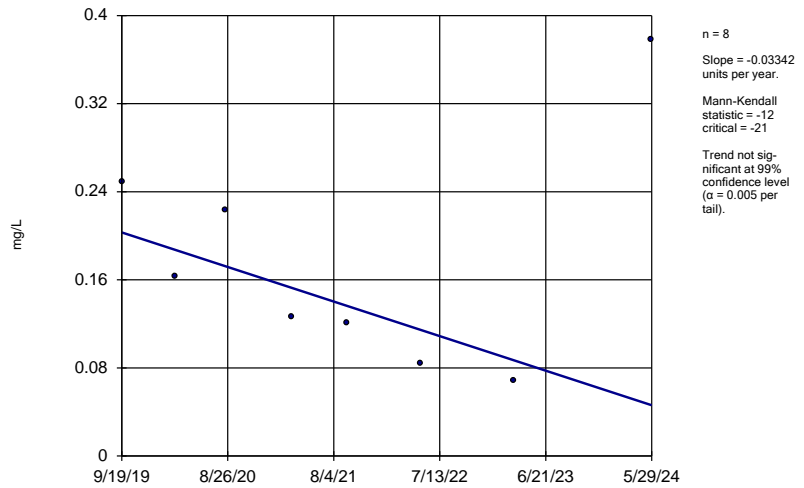
MW-12



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

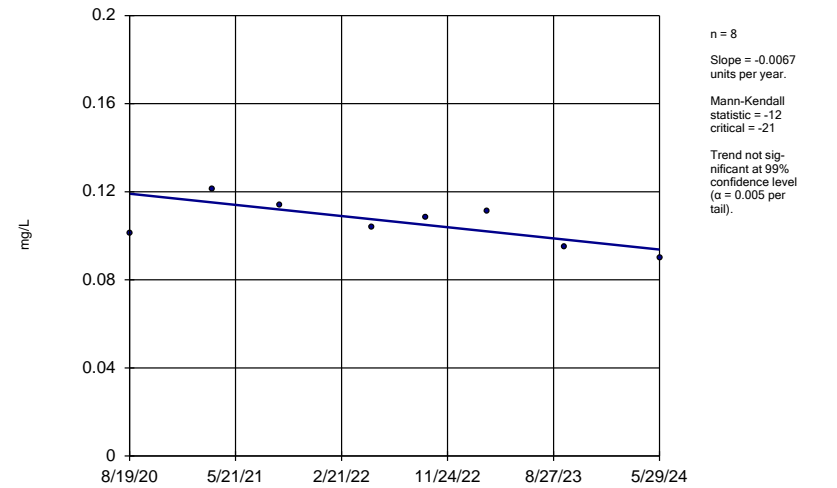
MW-13R



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

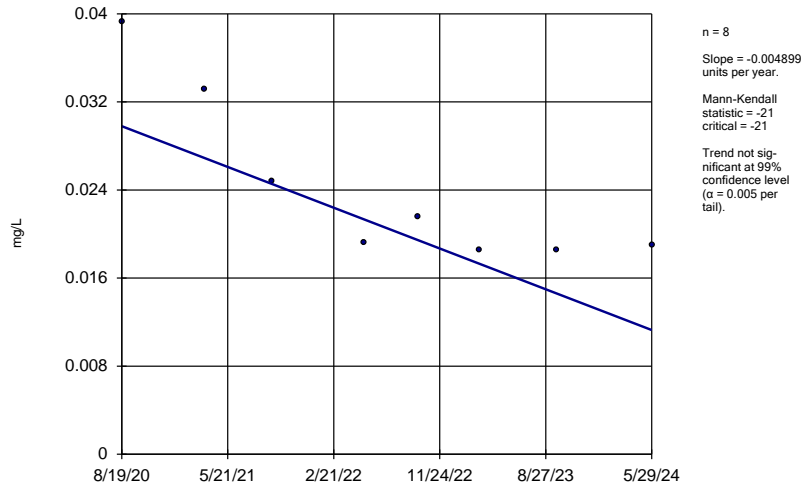
MW-15C



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

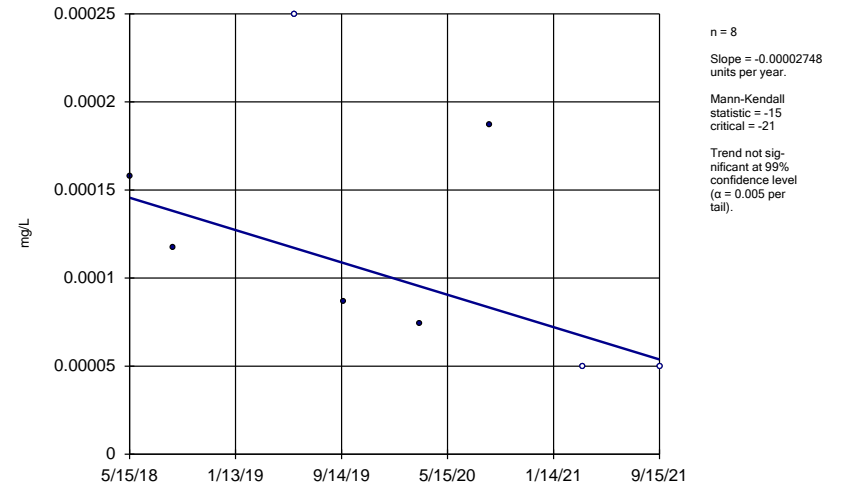
MW-44



Constituent: Barium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

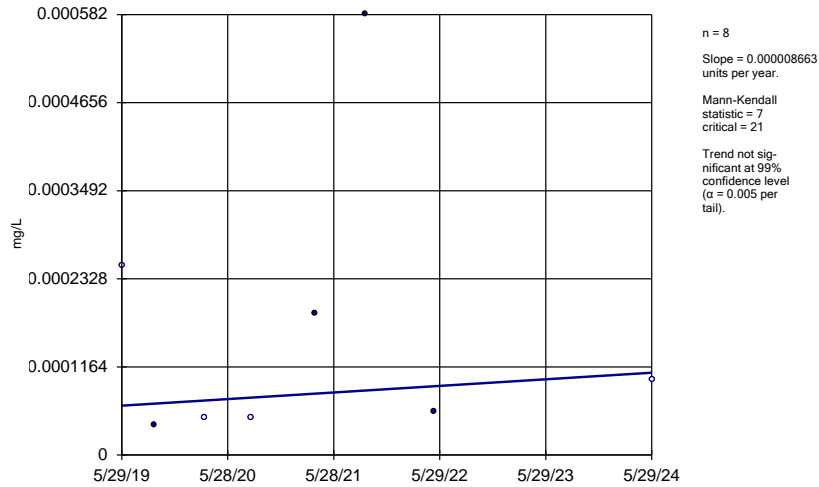
MW-9R



Constituent: Cadmium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

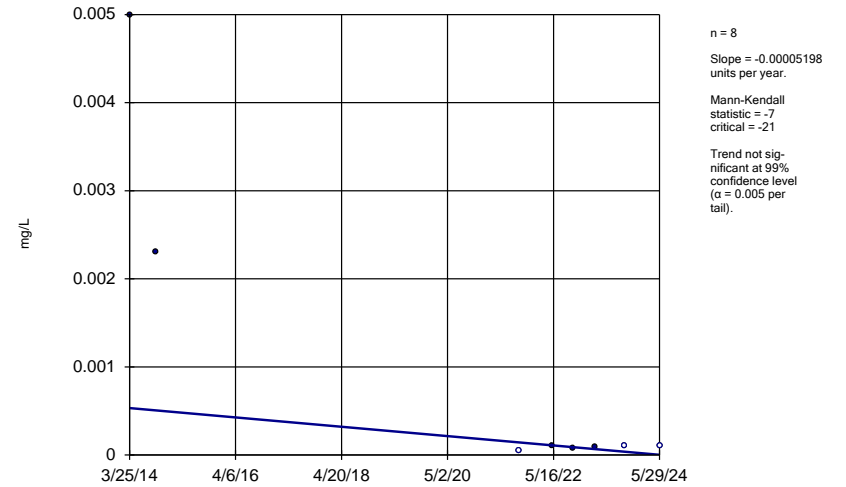
MW-12



Constituent: Cadmium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

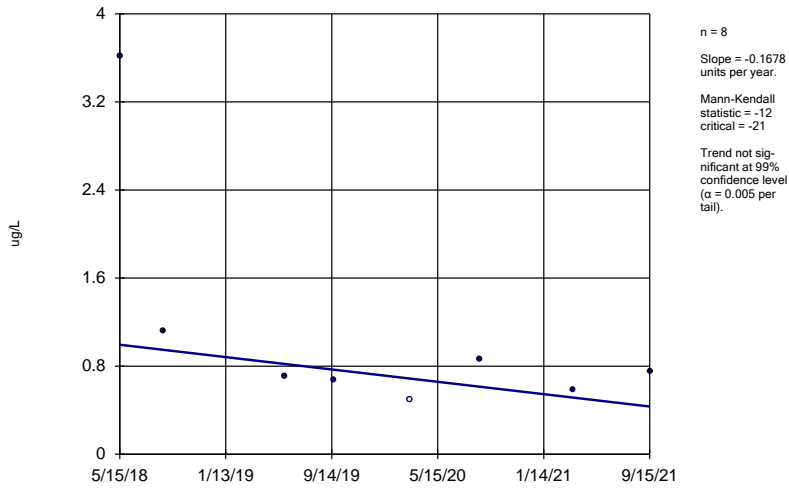
MW-15C



Constituent: Cadmium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

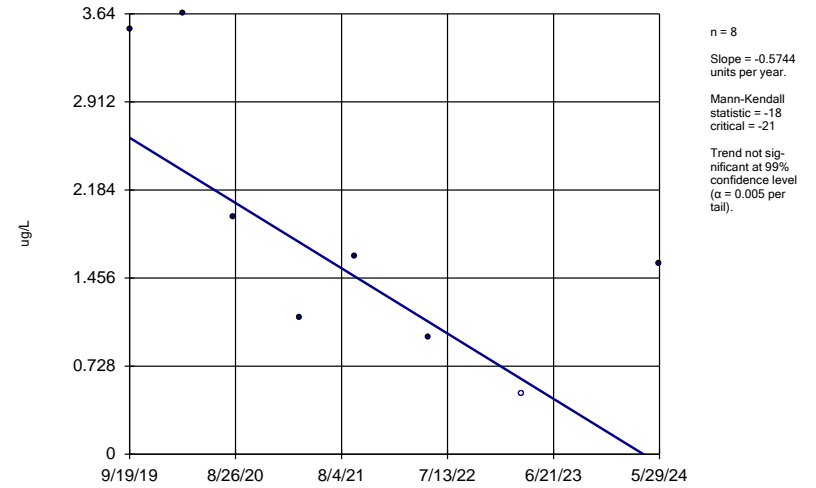
MW-9R



Constituent: Carbon Disulfide Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

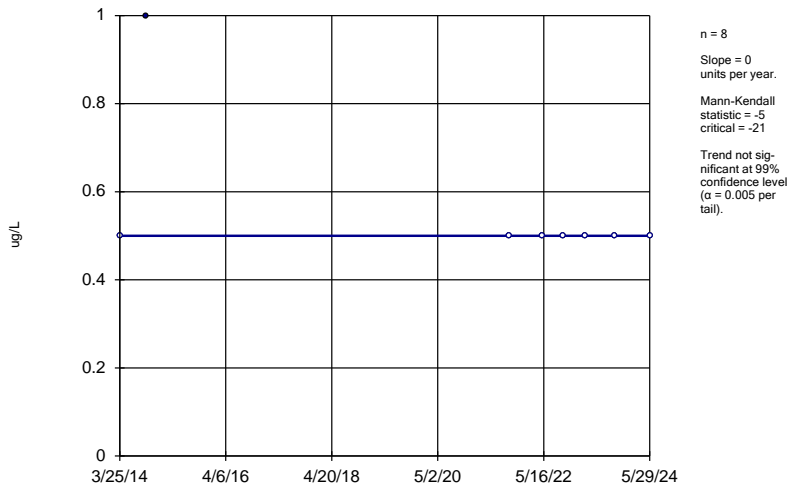
MW-13R



Constituent: Chlorobenzene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

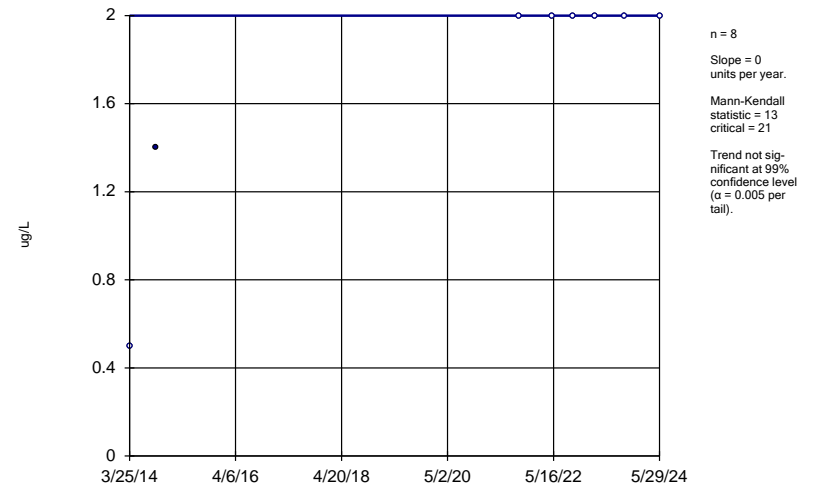
MW-15C



Constituent: Chlorobenzene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

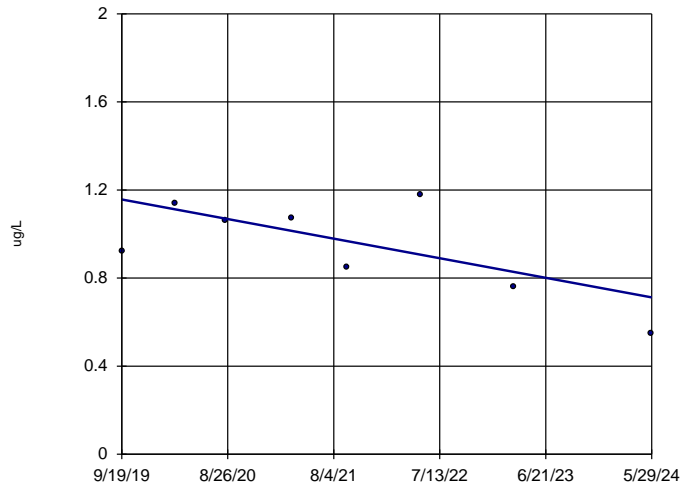
MW-15C



Constituent: Chloroethane Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-7

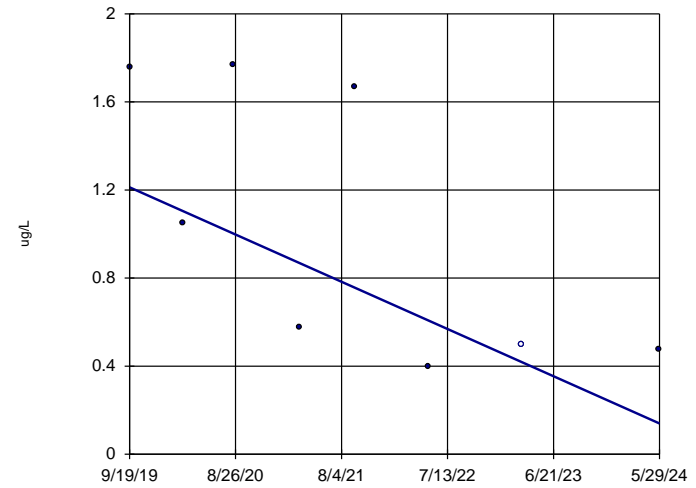


n = 8  
 Slope = -0.0946 units per year.  
 Mann-Kendall statistic = -10  
 critical = -21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-10R

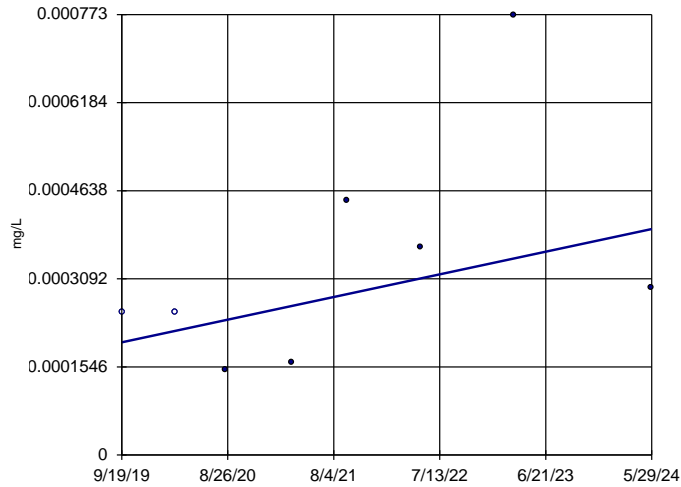


n = 8  
 Slope = -0.2283 units per year.  
 Mann-Kendall statistic = -16  
 critical = -21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-7

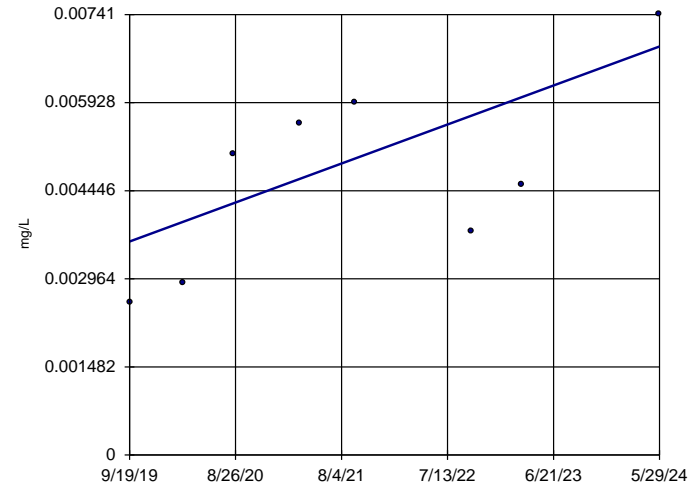


n = 8  
 Slope = 0.00004231 units per year.  
 Mann-Kendall statistic = 11  
 critical = 21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-9R



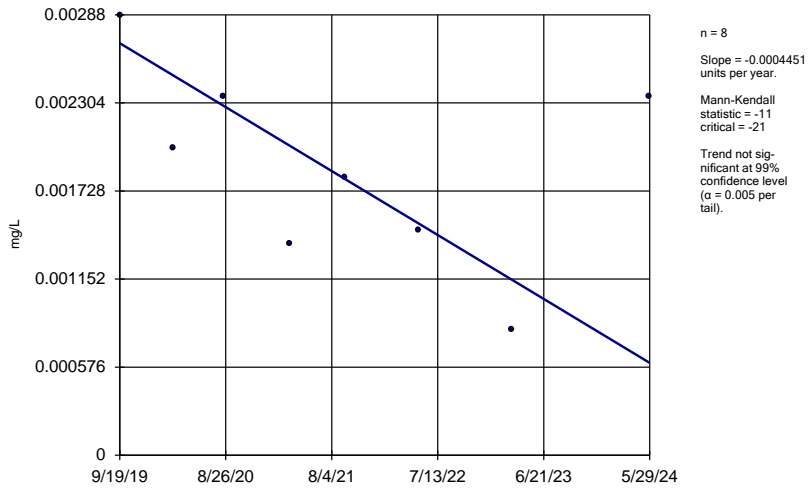
n = 8  
 Slope = 0.0006987 units per year.  
 Mann-Kendall statistic = 16  
 critical = 21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN



### Sen's Slope Estimator

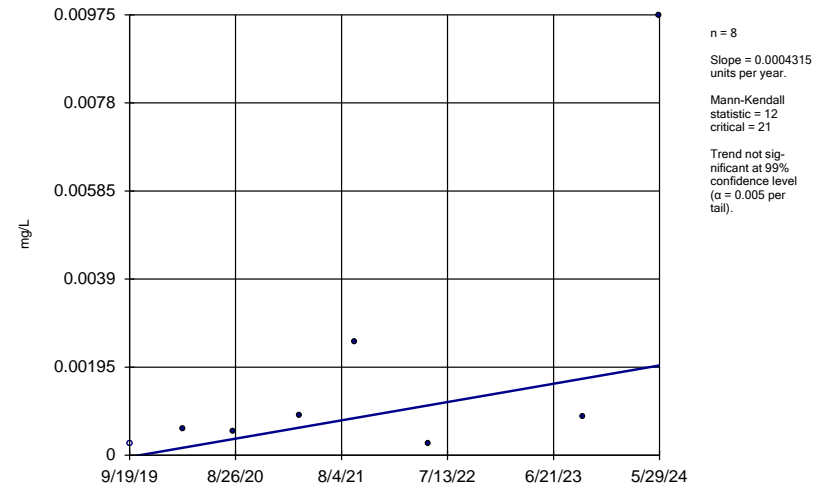
MW-10R



Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

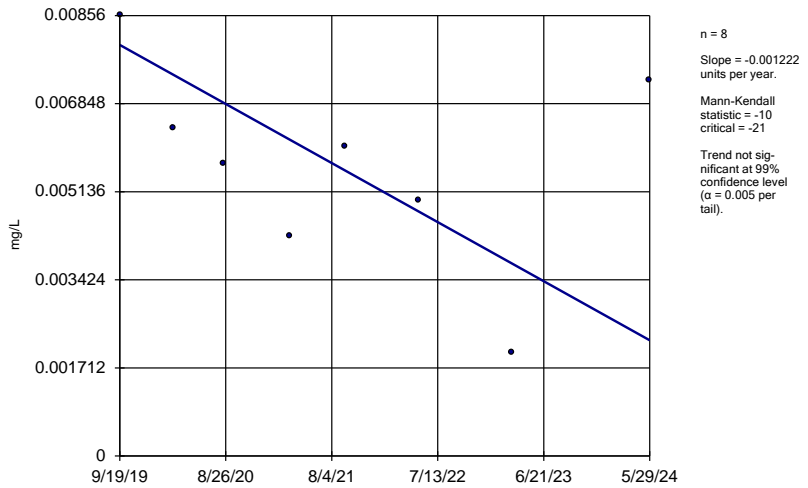
MW-12



Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

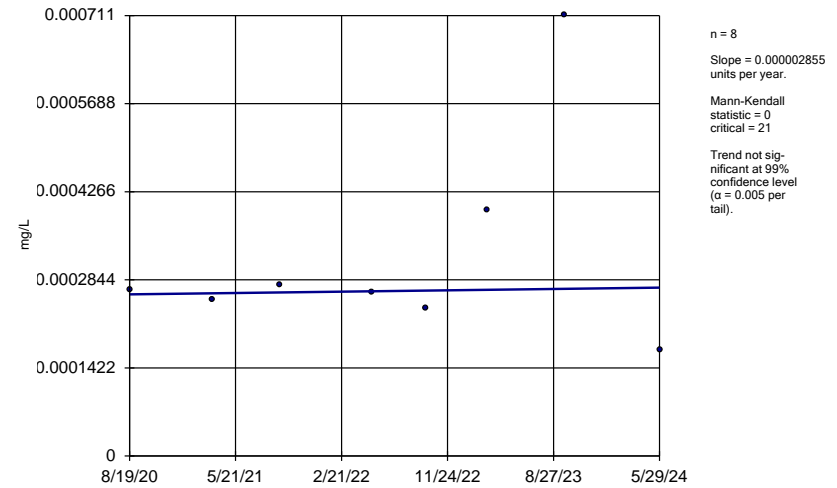
MW-13R



Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

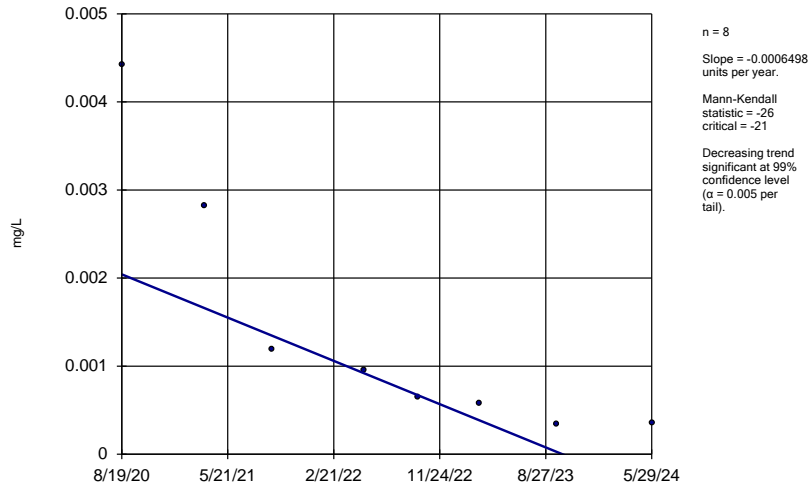
MW-15C



Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

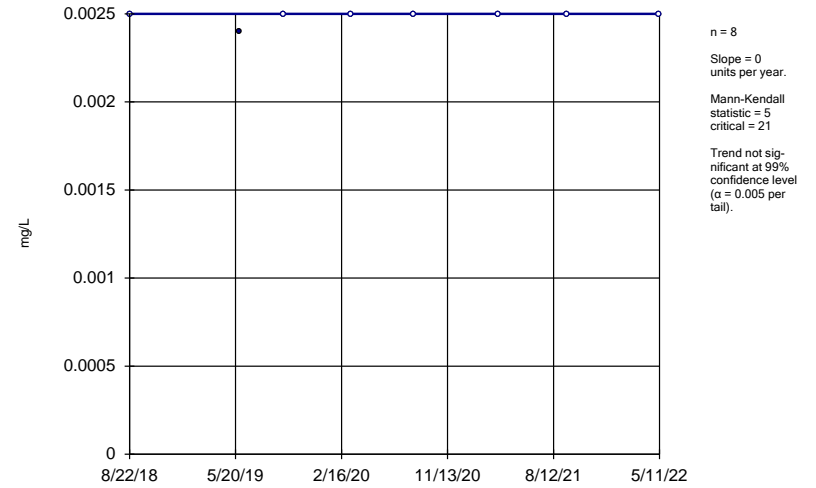
MW-44



Constituent: Cobalt Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

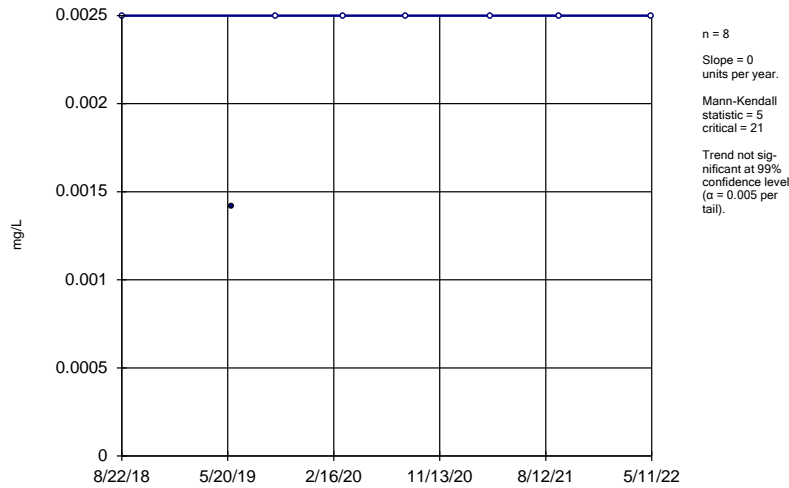
MW-7



Constituent: Copper Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

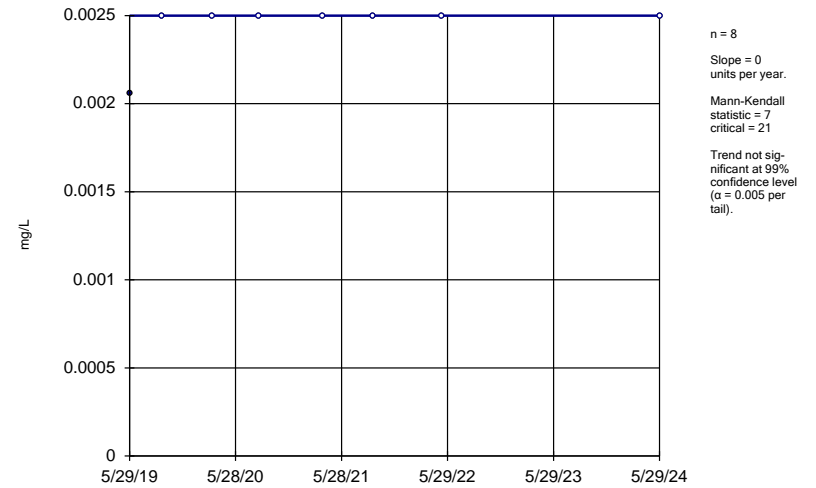
MW-10R



Constituent: Copper Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

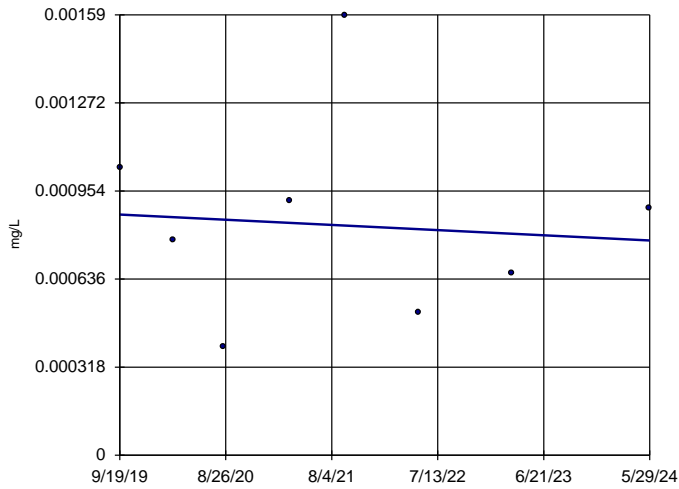
MW-13R



Constituent: Copper Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-10R

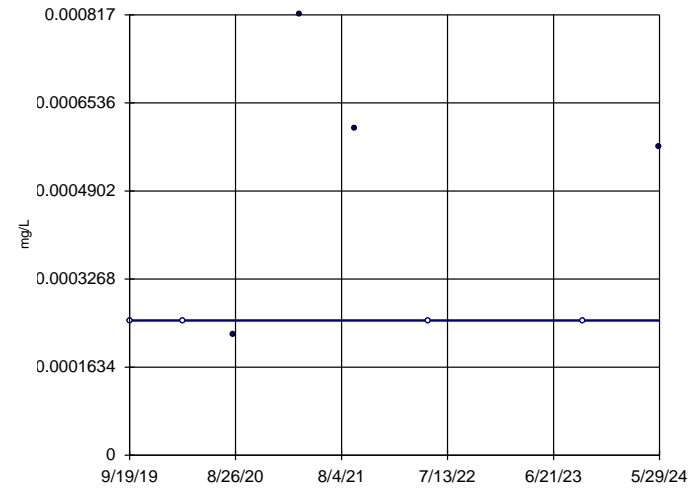


n = 8  
 Slope = -0.00002 units per year.  
 Mann-Kendall statistic = -2  
 critical = -21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-12

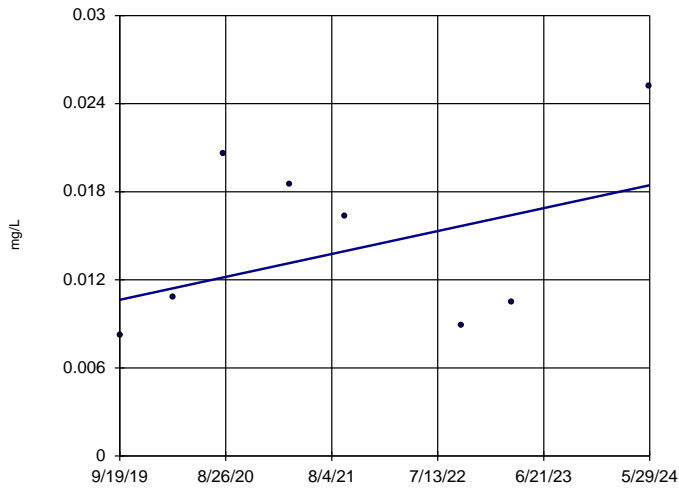


n = 8  
 Slope = 0 units per year.  
 Mann-Kendall statistic = 4  
 critical = 21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-9R

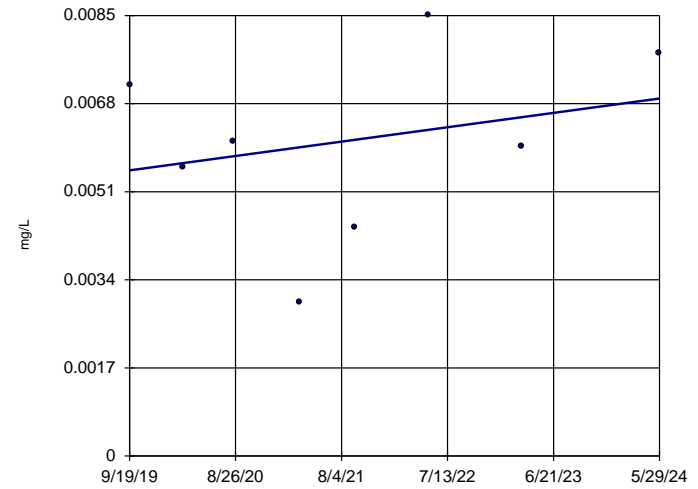


n = 8  
 Slope = 0.00166 units per year.  
 Mann-Kendall statistic = 6  
 critical = 21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-10R

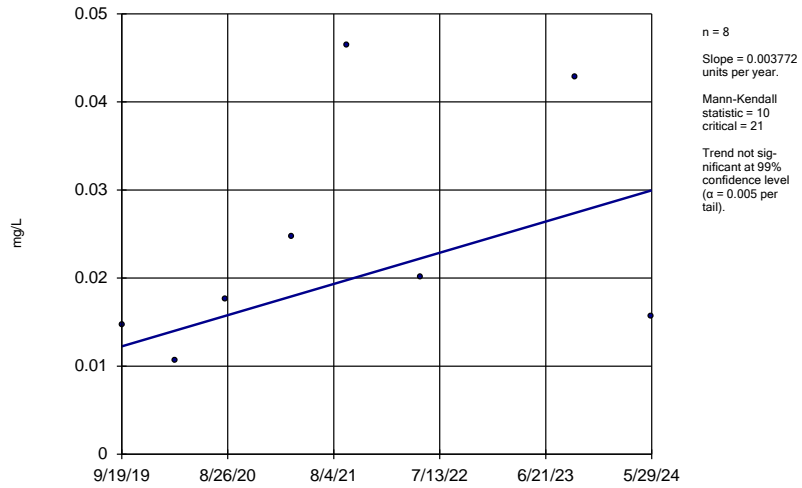


n = 8  
 Slope = 0.0002952 units per year.  
 Mann-Kendall statistic = 4  
 critical = 21  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

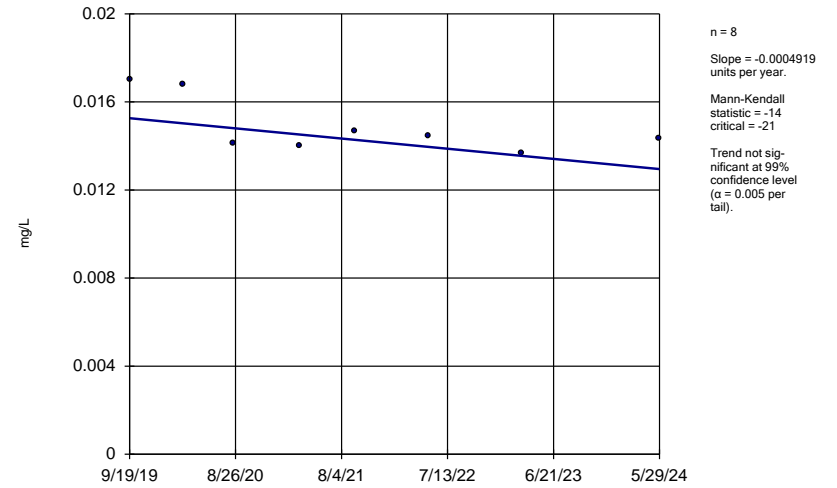
MW-12



Constituent: Nickel Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

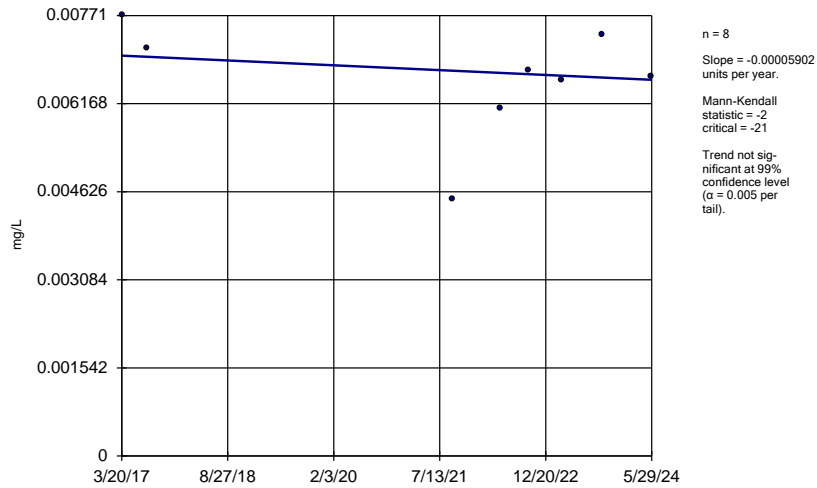
MW-13R



Constituent: Nickel Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

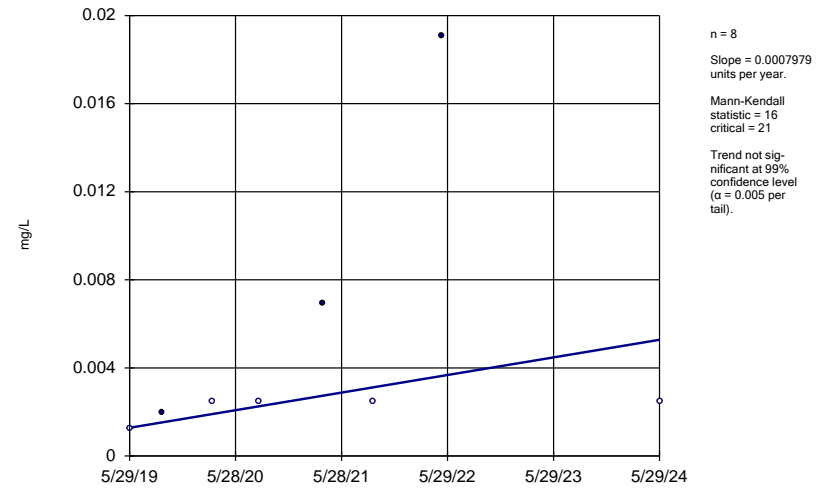
MW-15C



Constituent: Nickel Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

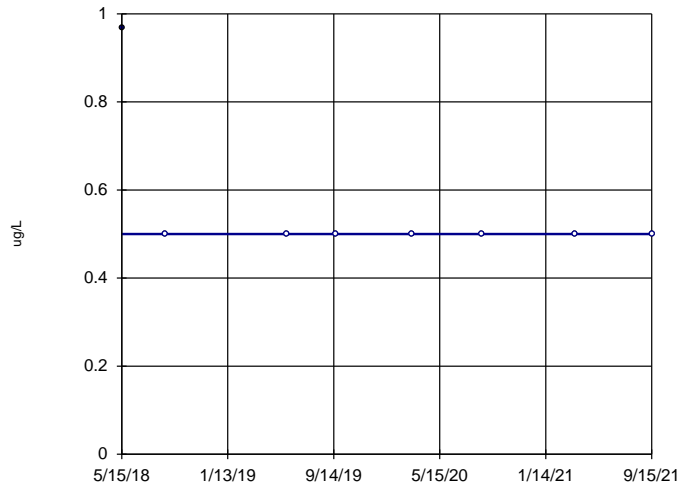
MW-12



Constituent: Selenium Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-9R

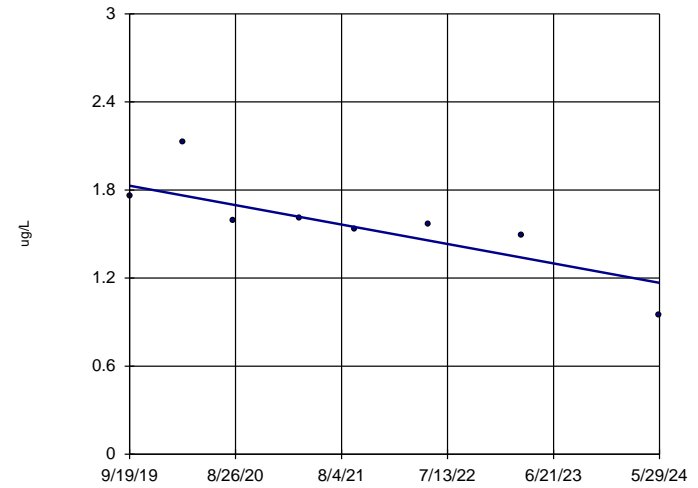


n = 8  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = -7  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Styrene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-7

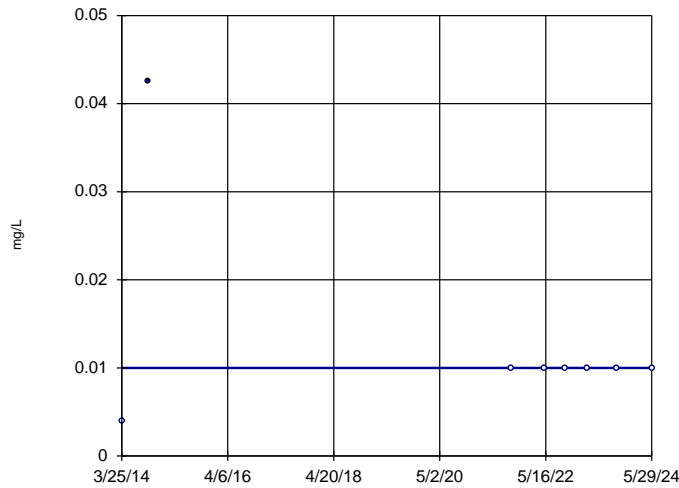


n = 8  
 Slope = -0.1407  
 units per year.  
 Mann-Kendall  
 statistic = -22  
 critical = -21  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Trichloroethene Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope Estimator

MW-15C



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

Constituent: Zinc Analysis Run 9/13/2024 3:39 PM View: 2024SSN Mann Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

**Confidence Interval Summary Table and Graphs – Closed MSWLF Unit**

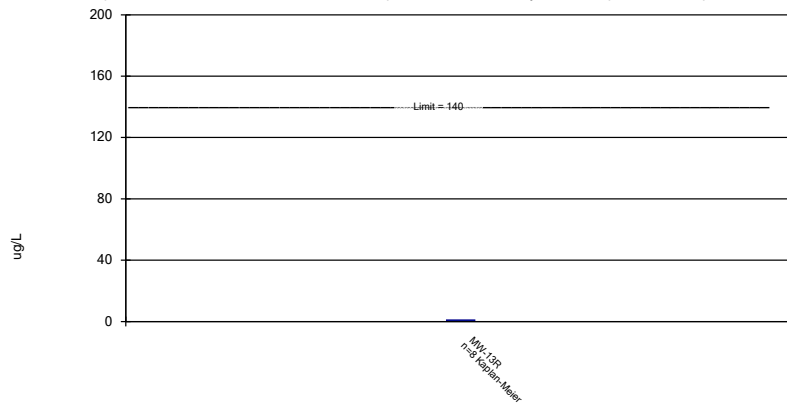
# Confidence Interval

Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN Printed 9/13/2024, 4:20 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>
1,1-Dichloroethane (ug/L)	MW-13R	1.047	0.1418	140	No	8	37.5	No	0.01	Param.
Acrylonitrile (ug/L)	MW-9R	18.1	2.5	10	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-10R	0.006129	0.0004393	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-12	0.0217	0.0008915	0.01	No	8	12.5	No	0.004	NP (normality)
Arsenic (mg/L)	MW-13R	0.0279	0.001	0.01	No	8	37.5	No	0.004	NP (normality)
Barium (mg/L)	MW-7	0.01763	0.01447	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-10R	0.1327	0.0887	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-12	0.678	0.0545	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-13R	0.2856	0.06761	2	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-9R	0.0001556	0.0000683	0.0494	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-12	0.000582	0.00004	0.0494	No	8	50	No	0.004	NP (normality)
Carbon Disulfide (ug/L)	MW-9R	3.615	0.5	700	No	8	12.5	No	0.004	NP (normality)
Chlorobenzene (ug/L)	MW-13R	3.081	0.6498	100	No	8	12.5	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-7	1.169	0.7147	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-10R	1.681	0.3689	70	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW-7	0.0005505	0.0001387	0.0074	No	8	25	No	0.01	Param.
Cobalt (mg/L)	MW-9R	0.006447	0.002998	0.0074	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-10R	0.002579	0.001192	0.0074	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-12	0.00975	0.000247	0.0074	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	MW-13R	0.00775	0.003555	0.0074	No	8	0	No	0.01	Param.
Copper (mg/L)	MW-7	0.0025	0.0024	1.3	No	8	87.5	No	0.004	NP (NDs)
Copper (mg/L)	MW-10R	0.0025	0.001417	1.3	No	8	87.5	No	0.004	NP (NDs)
Copper (mg/L)	MW-13R	0.0025	0.00206	1.3	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-10R	0.001239	0.0004569	0.0222	No	8	0	No	0.01	Param.
Lead (mg/L)	MW-12	0.000627	0.0001524	0.0222	No	8	50	No	0.01	Param.
Nickel (mg/L)	MW-9R	0.02146	0.008296	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-10R	0.00796	0.004153	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-12	0.03822	0.009929	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-13R	0.01624	0.01353	0.1	No	8	0	No	0.01	Param.
Selenium (mg/L)	MW-12	0.0191	0.00125	0.05	No	8	62.5	No	0.004	NP (NDs)
Styrene (ug/L)	MW-9R	0.969	0.5	100	No	8	87.5	No	0.004	NP (NDs)

### Parametric Confidence Interval

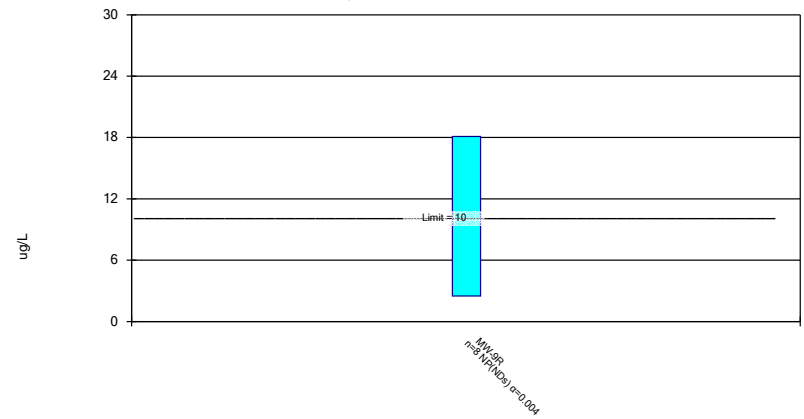
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Non-Parametric Confidence Interval

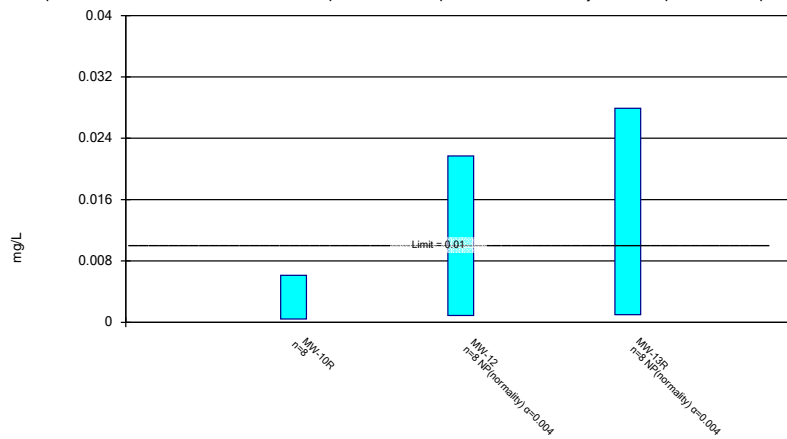
Compliance Limit is not exceeded.



Constituent: Acrylonitrile Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric and Non-Parametric (NP) Confidence Interval

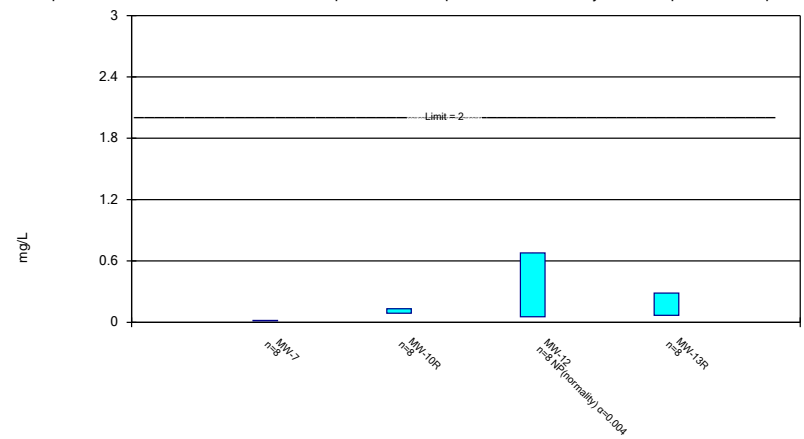
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-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.

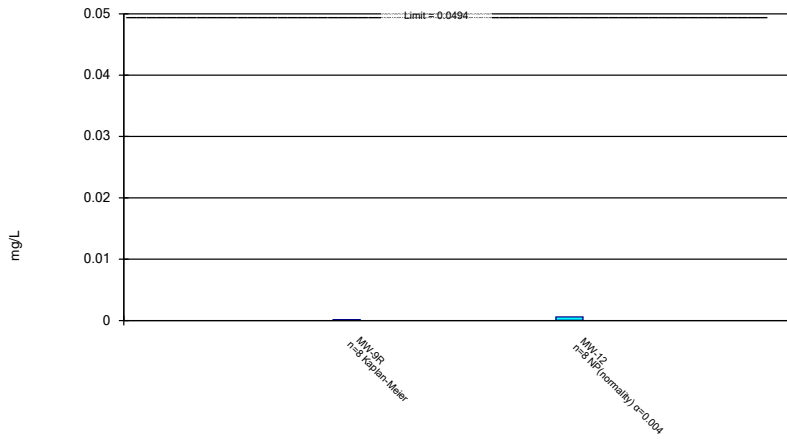


Constituent: Barium Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN



### Parametric and Non-Parametric (NP) Confidence Interval

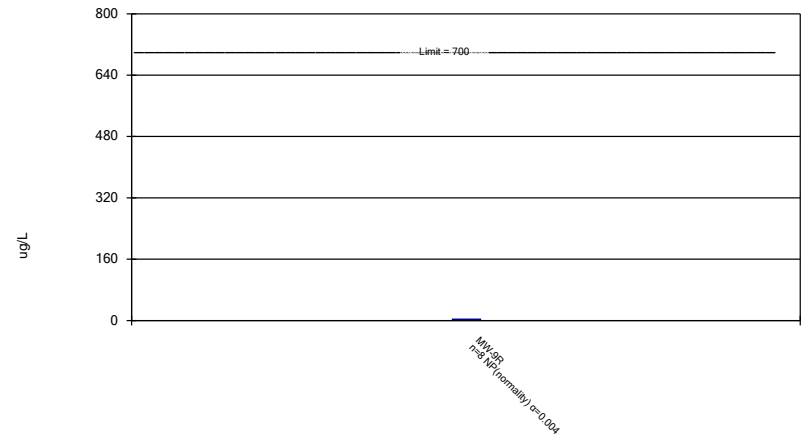
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Non-Parametric Confidence Interval

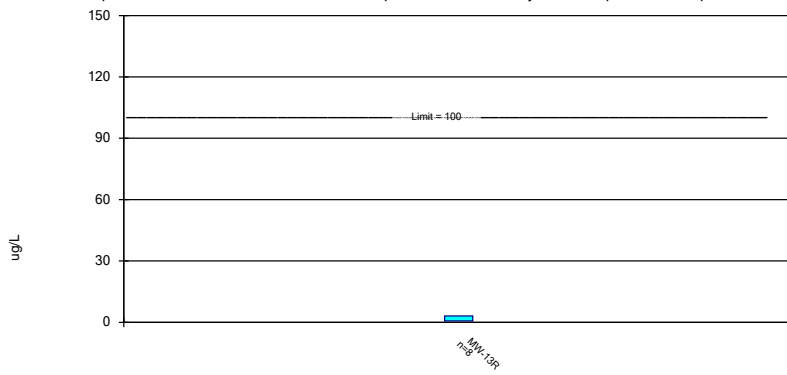
Compliance Limit is not exceeded.



Constituent: Carbon Disulfide Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric Confidence Interval

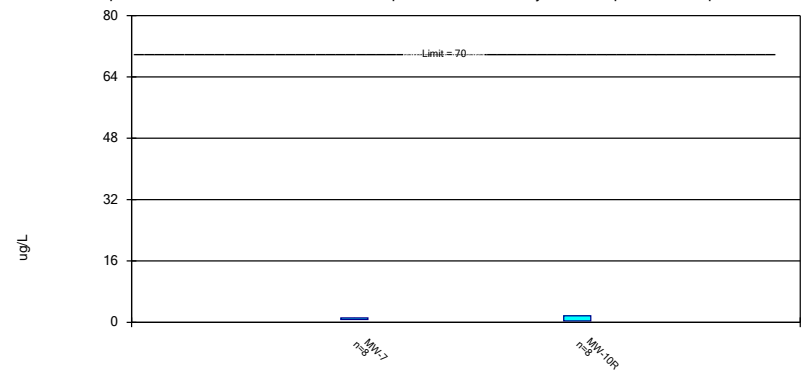
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric Confidence Interval

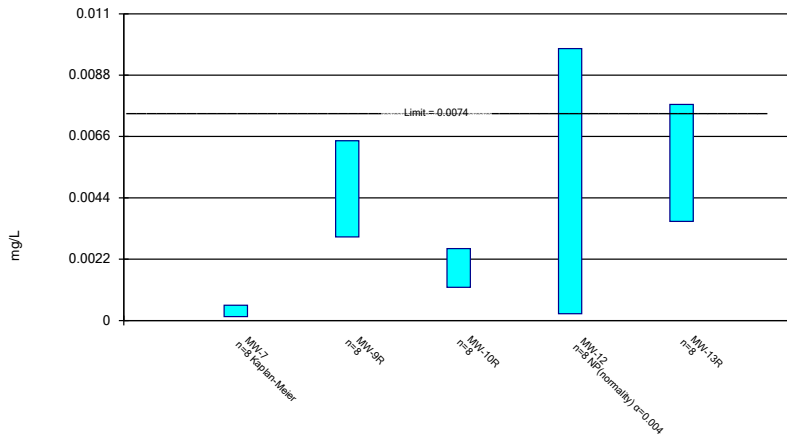
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric and Non-Parametric (NP) Confidence Interval

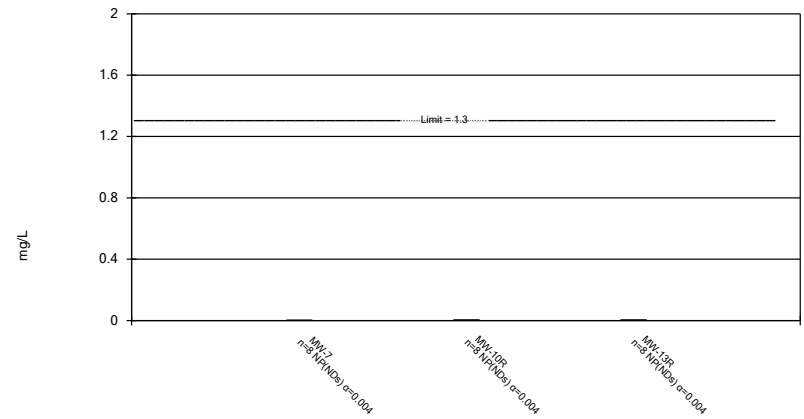
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cobalt Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Non-Parametric Confidence Interval

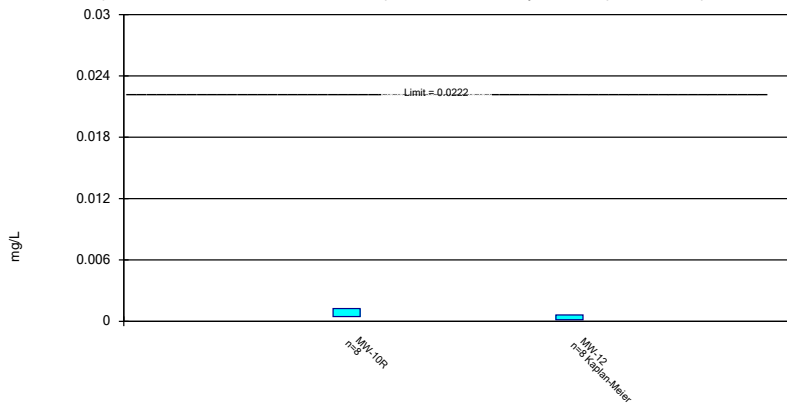
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric Confidence Interval

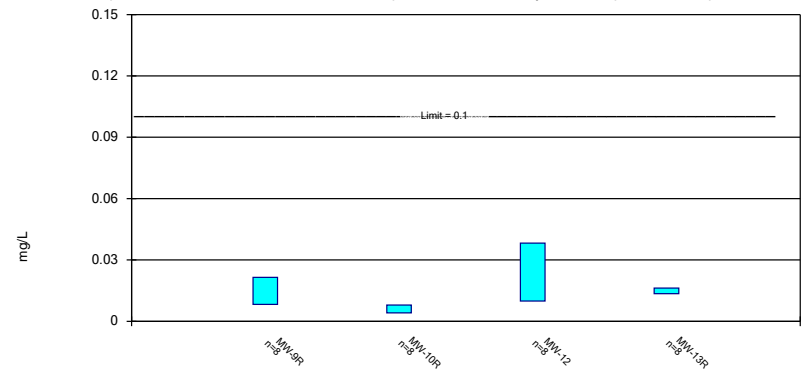
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Lead Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Parametric Confidence Interval

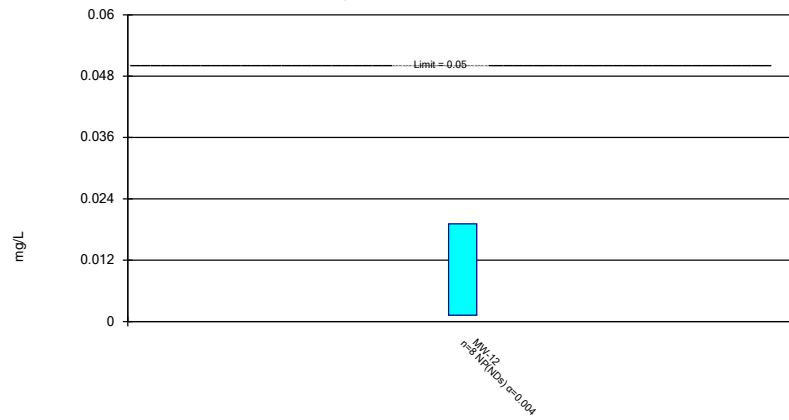
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Non-Parametric Confidence Interval

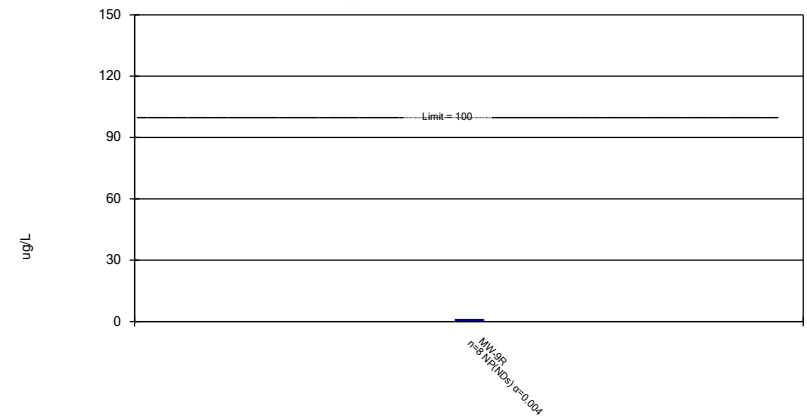
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Styrene Analysis Run 9/13/2024 4:13 PM View: 2024SSN Confidence Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

**Theil-Sen Summary Table and Graphs – Closed MSWLF Unit**

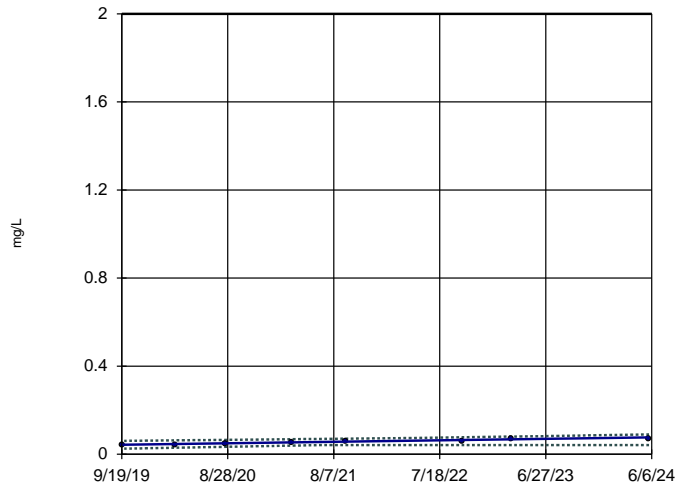
# Trend Test

Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN Printed 9/13/2024, 4:37 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>
Barium (mg/L)	MW-9R	0.007121	26	21	Yes	8	0	0.01	NP
Cobalt (mg/L)	MW-44	-0.0006498	-26	-21	Yes	8	0	0.01	NP
Trichloroethene (ug/L)	MW-7	-0.1407	-22	-21	Yes	8	0	0.01	NP

### Sen's Slope and 99% Confidence Band

MW-9R

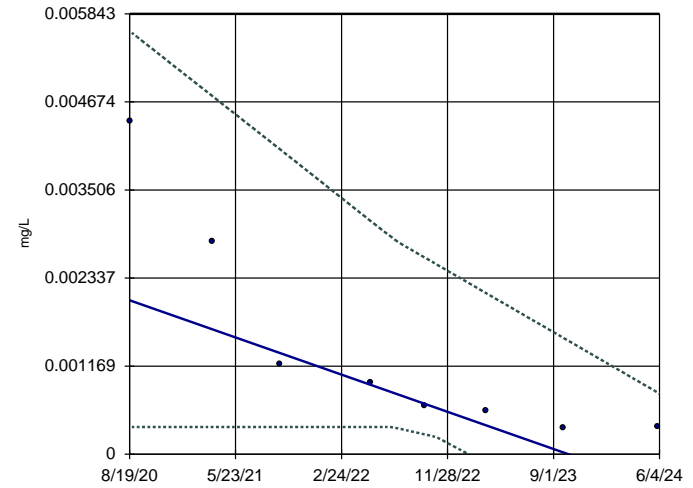


n = 8  
 Slope = 0.007121 units per year.  
 Mann-Kendall statistic = 26  
 critical = 21  
 Increasing trend significant at 99% confidence level ( $\alpha = 0.005$  per tail).  
 Confidence band is below GWPS mg/L (2).

Constituent: Barium Analysis Run 9/13/2024 4:35 PM View: 2024SSN Theil Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope and 99% Confidence Band

MW-44

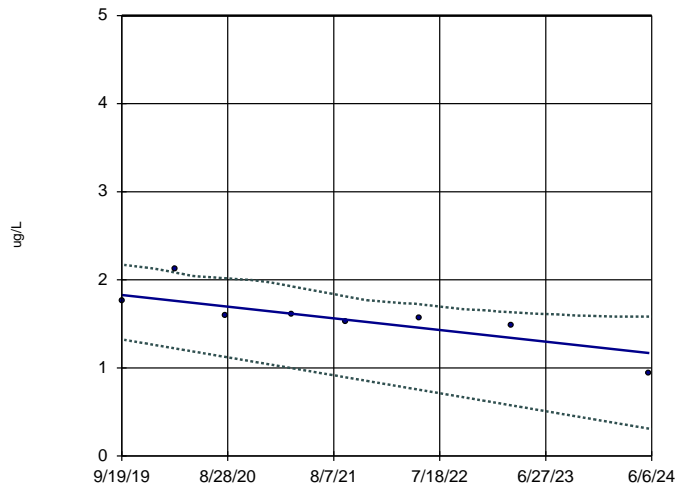


n = 8  
 Slope = -0.0006498 units per year.  
 Mann-Kendall statistic = -26  
 critical = -21  
 Decreasing trend significant at 99% confidence level ( $\alpha = 0.005$  per tail).  
 Confidence band is below GWPS mg/L (0.005843).

Constituent: Cobalt Analysis Run 9/13/2024 4:35 PM View: 2024SSN Theil Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

### Sen's Slope and 99% Confidence Band

MW-7



n = 8  
 Slope = -0.1407 units per year.  
 Mann-Kendall statistic = -22  
 critical = -21  
 Decreasing trend significant at 99% confidence level ( $\alpha = 0.005$  per tail).  
 Confidence band is below GWPS ug/L (5).

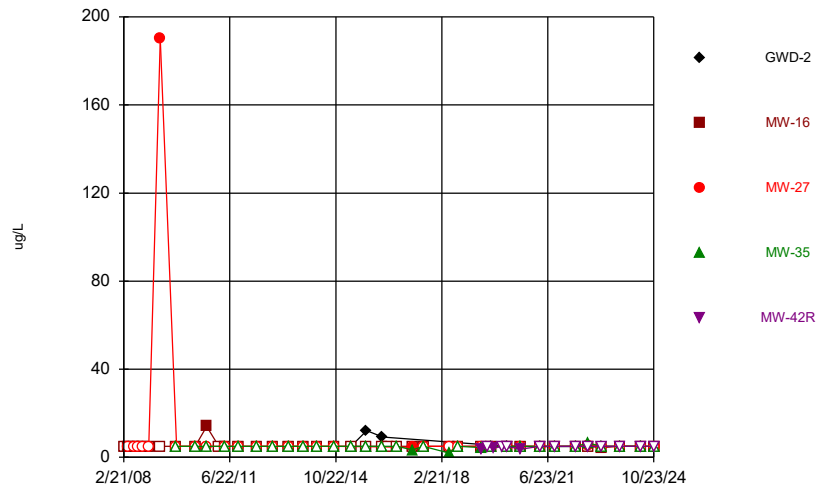
Constituent: Trichloroethene Analysis Run 9/13/2024 4:35 PM View: 2024SSN Theil Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE Closed-AM 2024SSN

**Attachment B**  
**2<sup>nd</sup> 2024 Statistical Evaluation Output**

## **Time Series Plots – Open MSWLF Unit**

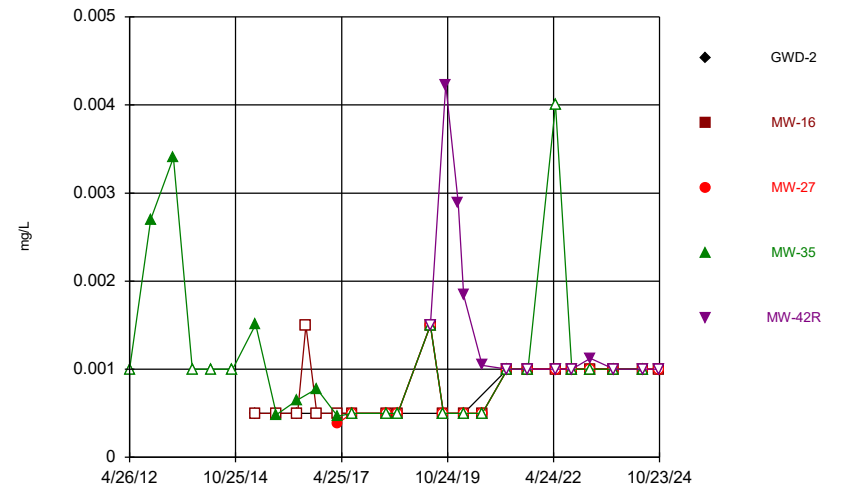


Time Series



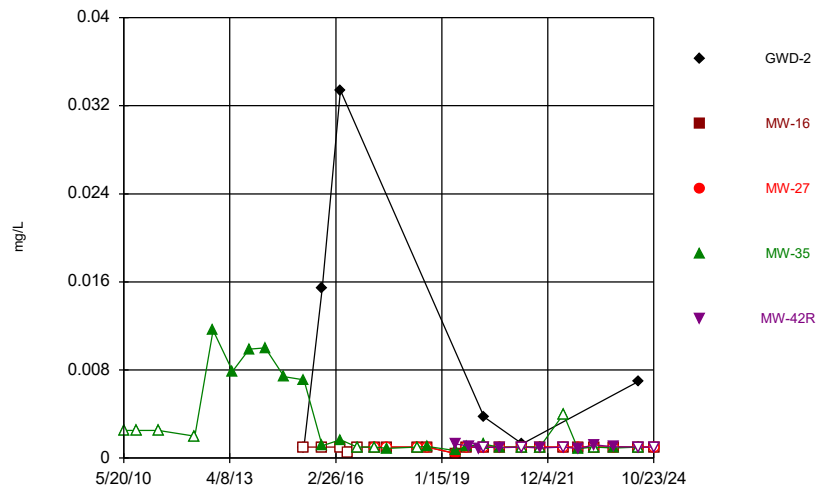
Constituent: Acetone Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



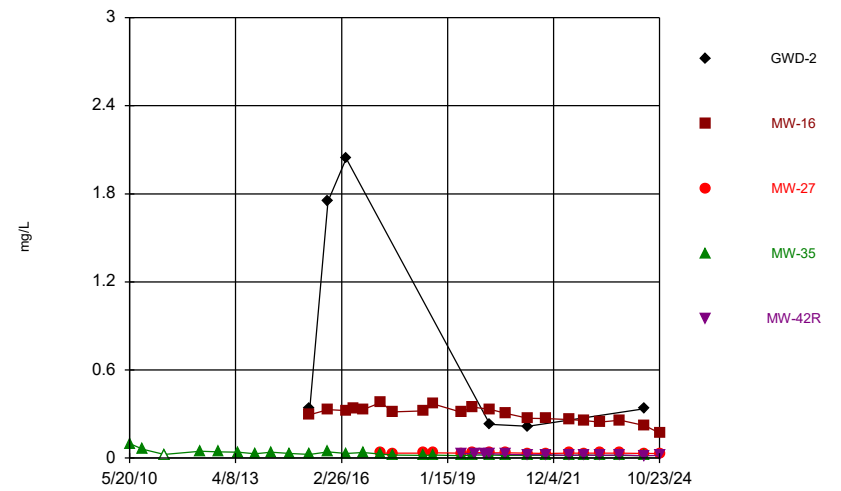
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



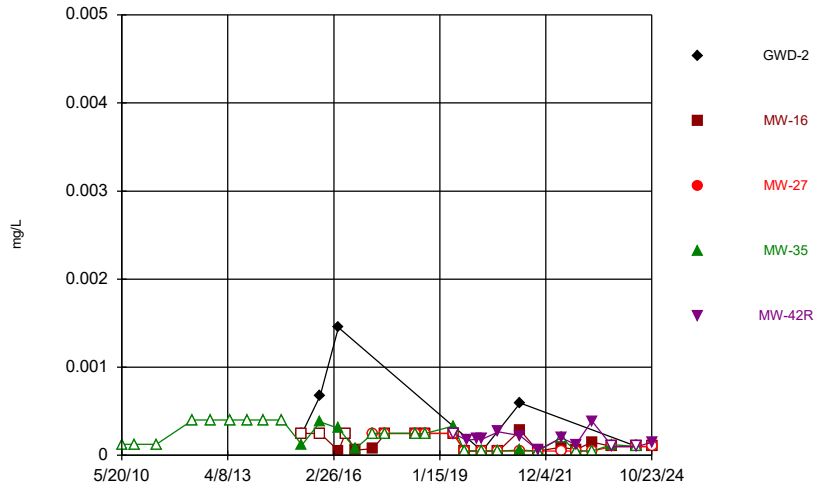
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



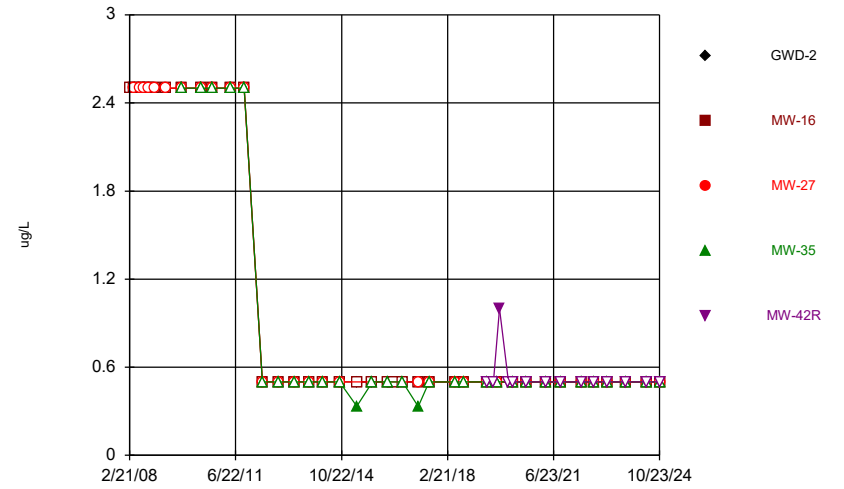
Constituent: Barium Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



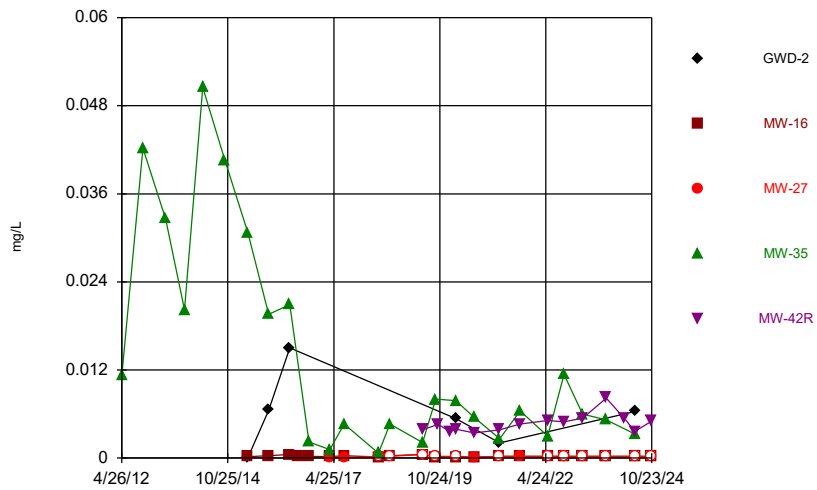
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



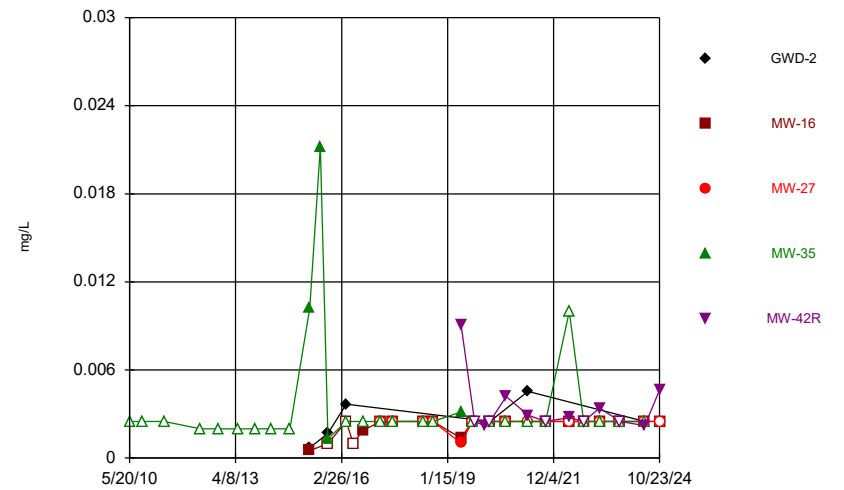
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



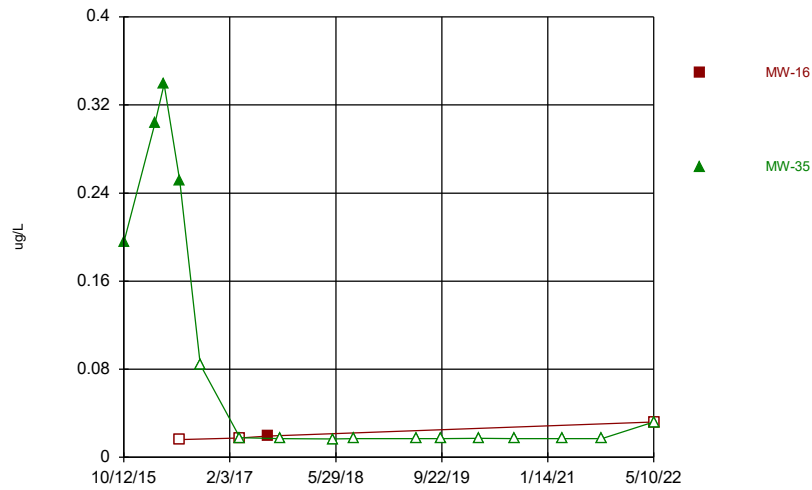
Constituent: Cobalt Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



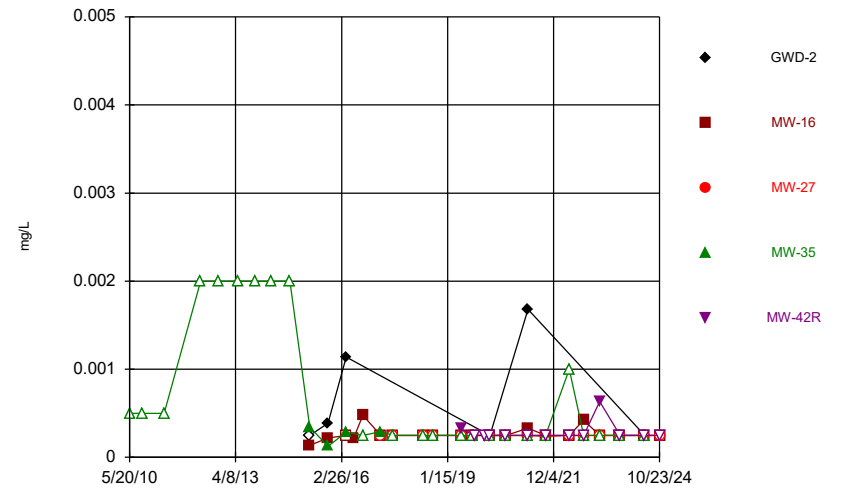
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



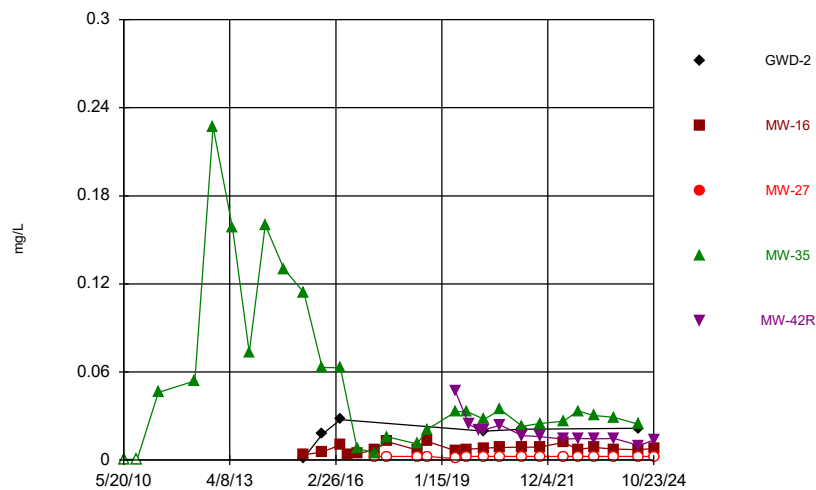
Constituent: Endrin aldehyde Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



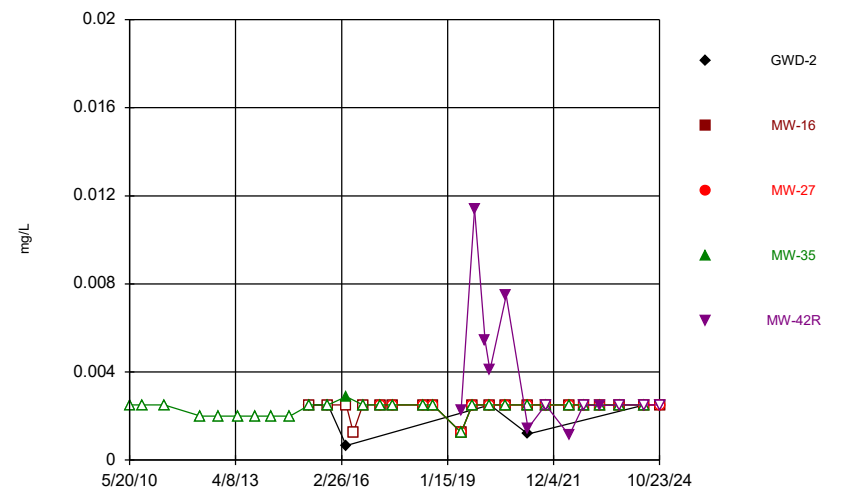
Constituent: Lead Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



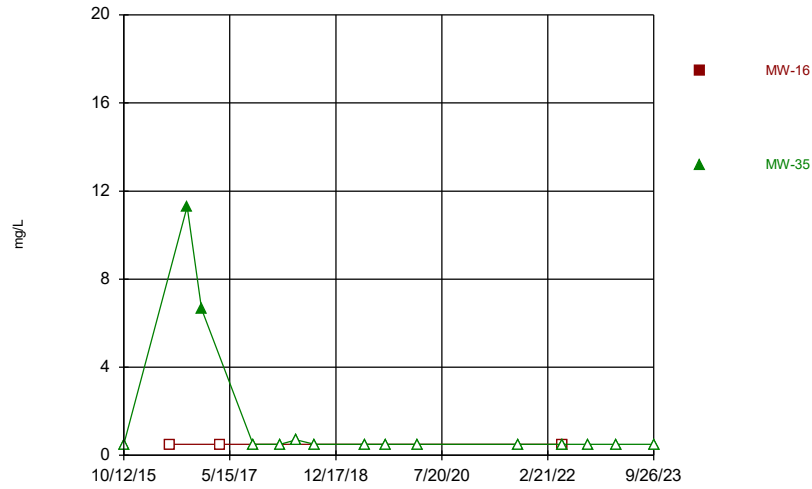
Constituent: Nickel Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Time Series



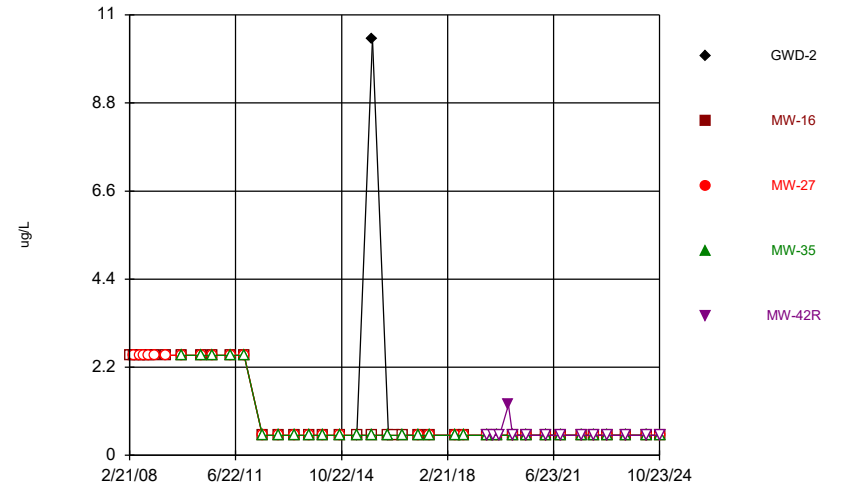
Constituent: Selenium Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



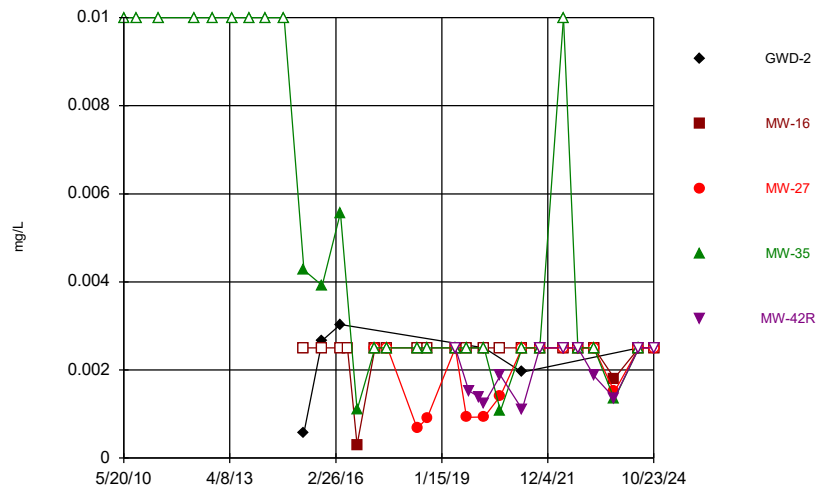
Constituent: Sulfide Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



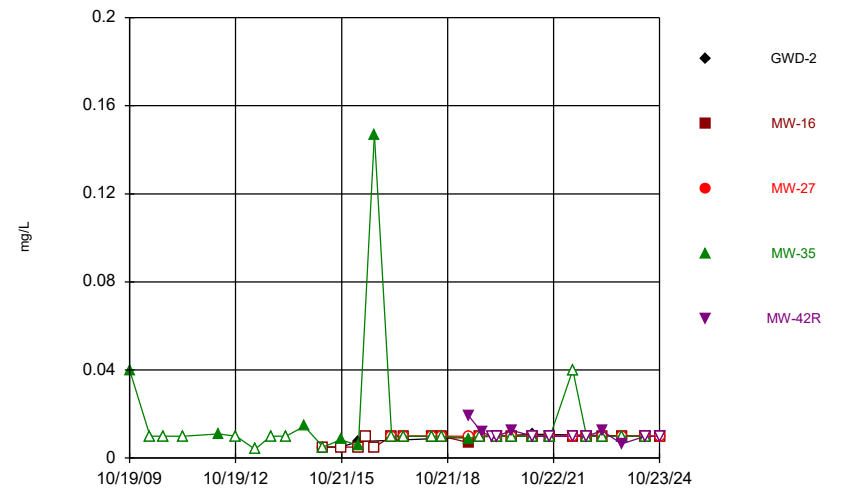
Constituent: Toluene Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Time Series



Constituent: Vanadium Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

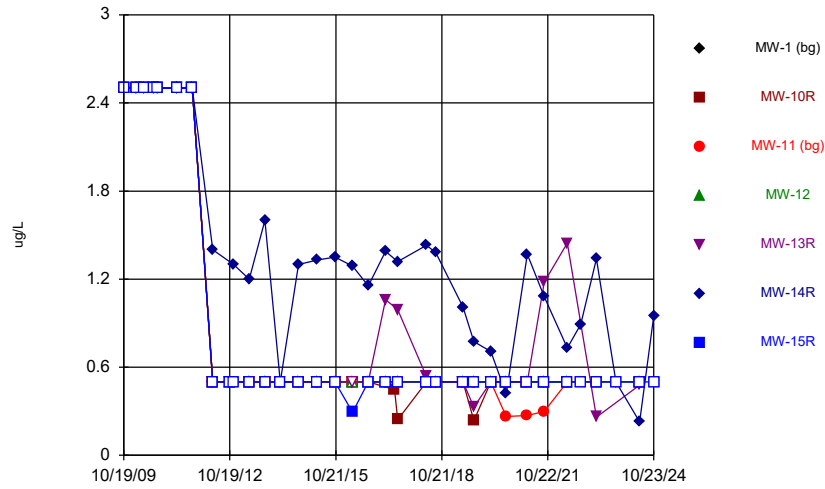
### Time Series



Constituent: Zinc Analysis Run 2/26/2025 1:49 PM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

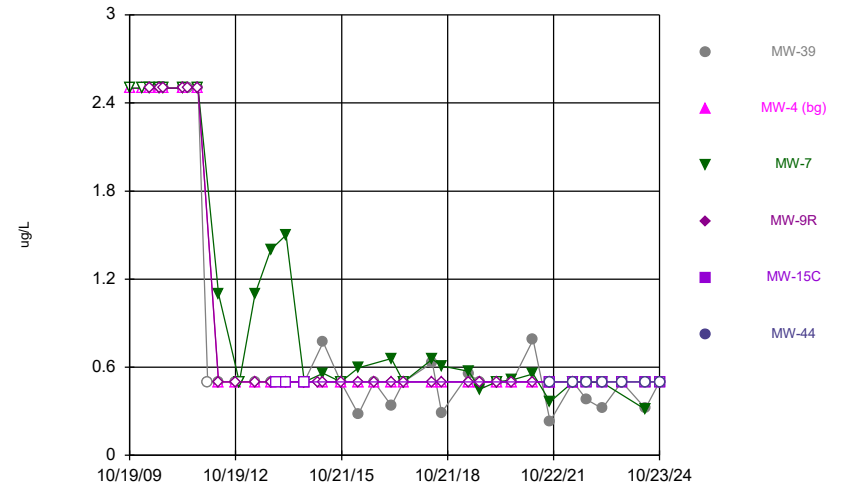
## **Time Series Plots – Closed MSWLF Unit**

Time Series



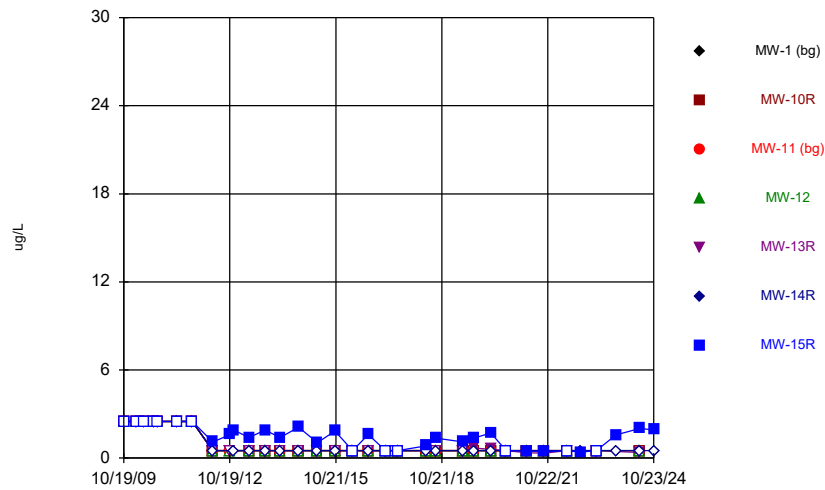
Constituent: 1,1-Dichloroethane Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



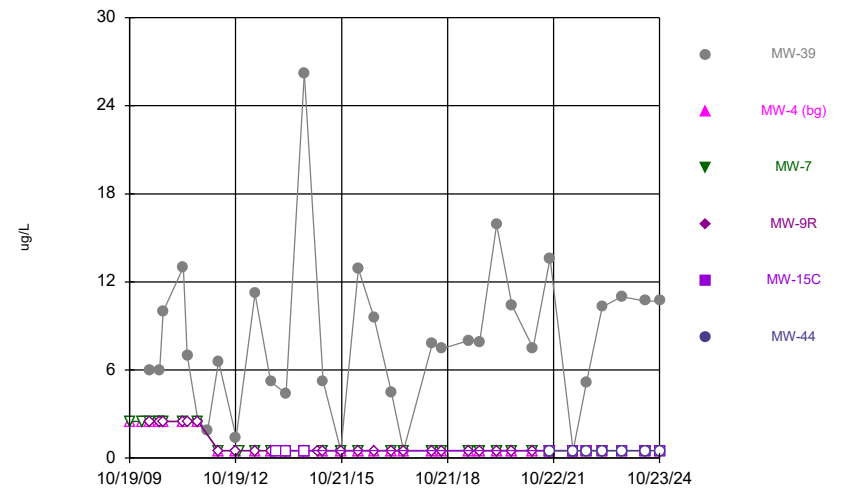
Constituent: 1,1-Dichloroethane Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



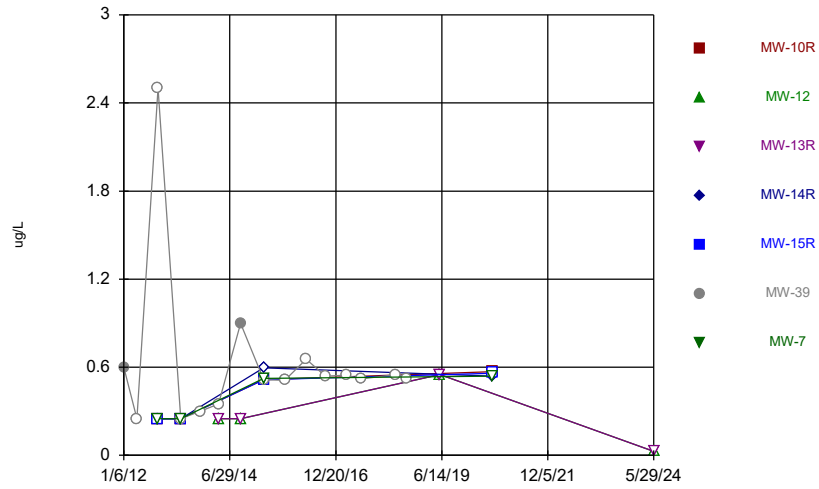
Constituent: 1,4-Dichlorobenzene Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



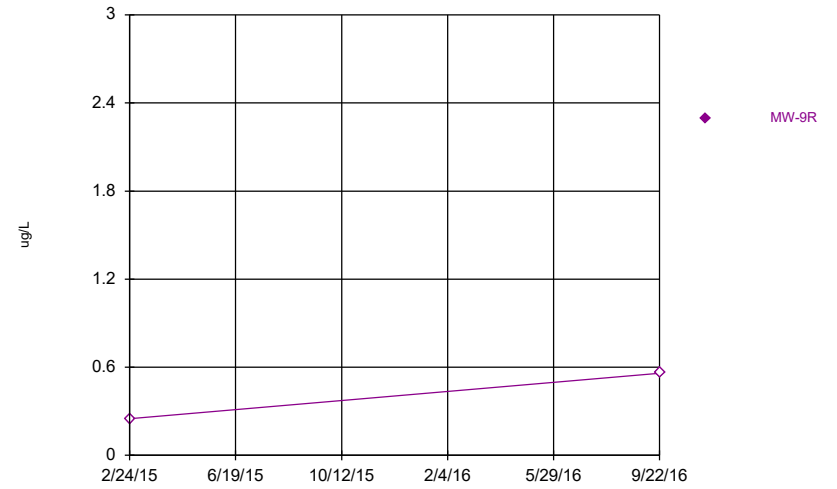
Constituent: 1,4-Dichlorobenzene Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



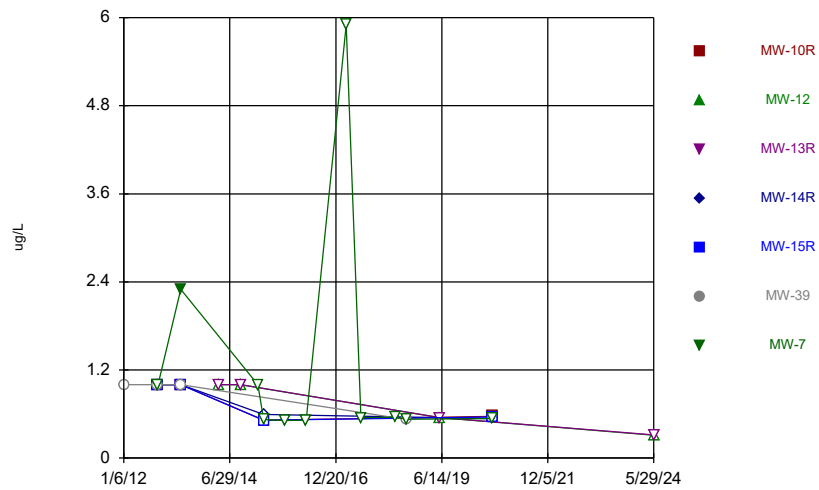
Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



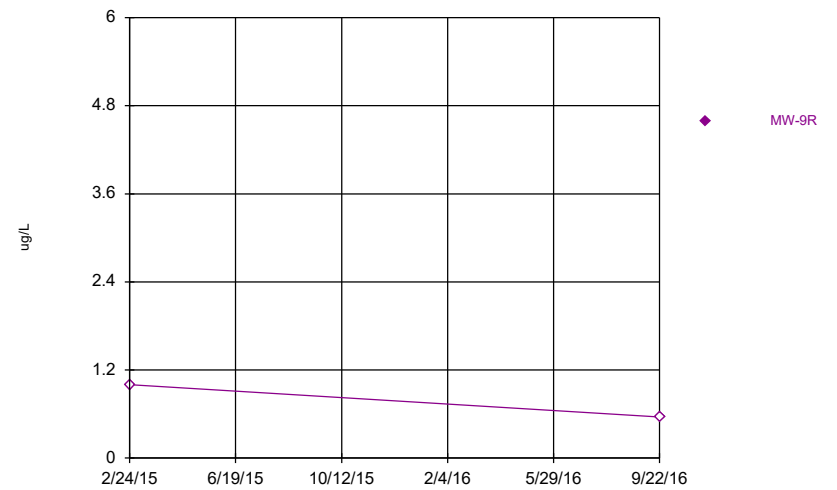
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



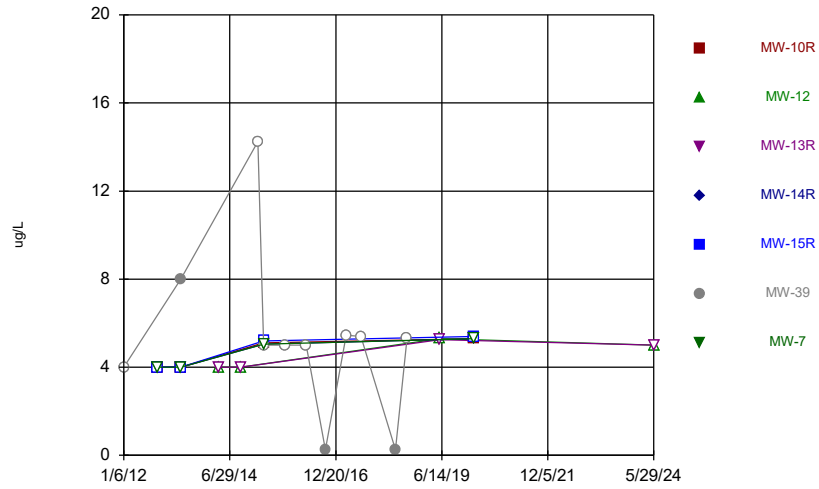
Constituent: 2,4-D [2C] Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



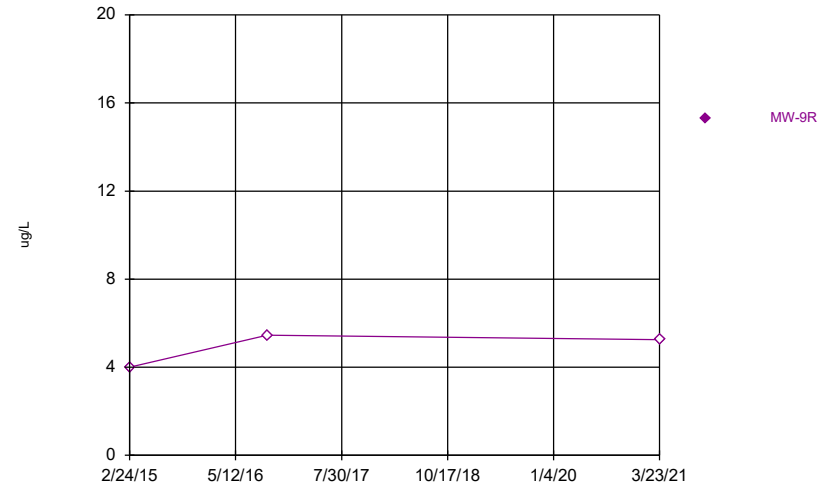
Constituent: 2,4-D [2C] Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



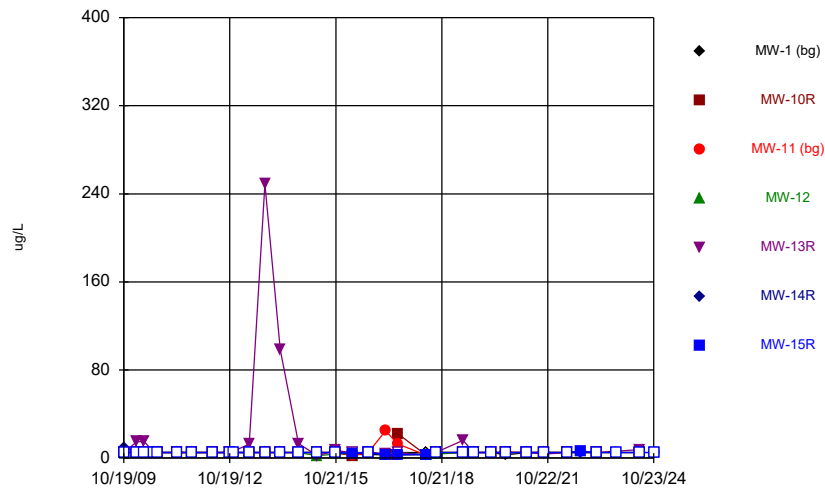
Constituent: 3/4-Methylphenol Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



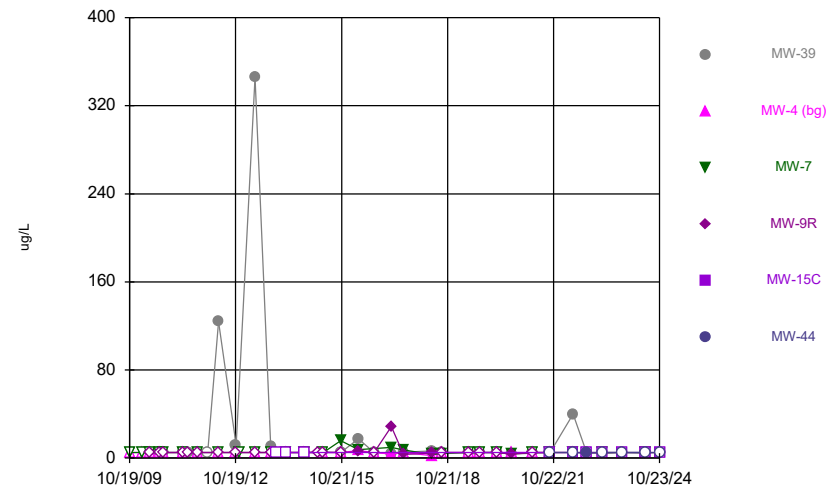
Constituent: 3/4-Methylphenol Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



Constituent: Acetone Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

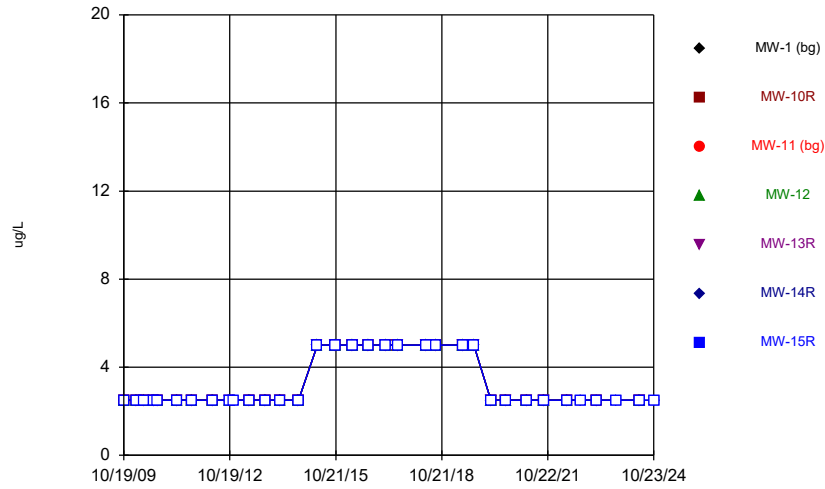
Time Series



Constituent: Acetone Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

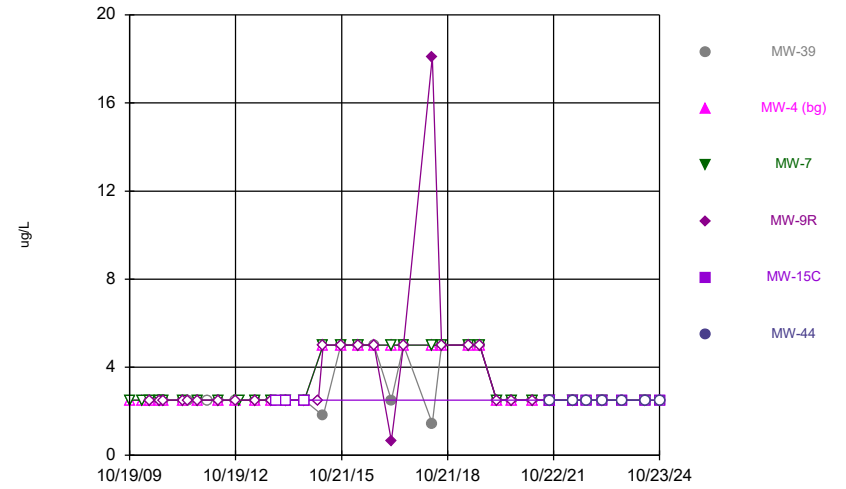


Time Series



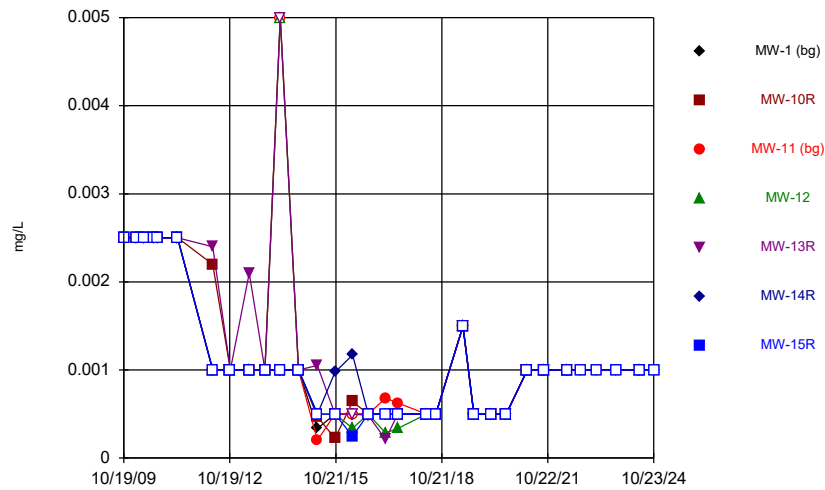
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



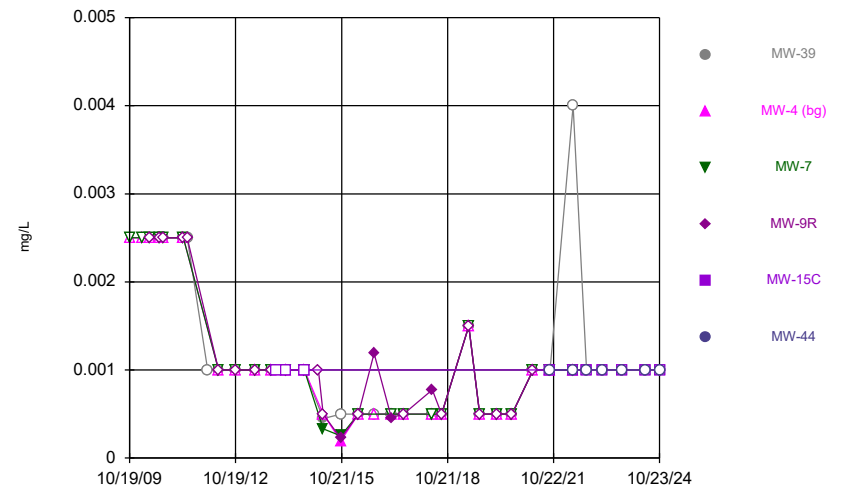
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



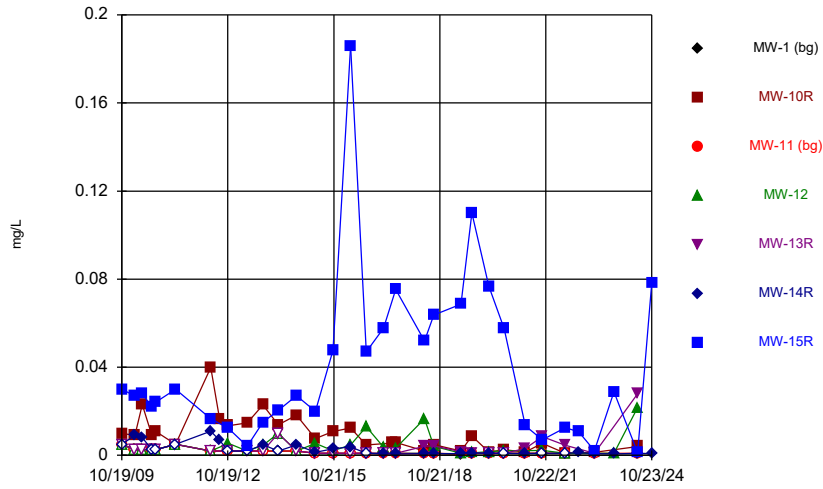
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



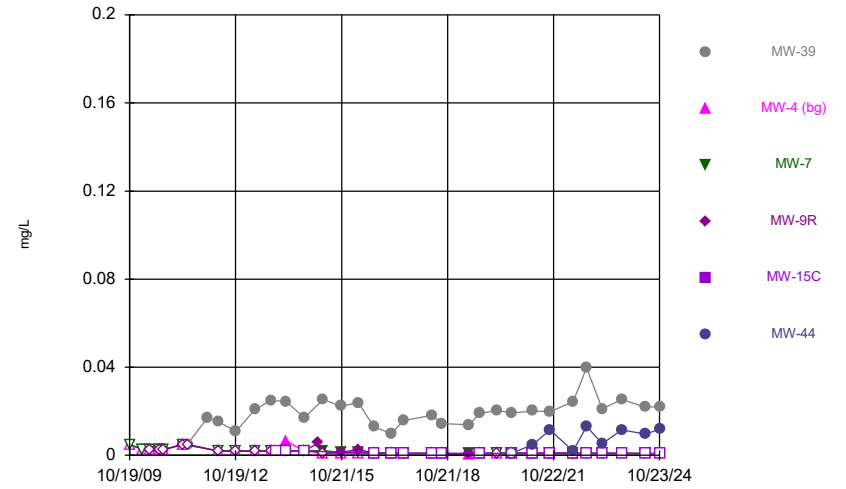
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



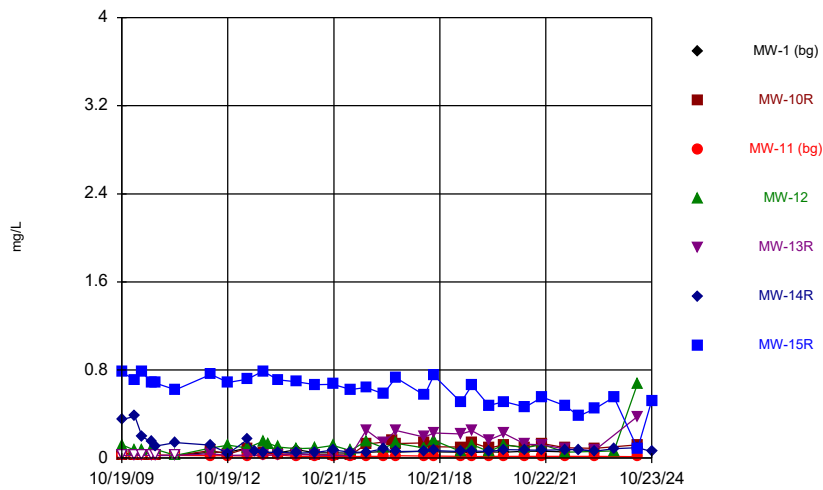
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



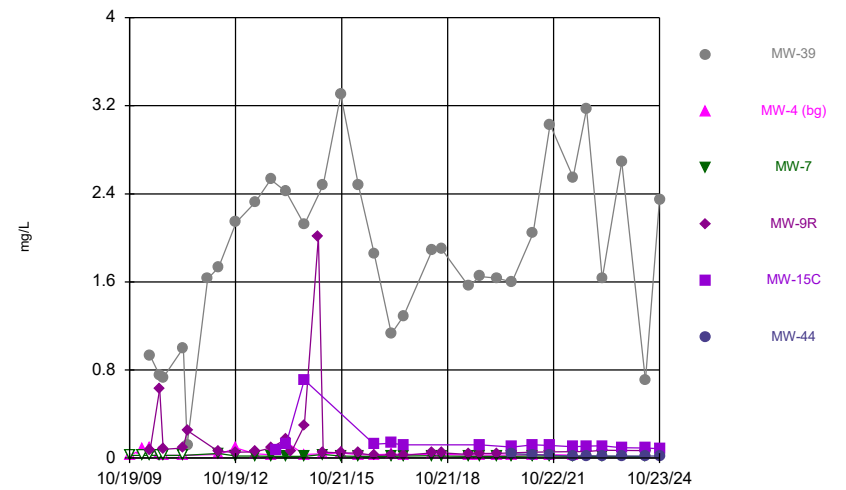
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



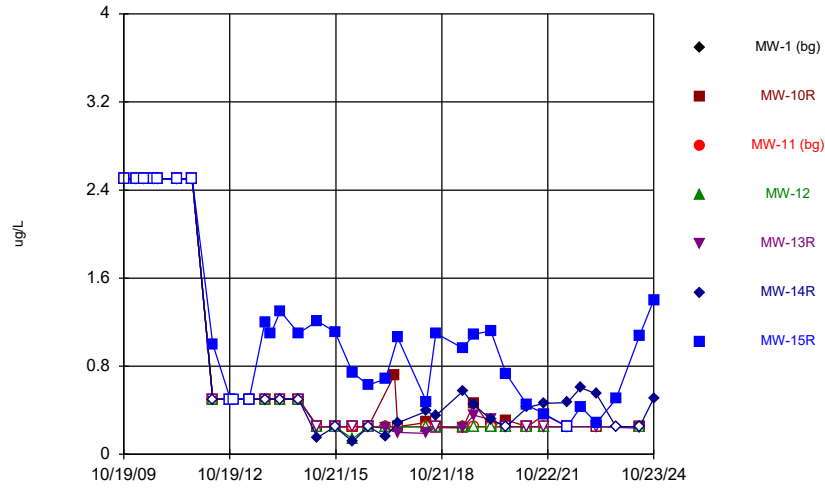
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



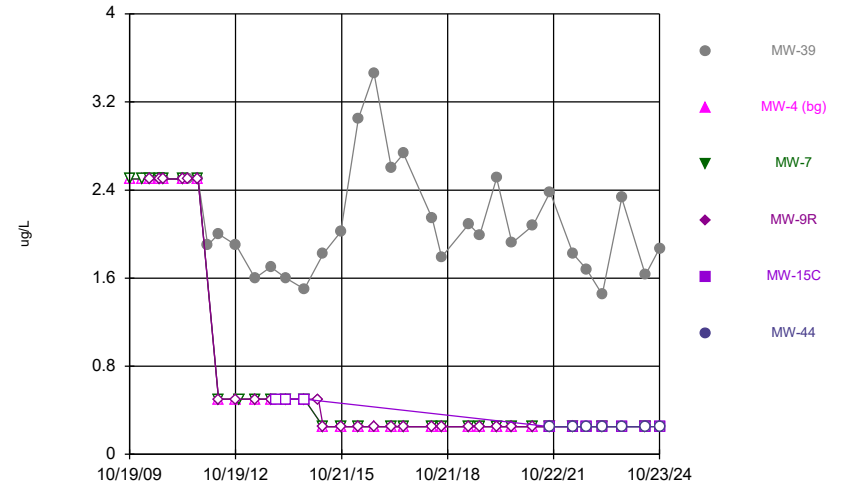
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



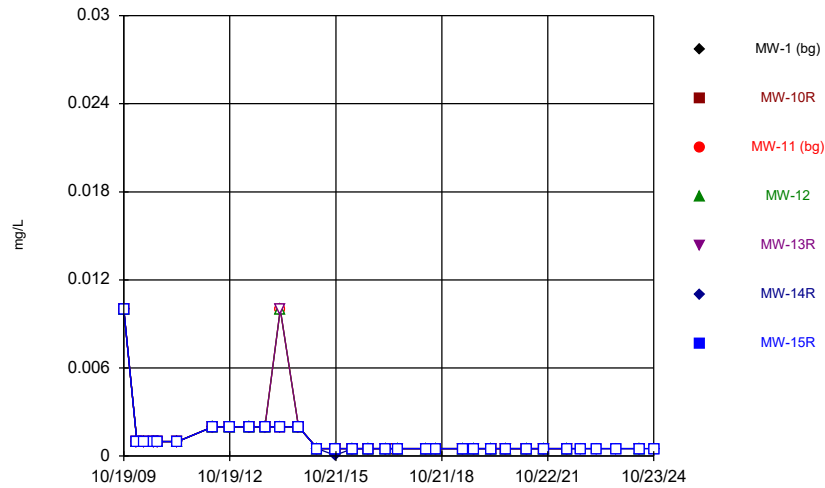
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



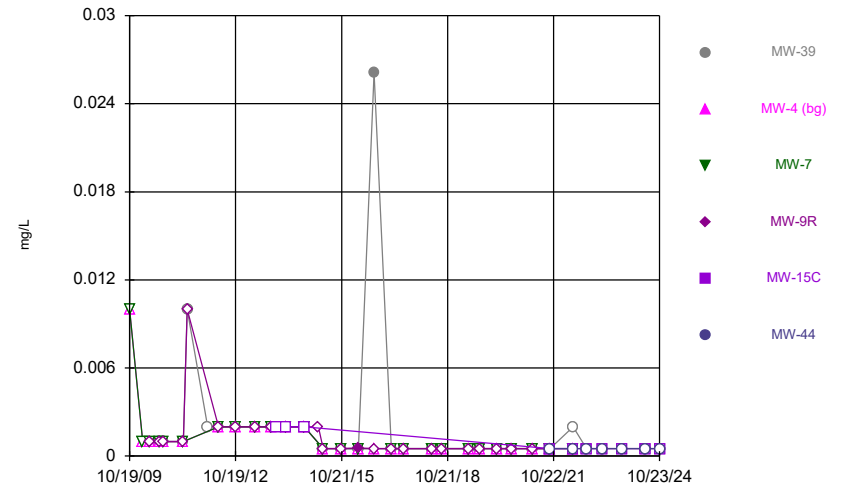
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



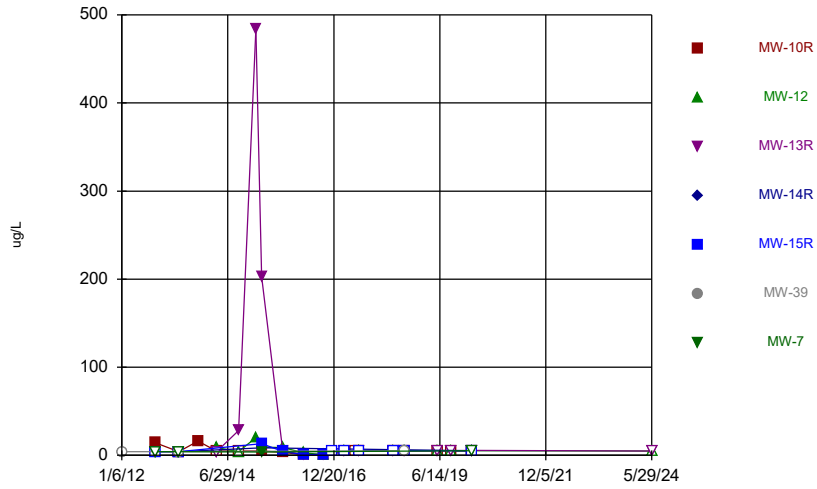
Constituent: Beryllium Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



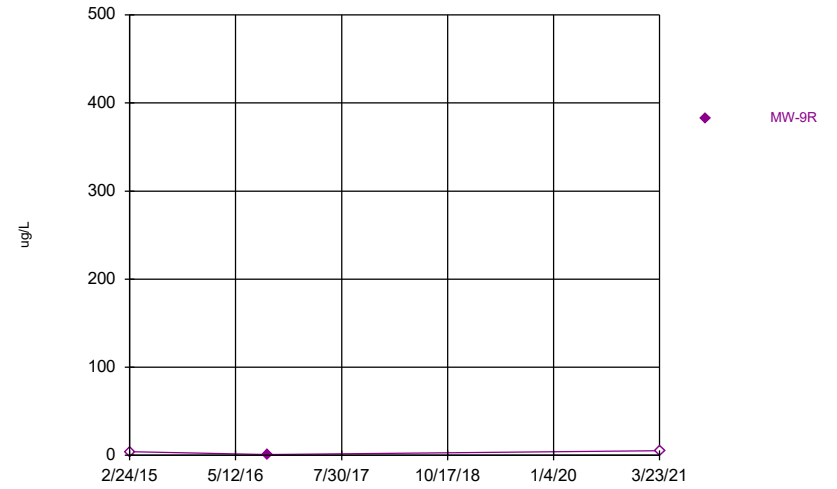
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



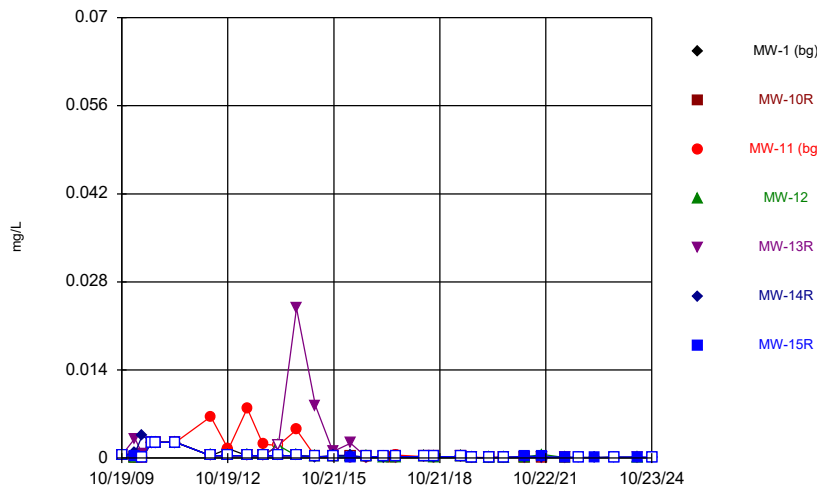
Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



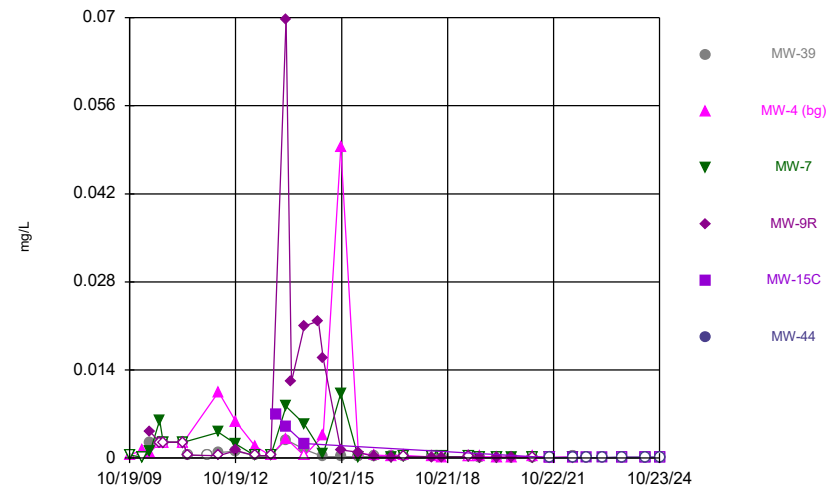
Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 2/28/2025 9:59 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



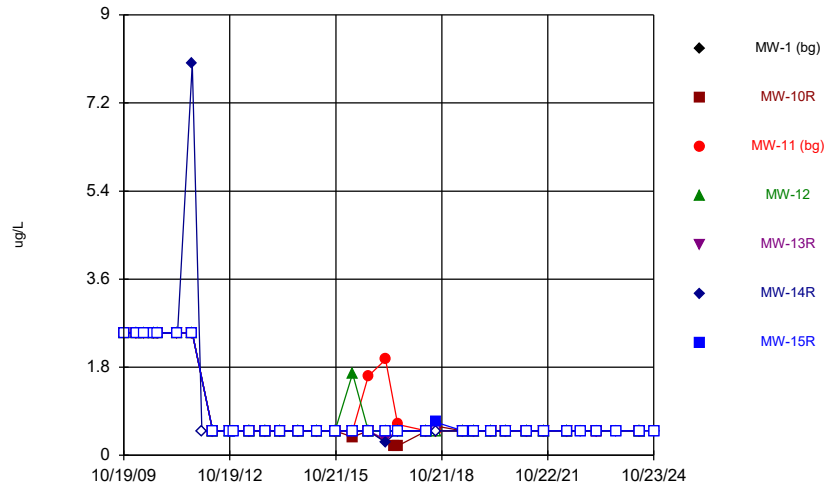
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



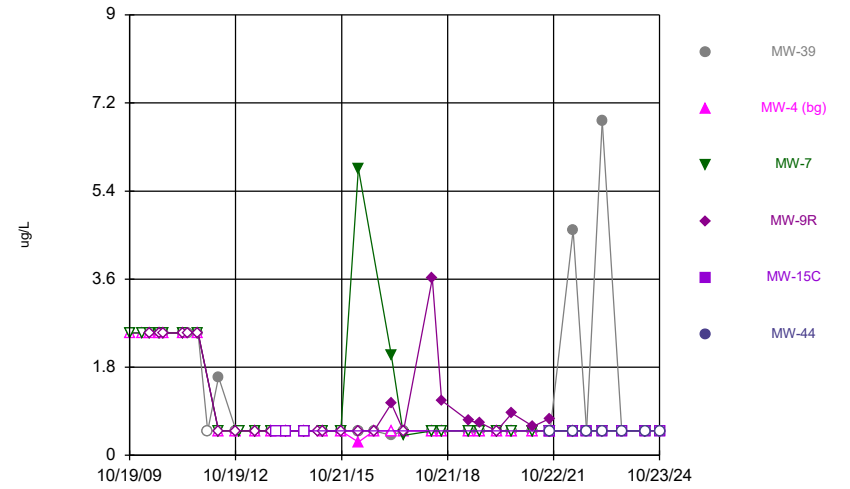
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



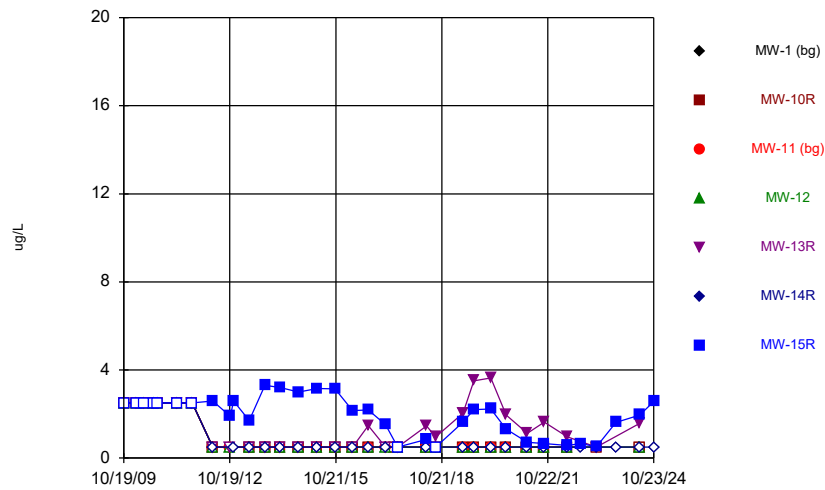
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



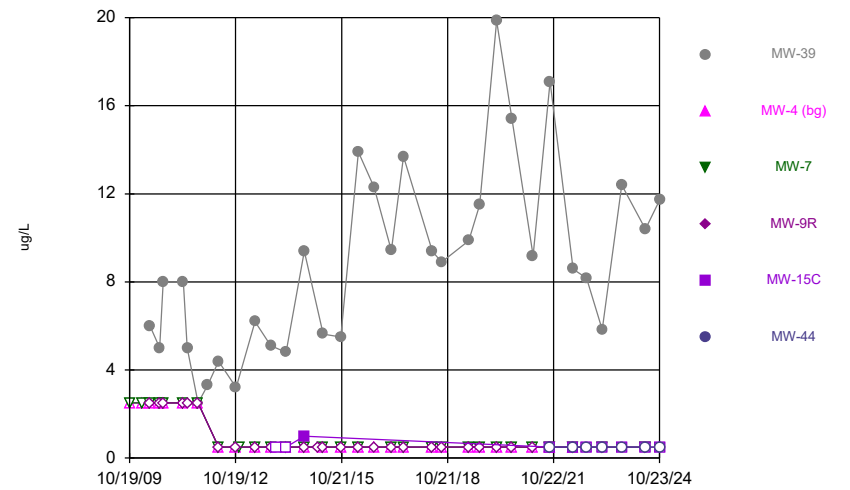
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



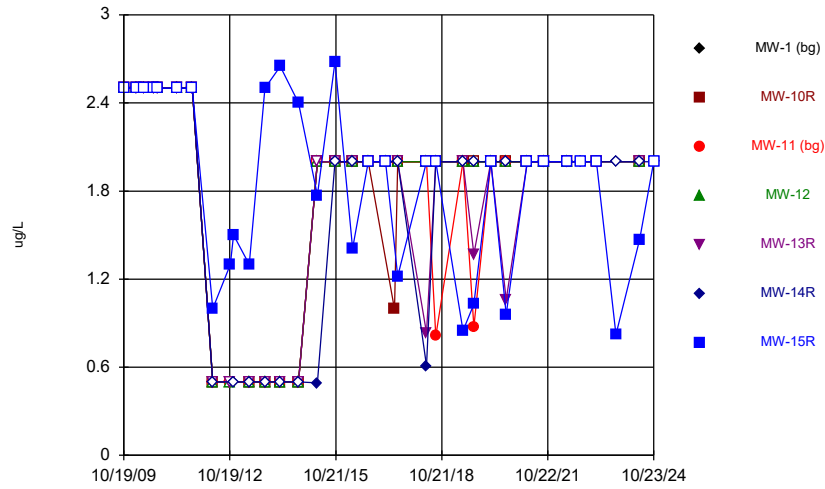
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



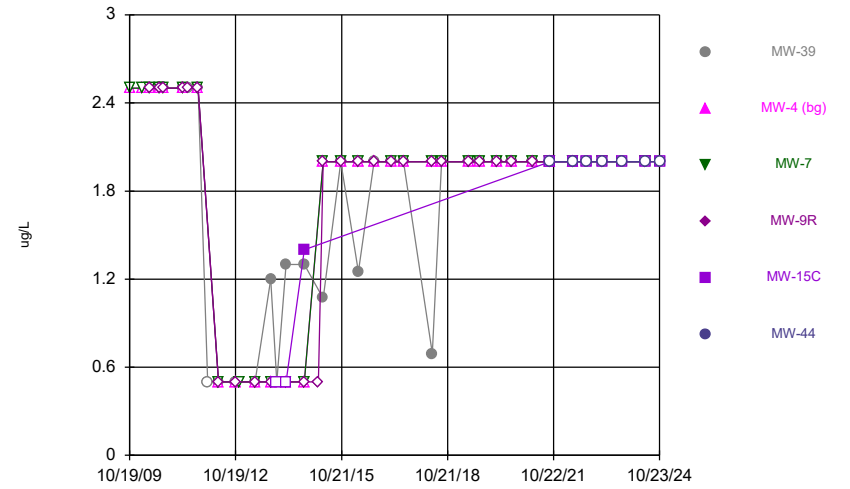
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



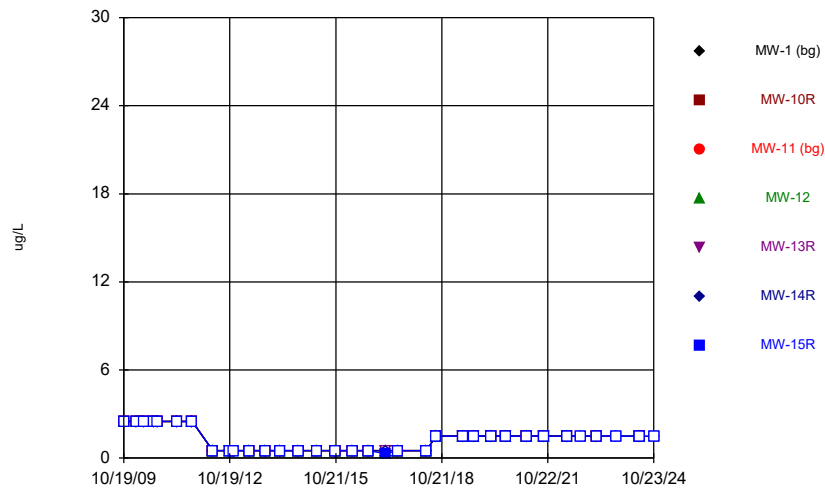
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



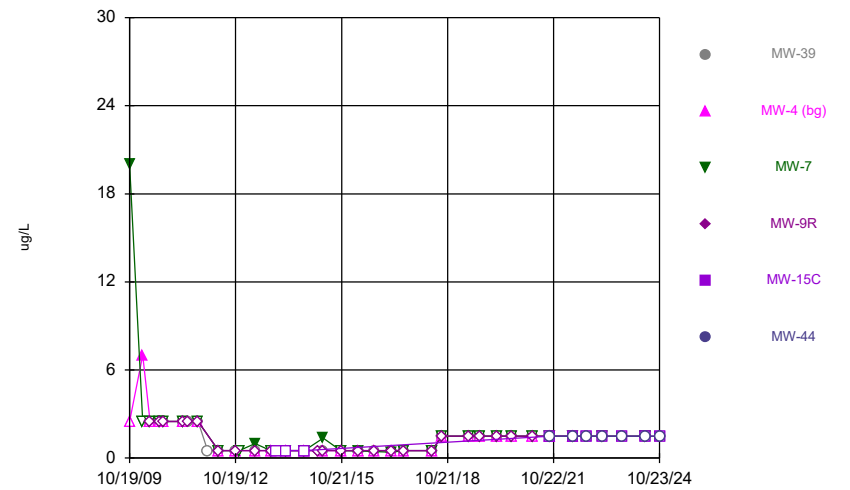
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



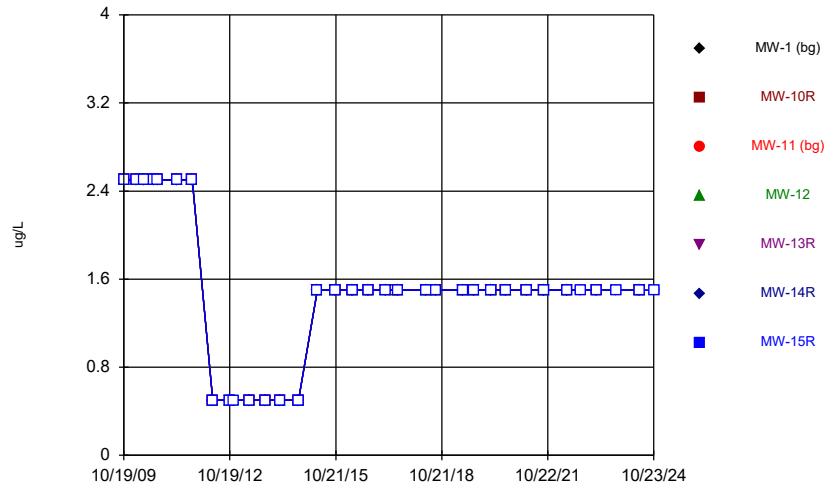
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Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



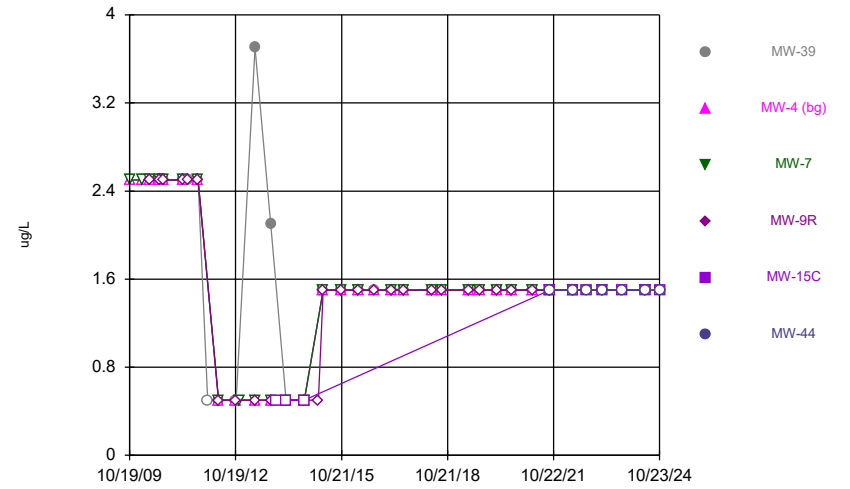
Constituent: Chloroform Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



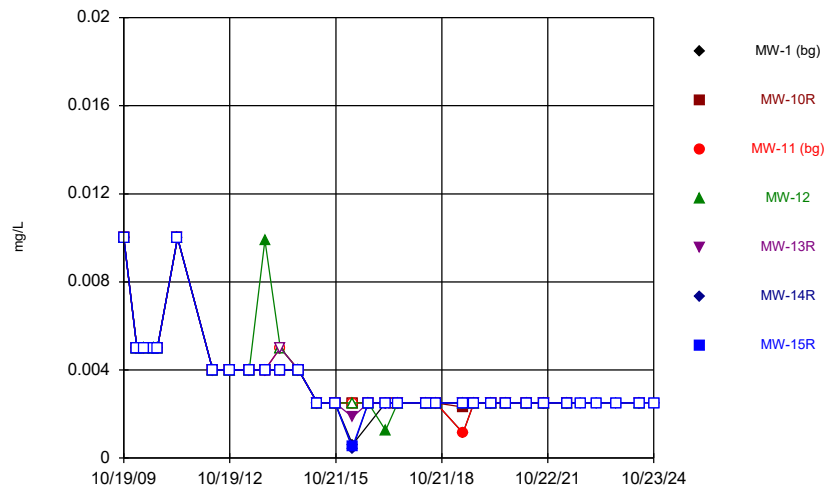
Constituent: Chloromethane Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



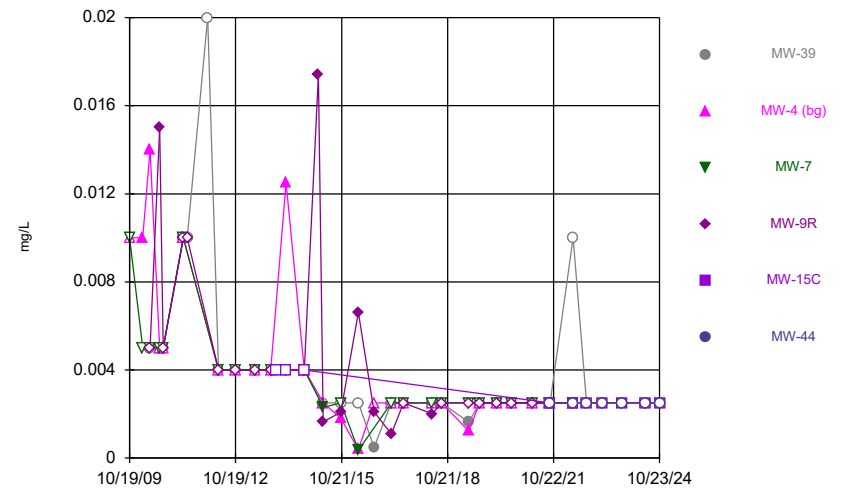
Constituent: Chloromethane Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



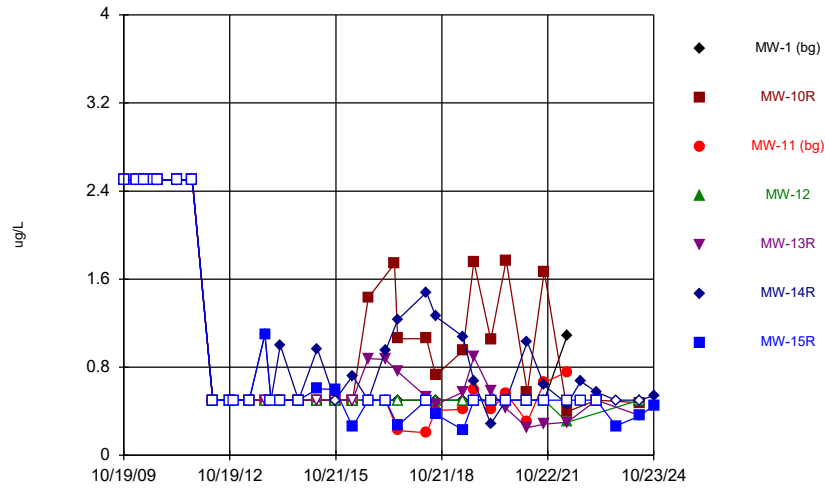
Constituent: Chromium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



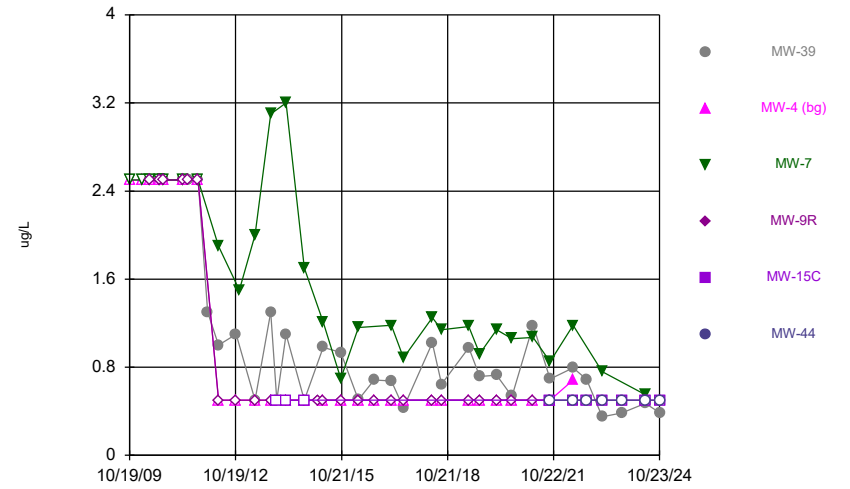
Constituent: Chromium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



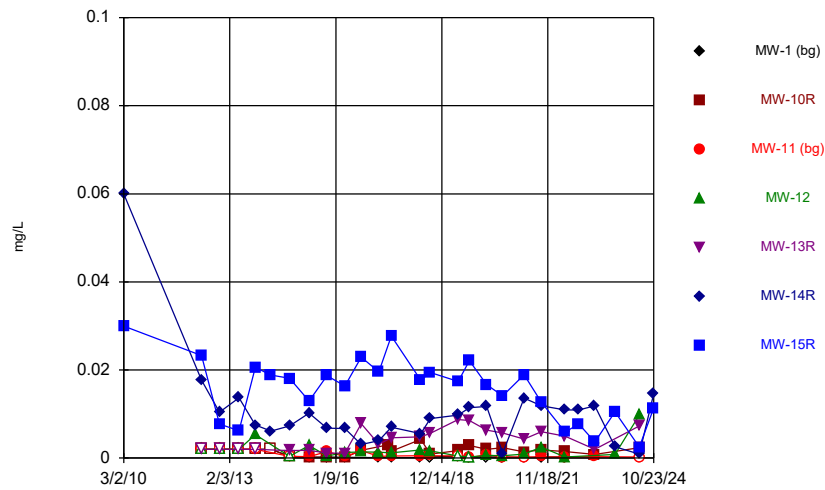
Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



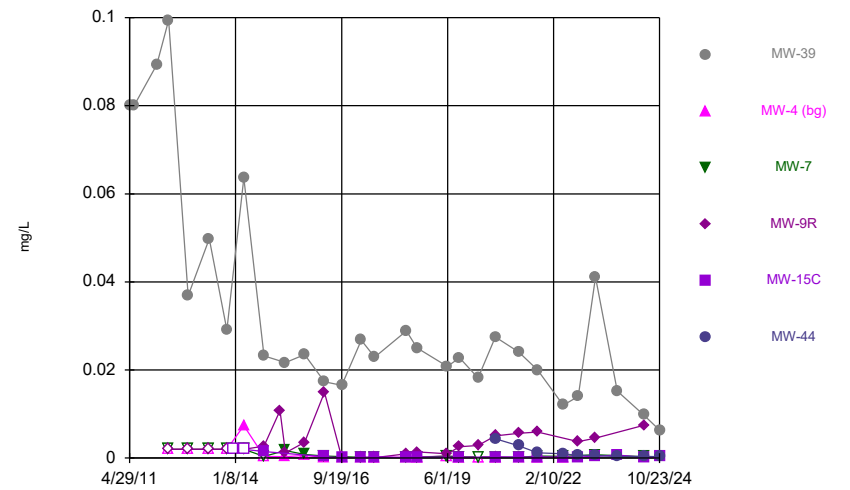
Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



Constituent: Cobalt Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

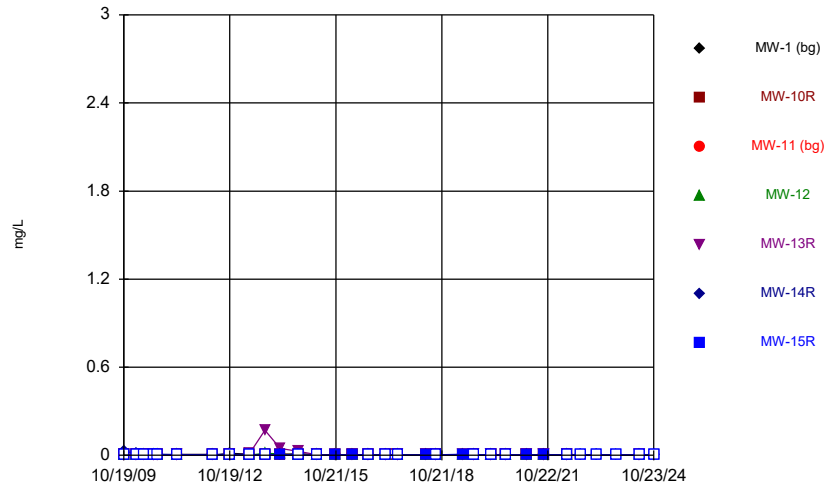
### Time Series



Constituent: Cobalt Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

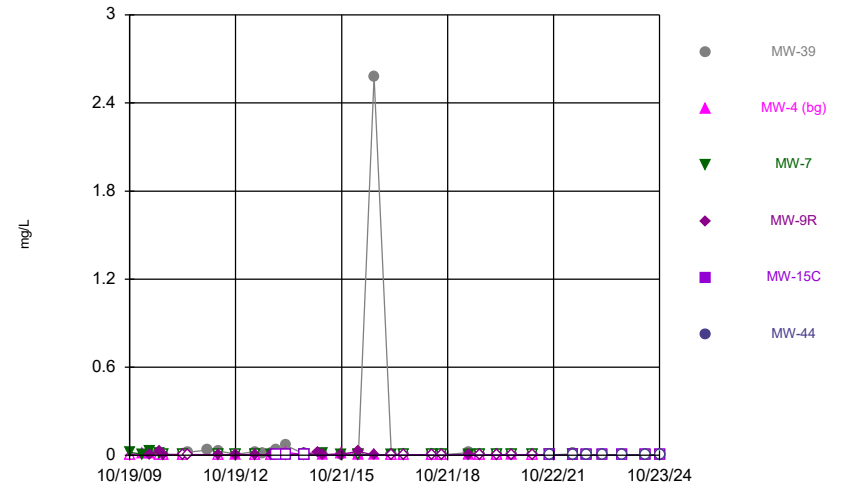


### Time Series



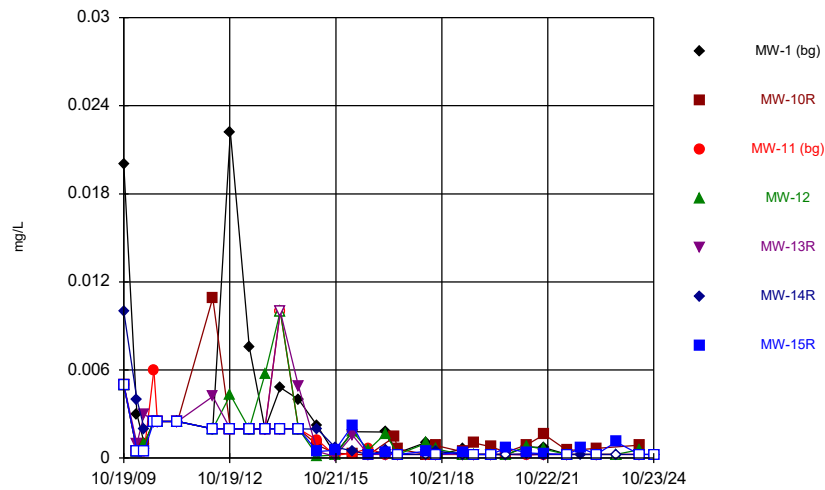
Constituent: Copper Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



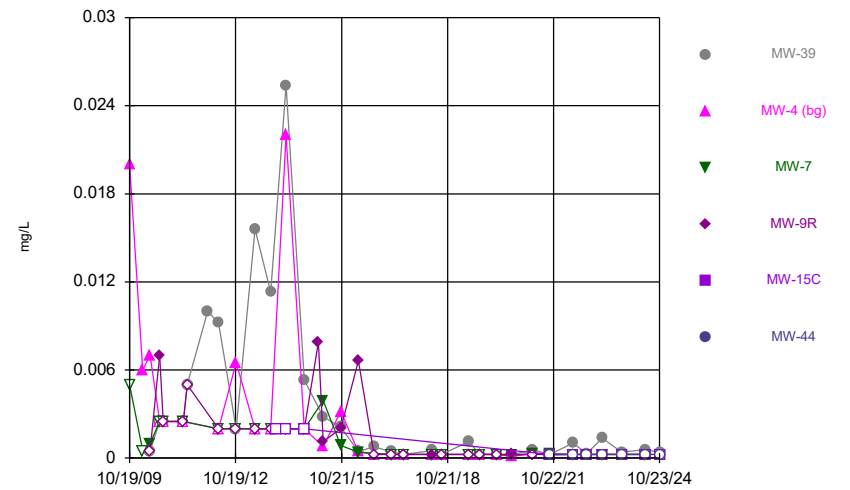
Constituent: Copper Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



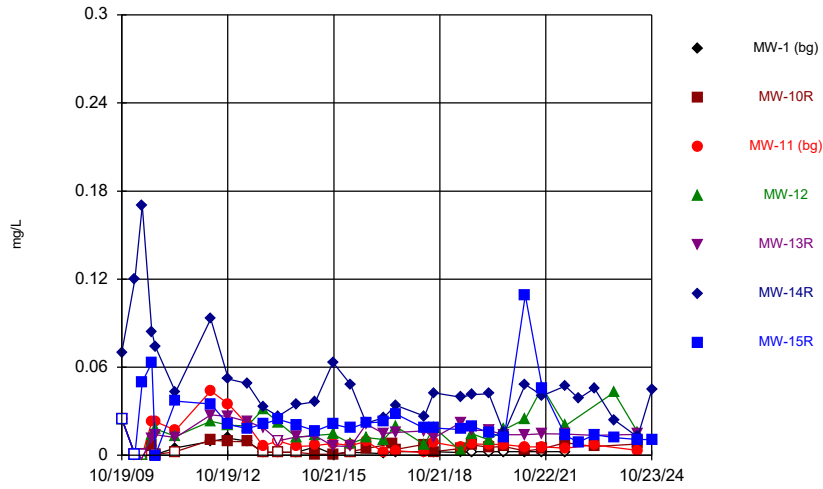
Constituent: Lead Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



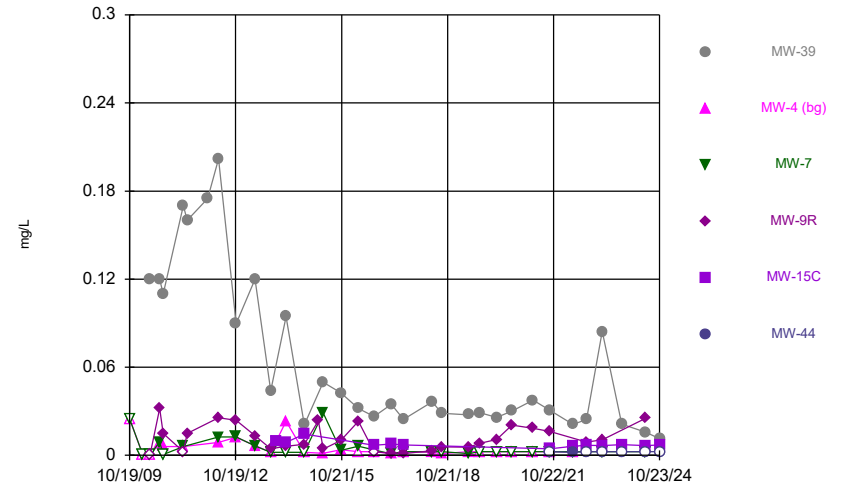
Constituent: Lead Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



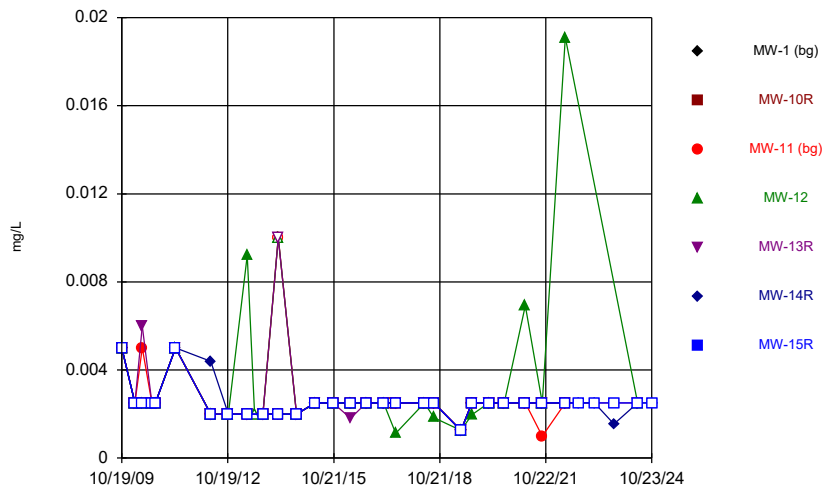
Constituent: Nickel Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



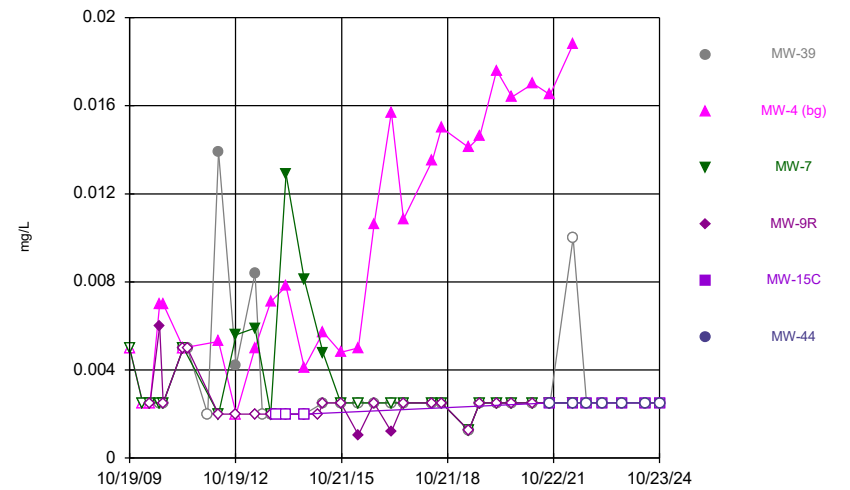
Constituent: Nickel Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



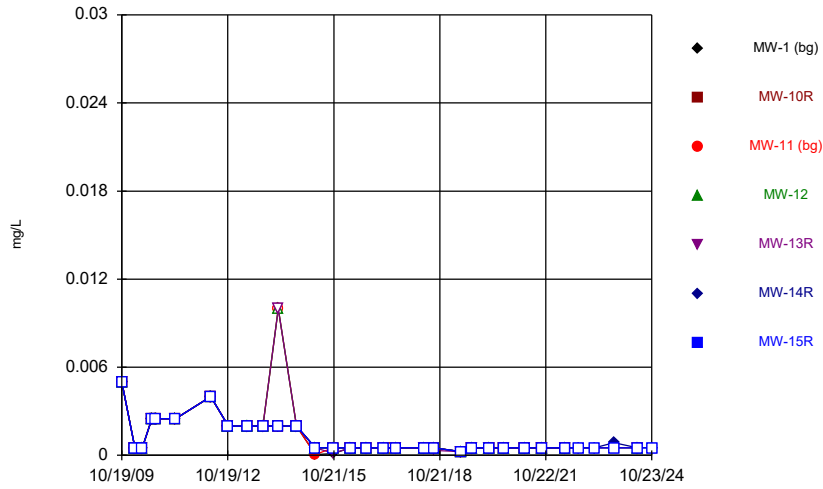
Constituent: Selenium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



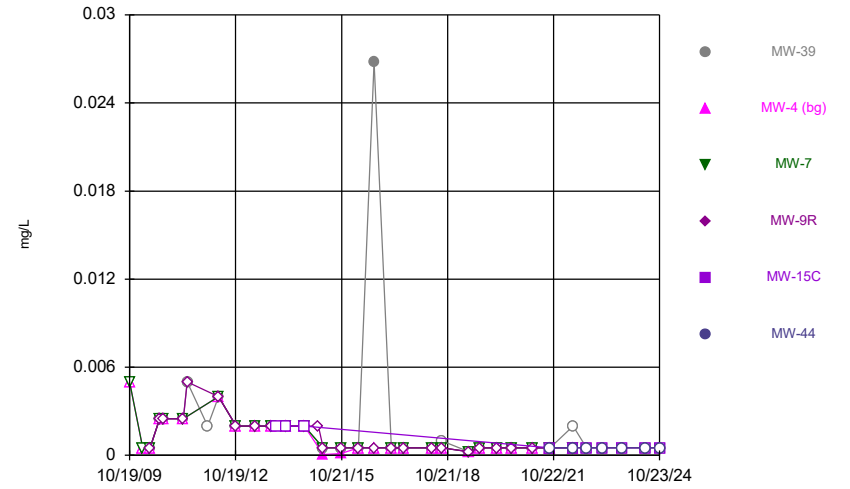
Constituent: Selenium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



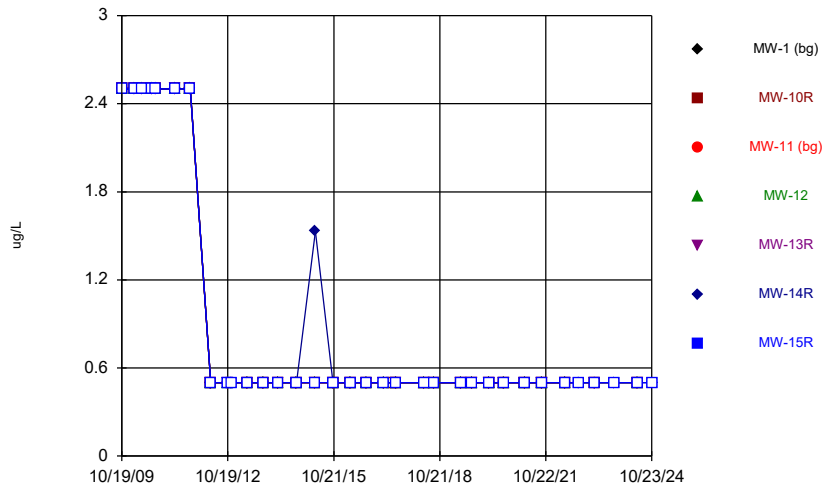
Constituent: Silver Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



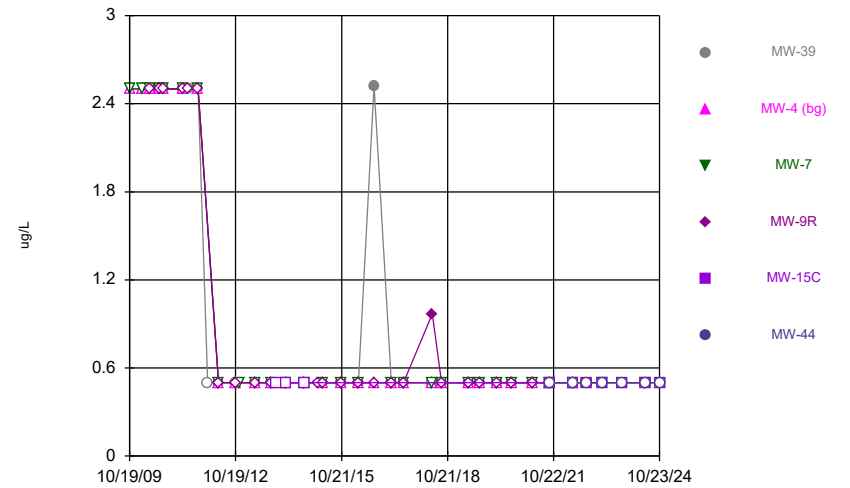
Constituent: Silver Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



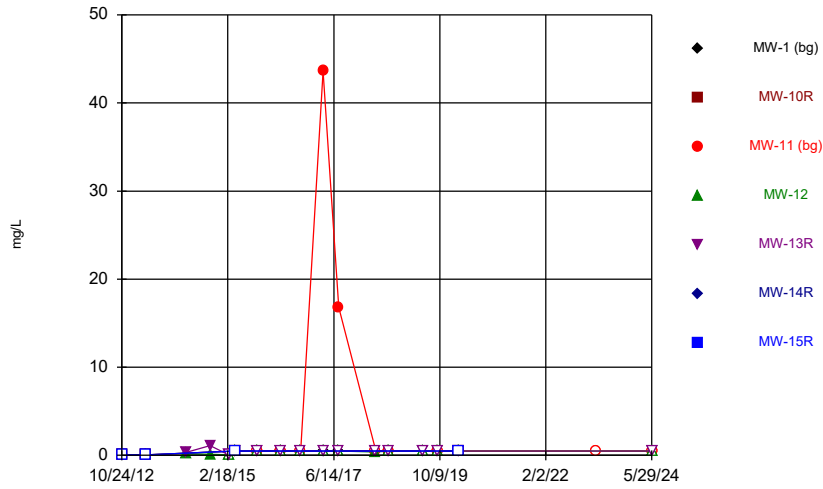
Constituent: Styrene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



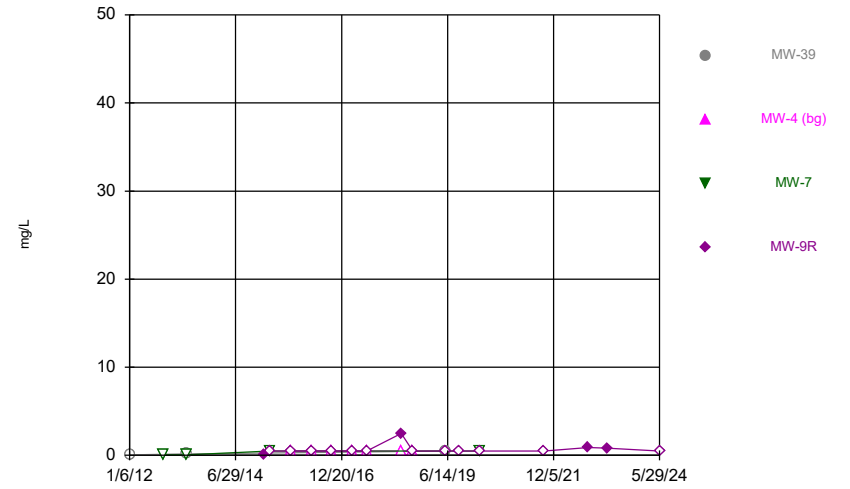
Constituent: Styrene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



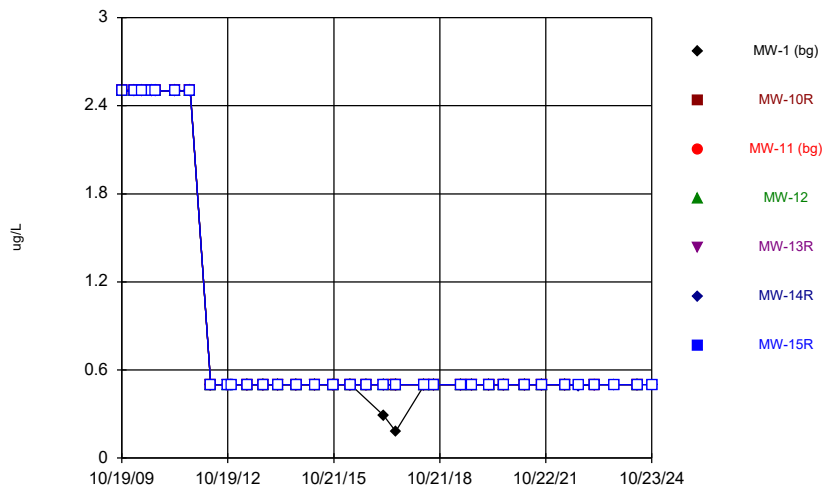
Constituent: Sulfide Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



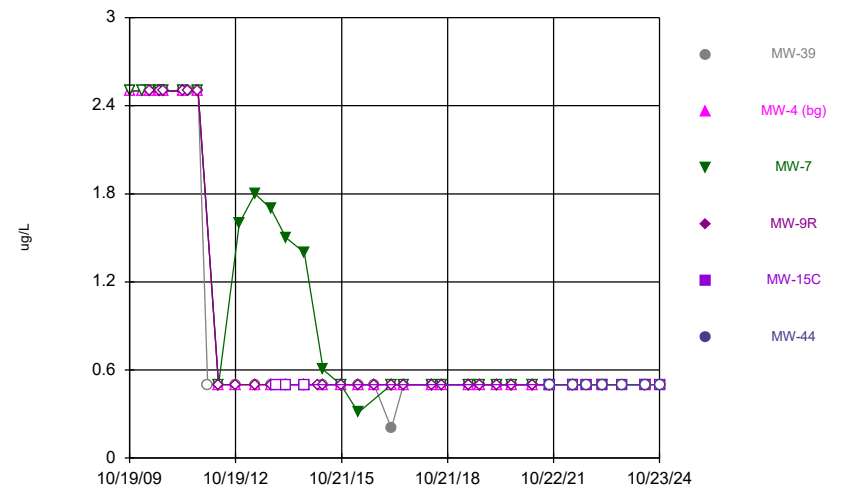
Constituent: Sulfide Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



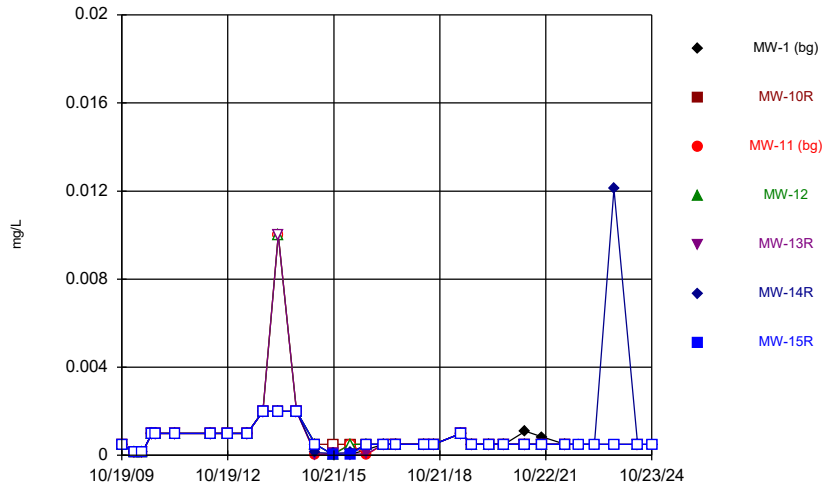
Constituent: Tetrachloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



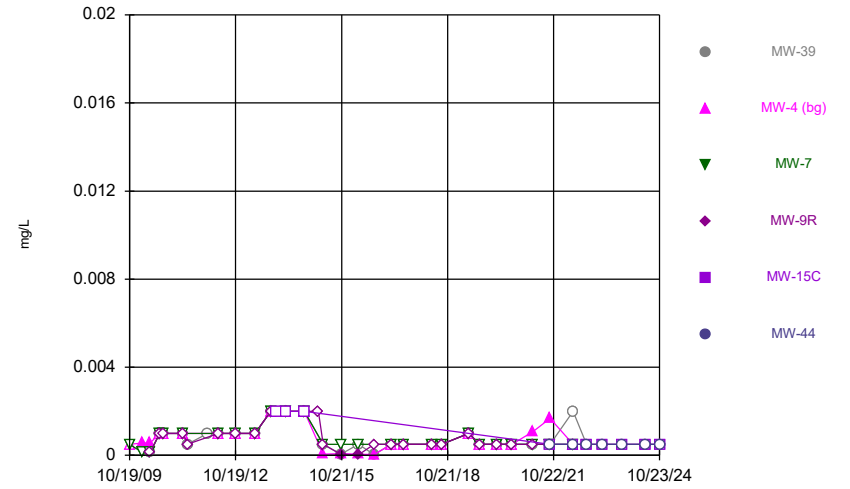
Constituent: Tetrachloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



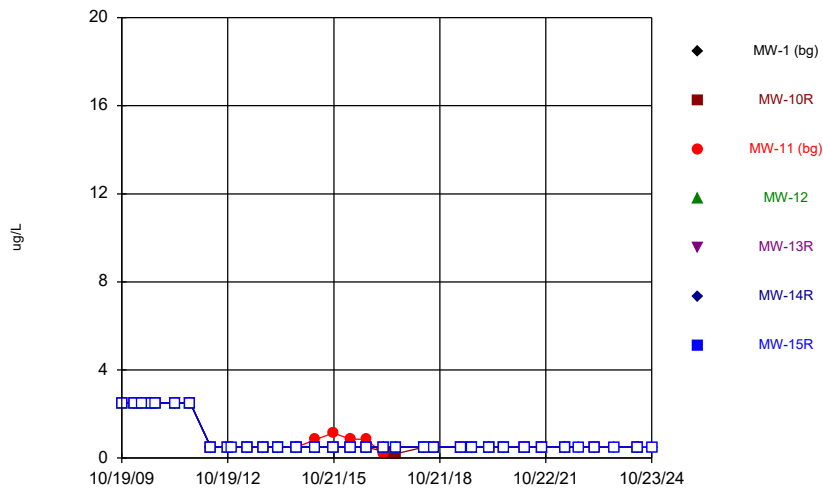
Constituent: Thallium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



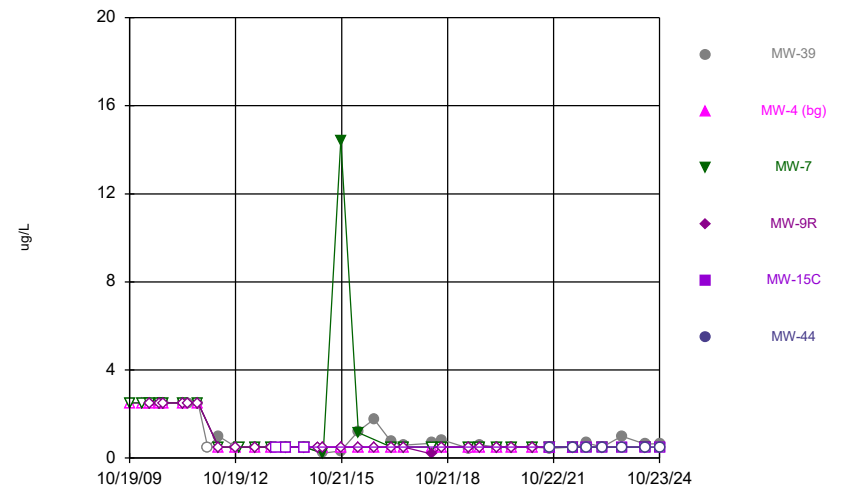
Constituent: Thallium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



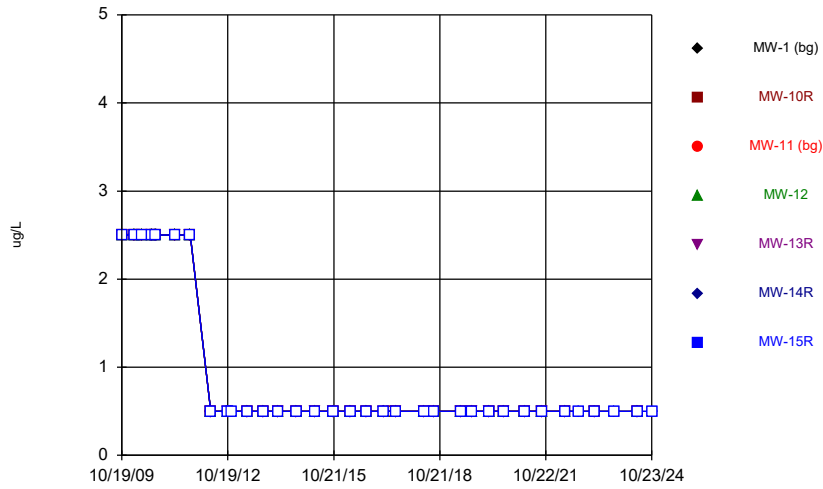
Constituent: Toluene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Time Series



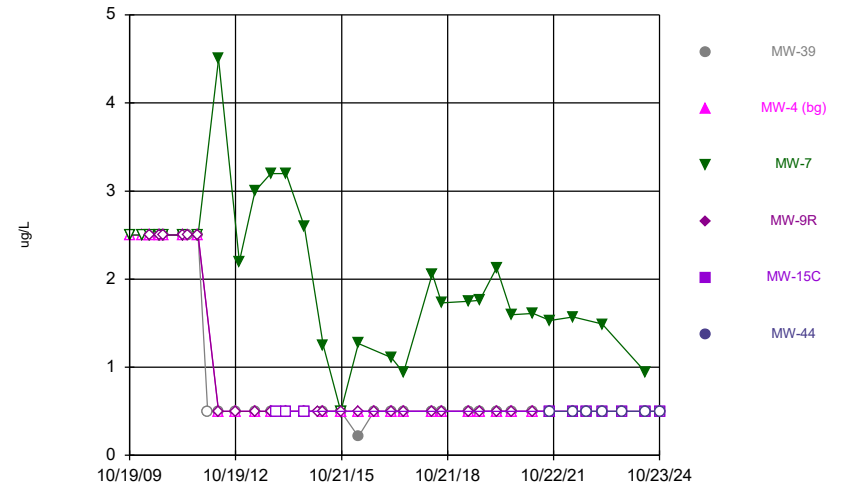
Constituent: Toluene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



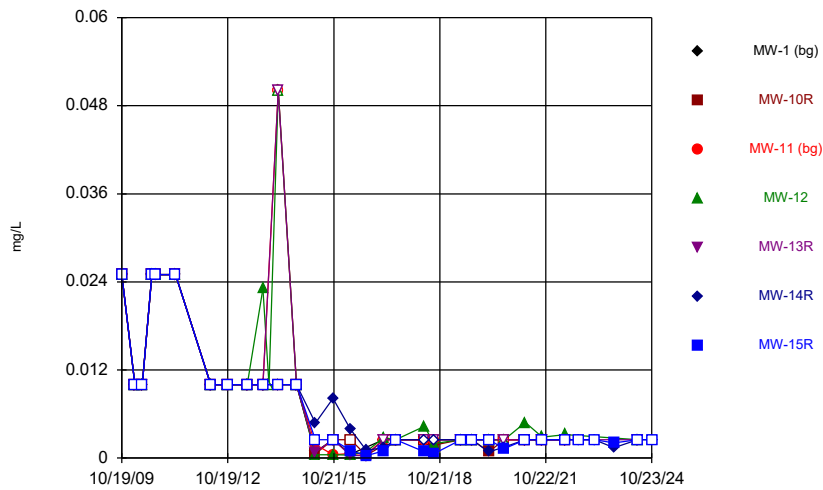
Constituent: Trichloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



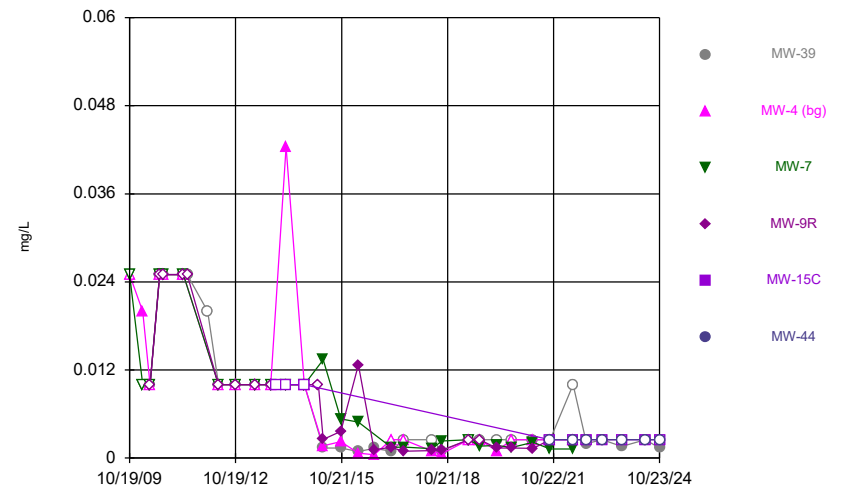
Constituent: Trichloroethene Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



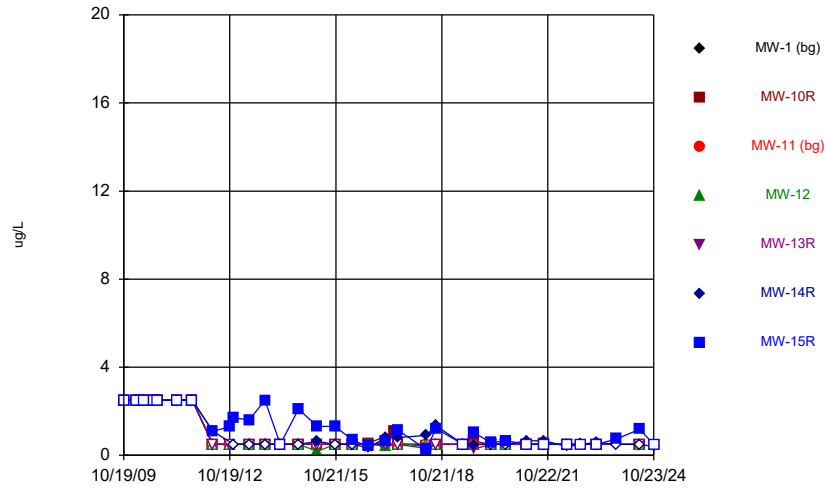
Constituent: Vanadium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



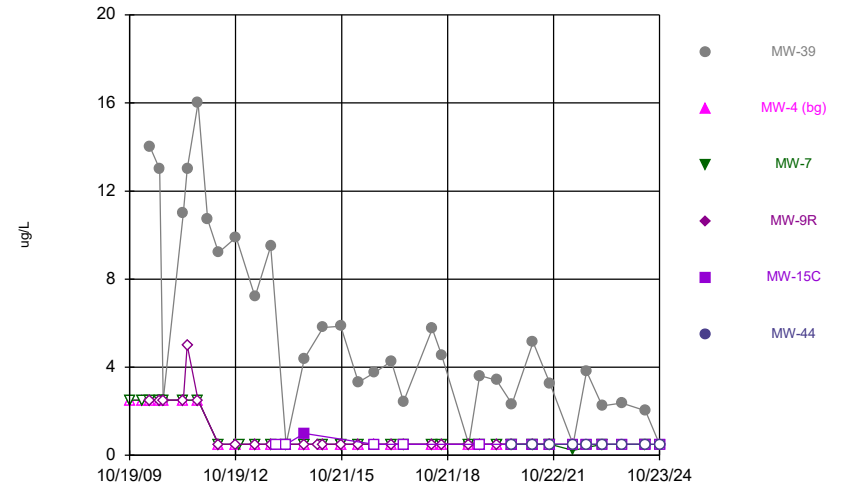
Constituent: Vanadium Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



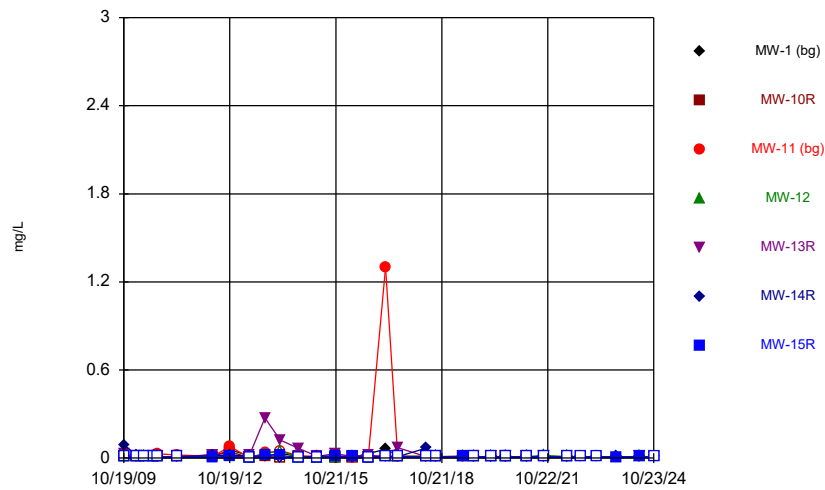
Constituent: Vinyl Chloride Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



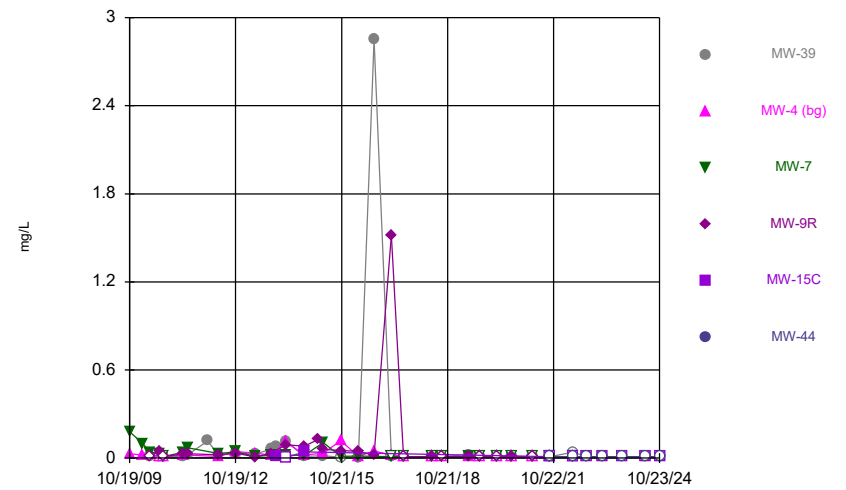
Constituent: Vinyl Chloride Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



Constituent: Zinc Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Time Series



Constituent: Zinc Analysis Run 2/28/2025 10:00 AM View: 2024AWQR-Time\_Series  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

**Outlier Test Summary Table and Graphs – Open MSWLF Unit**



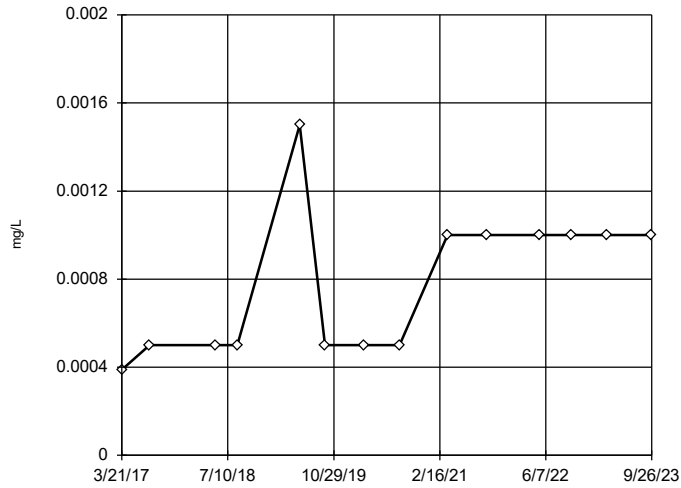
# MW-27 BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 5:40 PM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0007777	0.000332	n/a	n/a
Arsenic (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0009589	0.0001537	n/a	n/a
Barium (mg/L)	MW-27	No	n/a	n/a	EPA/OH	0.05	14	0.0342	0.001669	normal	ShapiroWilk
Chromium (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.002252	0.0006316	n/a	n/a
<b>Cobalt (mg/L)</b>	<b>MW-27</b>	<b>Yes</b>	<b>0.0005</b>	<b>5/29/2019</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>14</b>	<b>0.0002355</b>	<b>0.0001007</b>	<b>unknown</b>	<b>ShapiroWilk</b>
Copper (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.002394	0.0003955	n/a	n/a
Lead (mg/L)	MW-27	No	n/a	n/a	OH	NaN	14	0.0002492	0.00000294	n/a	n/a
Vanadium (mg/L)	MW-27	No	n/a	n/a	NP (nrm)/OH	NaN	14	0.001883	0.0007664	unknown	ShapiroWilk

### Ohio EPA 0715 Outlier Algorithm

MW-27

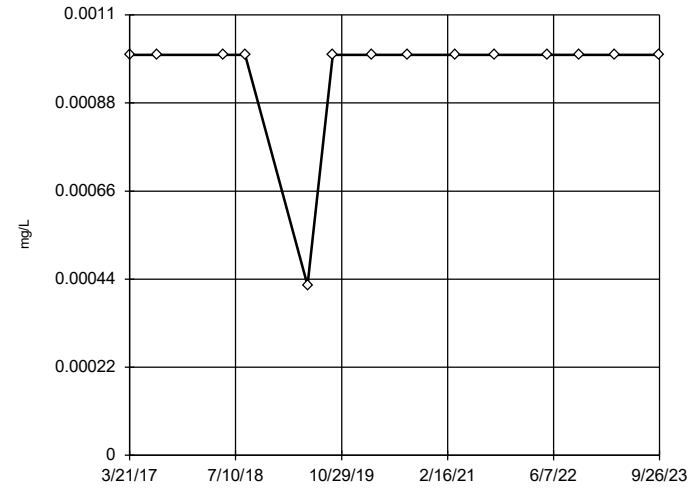


n = 14  
No statistical outliers.

Constituent: Antimony Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

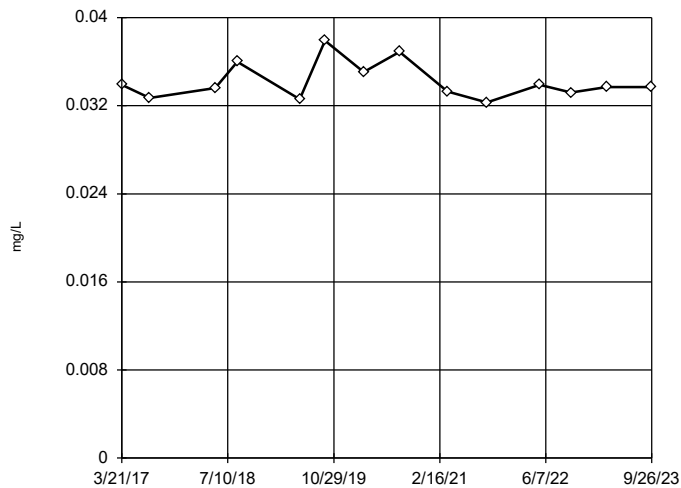


n = 14  
No statistical outliers.

Constituent: Arsenic Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-27

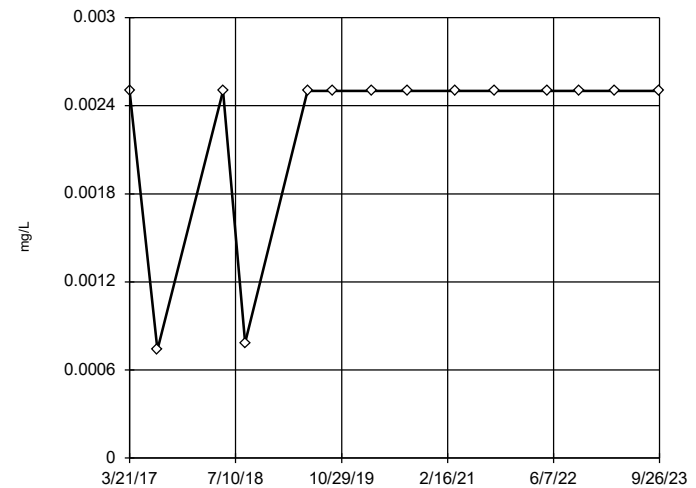


n = 14  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.0342, std. dev. 0.001669, critical Tn 2.371  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.8687  
Critical = 0.825  
The distribution was found to be normally distributed.

Constituent: Barium Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

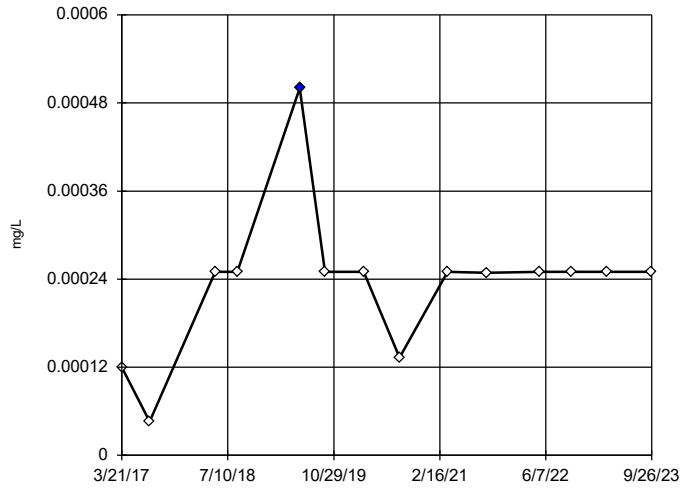


n = 14  
No statistical outliers.

Constituent: Chromium Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-27

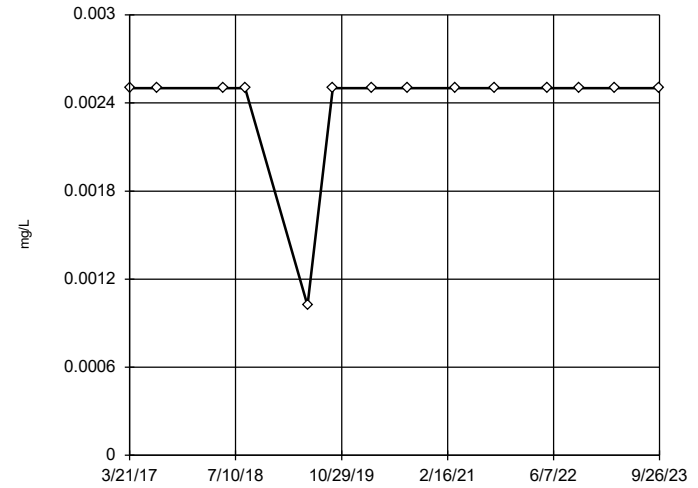


n = 14  
 Outlier is drawn as solid.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.0004278, low cutoff = 0.000013, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

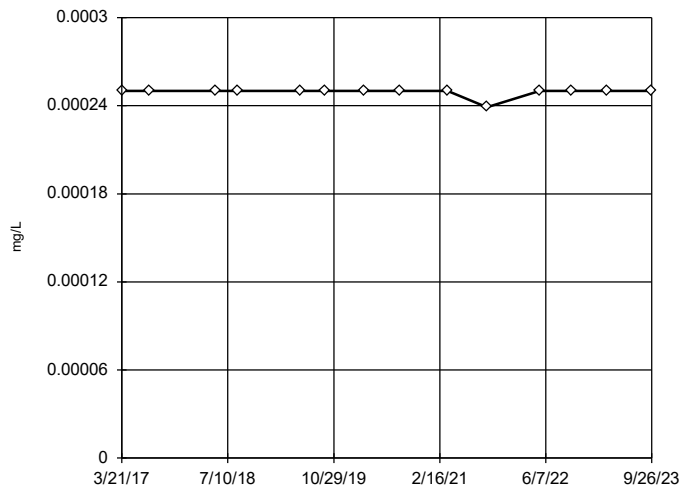


n = 14  
 No statistical outliers.

Constituent: Copper Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-27

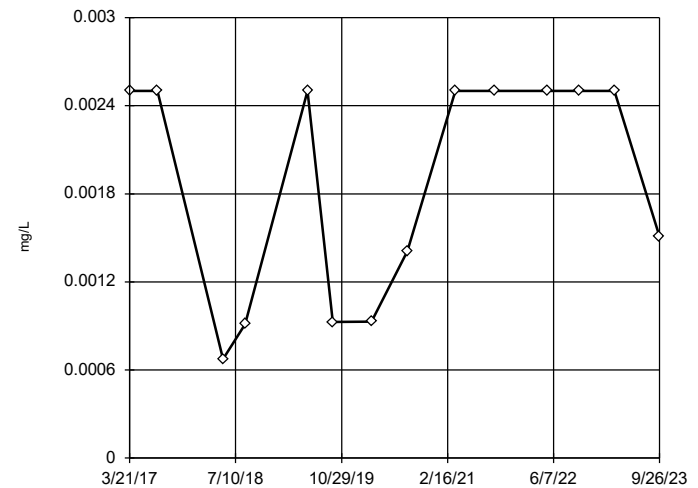


n = 14  
 No statistical outliers.

Constituent: Lead Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-27



n = 14  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.007214, low cutoff = -0.003786, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 2/27/2025 5:37 PM View: 2024AWQR-MW-27\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

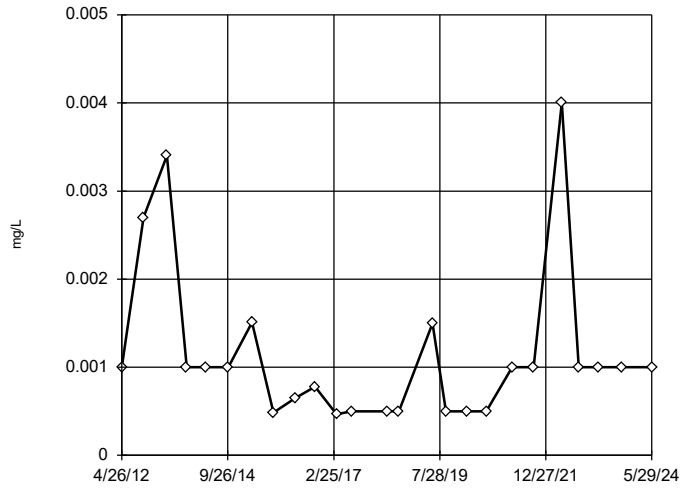
# MW-35 BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 6:27 PM

<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-35	No	n/a	n/a	NP (nrm)/OH	NaN	25	0.00114	0.0009105	unknown	ShapiroWilk
<b>Arsenic (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.0116</b>	<b>10/24/2012</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>28</b>	<b>0.003031</b>	<b>0.003335</b>	<b>unknown</b>	<b>ShapiroWilk</b>
<b>Barium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.1</b>	<b>5/20/2010</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>28</b>	<b>0.03024</b>	<b>0.01767</b>	<b>unknown</b>	<b>ShapiroWilk</b>
Cadmium (mg/L)	MW-35	No	n/a	n/a	OH	NaN	28	0.0002061	0.0001388	n/a	n/a
Chromium (mg/L)	MW-35	No	n/a	n/a	OH	NaN	28	0.003023	0.001034	n/a	n/a
Cobalt (mg/L)	MW-35	No	n/a	n/a	EPA/OH	0.05	25	0.01373	0.01458	ln(x)	ShapiroWilk
<b>Copper (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.0212,0.0102,0.01</b>	<b>7/28/2015,4/15/2015,5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>29</b>	<b>0.003547</b>	<b>0.00395</b>	<b>n/a</b>	<b>n/a</b>
<b>Lead (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.002,0.002,0.002,0.002,0.002,0.002,0.002,0.001</b>	<b>4/26/2012,10/24/2012,5/7/2013,10/18/2013,3/25/201</b>	<b>OH</b>	<b>NaN</b>	<b>28</b>	<b>0.0006802</b>	<b>0.0007193</b>	<b>n/a</b>	<b>n/a</b>
<b>Nickel (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.227</b>	<b>10/24/2012</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>28</b>	<b>0.05247</b>	<b>0.05564</b>	<b>unknown</b>	<b>ShapiroWilk</b>
Selenium (mg/L)	MW-35	No	n/a	n/a	OH	NaN	28	0.002362	0.0003146	n/a	n/a
<b>Thallium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.002,0.002,0.002,0.002</b>	<b>10/18/2013,3/25/2014,9/30/2014,5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>28</b>	<b>0.0007029</b>	<b>0.0006009</b>	<b>n/a</b>	<b>n/a</b>
<b>Vanadium (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01,0.01</b>	<b>5/20/2010,10/1/2010,4/29/2011,4/26/2012,10/24/201</b>	<b>OH</b>	<b>NaN</b>	<b>28</b>	<b>0.005259</b>	<b>0.003698</b>	<b>n/a</b>	<b>n/a</b>
<b>Zinc (mg/L)</b>	<b>MW-35</b>	<b>Yes</b>	<b>0.147,0.04,0.04</b>	<b>9/23/2016,10/19/2009,5/10/2022</b>	<b>OH</b>	<b>NaN</b>	<b>29</b>	<b>0.01636</b>	<b>0.02639</b>	<b>n/a</b>	<b>n/a</b>

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-35

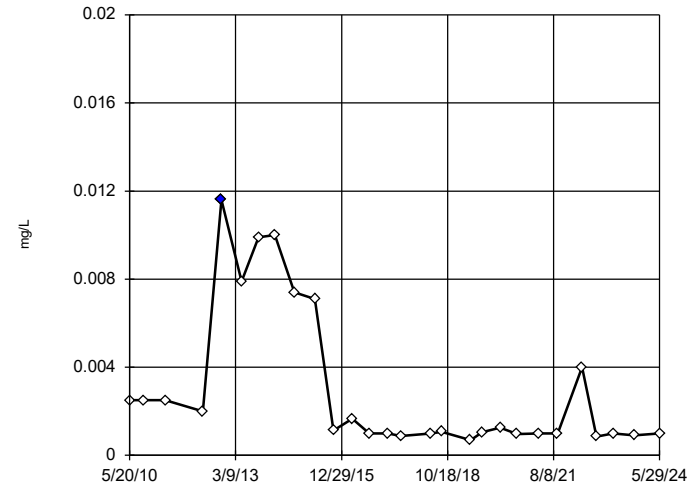


n = 25  
 No outliers found.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 The results were invalidated, because both the lower and upper quartiles represent reporting limits.

Constituent: Antimony Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-35

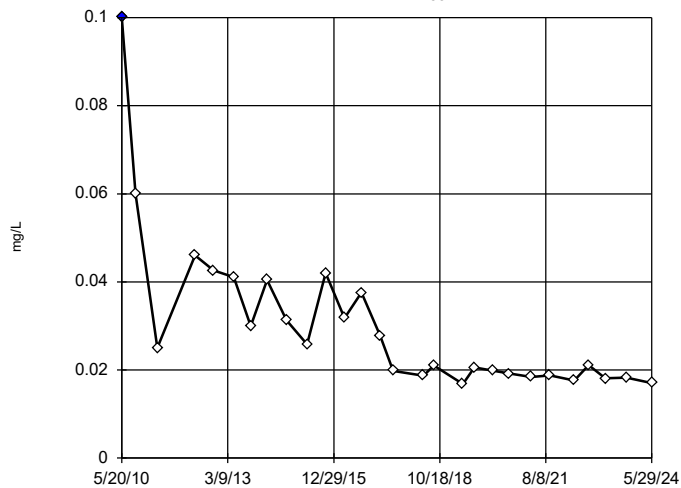


n = 28  
 Outlier is drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.01, low cutoff = -0.00575, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-35

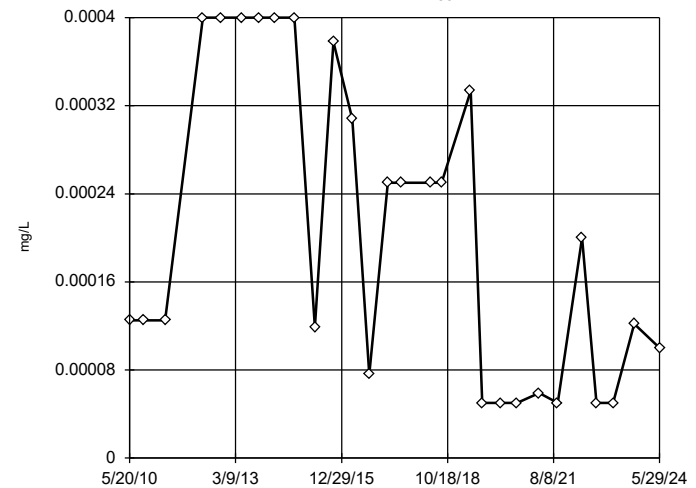


n = 28  
 Outlier is drawn as solid. Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.09975, low cutoff = -0.042, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm

MW-35

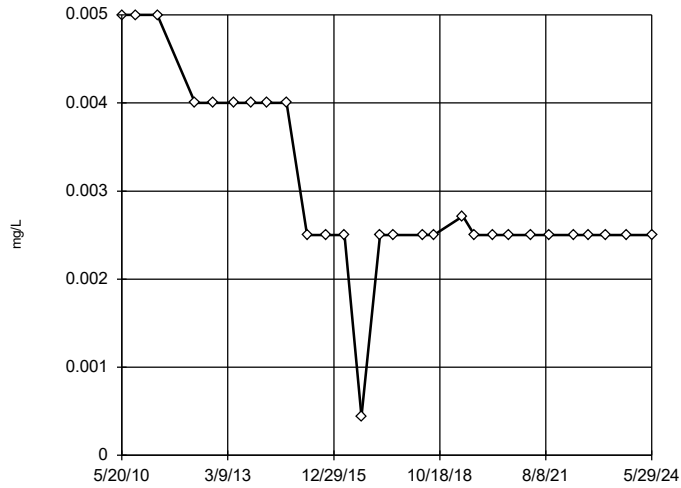


n = 28  
 No statistical outliers.  
 Normality test used: Shapiro Wilk@alpha = 0.01  
 Calculated = 0.8941  
 Critical = 0.894  
 The distribution was found to be normally distributed.

Constituent: Cadmium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

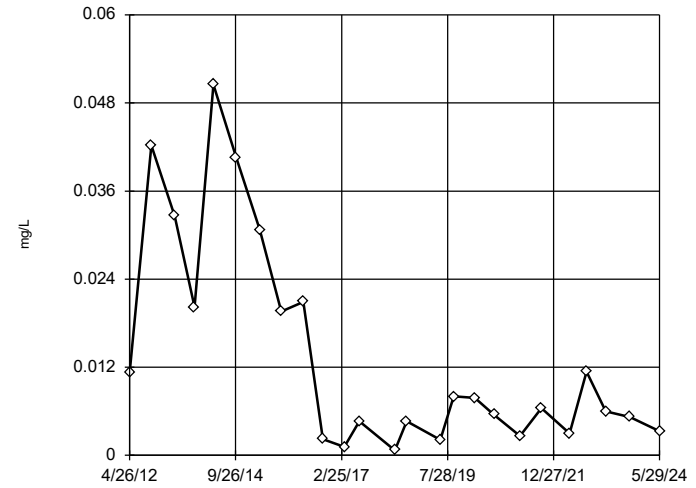


n = 28  
No statistical outliers.

Constituent: Chromium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Rosner's Test)

MW-35

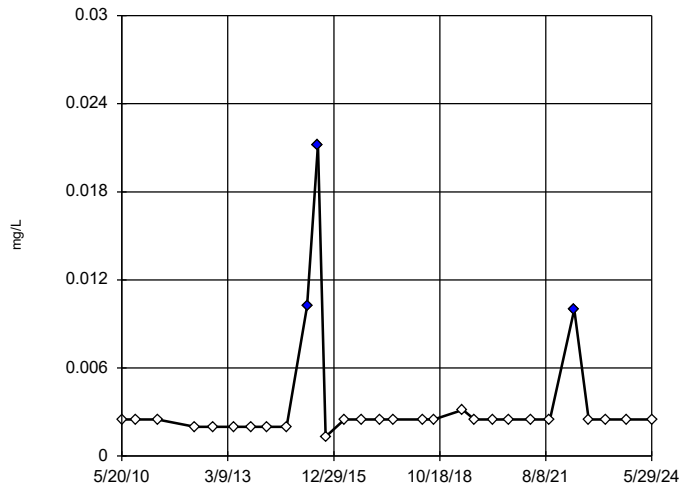


n = 25  
Rosner's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.01373, std. dev. 0.01458, critical Tn 2.663  
  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.968  
Critical = 0.888 (after natural log transformation)  
The distribution was found to be log-normal.

Constituent: Cobalt Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

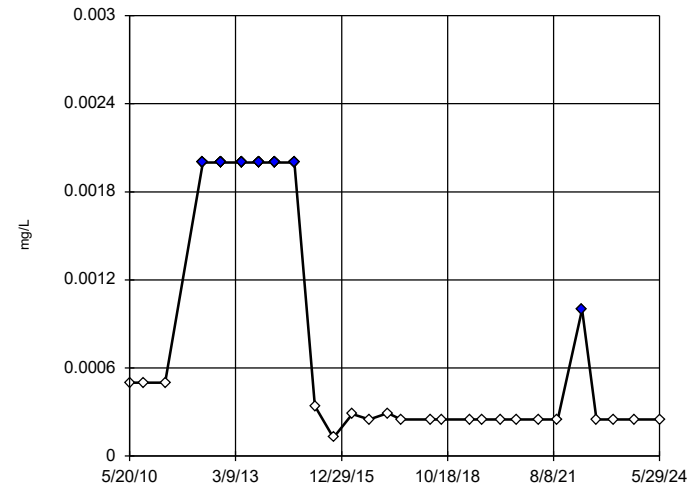


n = 29  
Statistical outliers are drawn as solid.  
Outliers per Ohio method.

Constituent: Copper Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

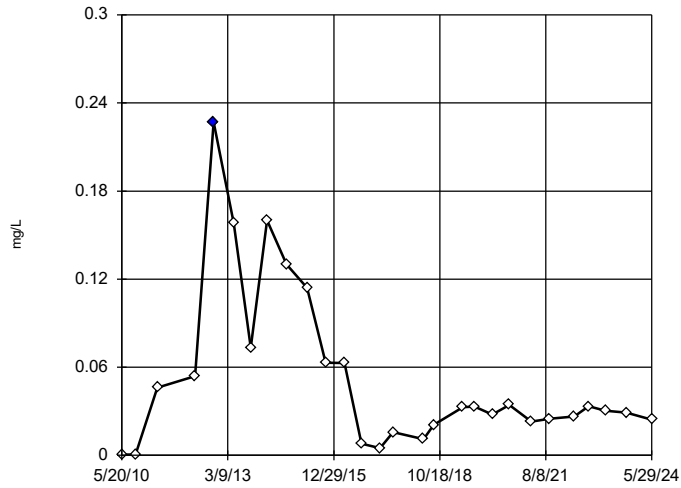


n = 28  
Statistical outliers are drawn as solid.  
Outliers per Ohio method.

Constituent: Lead Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

MW-35

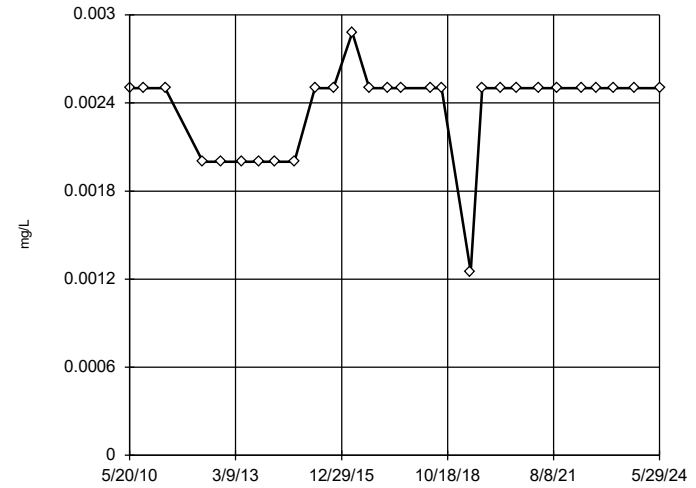


n = 28  
 Outlier is drawn as solid.  
 Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.  
 High cutoff = 0.1863, low cutoff = -0.1015, based on IQR multiplier of 3.

Constituent: Nickel Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

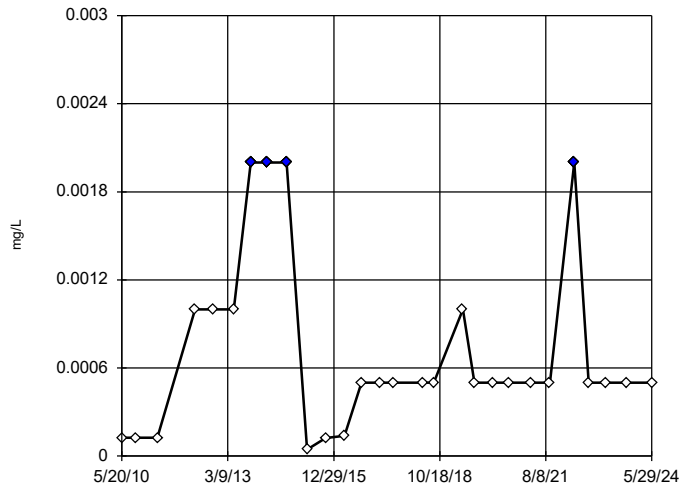


n = 28  
 No statistical outliers.

Constituent: Selenium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

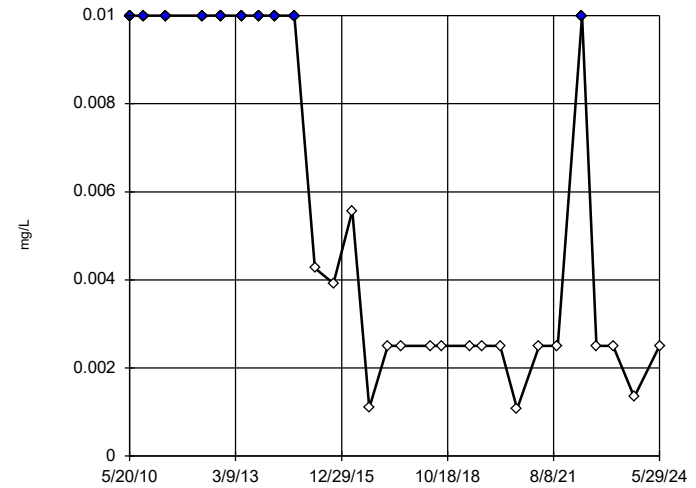


n = 28  
 Statistical outliers are drawn as solid.  
 Outliers per Ohio method.

Constituent: Thallium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35

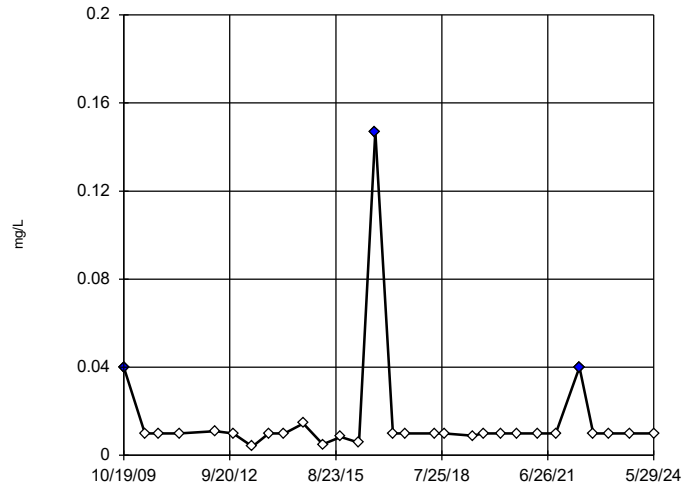


n = 28  
 Statistical outliers are drawn as solid.  
 Outliers per Ohio method.

Constituent: Vanadium Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-35



n = 29  
Statistical outliers are drawn as solid.  
Outliers per Ohio method.

Constituent: Zinc Analysis Run 2/27/2025 6:22 PM View: 2024AWQR-MW-35\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

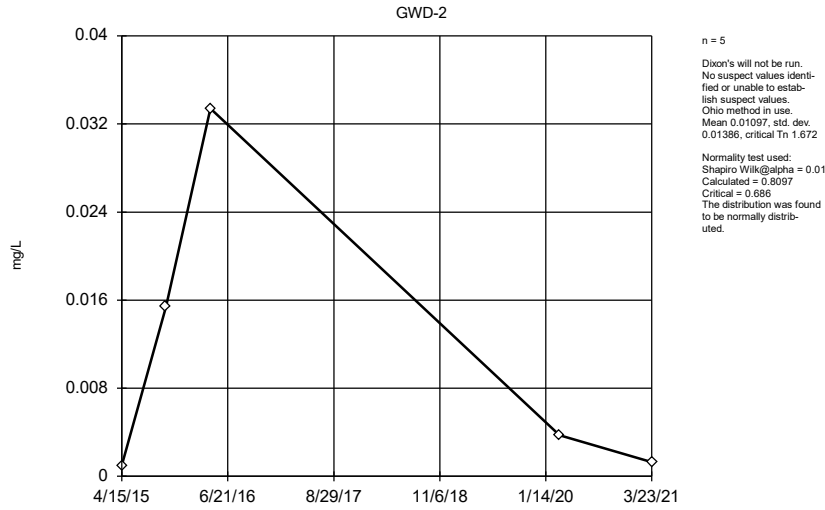


# GWD-2 BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/26/2025, 2:19 PM

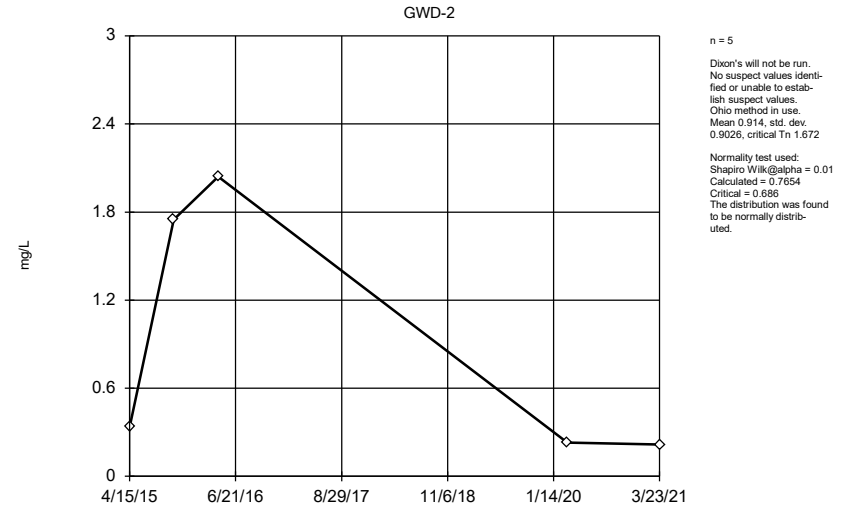
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.01097	0.01386	normal	ShapiroWilk
Barium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.914	0.9026	normal	ShapiroWilk
Beryllium (mg/L)	GWD-2	No	n/a	n/a	OH	NaN	5	0.0004152	0.0001896	n/a	n/a
Cadmium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.0006044	0.000537	normal	ShapiroWilk
Chromium (mg/L)	GWD-2	No	n/a	n/a	OH	NaN	5	0.002162	0.0007562	n/a	n/a
Cobalt (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01	5	0.005806	0.00575	normal	ShapiroWilk
Copper (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.002621	0.001532	normal	ShapiroWilk
Lead (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.0007414	0.0006419	normal	ShapiroWilk
Nickel (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01	5	0.01751	0.009664	normal	ShapiroWilk
Selenium (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.00187	0.0008824	normal	ShapiroWilk
Vanadium (mg/L)	GWD-2	No	n/a	n/a	Dixon/OH	0.01	5	0.002145	0.0009602	normal	ShapiroWilk
Zinc (mg/L)	GWD-2	No	n/a	n/a	EPA/OH	0.05	5	0.007648	0.002717	normal	ShapiroWilk

EPA Screening (suspected outliers for Dixon's Test)



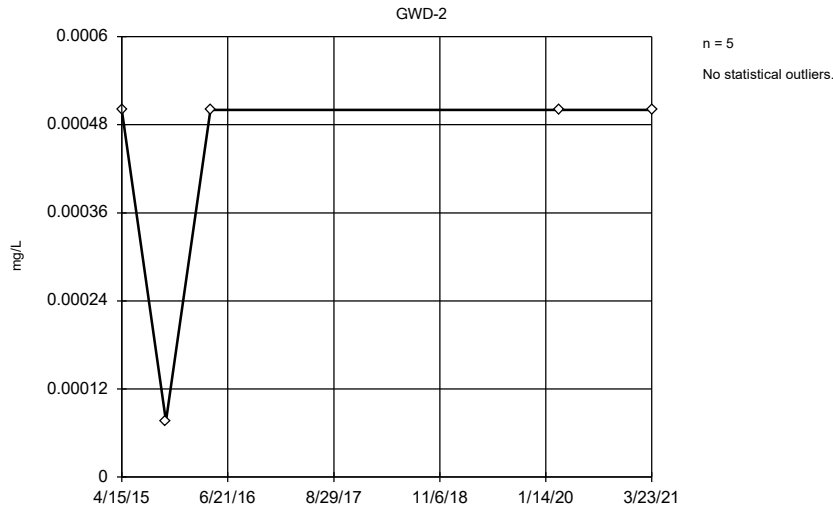
Constituent: Arsenic Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



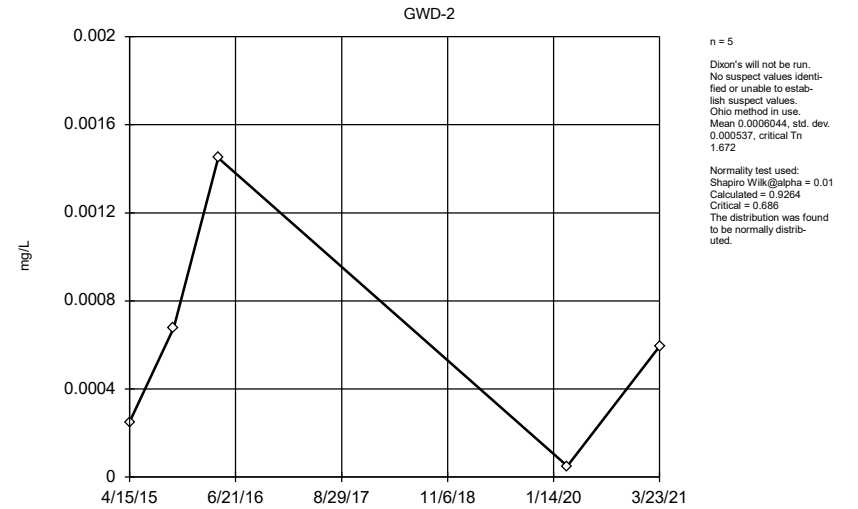
Constituent: Barium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm



Constituent: Beryllium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

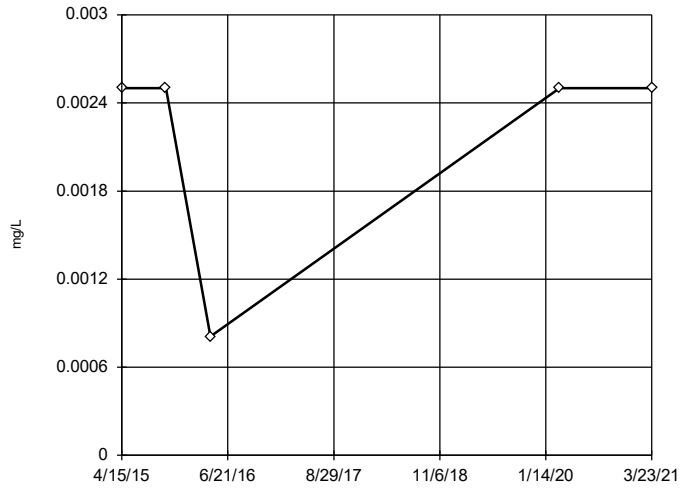
EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cadmium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

GWD-2

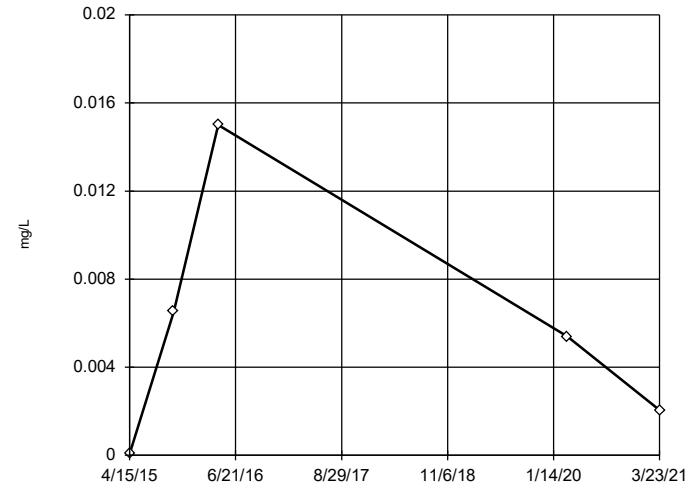


n = 5  
No statistical outliers.

Constituent: Chromium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

GWD-2

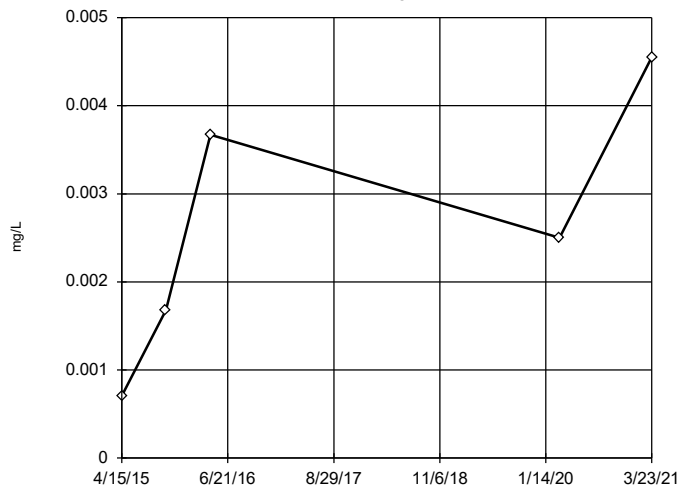


n = 5  
No statistical outliers.  
Testing for 1 low outlier.  
Mean = 0.005806  
Std. Dev. = 0.00575  
6.6E-05 (L); c = 0.1327  
tbl = 0.78  
Alpha = 0.01.  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.9068  
Critical = 0.687  
The distribution was found to be normally distributed.

Constituent: Cobalt Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

GWD-2

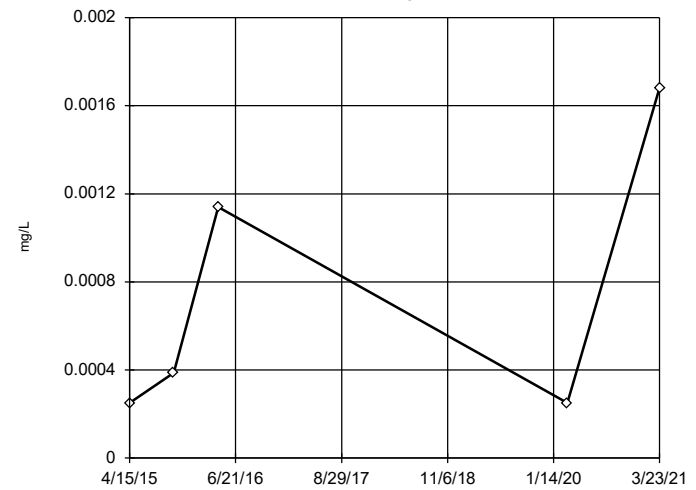


n = 5  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.002621, std. dev. 0.001532, critical Tn 1.672  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.981  
Critical = 0.686  
The distribution was found to be normally distributed.

Constituent: Copper Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

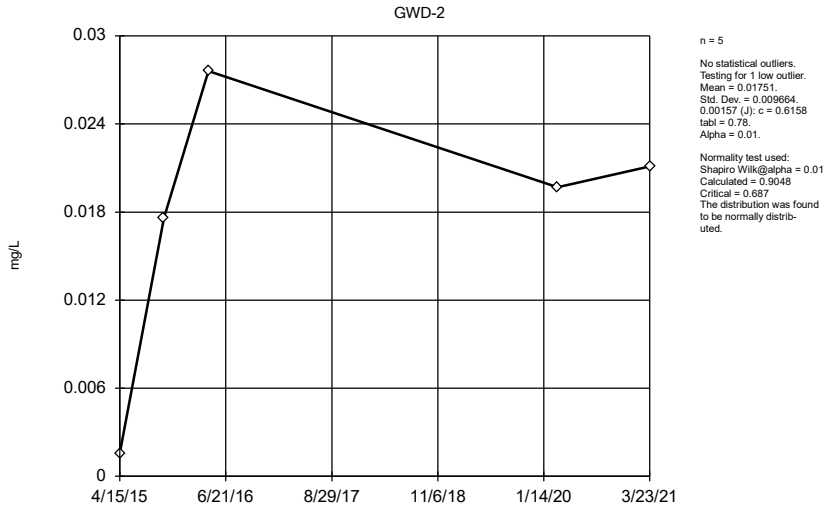
GWD-2



n = 5  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.000744, std. dev. 0.0006419, critical Tn 1.672  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.8236  
Critical = 0.686  
The distribution was found to be normally distributed.

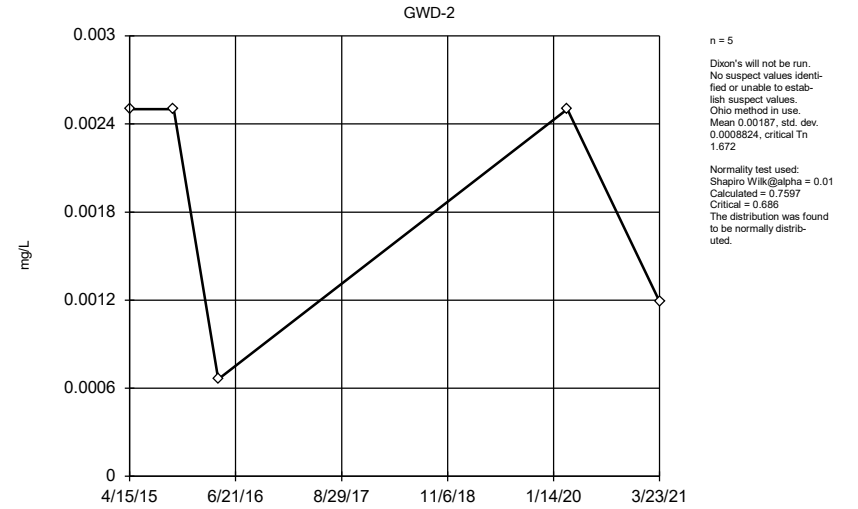
Constituent: Lead Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



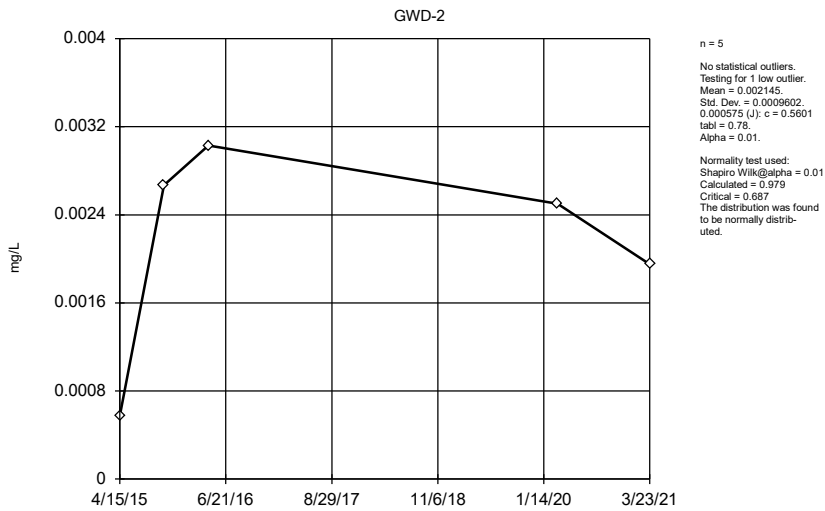
Constituent: Nickel Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



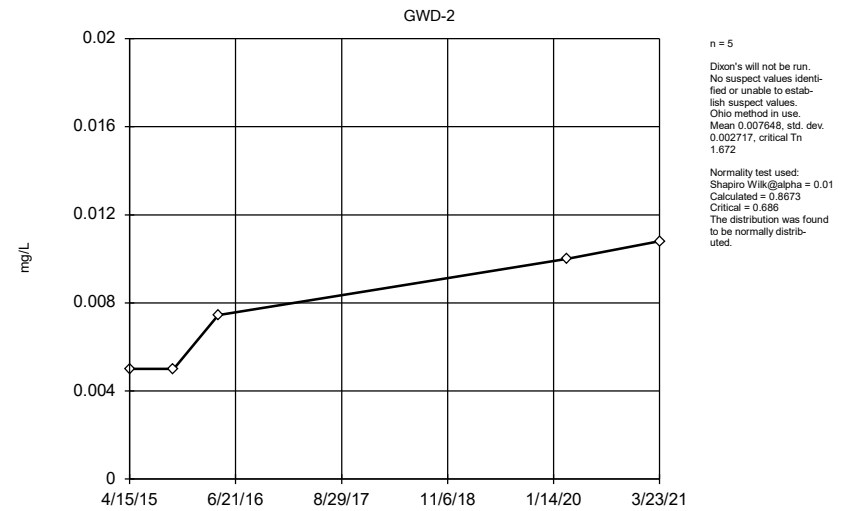
Constituent: Selenium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Vanadium Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



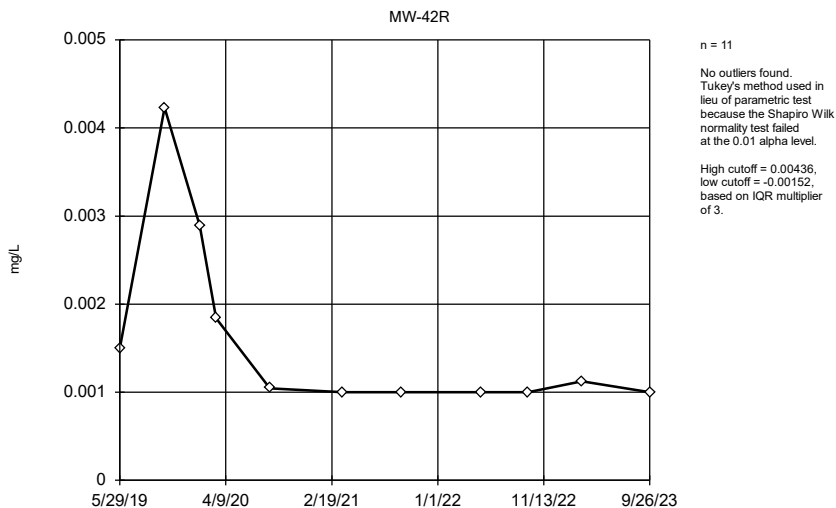
Constituent: Zinc Analysis Run 2/26/2025 2:14 PM View: 2024AWQR-GWD-2\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

# MW-42R BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 7:22 PM

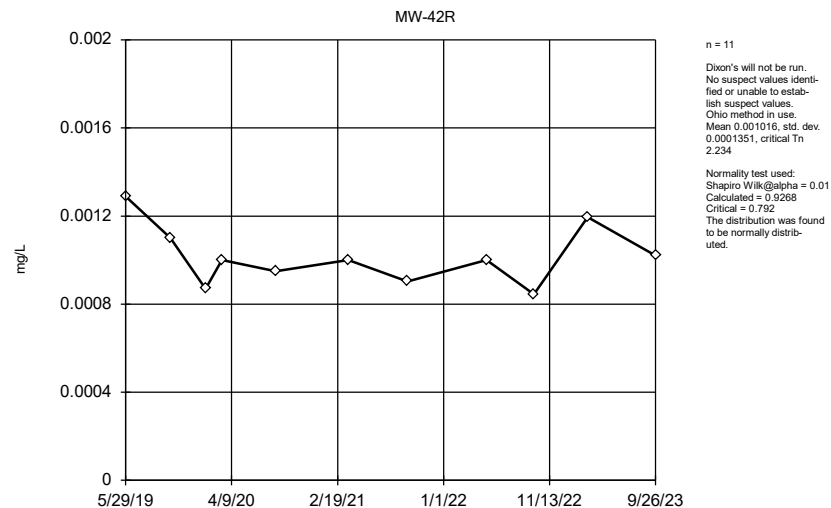
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Antimony (mg/L)	MW-42R	No	n/a	n/a	NP (nm)/OH	NaN	11	0.001603	0.001048	unknown	ShapiroWilk
Arsenic (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.001016	0.0001351	normal	ShapiroWilk
Barium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.02443	0.004789	normal	ShapiroWilk
Beryllium (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.0004976	0.000007836	n/a	n/a
Cadmium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.000195	0.00008983	normal	ShapiroWilk
Chromium (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.002398	0.0003377	n/a	n/a
Cobalt (mg/L)	MW-42R	No	n/a	n/a	Dixon/OH	0.01	12	0.004744	0.001288	normal	ShapiroWilk
<b>Copper (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.00419,0.00905</b>	<b>8/19/2020,5/29/2019</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>11</b>	<b>0.003365</b>	<b>0.001967</b>	<b>normal</b>	<b>ShapiroWilk</b>
Lead (mg/L)	MW-42R	No	n/a	n/a	OH	NaN	11	0.0002916	0.000116	n/a	n/a
<b>Nickel (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.0469</b>	<b>5/29/2019</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>11</b>	<b>0.02061</b>	<b>0.009487</b>	<b>normal</b>	<b>ShapiroWilk</b>
Selenium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.003925	0.003093	ln(x)	ShapiroWilk
<b>Thallium (mg/L)</b>	<b>MW-42R</b>	<b>Yes</b>	<b>0.001</b>	<b>5/29/2019</b>	<b>OH</b>	<b>NaN</b>	<b>11</b>	<b>0.0005608</b>	<b>0.0001542</b>	<b>n/a</b>	<b>n/a</b>
Vanadium (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.00185	0.0005645	normal	ShapiroWilk
Zinc (mg/L)	MW-42R	No	n/a	n/a	EPA/OH	0.05	11	0.01111	0.003106	ln(x)	ShapiroWilk

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



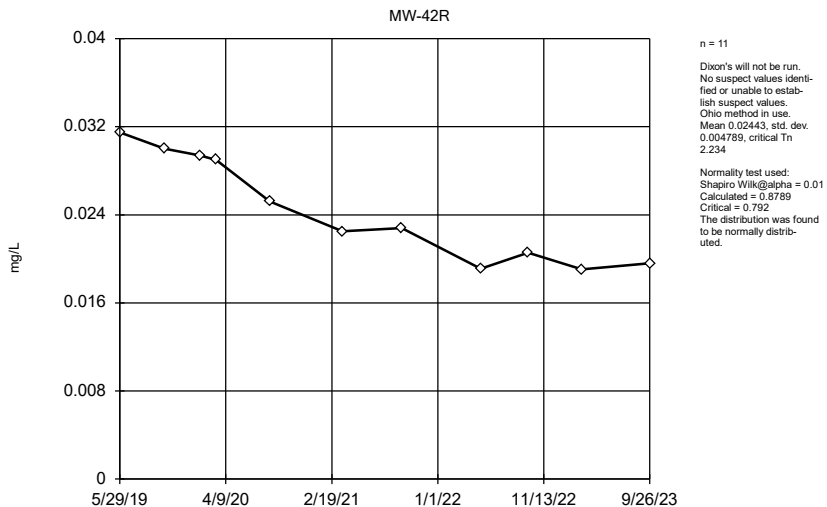
Constituent: Antimony Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGOOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



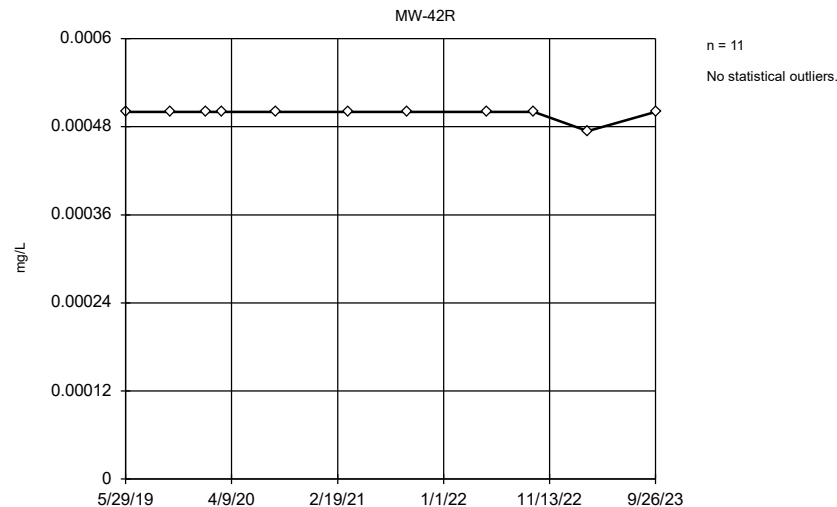
Constituent: Arsenic Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGOOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



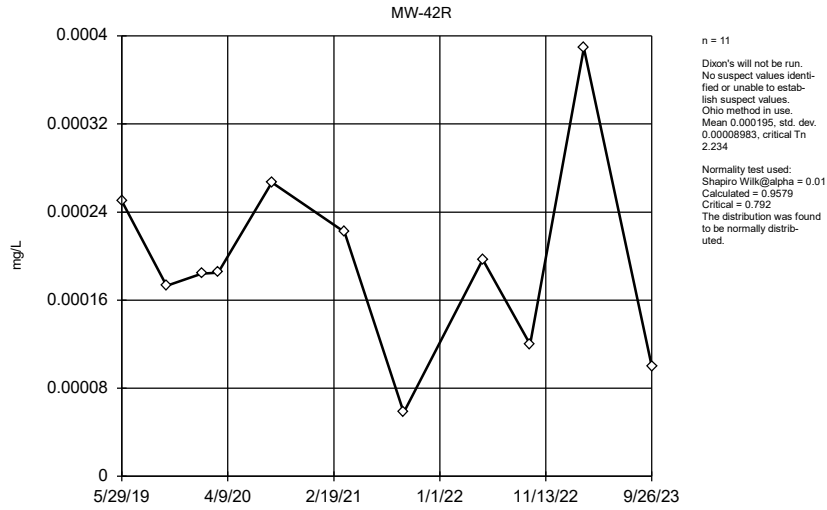
Constituent: Barium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGOOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm



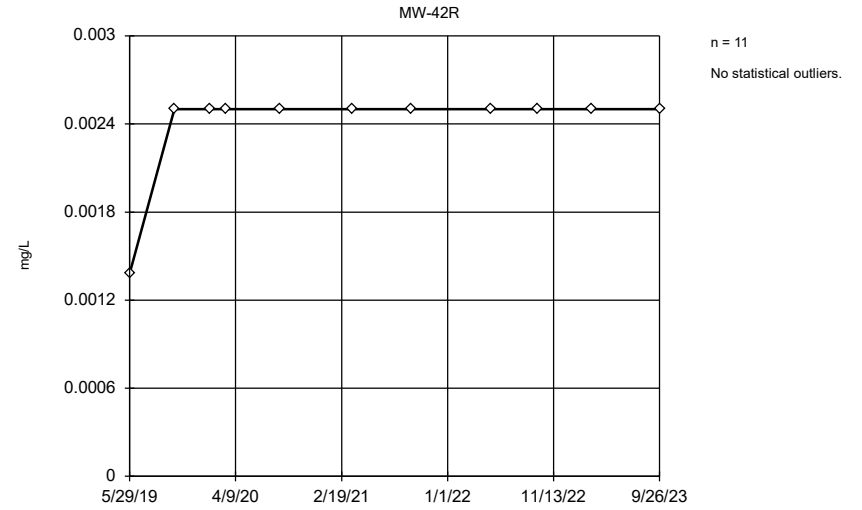
Constituent: Beryllium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGOOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



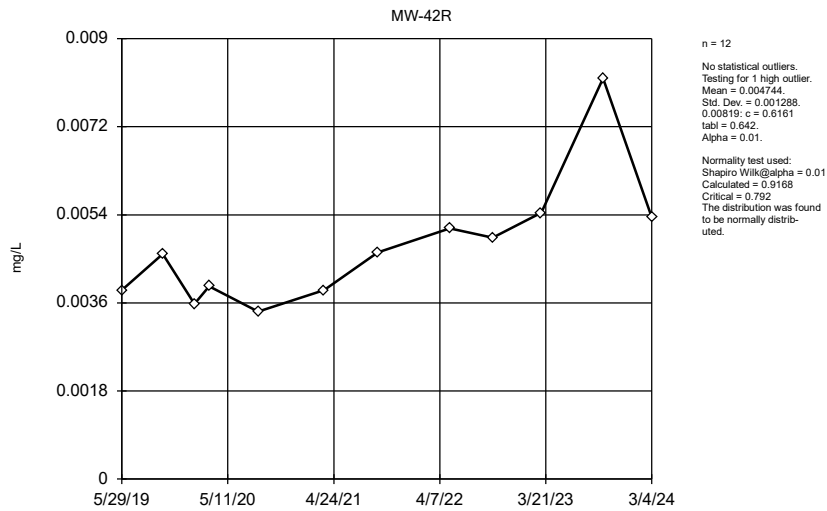
Constituent: Cadmium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Ohio EPA 0715 Outlier Algorithm



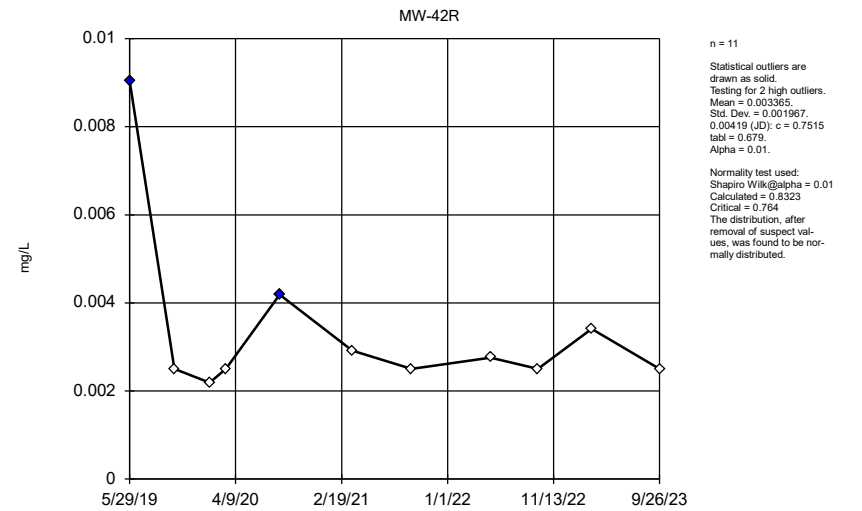
Constituent: Chromium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Cobalt Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

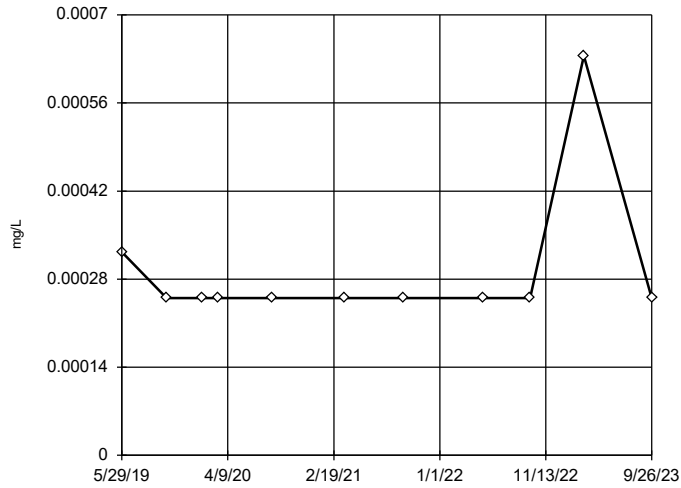
Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



Constituent: Copper Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-42R

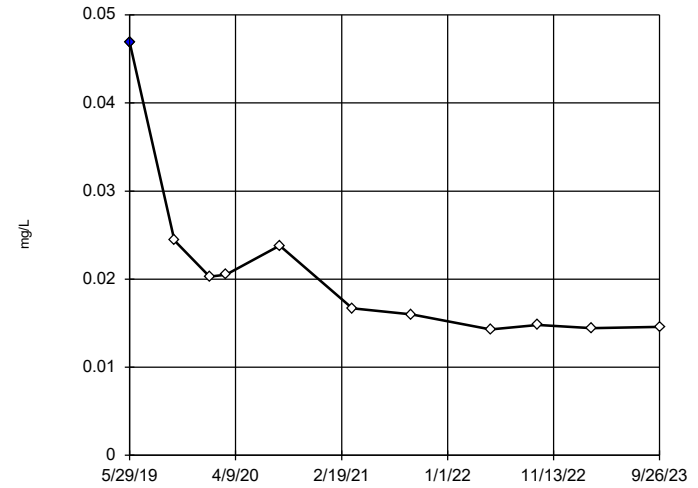


n = 11  
No statistical outliers.

Constituent: Lead Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm

MW-42R

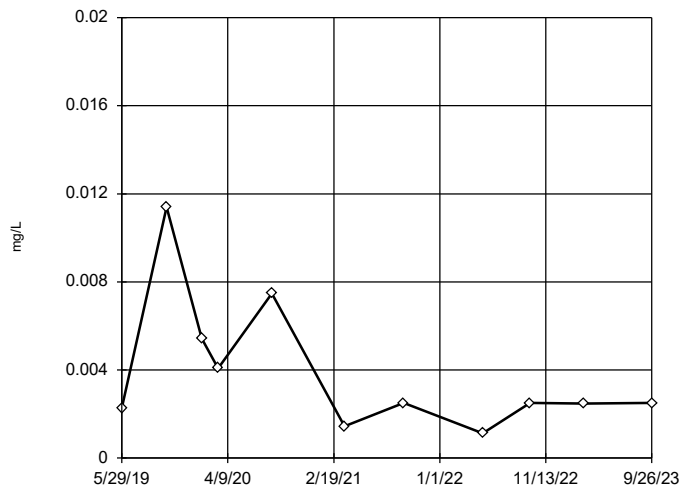


n = 11  
Statistical outlier is drawn as solid.  
Testing for 1 high outlier.  
Mean = 0.02061  
Std. Dev. = 0.009487  
0.0469; c = 0.7119  
tab1 = 0.679  
Alpha = 0.01.  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.8395  
Critical = 0.781  
The distribution, after removal of suspect value, was found to be normally distributed.

Constituent: Nickel Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### EPA Screening (suspected outliers for Dixon's Test)

MW-42R

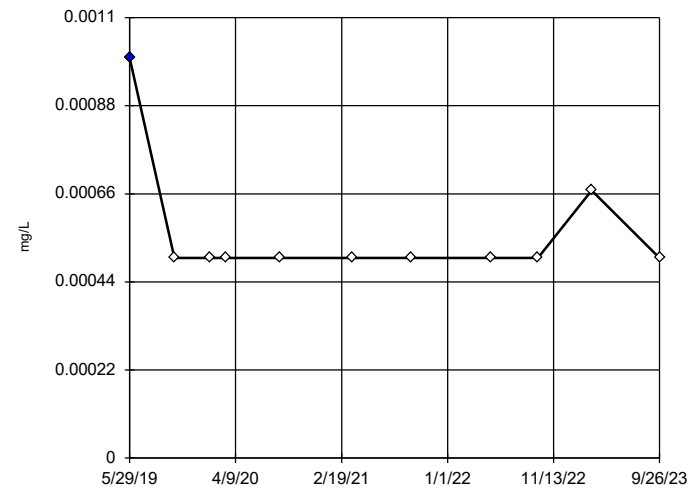


n = 11  
Dixon's will not be run.  
No suspect values identified or unable to establish suspect values.  
Ohio method in use.  
Mean 0.003925, std. dev. 0.003093, critical Tn 2.234  
Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.9368  
Critical = 0.792 (after natural log transformation)  
The distribution was found to be log-normal.

Constituent: Selenium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

### Ohio EPA 0715 Outlier Algorithm

MW-42R

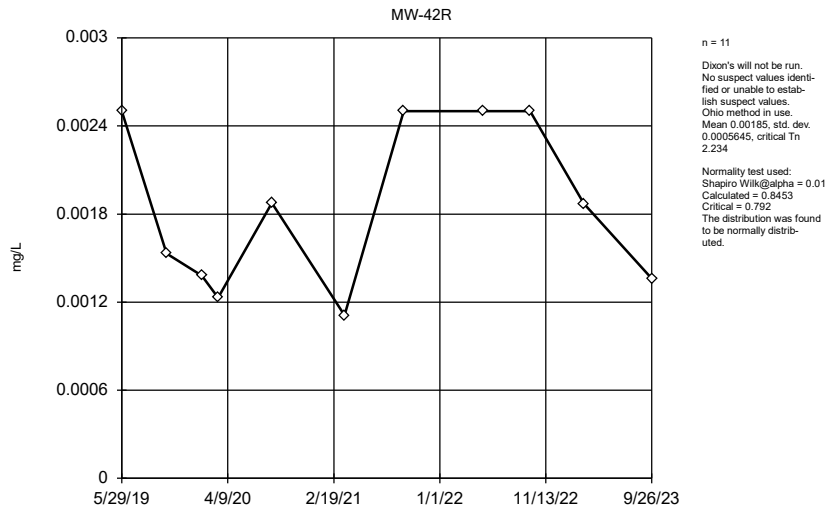


n = 11  
Statistical outlier is drawn as solid.  
Outlier per Ohio method.

Constituent: Thallium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

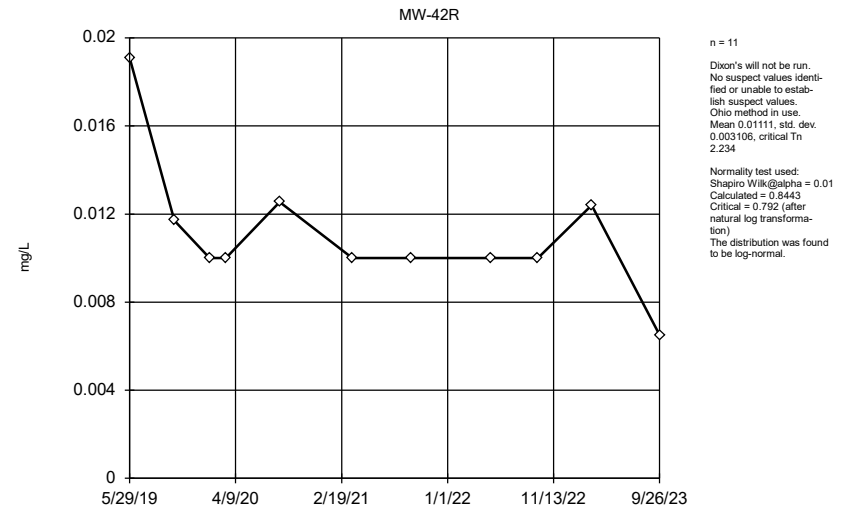


EPA Screening (suspected outliers for Dixon's Test)



Constituent: Vanadium Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

EPA Screening (suspected outliers for Dixon's Test)



Constituent: Zinc Analysis Run 2/27/2025 7:18 PM View: 2024AWQR-MW-42R\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

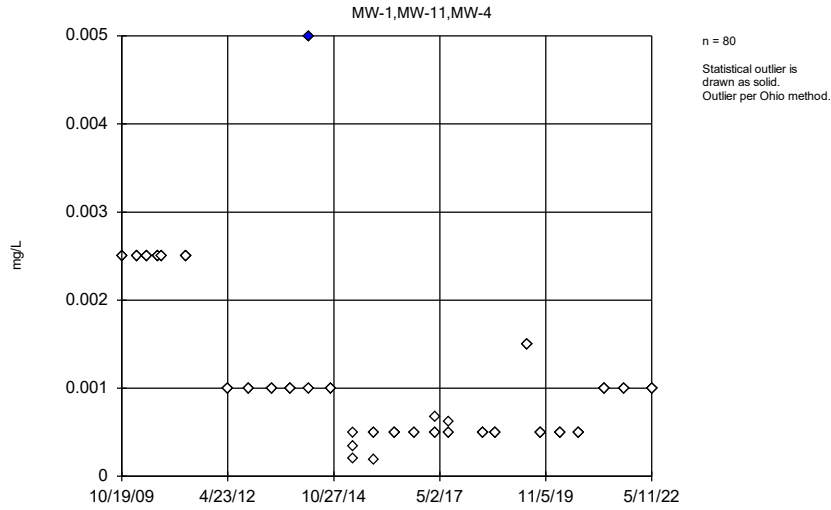
**Outlier Test Summary Table and Graphs – Closed MSWLF Unit**

# BG Outlier Analysis

Cherokee County Sanitary Landfill    Client: SCS Engineers    Data: Sanitas CHRKE Closed Master    Printed 2/28/2025, 3:13 PM

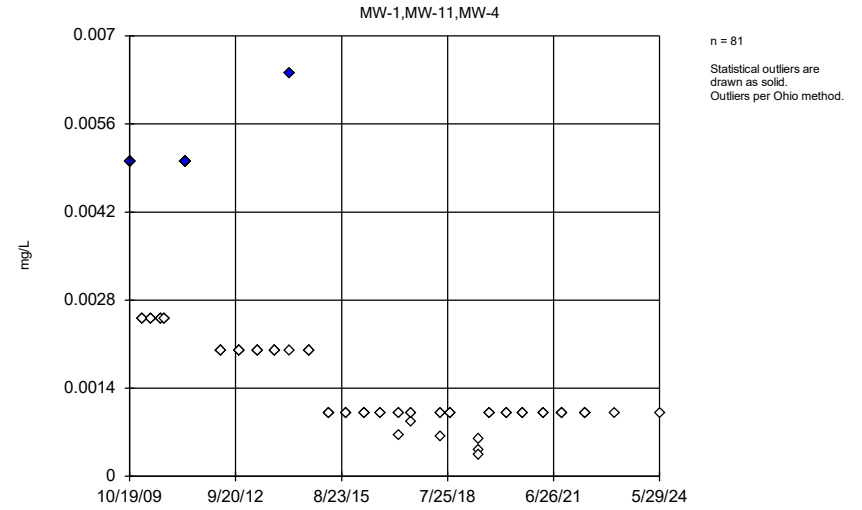
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
<b>Antimony (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.005</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>80</b>	<b>0.0012</b>	<b>0.0008913</b>	<b>n/a</b>	<b>n/a</b>
<b>Arsenic (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.0064,0.005,0.005</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>81</b>	<b>0.001752</b>	<b>0.001243</b>	<b>n/a</b>	<b>n/a</b>
Barium (mg/L)	MW-11,MW-1,MW-4	No	n/a	n/a w/combined bg	EPA/OH	0.05	82	0.03684	0.02306	ln(x)	ShapiroFrancia
<b>Cadmium (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.0066,0.0079,0.0105,0.0494</b>	<b>n/a w/combined bg</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>80</b>	<b>0.001727</b>	<b>0.005707</b>	<b>unknown</b>	<b>ShapiroFrancia</b>
<b>Chromium (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.014,0.0125,0.01,0.01,0.01</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>80</b>	<b>0.00396</b>	<b>0.002695</b>	<b>n/a</b>	<b>n/a</b>
<b>Cobalt (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.0074</b>	<b>n/a w/combined bg</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>63</b>	<b>0.0007968</b>	<b>0.001114</b>	<b>unknown</b>	<b>ShapiroFrancia</b>
<b>Copper (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.005,0.005,0.005,0.0133,0.0068,0.0051,0.0111,0.0</b>	<b>n/a w/combined bg</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>80</b>	<b>0.003762</b>	<b>0.00356</b>	<b>unknown</b>	<b>ShapiroFrancia</b>
Lead (mg/L)	MW-1,MW-11,MW-4	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	82	0.002582	0.004646	unknown	ShapiroFrancia
Nickel (mg/L)	MW-11,MW-4,MW-1	No	n/a	n/a w/combined bg	EPA/OH	0.05	82	0.006801	0.008193	ln(x)	ShapiroFrancia
Selenium (mg/L)	MW-1,MW-11,MW-4	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	80	0.004993	0.004639	unknown	ShapiroFrancia
<b>Silver (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.01,0.005,0.004,0.0025,0.0025,0.0025</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>80</b>	<b>0.001371</b>	<b>0.001574</b>	<b>n/a</b>	<b>n/a</b>
<b>Thallium (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.01,0.002,0.002</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>80</b>	<b>0.0008656</b>	<b>0.001166</b>	<b>n/a</b>	<b>n/a</b>
<b>Vanadium (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.05,0.0424</b>	<b>n/a w/combined bg</b>	<b>OH</b>	<b>NaN</b>	<b>80</b>	<b>0.008904</b>	<b>0.01017</b>	<b>n/a</b>	<b>n/a</b>
<b>Zinc (mg/L)</b>	<b>MW-1,MW-11,MW-4</b>	<b>Yes</b>	<b>0.0551,0.0598,0.0772,0.05,1.3,0.113,0.119</b>	<b>n/a w/combined bg</b>	<b>NP (nrm)/OH</b>	<b>NaN</b>	<b>80</b>	<b>0.03498</b>	<b>0.1447</b>	<b>unknown</b>	<b>ShapiroFrancia</b>

Ohio EPA 0715 Outlier Algorithm, Pooled Background



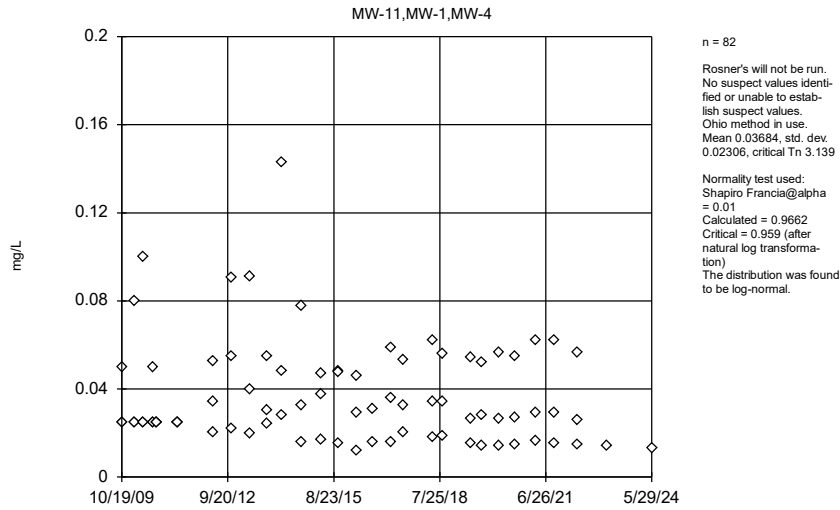
Constituent: Antimony Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Ohio EPA 0715 Outlier Algorithm, Pooled Background



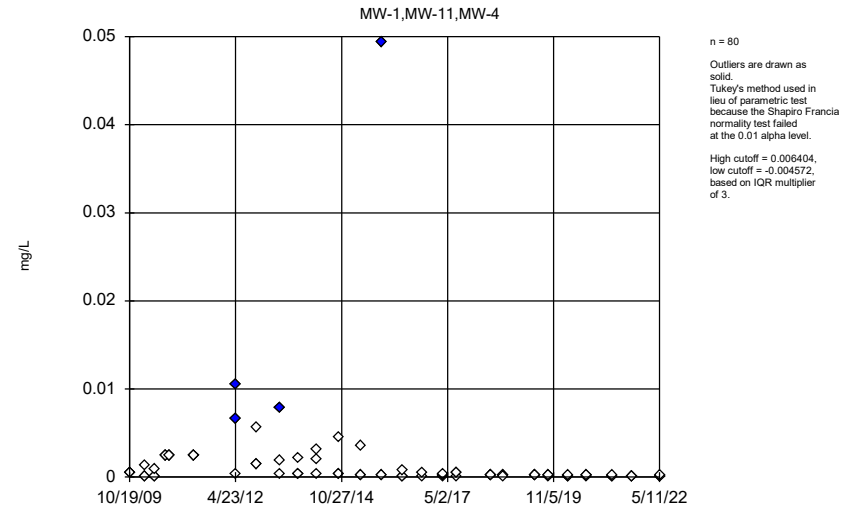
Constituent: Arsenic Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Rosner's Test)



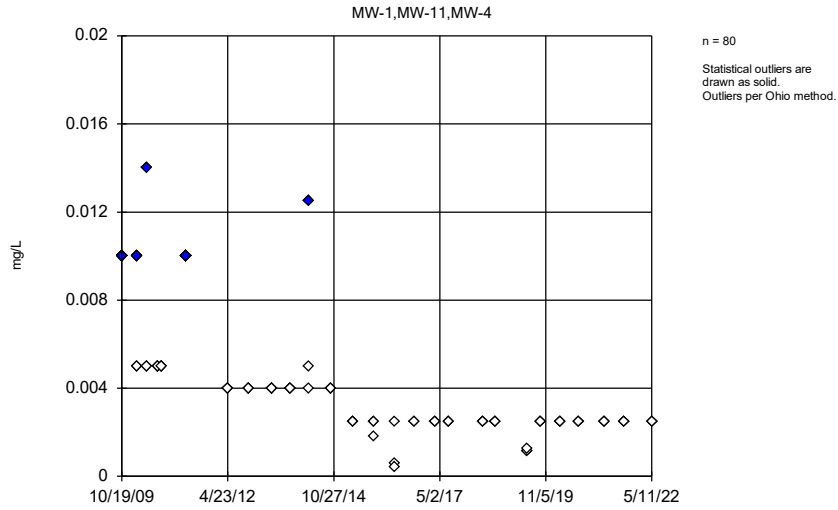
Constituent: Barium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



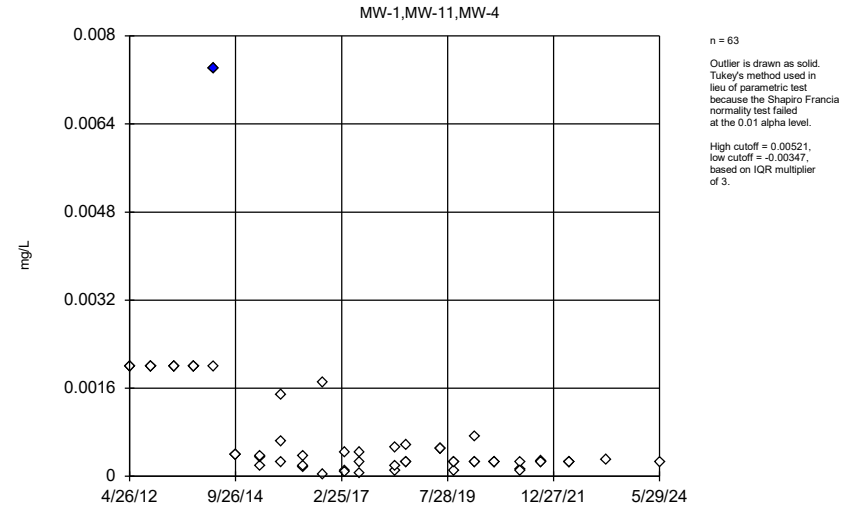
Constituent: Cadmium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background



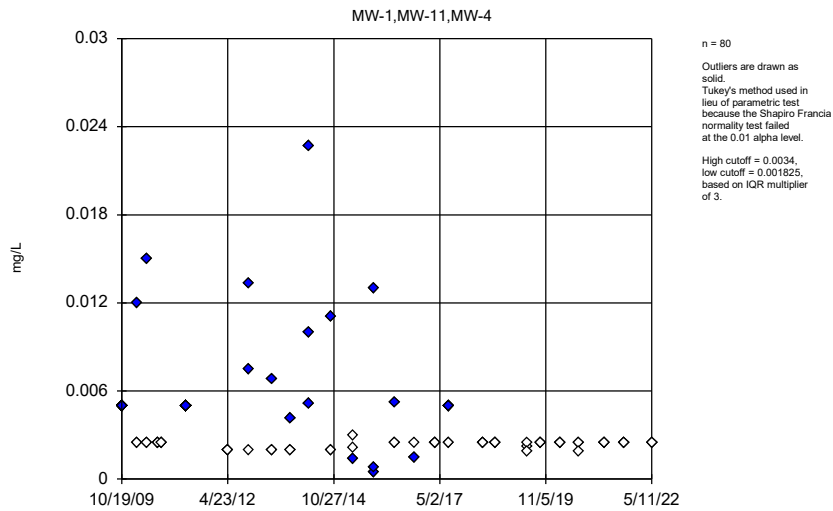
Constituent: Chromium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



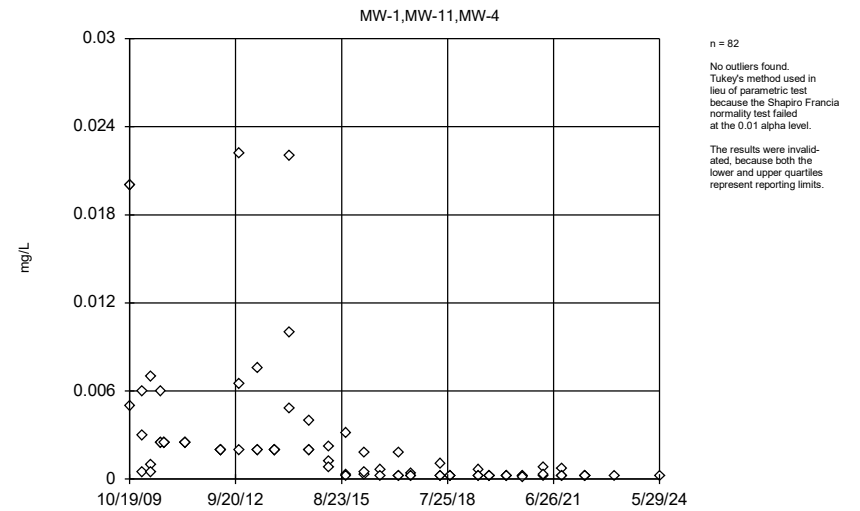
Constituent: Cobalt Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



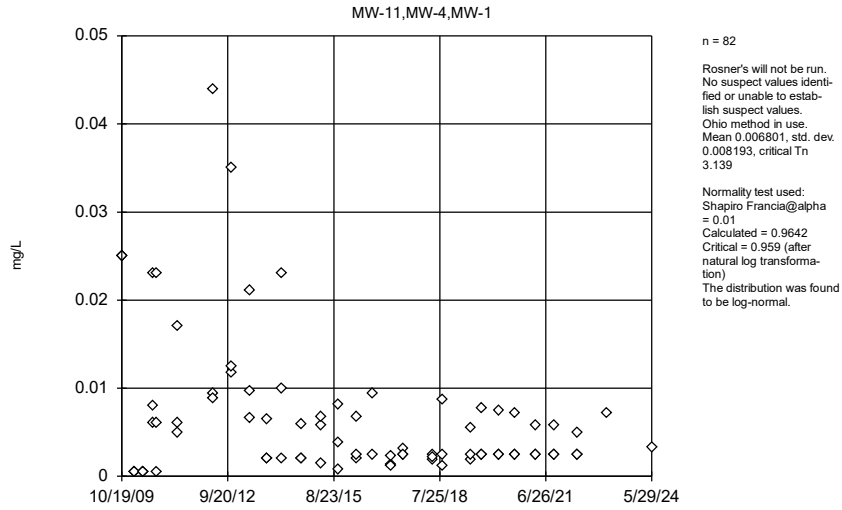
Constituent: Copper Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



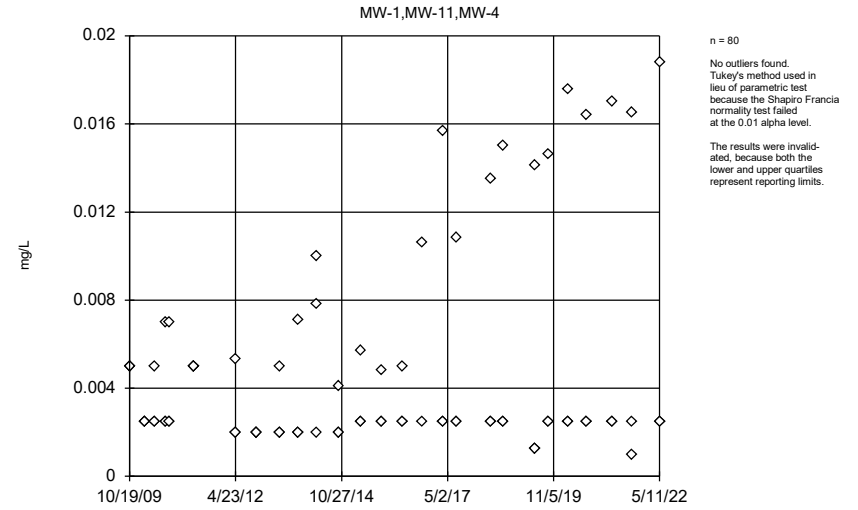
Constituent: Lead Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### EPA Screening (suspected outliers for Rosner's Test)



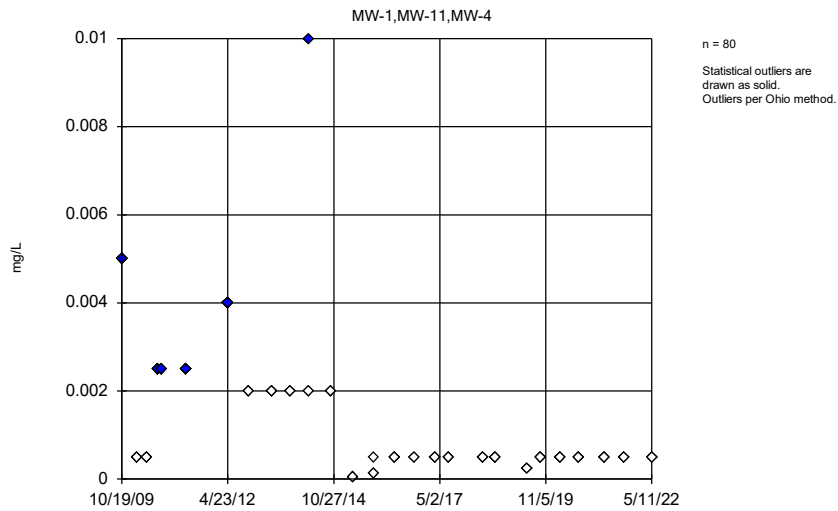
Constituent: Nickel Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background



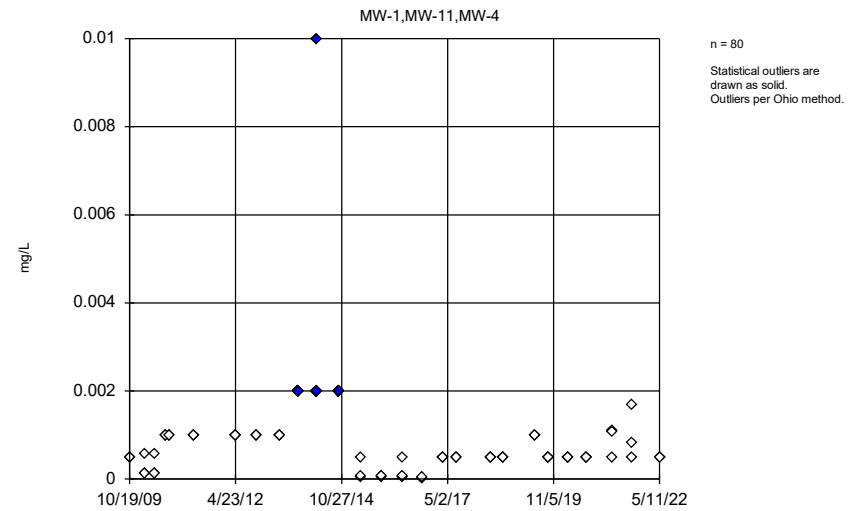
Constituent: Selenium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background



Constituent: Silver Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

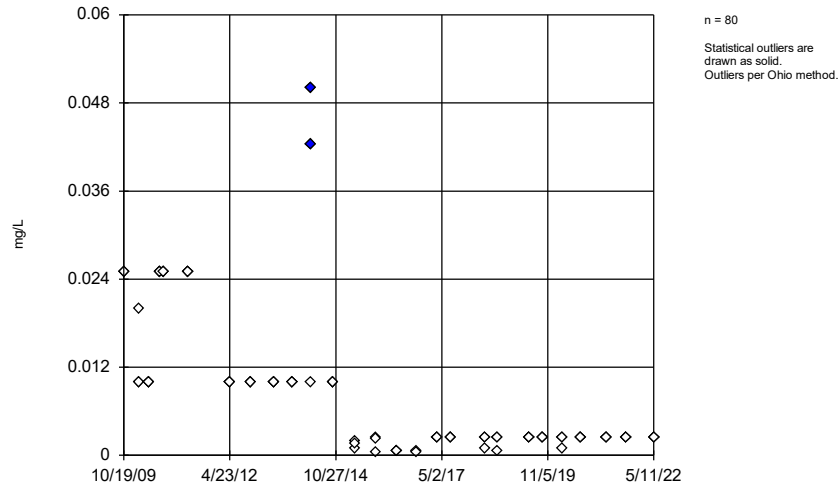
### Ohio EPA 0715 Outlier Algorithm, Pooled Background



Constituent: Thallium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm, Pooled Background

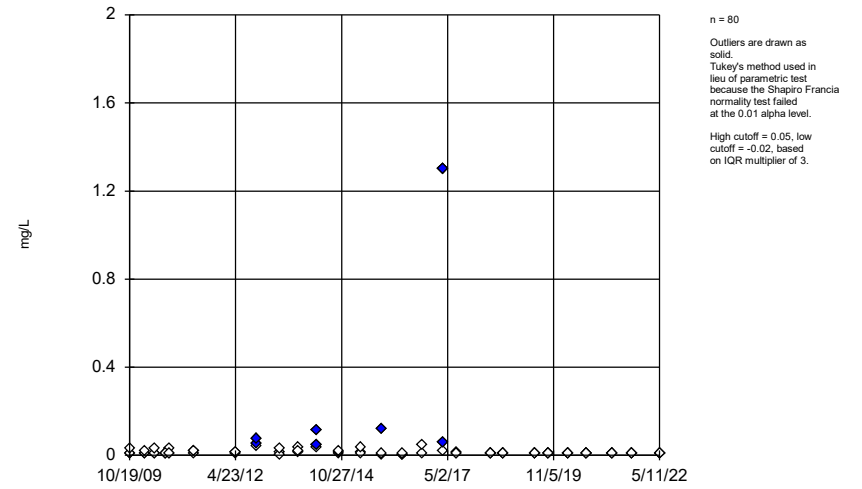
MW-1,MW-11,MW-4



Constituent: Vanadium Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-1,MW-11,MW-4



Constituent: Zinc Analysis Run 2/28/2025 2:58 PM View: 2024AWQR-BG\_Outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

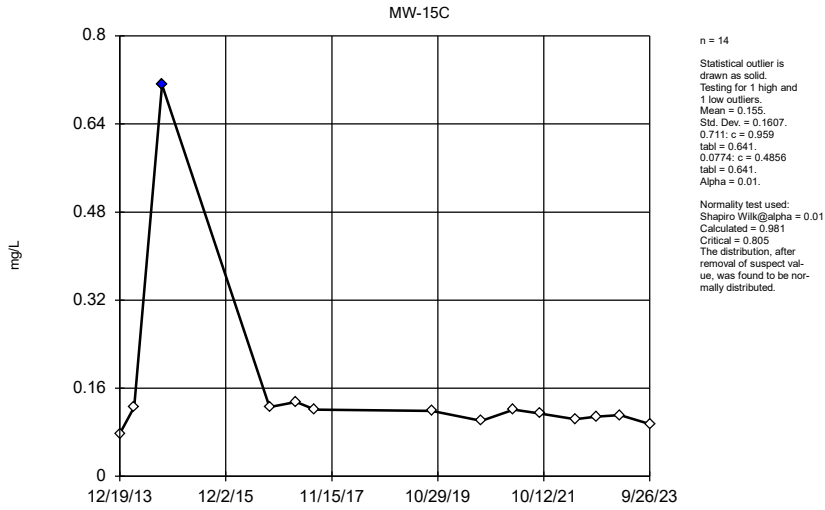
# MW-15C BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 2/28/2025, 4:12 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>
<b>Barium (mg/L)</b>	<b>MW-15C</b>	<b>Yes</b>	<b>0.711</b>	<b>9/30/2014</b>	<b>Dixon/OH</b>	<b>0.01</b>	<b>14</b>	<b>0.155</b>	<b>0.1607</b>	<b>normal</b>	<b>ShapiroWilk</b>
Cadmium (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	8	0.001839	0.002733	ln(x)	ShapiroWilk
Cobalt (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	17	0.0005391	0.0006417	ln(x)	ShapiroWilk
Nickel (mg/L)	MW-15C	No	n/a	n/a	EPA/OH	0.05	11	0.007845	0.002621	normal	ShapiroWilk
<b>Zinc (mg/L)</b>	<b>MW-15C</b>	<b>Yes</b>	<b>0.0426</b>	<b>9/30/2014</b>	<b>OH</b>	<b>NaN</b>	<b>8</b>	<b>0.01342</b>	<b>0.01199</b>	<b>n/a</b>	<b>n/a</b>

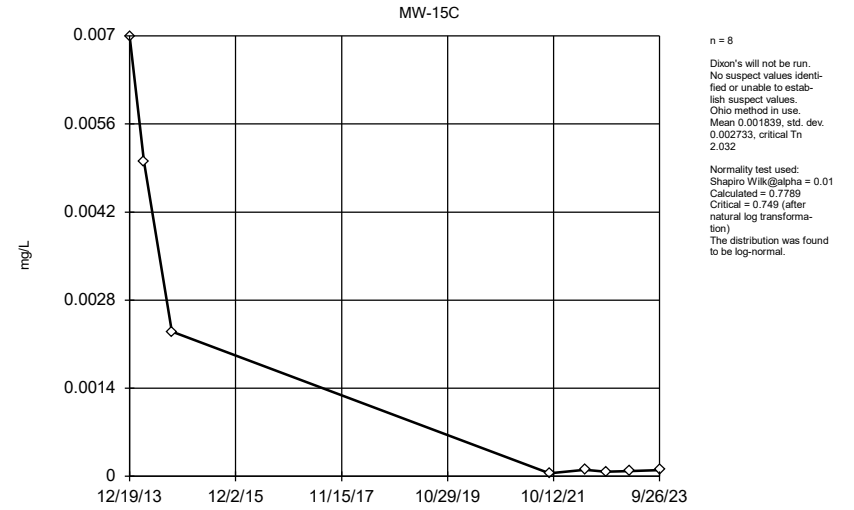


Dixon's Outlier Test / Ohio EPA 0715 Outlier Algorithm



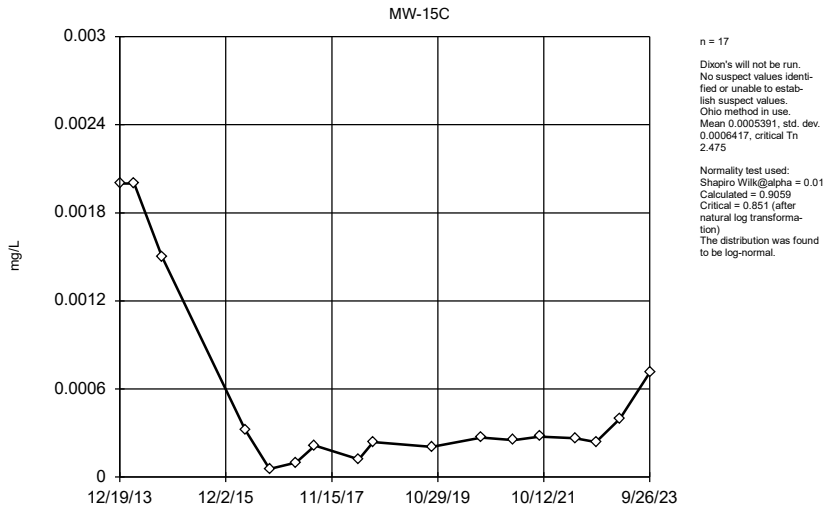
Constituent: Barium Analysis Run 2/28/2025 4:04 PM View: 2024AWQR-MW-15C\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Dixon's Test)



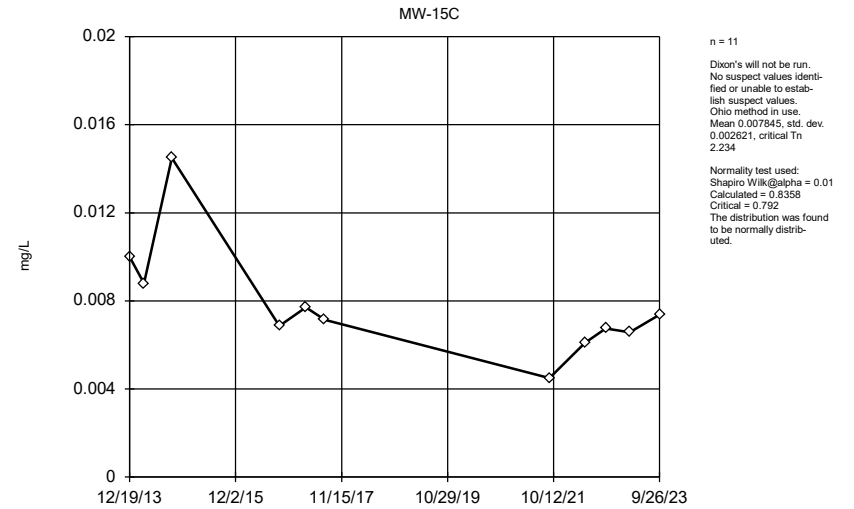
Constituent: Cadmium Analysis Run 2/28/2025 4:04 PM View: 2024AWQR-MW-15C\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cobalt Analysis Run 2/28/2025 4:04 PM View: 2024AWQR-MW-15C\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

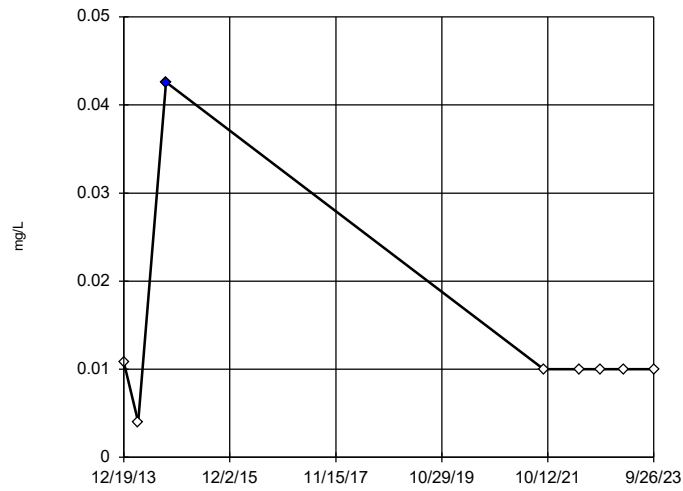
EPA Screening (suspected outliers for Dixon's Test)



Constituent: Nickel Analysis Run 2/28/2025 4:04 PM View: 2024AWQR-MW-15C\_BGOutliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

### Ohio EPA 0715 Outlier Algorithm

MW-15C



n = 8  
Statistical outlier is drawn as solid.  
Outlier per Ohio method.

Normality test used:  
Shapiro Wilk@alpha = 0.01  
Calculated = 0.8358  
Critical = 0.792  
The distribution, after removal of suspect value, was found to be normally distributed.

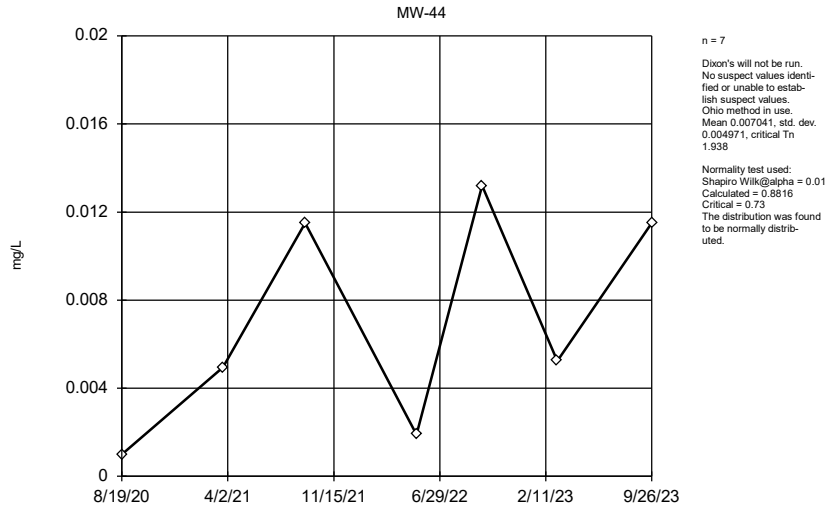
Constituent: Zinc Analysis Run 2/28/2025 4:04 PM View: 2024AWQR-MW-15C\_BGO outliers  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

# MW-44 BG Outlier Analysis

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master Printed 2/28/2025, 4:23 PM

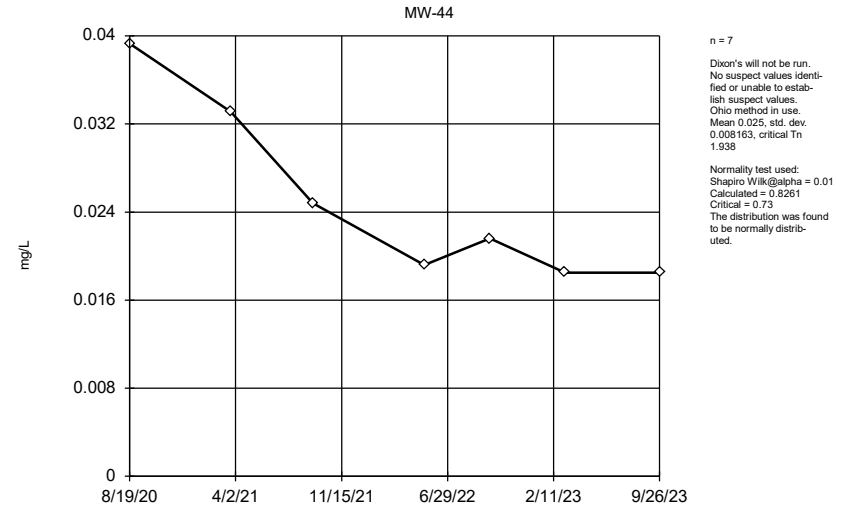
<u>Constituent</u>	<u>Well</u>	<u>Outlier</u>	<u>Value(s)</u>	<u>Date(s)</u>	<u>Method</u>	<u>Alpha</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>Distribution</u>	<u>Normality Test</u>
Arsenic (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.007041	0.004971	normal	ShapiroWilk
Barium (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.025	0.008163	normal	ShapiroWilk
Cobalt (mg/L)	MW-44	No	n/a	n/a	EPA/OH	0.05	7	0.001564	0.001503	normal	ShapiroWilk
Nickel (mg/L)	MW-44	No	n/a	n/a	OH	NaN	5	0.002402	0.0002191	n/a	n/a

EPA Screening (suspected outliers for Dixon's Test)



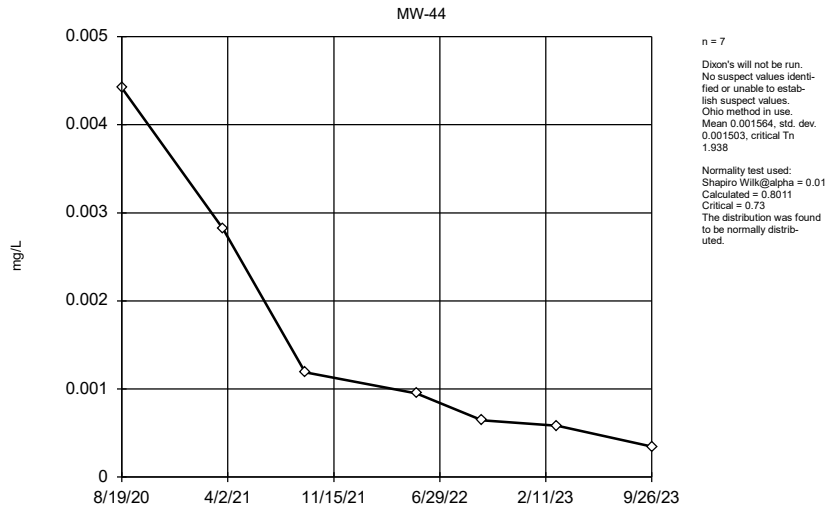
Constituent: Arsenic Analysis Run 2/28/2025 4:22 PM View: 2024AWQR-MW-44\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Dixon's Test)



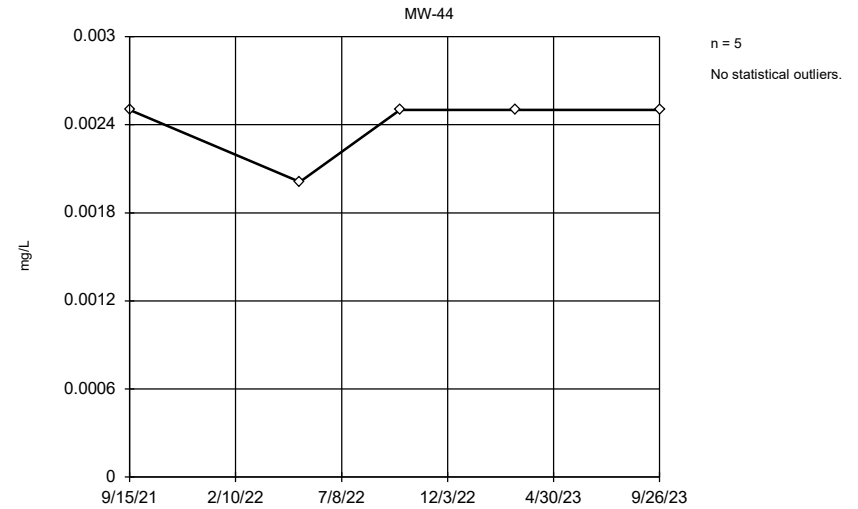
Constituent: Barium Analysis Run 2/28/2025 4:22 PM View: 2024AWQR-MW-44\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

EPA Screening (suspected outliers for Dixon's Test)



Constituent: Cobalt Analysis Run 2/28/2025 4:22 PM View: 2024AWQR-MW-44\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Ohio EPA 0715 Outlier Algorithm



Constituent: Nickel Analysis Run 2/28/2025 4:22 PM View: 2024AWQR-MW-44\_BGO outliers  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

**Intrawell Prediction Limits Summary Table and Graphs –  
Open MSWLF Unit**

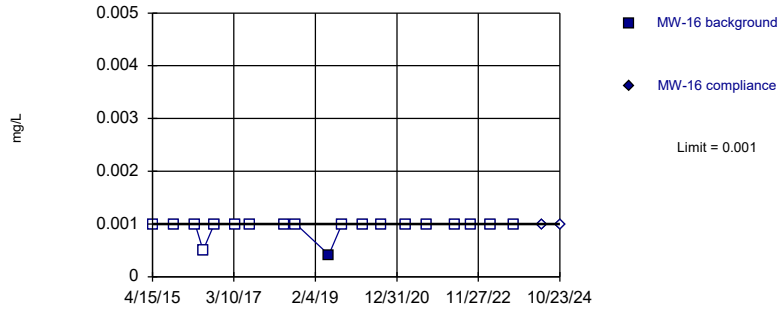
# MW-16 Intra Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 5:15 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	MW-16	0.001	n/a	10/23/2024	0.001ND	No	19	n/a	94.74	n/a	0.004832	NP Intra (NDs) 1 of 2
Barium (mg/L)	MW-16	0.3962	n/a	10/23/2024	0.171	No	19	n/a	0	No	0.0008776	Param Intra 1 of 2
Beryllium (mg/L)	MW-16	0.0005	n/a	10/23/2024	0.0005ND	No	19	n/a	94.74	n/a	0.004832	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	MW-16	0.0002835	n/a	10/23/2024	0.0001ND	No	19	n/a	63.16	n/a	0.004832	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-16	0.0004544	n/a	10/23/2024	0.00025ND	No	19	n/a	21.05	No	0.0008776	Param Intra 1 of 2
Copper (mg/L)	MW-16	0.0025	n/a	10/23/2024	0.0025ND	No	18	n/a	83.33	n/a	0.005373	NP Intra (NDs) 1 of 2
Lead (mg/L)	MW-16	0.000478	n/a	10/23/2024	0.00025ND	No	19	n/a	68.42	n/a	0.004832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	MW-16	0.01394	n/a	10/23/2024	0.00784	No	19	n/a	0	No	0.0008776	Param Intra 1 of 2
Silver (mg/L)	MW-16	0.000752	n/a	10/23/2024	0.0005ND	No	19	n/a	94.74	n/a	0.004832	NP Intra (NDs) 1 of 2
Thallium (mg/L)	MW-16	0.001	n/a	10/23/2024	0.0005ND	No	19	n/a	94.74	n/a	0.004832	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-16	0.0025	n/a	10/23/2024	0.0025ND	No	19	n/a	89.47	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	MW-16	0.01	n/a	10/23/2024	0.01ND	No	19	n/a	94.74	n/a	0.004832	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

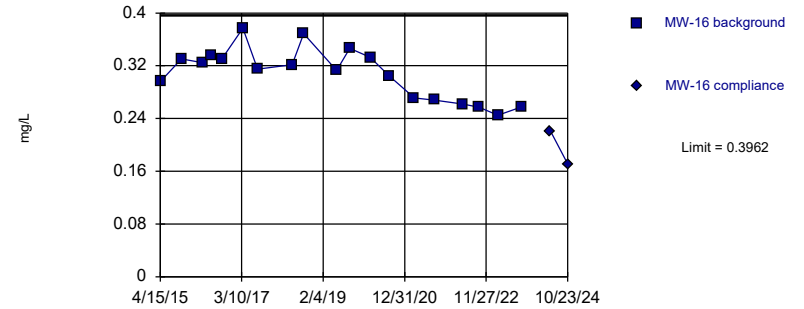


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

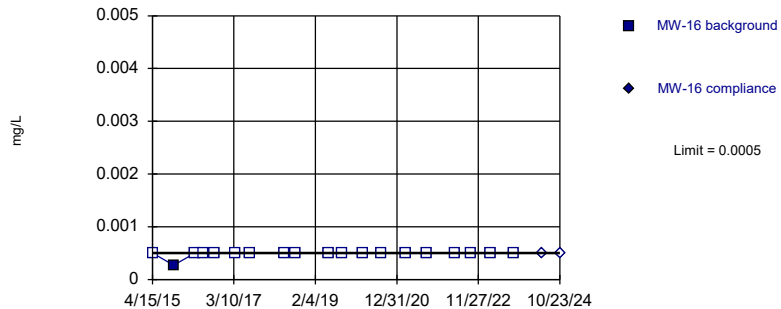


Background Data Summary: Mean=0.3083, Std. Dev.=0.03886, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9453, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Barium Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

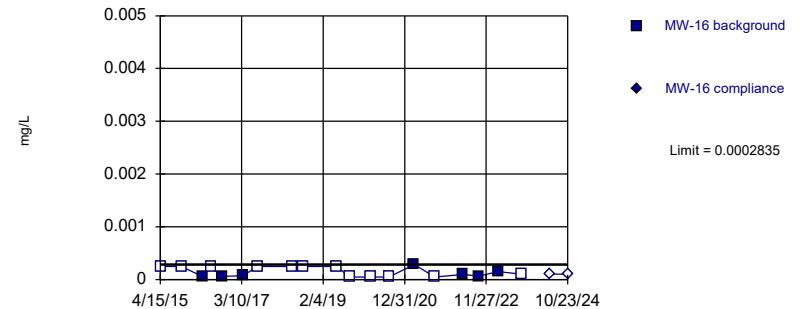


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Beryllium Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



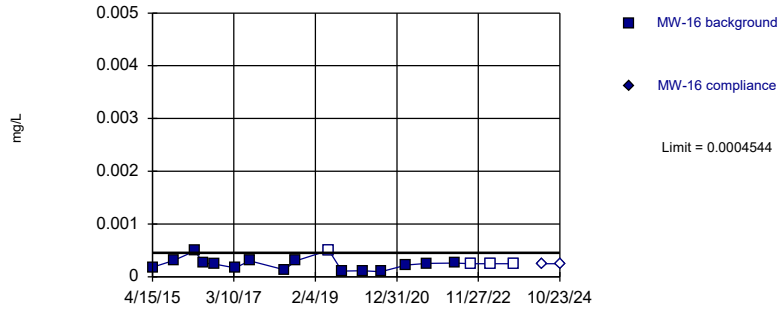
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 63.16% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Cadmium Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



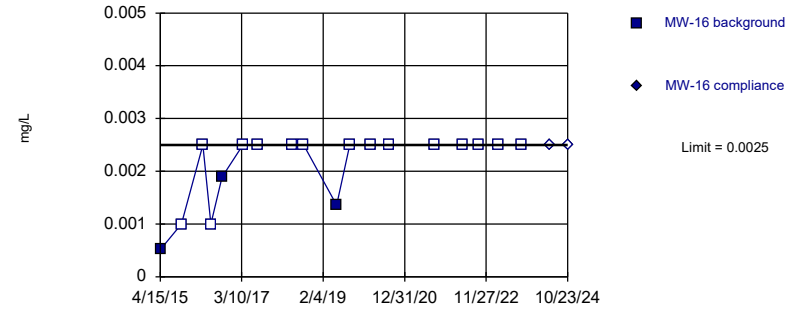
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0002298, Std. Dev.=0.00009929, n=19, 21.05% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8834, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Cobalt Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Non-parametric



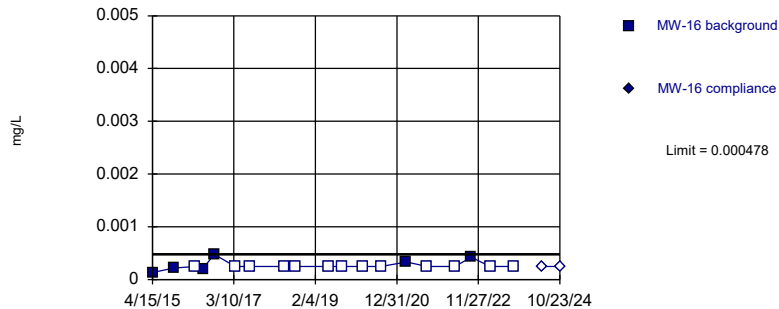
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Copper Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Non-parametric



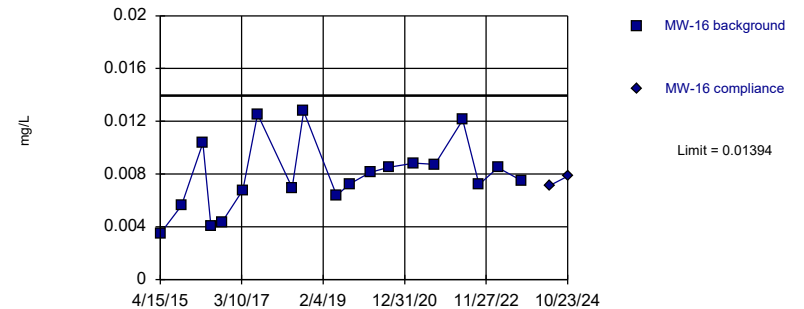
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Lead Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



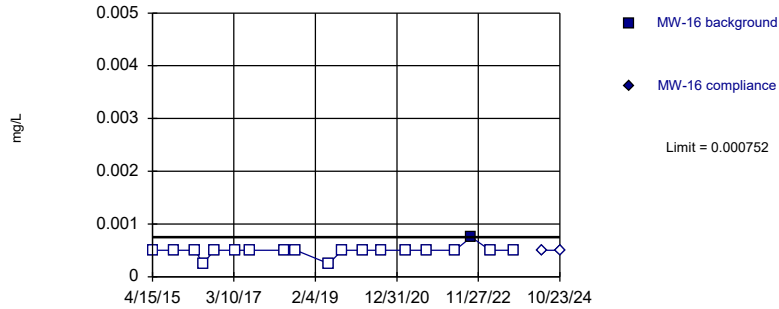
Background Data Summary: Mean=0.007898, Std. Dev.=0.002671, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.863. Kappa = 2.263 (c=12, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008776.

Constituent: Nickel Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master



Within Limit

Prediction Limit  
Intrawell Non-parametric

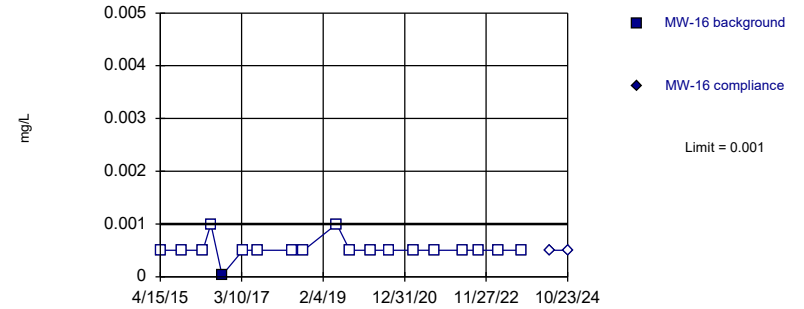


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Silver Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

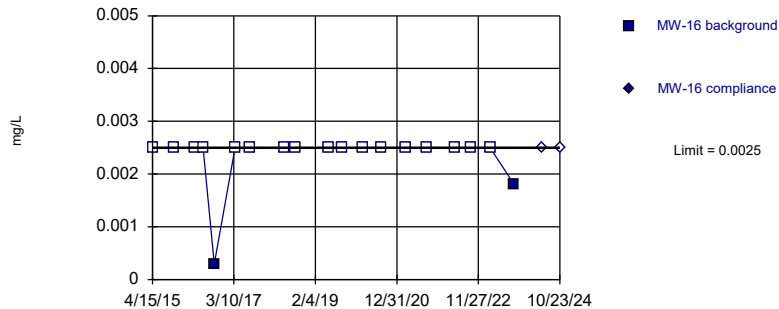


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

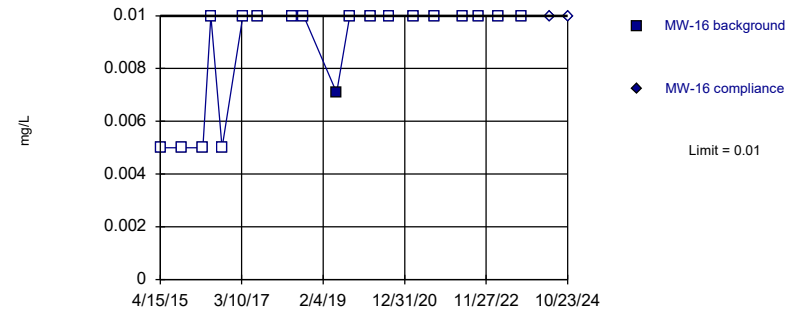


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Vanadium Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 94.74% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Zinc Analysis Run 2/27/2025 5:13 PM View: 2024AWQR-MW-16\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

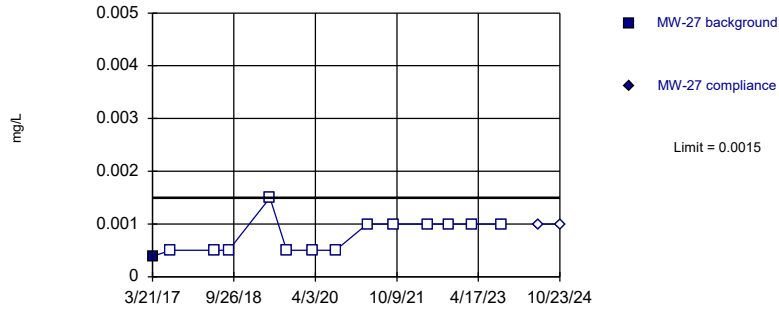
# MW-27 Intra Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 5:51 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-27	0.0015	n/a	10/23/2024	0.001ND	No	14	n/a	92.86	n/a	0.008612	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	MW-27	0.001	n/a	10/23/2024	0.001ND	No	14	n/a	92.86	n/a	0.008612	NP Intra (NDs) 1 of 2
Barium (mg/L)	MW-27	0.03802	n/a	10/23/2024	0.03185	No	14	n/a	0	No	0.001316	Param Intra 1 of 2
Chromium (mg/L)	MW-27	0.0025	n/a	10/23/2024	0.0025ND	No	14	n/a	85.71	n/a	0.008612	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-27	0.0005	n/a	10/23/2024	0.00025ND	No	14	n/a	71.43	n/a	0.008612	NP Intra (NDs) 1 of 2
Copper (mg/L)	MW-27	0.0025	n/a	10/23/2024	0.0025ND	No	14	n/a	92.86	n/a	0.008612	NP Intra (NDs) 1 of 2
Lead (mg/L)	MW-27	0.00025	n/a	10/23/2024	0.00025ND	No	14	n/a	92.86	n/a	0.008612	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-27	0.0025	n/a	10/23/2024	0.0025ND	No	14	n/a	57.14	n/a	0.008612	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

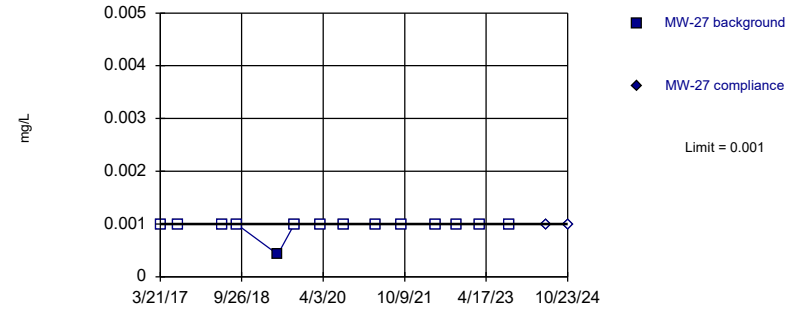


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Antimony Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

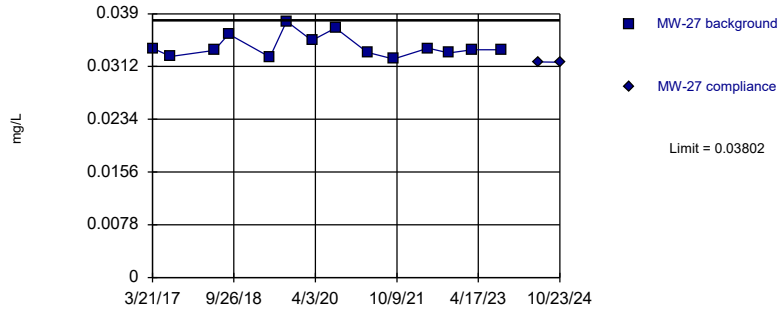


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Arsenic Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

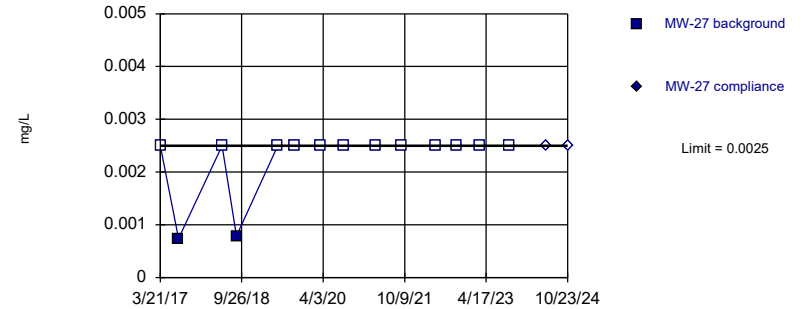


Background Data Summary: Mean=0.0342, Std. Dev.=0.001669, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8687, critical = 0.825. Kappa = 2.289 (c=8, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001316.

Constituent: Barium Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric

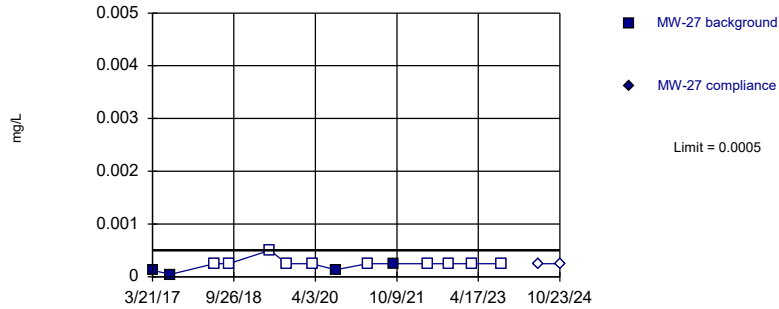


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Chromium Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

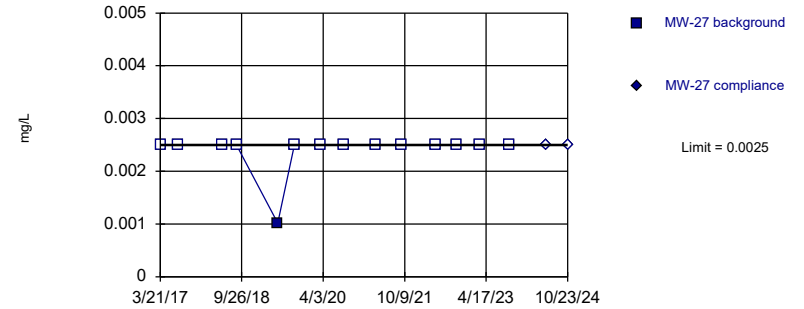


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Cobalt Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

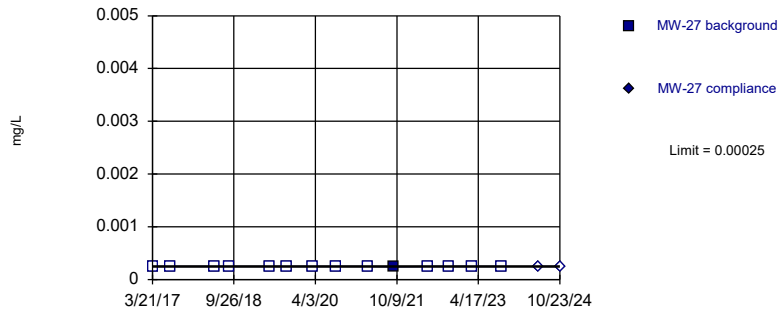


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Copper Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric

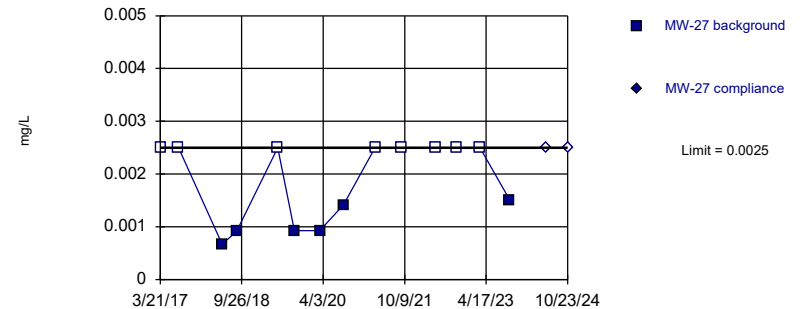


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Lead Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Vanadium Analysis Run 2/27/2025 5:49 PM View: 2024AWQR-MW-27\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

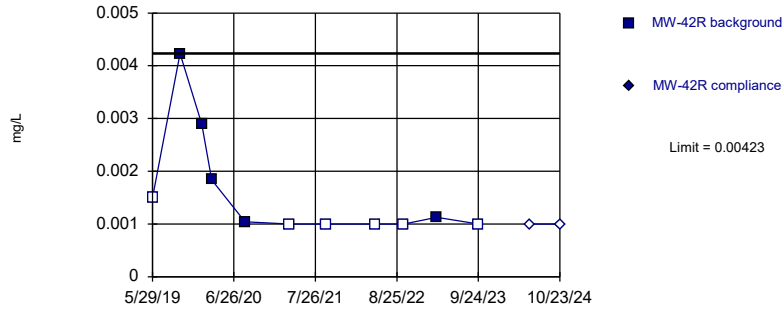
# MW-42R Intra Prediction Limit

Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master Printed 2/27/2025, 8:09 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	MW-42R	0.00423	n/a	10/23/2024	0.001ND	No	11	n/a	54.55	n/a	0.01276	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	MW-42R	0.001429	n/a	10/23/2024	0.001ND	No	11	n/a	27.27	No	0.0007523	Param Intra 1 of 2
Barium (mg/L)	MW-42R	0.03738	n/a	10/23/2024	0.0177	No	11	n/a	0	No	0.0007523	Param Intra 1 of 2
Beryllium (mg/L)	MW-42R	0.0005	n/a	10/23/2024	0.0005ND	No	11	n/a	90.91	n/a	0.01276	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	MW-42R	0.0004256	n/a	10/23/2024	0.000148J	No	11	n/a	18.18	No	0.0007523	Param Intra 1 of 2
Chromium (mg/L)	MW-42R	0.0025	n/a	10/23/2024	0.0025ND	No	11	n/a	90.91	n/a	0.01276	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	MW-42R	0.0081	n/a	10/23/2024	0.00505	No	12	n/a	0	No	0.0007523	Param Intra 1 of 2
Copper (mg/L)	MW-42R	0.00905	n/a	10/23/2024	0.00463J	No	11	n/a	45.45	n/a	0.01276	NP Intra (normality) ...
Lead (mg/L)	MW-42R	0.000635	n/a	10/23/2024	0.00025ND	No	11	n/a	81.82	n/a	0.01276	NP Intra (NDs) 1 of 2
Nickel (mg/L)	MW-42R	0.05051	n/a	10/23/2024	0.0136	No	11	n/a	0	ln(x)	0.0007523	Param Intra 1 of 2
Selenium (mg/L)	MW-42R	0.01389	n/a	10/23/2024	0.0025ND	No	11	n/a	27.27	sqrt(x)	0.0007523	Param Intra 1 of 2
Thallium (mg/L)	MW-42R	0.001	n/a	10/23/2024	0.0005ND	No	11	n/a	90.91	n/a	0.01276	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	MW-42R	0.002226	n/a	10/23/2024	0.0025ND	No	11	n/a	36.36	No	0.0007523	Param Intra 1 of 2
Zinc (mg/L)	MW-42R	0.0191	n/a	10/23/2024	0.01ND	No	11	n/a	54.55	n/a	0.01276	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit  
Intrawell Non-parametric

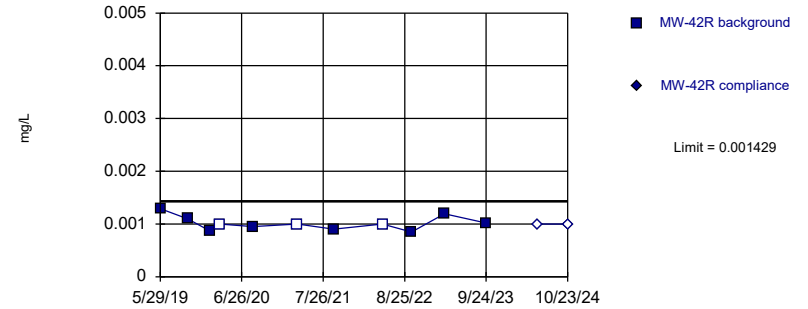


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Antimony Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

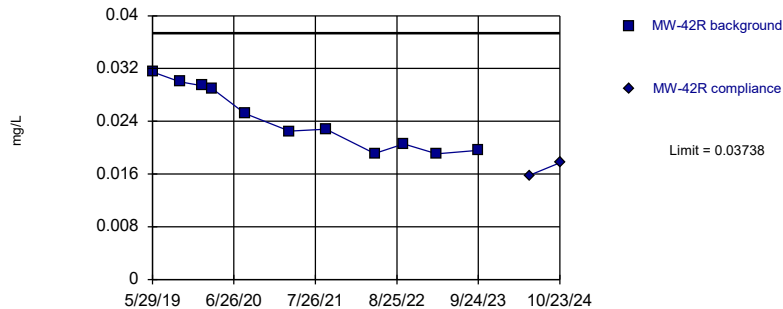


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001022, Std. Dev.=0.0001506, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9268, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Arsenic Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Parametric

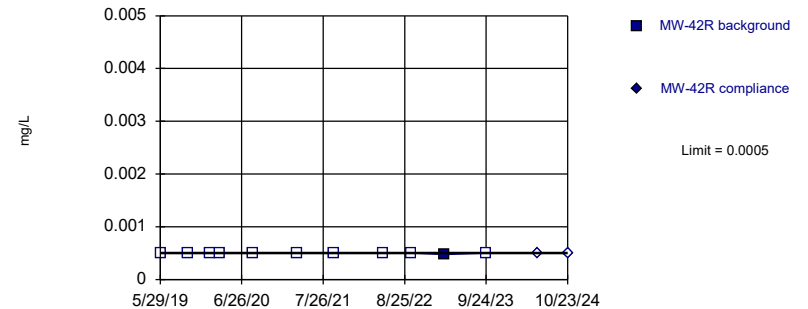


Background Data Summary: Mean=0.02443, Std. Dev.=0.004789, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8789, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Barium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
Intrawell Non-parametric



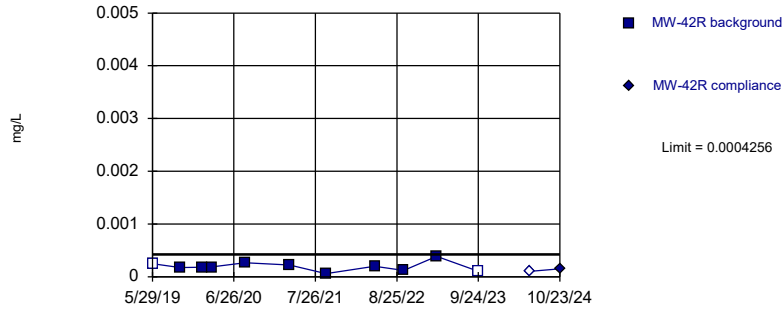
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Beryllium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



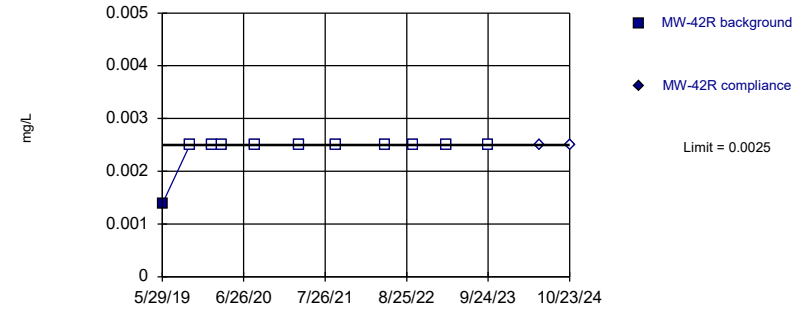
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0001948, Std. Dev.=0.00008534, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9579, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Cadmium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Non-parametric



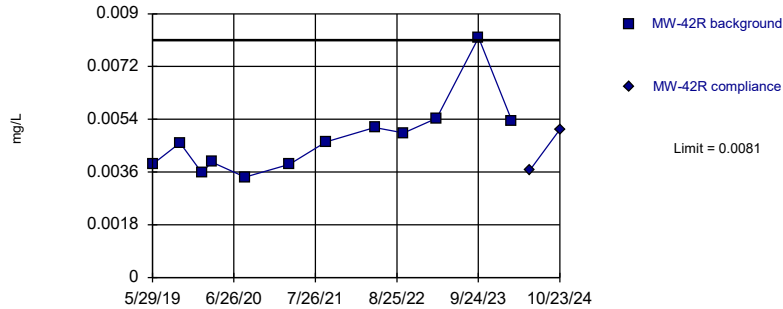
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Chromium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

Intrawell Parametric



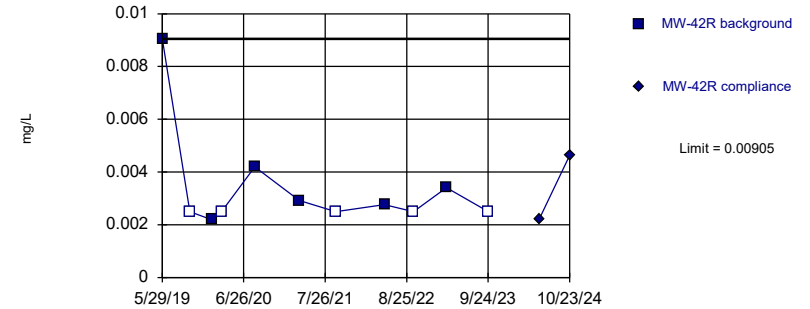
Background Data Summary: Mean=0.004744, Std. Dev.=0.001288, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8207, critical = 0.805. Kappa = 2.606 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Cobalt Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit

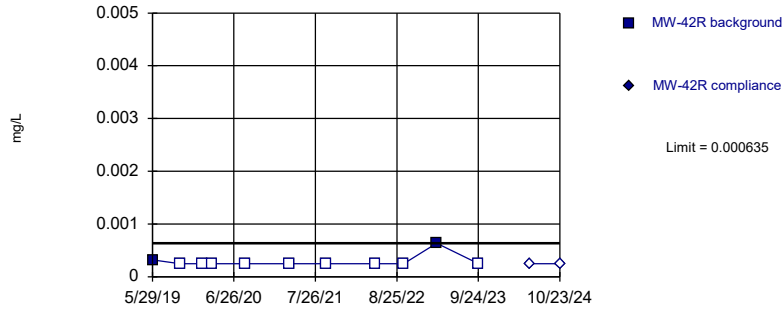
Intrawell Non-parametric



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 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Copper Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

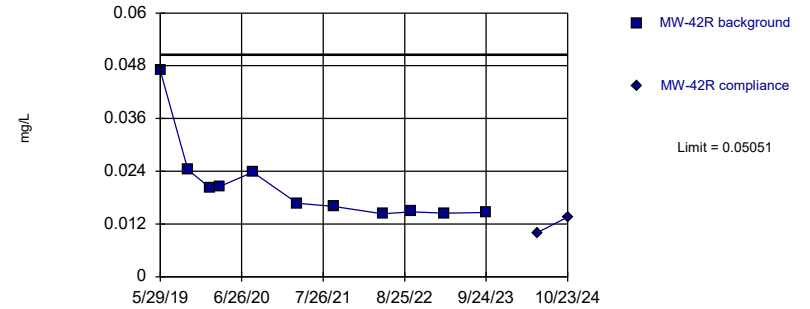
Within Limit  
Prediction Limit  
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Lead Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

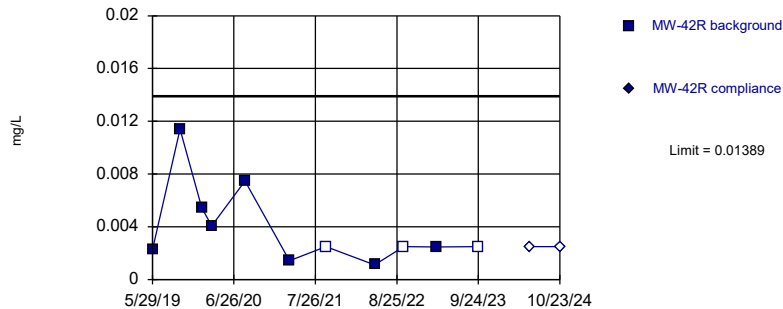
Within Limit  
Prediction Limit  
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.95, Std. Dev.=0.3566, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8062, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Nickel Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

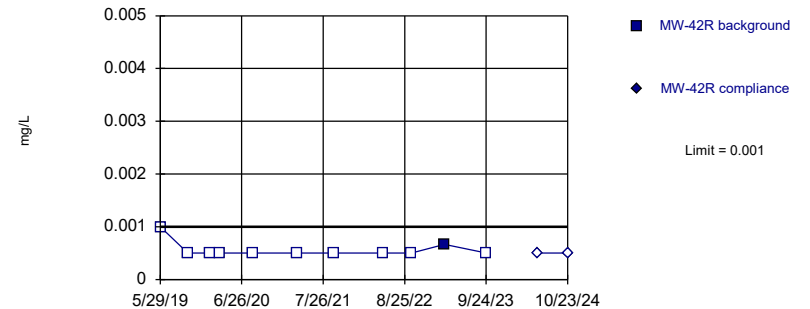
Within Limit  
Prediction Limit  
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05811, Std. Dev.=0.0221, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8762, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Selenium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit  
Prediction Limit  
Intrawell Non-parametric



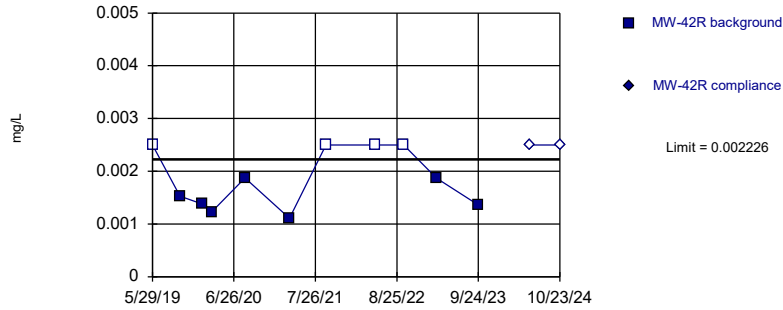
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Thallium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master



Within Limit

Prediction Limit  
 Intrawell Parametric

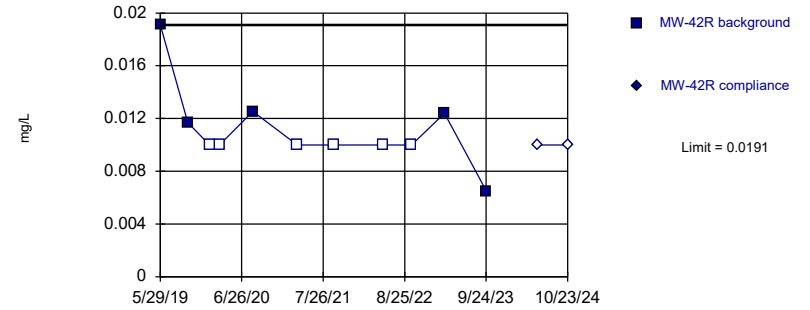


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001479, Std. Dev.=0.0002763, n=11, 36.36% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8453, critical = 0.792. Kappa = 2.704 (c=14, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.0007523.

Constituent: Vanadium Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

Within Limit

Prediction Limit  
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Zinc Analysis Run 2/27/2025 8:08 PM View: 2024AWQR-MW-42R\_IntraPL  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Open Master

**Intrawell Prediction Limits Summary Table and Graphs –  
Closed MSWLF Unit**

# MW-15C Intra Prediction Limit

Cherokee County Sanitary Landfill

Client: SCS Engineers

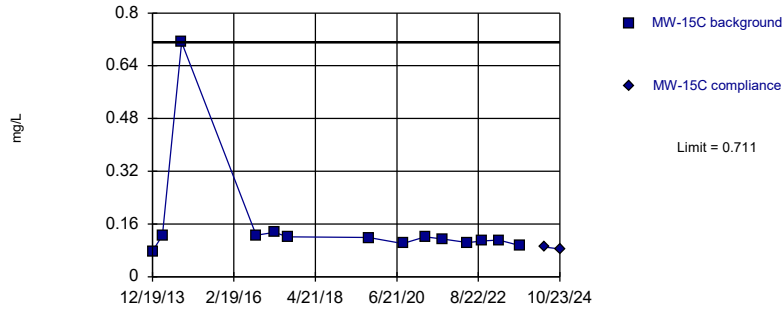
Data: Sanitas CHRKE Closed Master

Printed 2/28/2025, 4:19 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	MW-15C	0.711	n/a	10/23/2024	0.0842	No	14	n/a	0	n/a	0.008612	NP Intra (normality) ...
Cadmium (mg/L)	MW-15C	0.01272	n/a	10/23/2024	0.0001ND	No	8	n/a	25	sqrt(x)	0.001504	Param Intra 1 of 2
Cobalt (mg/L)	MW-15C	0.002712	n/a	10/23/2024	0.000301J	No	17	n/a	11.76	ln(x)	0.001504	Param Intra 1 of 2
Nickel (mg/L)	MW-15C	0.01417	n/a	10/23/2024	0.00705	No	11	n/a	0	No	0.001504	Param Intra 1 of 2
Zinc (mg/L)	MW-15C	0.0426	n/a	10/23/2024	0.01ND	No	8	n/a	75	n/a	0.02144	NP Intra (NDs) 1 of 2

Within Limit

### Prediction Limit Intrawell Non-parametric

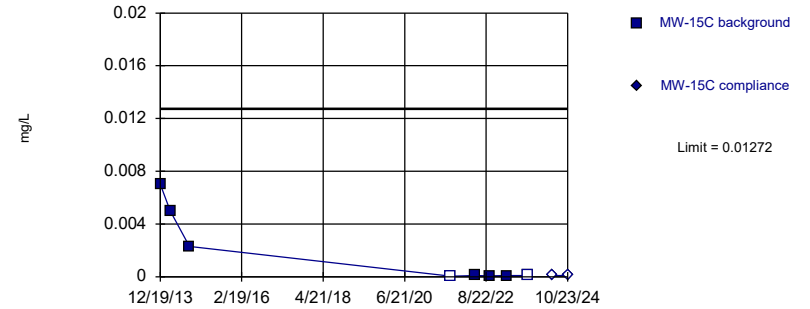


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Barium Analysis Run 2/28/2025 4:17 PM View: 2024AWQR-MW-15C\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit Intrawell Parametric

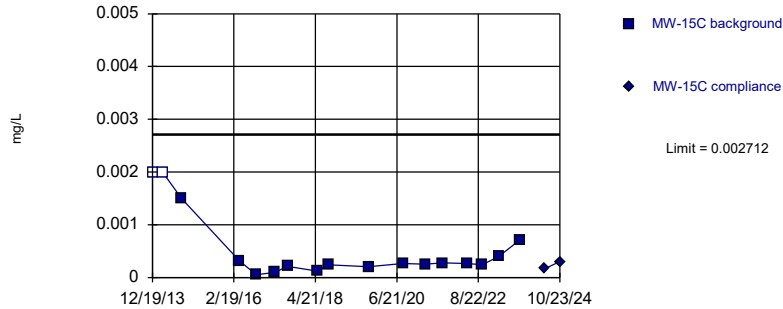


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.03102, Std. Dev.=0.02963, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.75, critical = 0.749. Kappa = 2.76 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Cadmium Analysis Run 2/28/2025 4:17 PM View: 2024AWQR-MW-15C\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit Intrawell Parametric

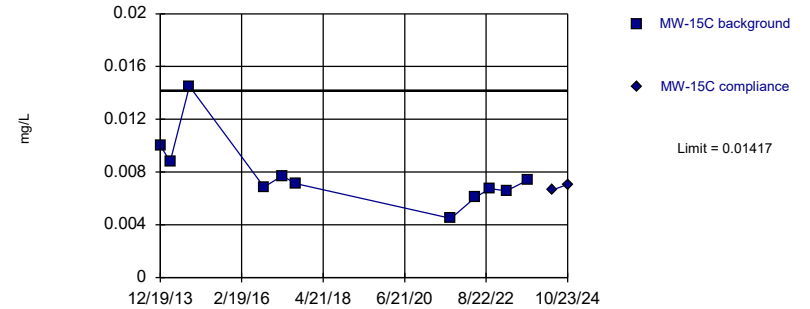


Background Data Summary (based on natural log transformation): Mean=-8.038, Std. Dev.=0.9943, n=17, 11.76% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.851. Kappa = 2.14 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Cobalt Analysis Run 2/28/2025 4:17 PM View: 2024AWQR-MW-15C\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit Intrawell Parametric

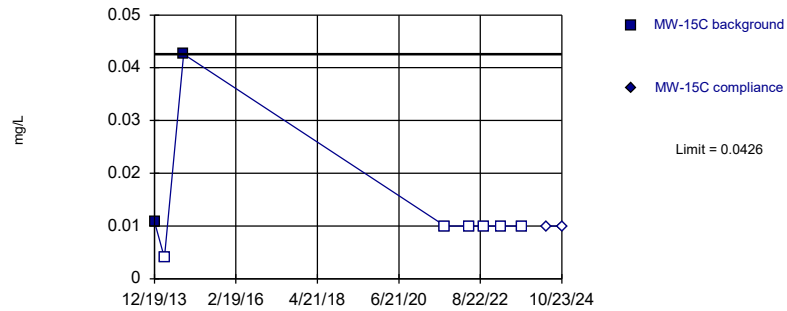


Background Data Summary: Mean=0.007845, Std. Dev.=0.002621, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8358, critical = 0.792. Kappa = 2.413 (c=5, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Constituent: Nickel Analysis Run 2/28/2025 4:17 PM View: 2024AWQR-MW-15C\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

### Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

# MW-44 Intra Prediction Limit

Cherokee County Sanitary Landfill

Client: SCS Engineers

Data: Sanitas CHRKE Closed Master

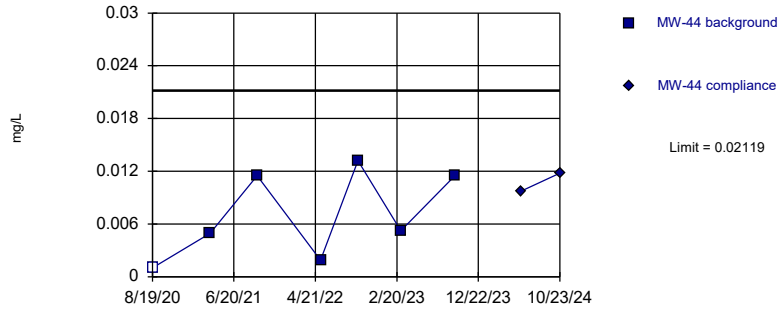
Printed 2/28/2025, 4:31 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	MW-44	0.02119	n/a	10/23/2024	0.0118	No	7	n/a	14.29	No	0.00188	Param Intra 1 of 2
Barium (mg/L)	MW-44	0.04824	n/a	10/23/2024	0.0193	No	7	n/a	0	No	0.00188	Param Intra 1 of 2
Cobalt (mg/L)	MW-44	0.005843	n/a	10/23/2024	0.000294J	No	7	n/a	0	No	0.00188	Param Intra 1 of 2
Nickel (mg/L)	MW-44	0.0025	n/a	10/23/2024	0.0025ND	No	5	n/a	80	n/a	0.04755	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit

Intrawell Parametric



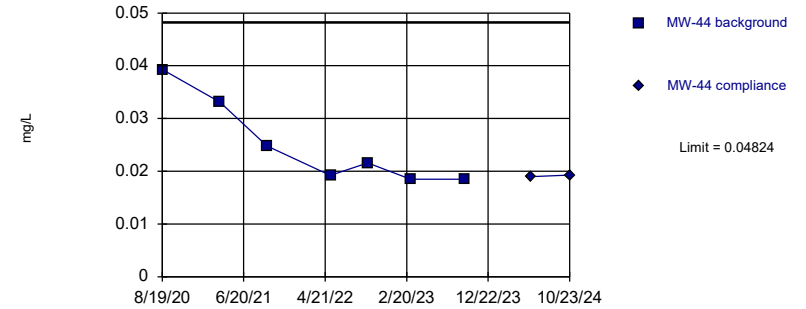
Background Data Summary: Mean=0.007041, Std. Dev.=0.004971, n=7, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8816, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Arsenic Analysis Run 2/28/2025 4:30 PM View: 2024AWQR-MW-44\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit

Intrawell Parametric



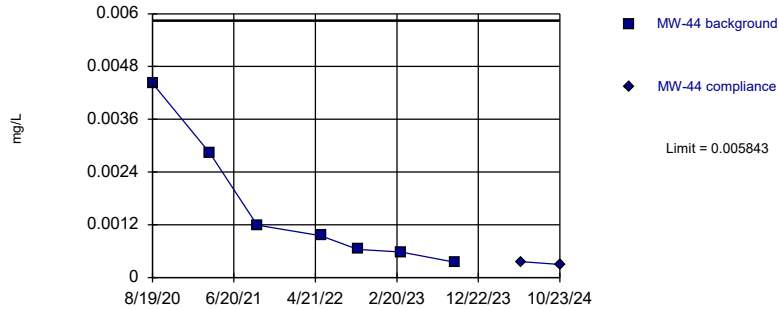
Background Data Summary: Mean=0.025, Std. Dev.=0.008163, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8261, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Barium Analysis Run 2/28/2025 4:30 PM View: 2024AWQR-MW-44\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001564, Std. Dev.=0.001503, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8011, critical = 0.73. Kappa = 2.847 (c=4, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

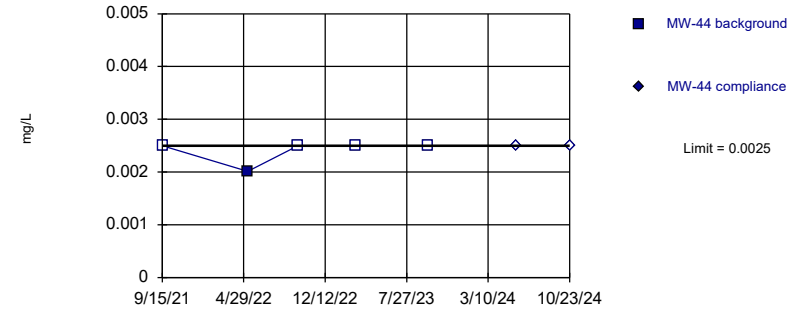
Constituent: Cobalt Analysis Run 2/28/2025 4:30 PM View: 2024AWQR-MW-44\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.09284. Individual comparison alpha = 0.04755 (1 of 2).

Constituent: Nickel Analysis Run 2/28/2025 4:30 PM View: 2024AWQR-MW-44\_IntraPL  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: Sanitas CHRKE Closed Master

**Sen's Slope/Mann-Kendall Summary Table and Graphs –  
Closed MSWLF Unit**



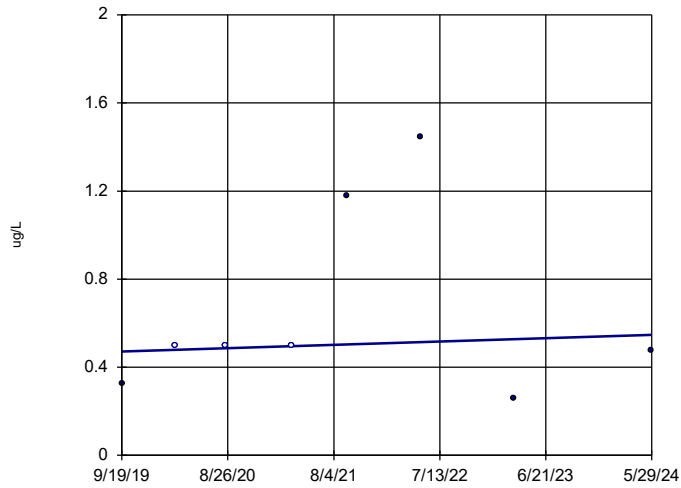
# AM AZPOC Trend Test

Cherokee County Sanitary Landfill    Client: SCS Engineers    Data: CHRKE C-AM AZPOC-2024AWQR-AM    Printed 2/28/2025, 6:05 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>
1,1-Dichloroethane (ug/L)	MW-13R	0.01602	3	21	No	8	37.5	0.01	NP
Acrylonitrile (ug/L)	MW-9R	-1.315	-19	-21	No	8	87.5	0.01	NP
Arsenic (mg/L)	MW-10R	-0.0003711	-8	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-12	0.0003609	6	21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-13R	0.001858	11	21	No	8	37.5	0.01	NP
Arsenic (mg/L)	MW-44	0.001568	9	21	No	8	0	0.01	NP
Barium (mg/L)	MW-7	-0.00002897	-2	-21	No	8	0	0.01	NP
<b>Barium (mg/L)</b>	<b>MW-9R</b>	<b>0.007121</b>	<b>26</b>	<b>21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Barium (mg/L)	MW-10R	-0.004455	-6	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-12	0.0008239	2	21	No	8	0	0.01	NP
Barium (mg/L)	MW-13R	-0.03342	-12	-21	No	8	0	0.01	NP
<b>Barium (mg/L)</b>	<b>MW-15C</b>	<b>-0.009629</b>	<b>-22</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Barium (mg/L)	MW-44	-0.001958	-13	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-9R	-0.00002748	-15	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-12	0.000008663	7	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-15C	0	1	21	No	8	50	0.01	NP
Carbon Disulfide (ug/L)	MW-9R	-0.1678	-12	-21	No	8	12.5	0.01	NP
Chlorobenzene (ug/L)	MW-13R	-0.5744	-18	-21	No	8	12.5	0.01	NP
Chlorobenzene (ug/L)	MW-15C	0	-7	-21	No	8	87.5	0.01	NP
Chloroethane (ug/L)	MW-15C	0	7	21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-7	-0.0946	-10	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-10R	-0.2283	-16	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-7	0.00004231	11	21	No	8	25	0.01	NP
Cobalt (mg/L)	MW-9R	0.0006987	16	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-10R	-0.0004451	-11	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-12	0.0004315	12	21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-13R	-0.001222	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-15C	0.00001256	4	21	No	8	0	0.01	NP
<b>Cobalt (mg/L)</b>	<b>MW-44</b>	<b>-0.00039</b>	<b>-26</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Copper (mg/L)	MW-7	0	5	21	No	8	87.5	0.01	NP
Copper (mg/L)	MW-10R	0	5	21	No	8	87.5	0.01	NP
Copper (mg/L)	MW-13R	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-10R	-0.00002	-2	-21	No	8	0	0.01	NP
Lead (mg/L)	MW-12	0	4	21	No	8	50	0.01	NP
Nickel (mg/L)	MW-9R	0.00166	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-10R	0.0002952	4	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-12	0.003772	10	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-13R	-0.0004919	-14	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-15C	0.0002782	8	21	No	8	0	0.01	NP
Selenium (mg/L)	MW-12	0.0007979	16	21	No	8	62.5	0.01	NP
Styrene (ug/L)	MW-9R	0	-7	-21	No	8	87.5	0.01	NP
<b>Trichloroethene (ug/L)</b>	<b>MW-7</b>	<b>-0.1407</b>	<b>-22</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Zinc (mg/L)	MW-15C	0	-7	-21	No	8	87.5	0.01	NP

### Sen's Slope Estimator

MW-13R

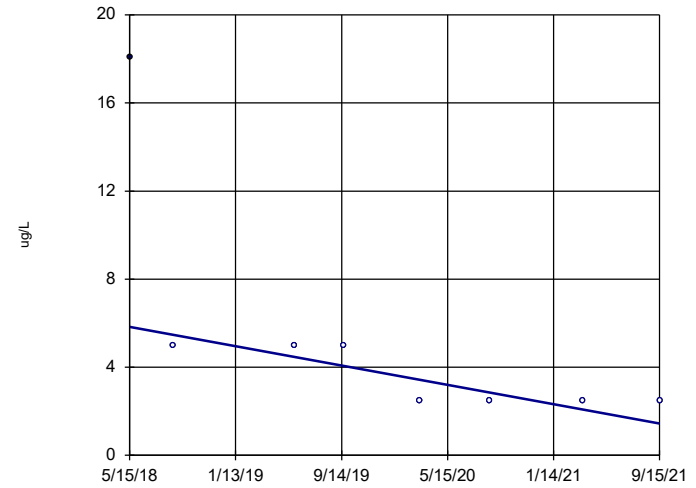


n = 8  
Slope = 0.01602  
units per year.  
Mann-Kendall  
statistic = 3  
critical = 21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: 1,1-Dichloroethane Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-9R

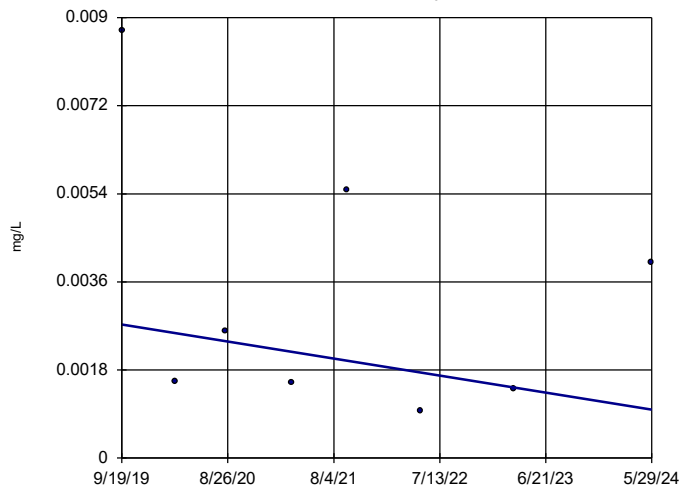


n = 8  
Slope = -1.315  
units per year.  
Mann-Kendall  
statistic = -19  
critical = -21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Acrylonitrile Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-10R

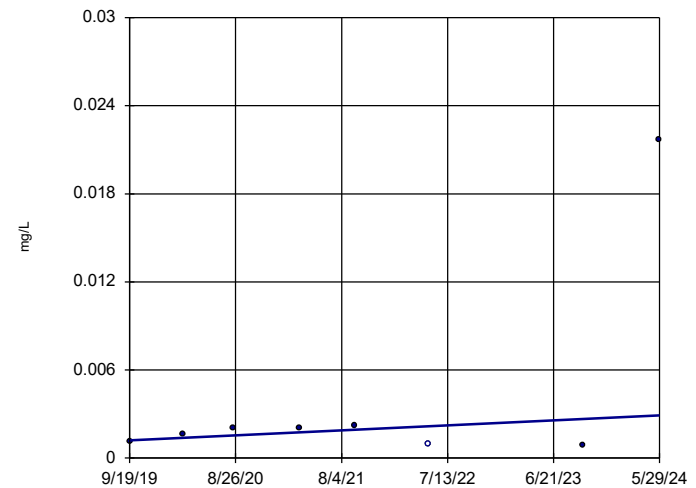


n = 8  
Slope = -0.0003711  
units per year.  
Mann-Kendall  
statistic = -8  
critical = -21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Arsenic Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-12

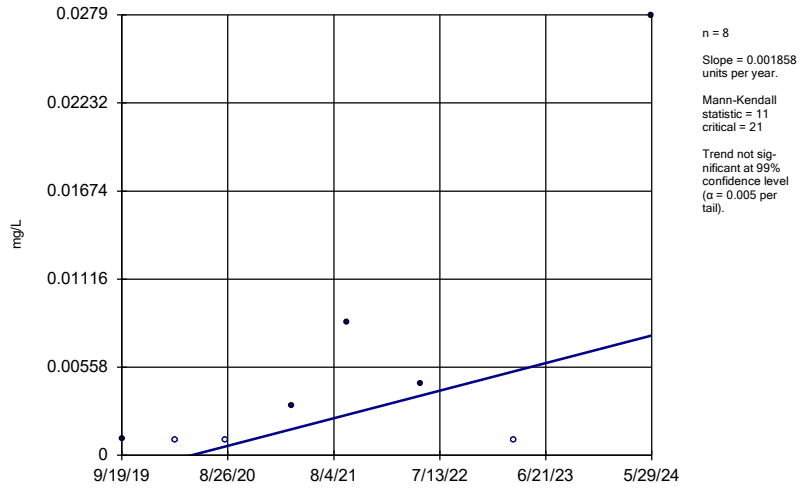


n = 8  
Slope = 0.0003609  
units per year.  
Mann-Kendall  
statistic = 6  
critical = 21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Arsenic Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

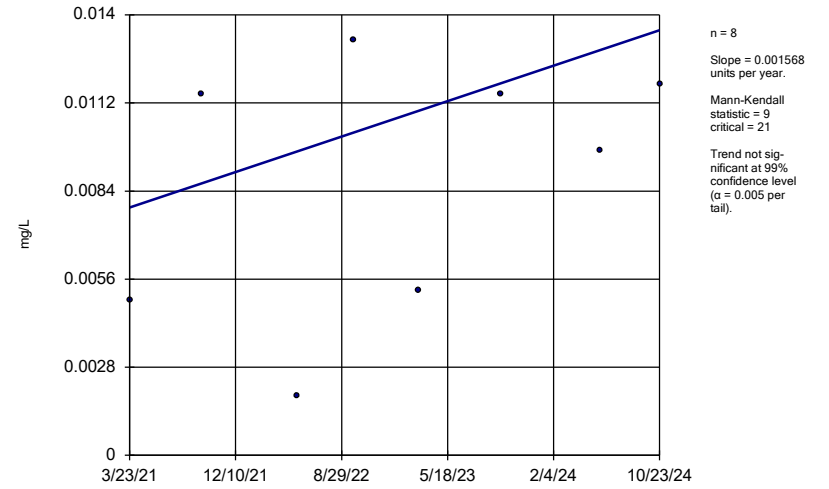
MW-13R



Constituent: Arsenic Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

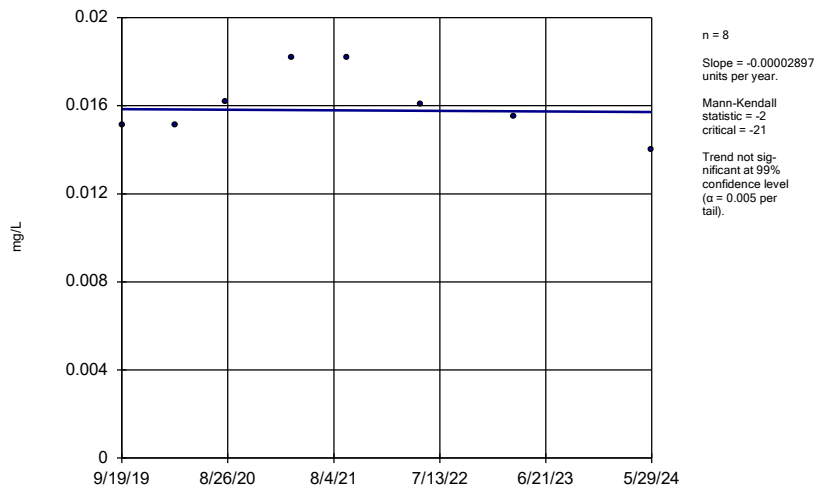
MW-44



Constituent: Arsenic Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

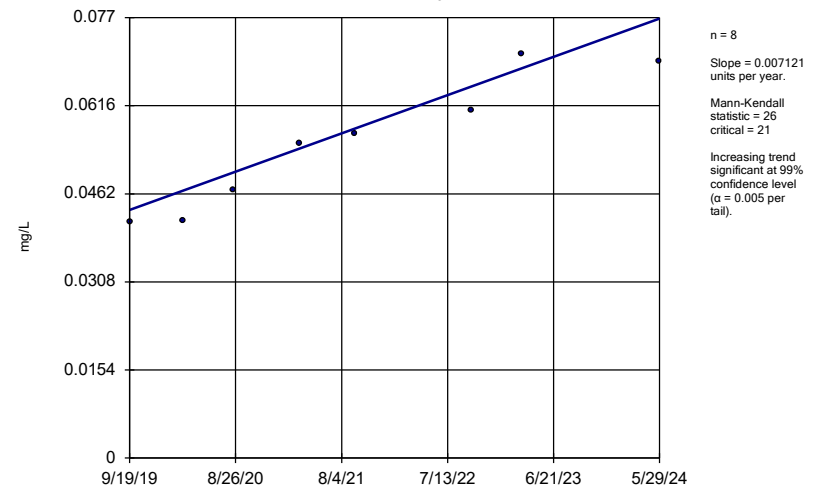
MW-7



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

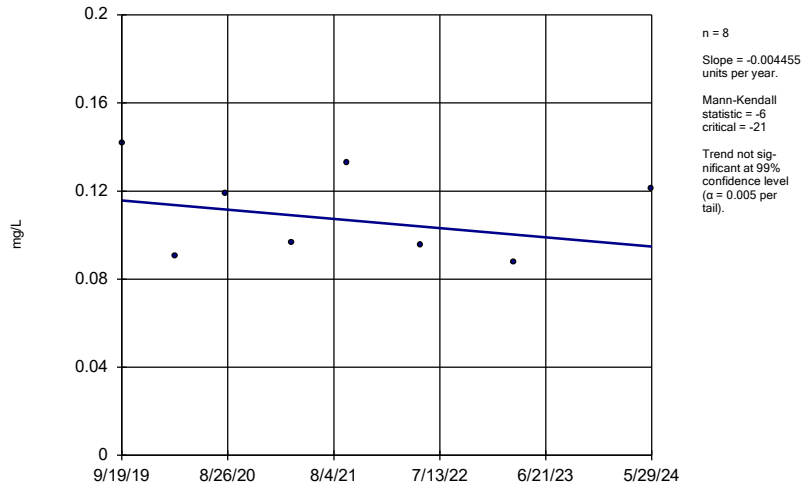
MW-9R



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

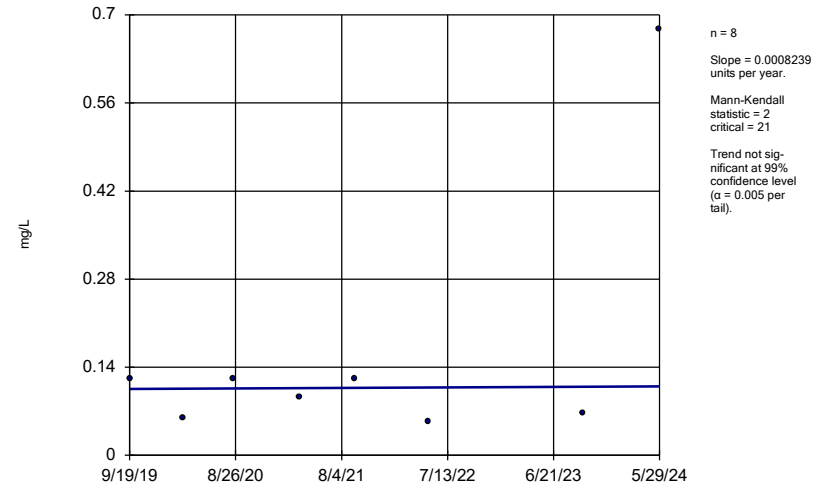
MW-10R



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

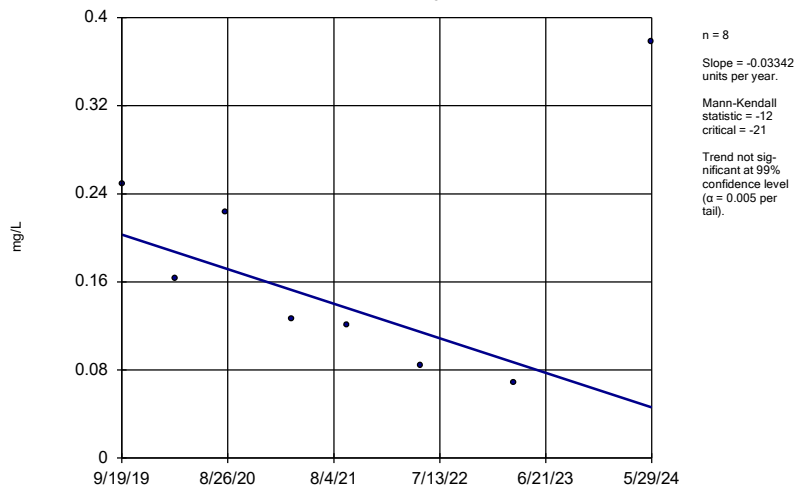
MW-12



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

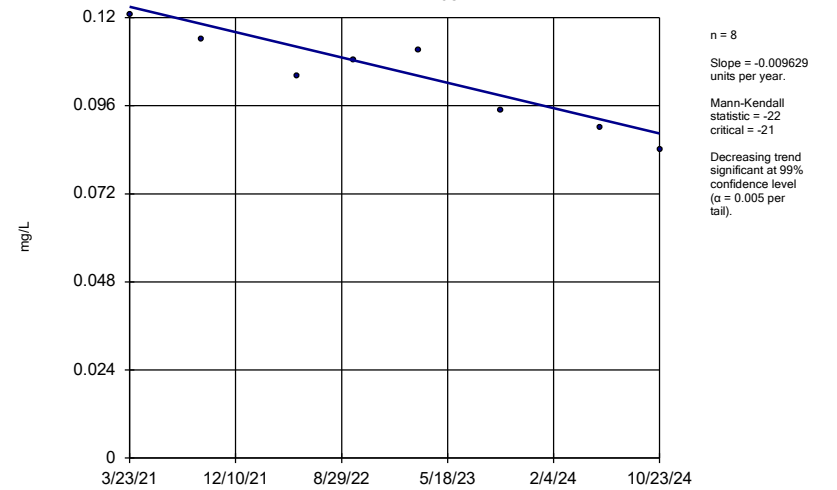
MW-13R



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

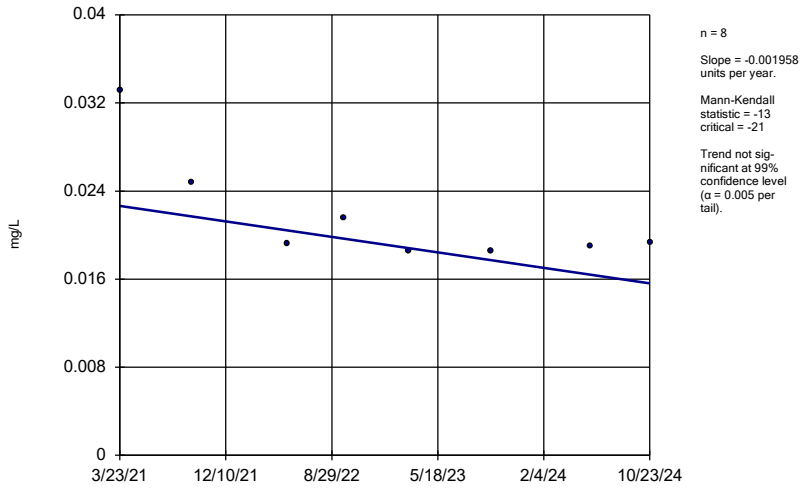
MW-15C



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

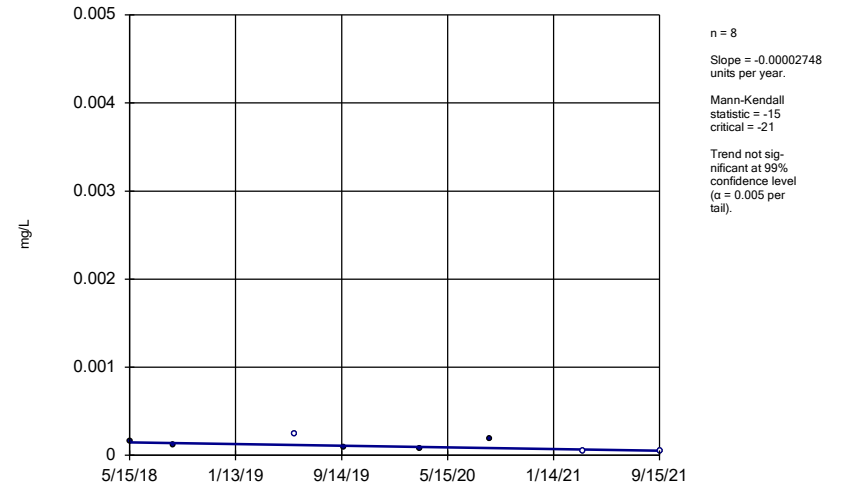
MW-44



Constituent: Barium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

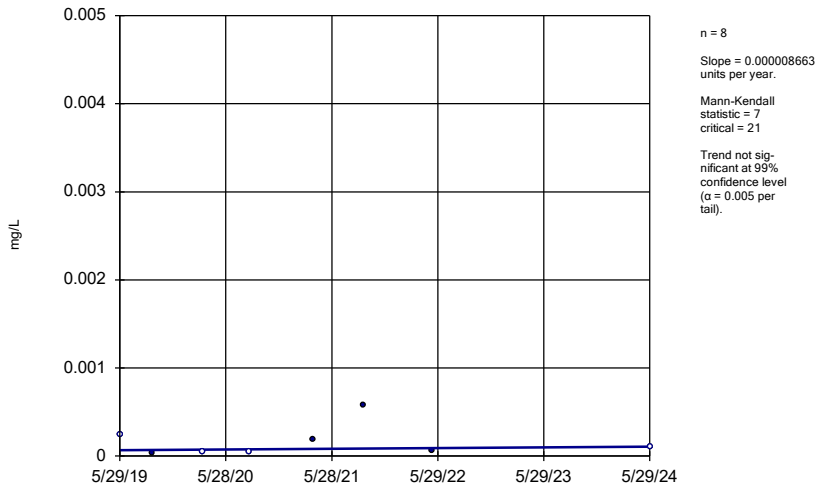
MW-9R



Constituent: Cadmium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

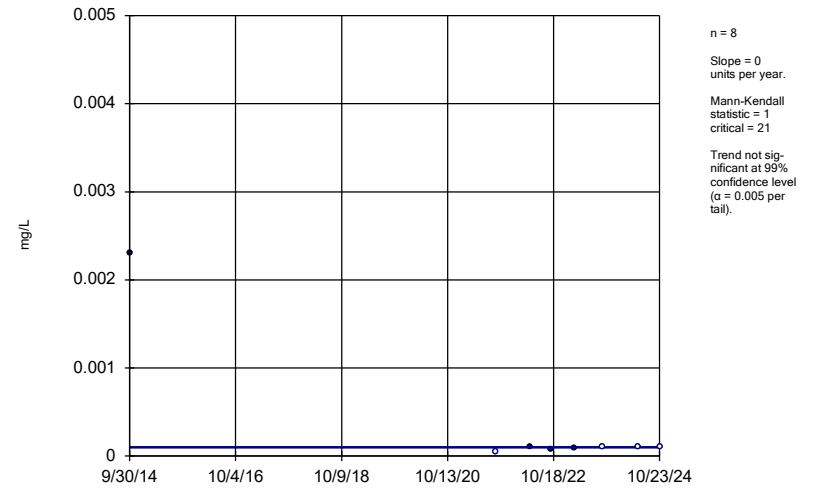
MW-12



Constituent: Cadmium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

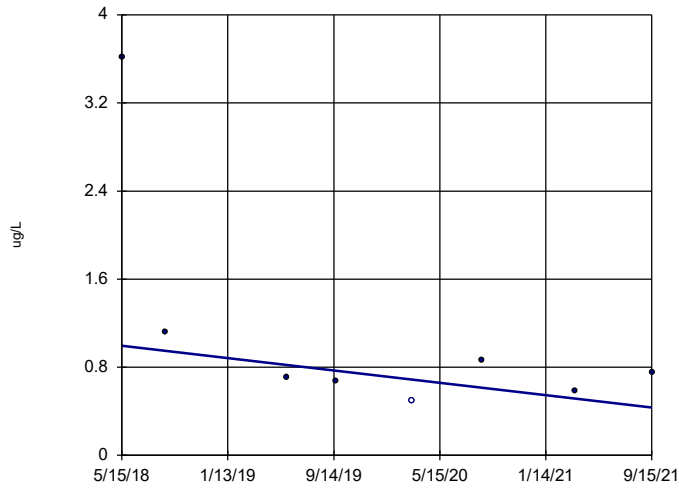
MW-15C



Constituent: Cadmium Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-9R

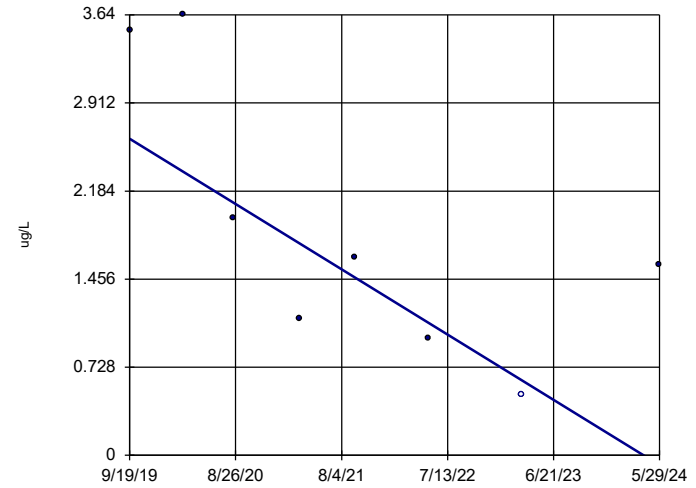


n = 8  
Slope = -0.1678  
units per year.  
Mann-Kendall  
statistic = -12  
critical = -21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Carbon Disulfide Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-13R

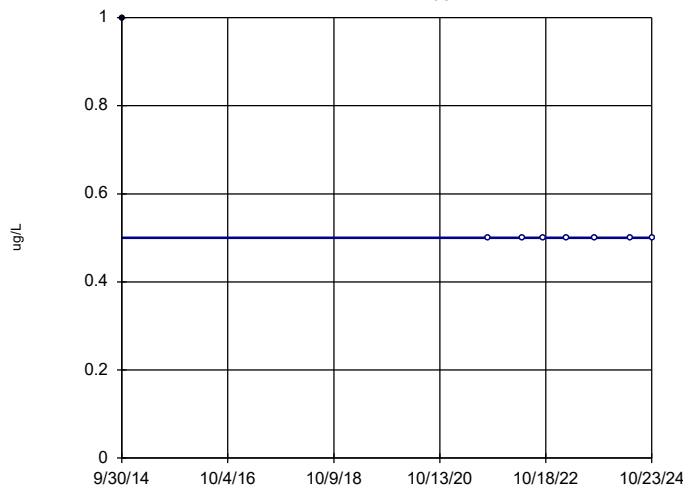


n = 8  
Slope = -0.5744  
units per year.  
Mann-Kendall  
statistic = -18  
critical = -21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Chlorobenzene Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-15C

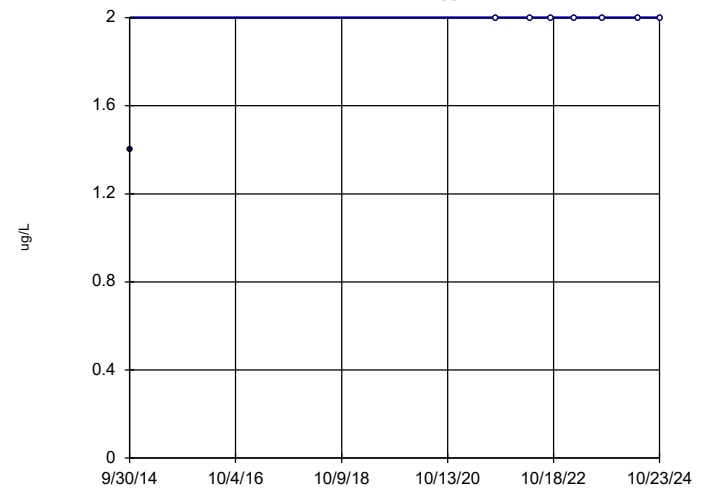


n = 8  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = -7  
critical = -21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Chlorobenzene Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-15C

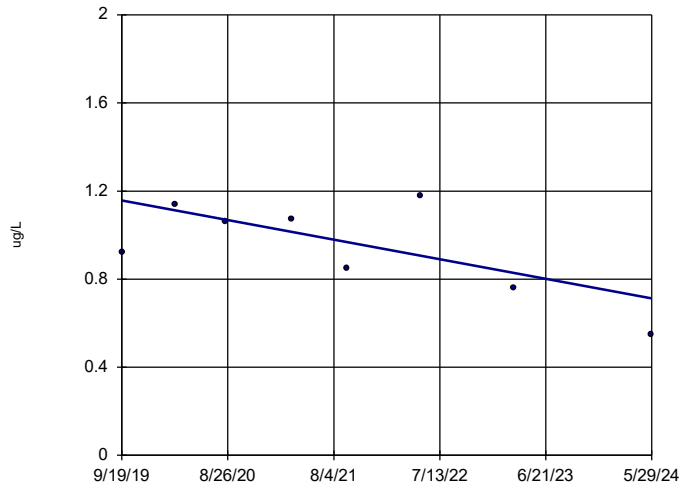


n = 8  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 7  
critical = 21  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Chloroethane Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-7

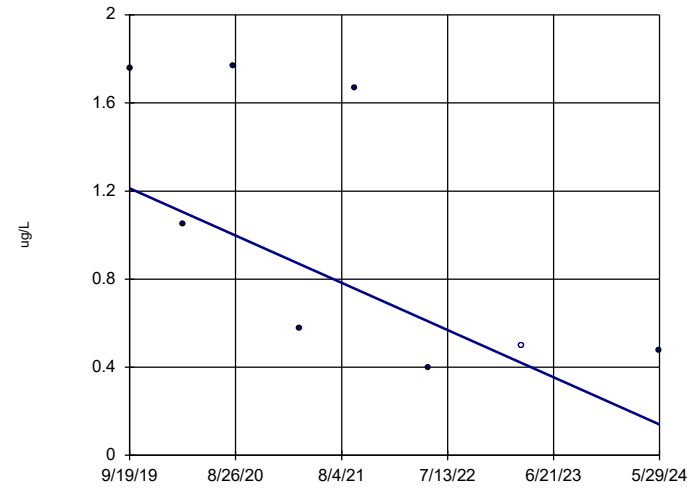


n = 8  
 Slope = -0.0946  
 units per year.  
 Mann-Kendall  
 statistic = -10  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-10R

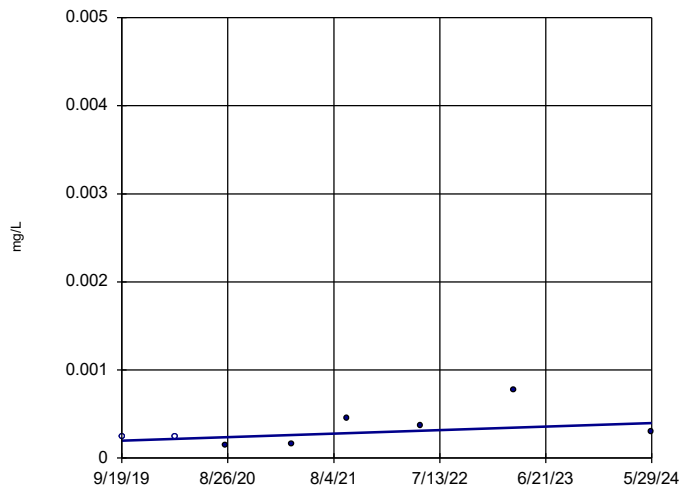


n = 8  
 Slope = -0.2283  
 units per year.  
 Mann-Kendall  
 statistic = -16  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-7

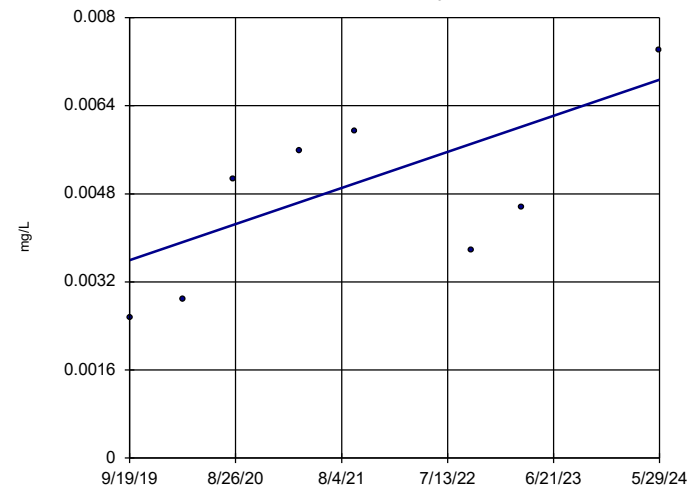


n = 8  
 Slope = 0.00004231  
 units per year.  
 Mann-Kendall  
 statistic = 11  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-9R

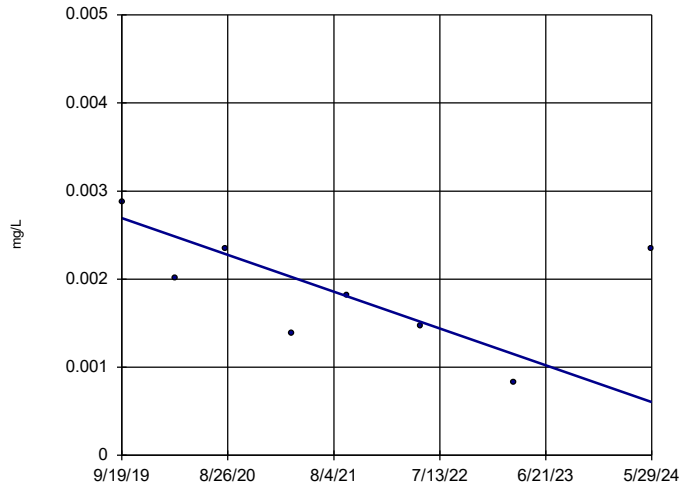


n = 8  
 Slope = 0.0006987  
 units per year.  
 Mann-Kendall  
 statistic = 16  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-10R

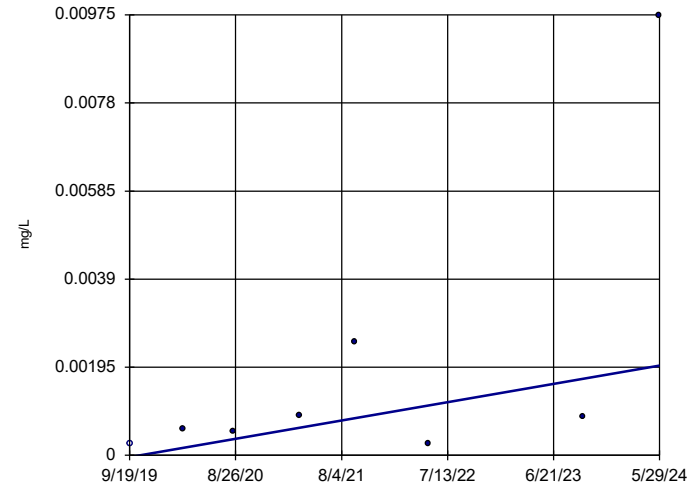


n = 8  
 Slope = -0.0004451  
 units per year.  
 Mann-Kendall  
 statistic = -11  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-12

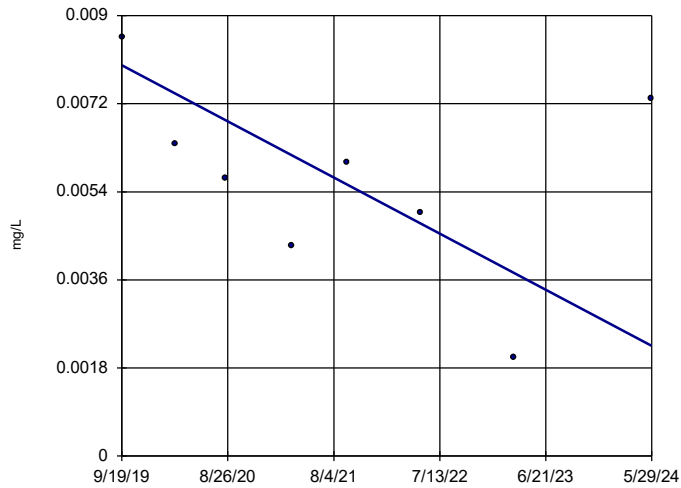


n = 8  
 Slope = 0.0004315  
 units per year.  
 Mann-Kendall  
 statistic = 12  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-13R

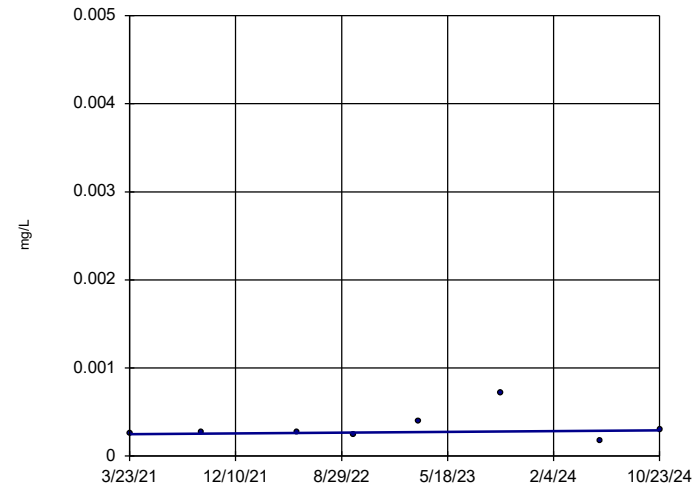


n = 8  
 Slope = -0.001222  
 units per year.  
 Mann-Kendall  
 statistic = -10  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-15C



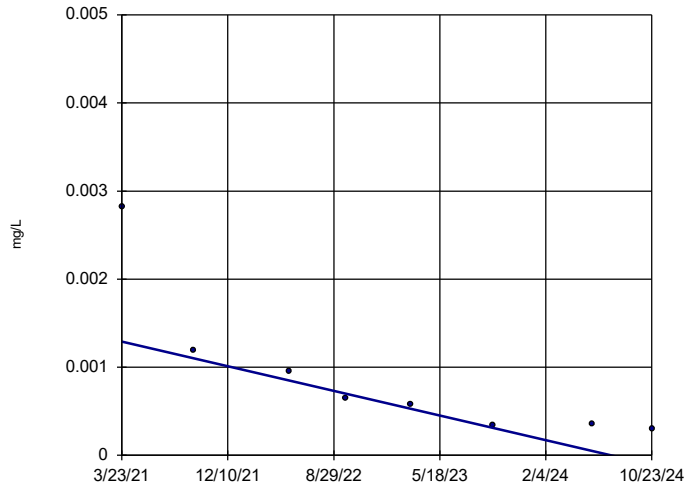
n = 8  
 Slope = 0.00001256  
 units per year.  
 Mann-Kendall  
 statistic = 4  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:03 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM



### Sen's Slope Estimator

MW-44



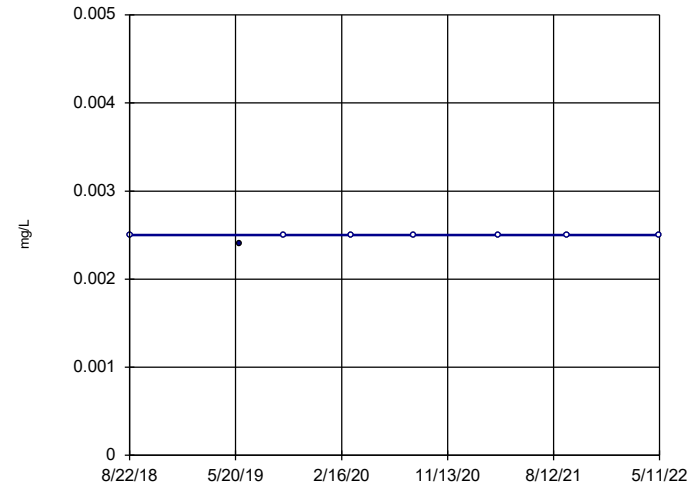
n = 8  
 Slope = -0.00039  
 units per year.  
 Mann-Kendall  
 statistic = -26  
 critical = -21  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Cobalt Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-7



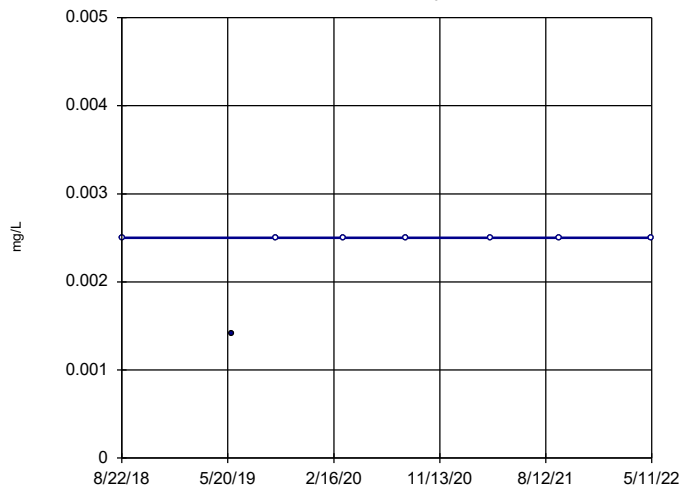
n = 8  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 5  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Copper Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-10R



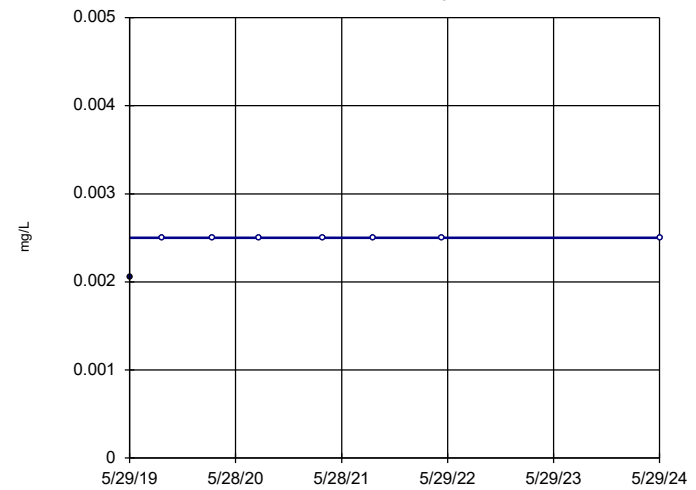
n = 8  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 5  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Copper Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-13R

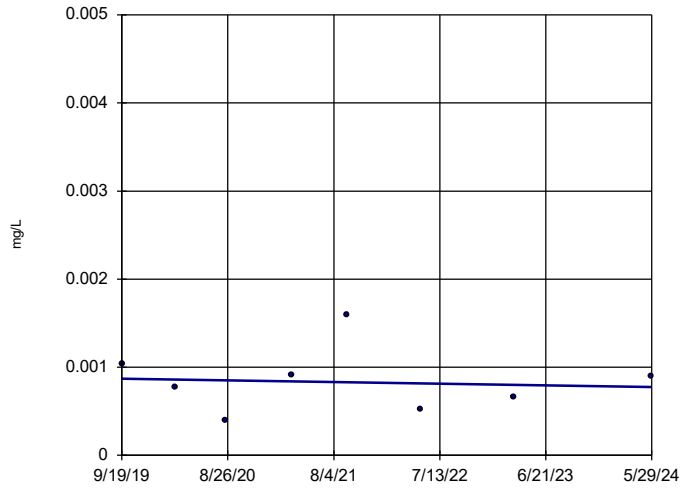


n = 8  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 7  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Copper Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-10R



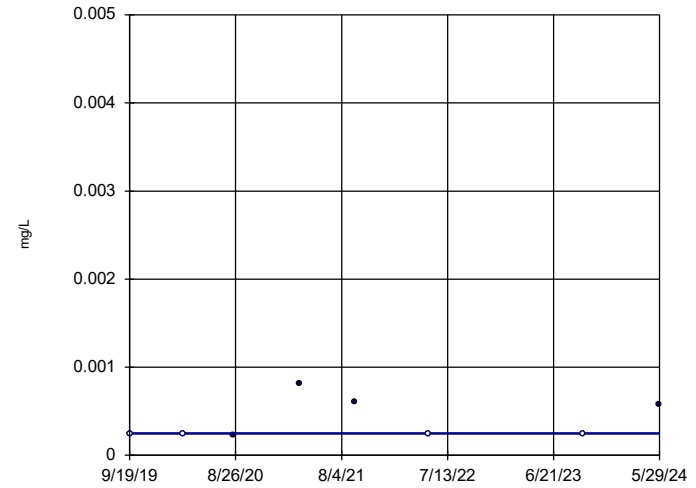
n = 8  
 Slope = -0.00002  
 units per year.  
 Mann-Kendall  
 statistic = -2  
 critical = -21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Lead Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

Hollow symbols indicate censored values.

### Sen's Slope Estimator

MW-12

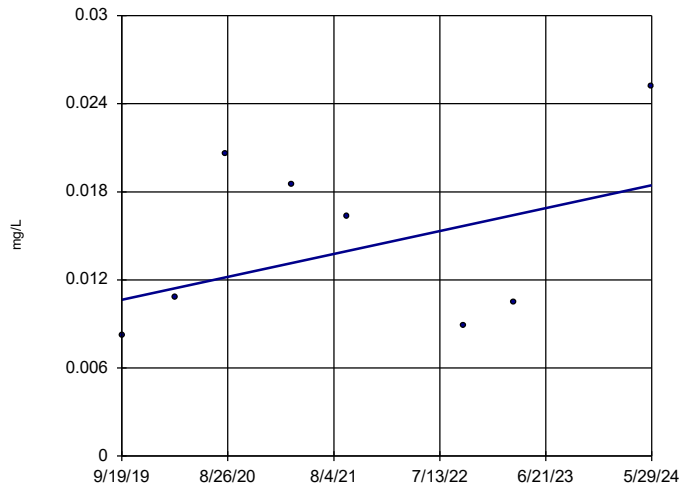


n = 8  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 4  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Lead Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-9R

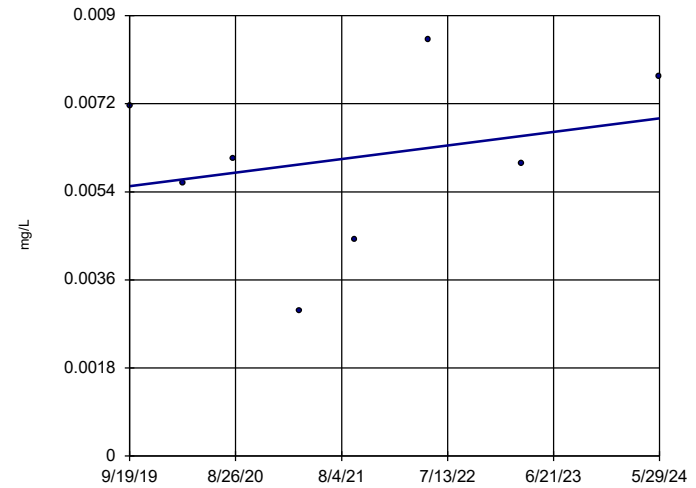


n = 8  
 Slope = 0.00166  
 units per year.  
 Mann-Kendall  
 statistic = 6  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Nickel Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-10R

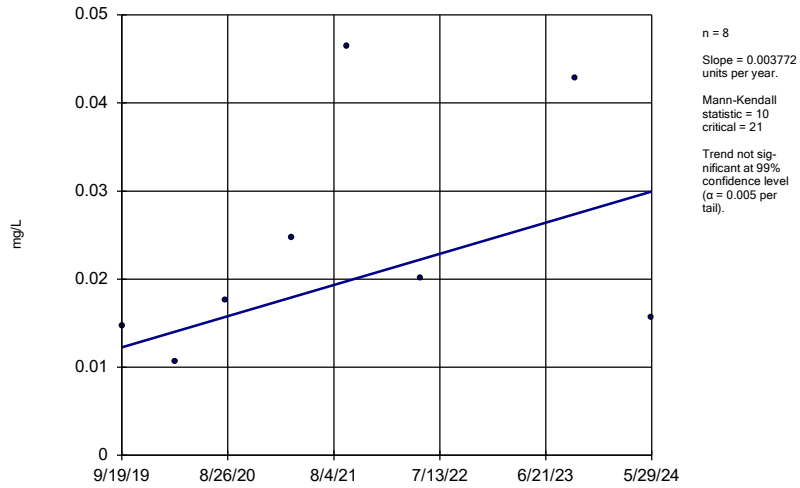


n = 8  
 Slope = 0.0002952  
 units per year.  
 Mann-Kendall  
 statistic = 4  
 critical = 21  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Nickel Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

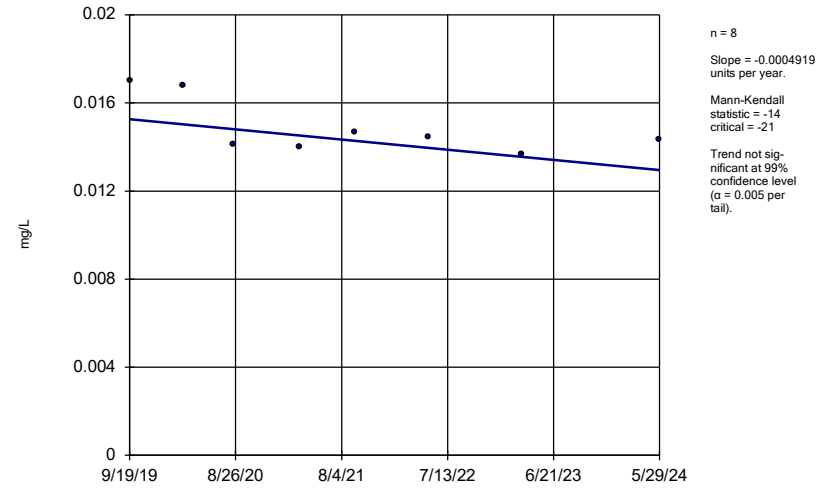
MW-12



Constituent: Nickel Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

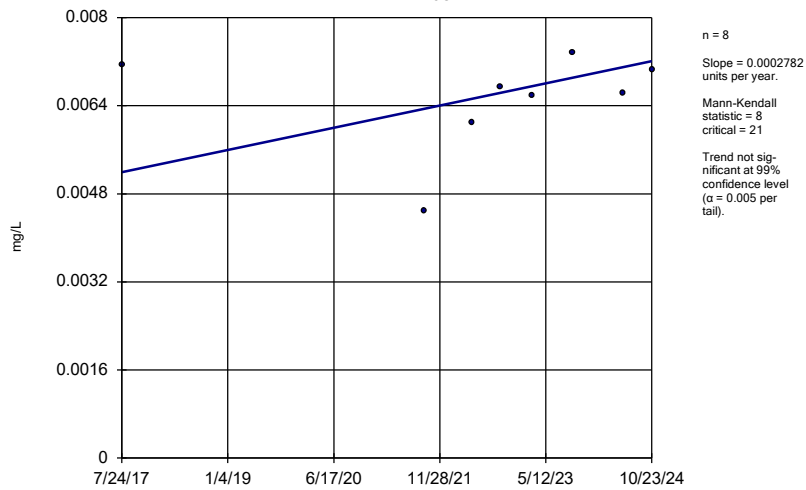
MW-13R



Constituent: Nickel Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

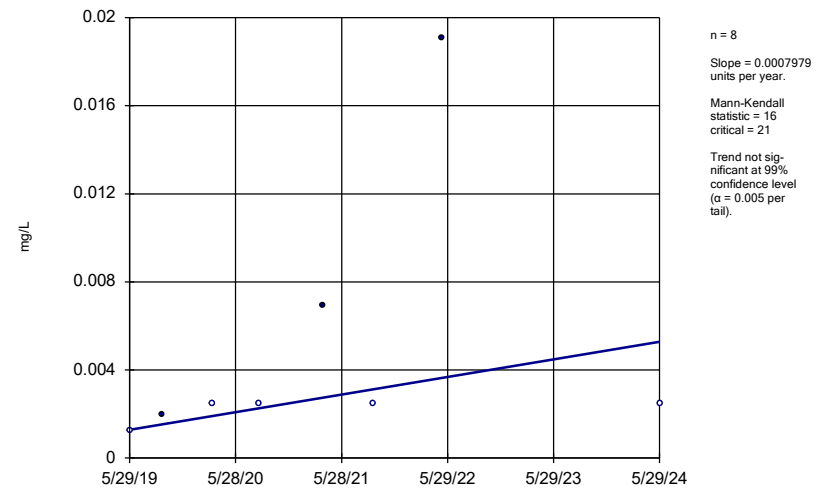
MW-15C



Constituent: Nickel Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

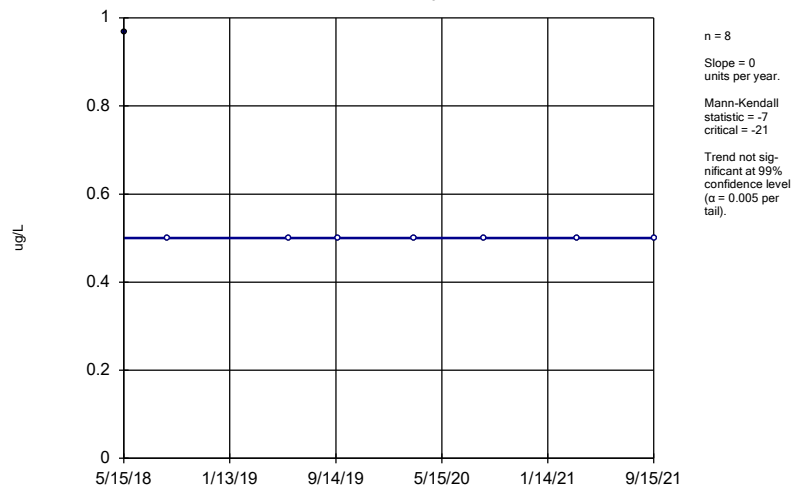
MW-12



Constituent: Selenium Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

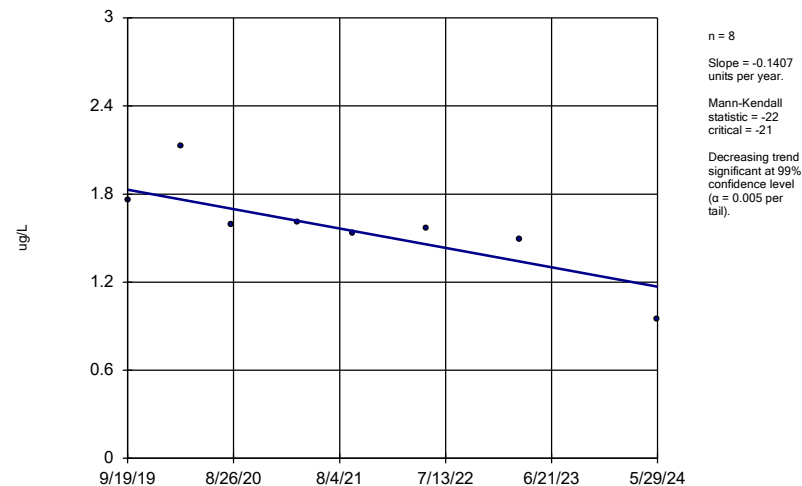
MW-9R



Constituent: Styrene Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

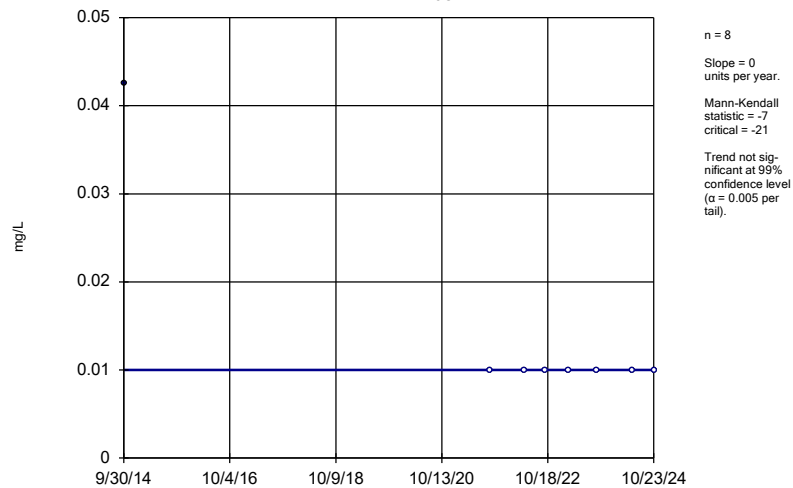
MW-7



Constituent: Trichloroethene Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope Estimator

MW-15C



Constituent: Zinc Analysis Run 2/28/2025 6:04 PM View: 2024AWQR-Mann\_Kendall  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

**Confidence Interval Summary Table and Graphs – Closed MSWLF Unit**

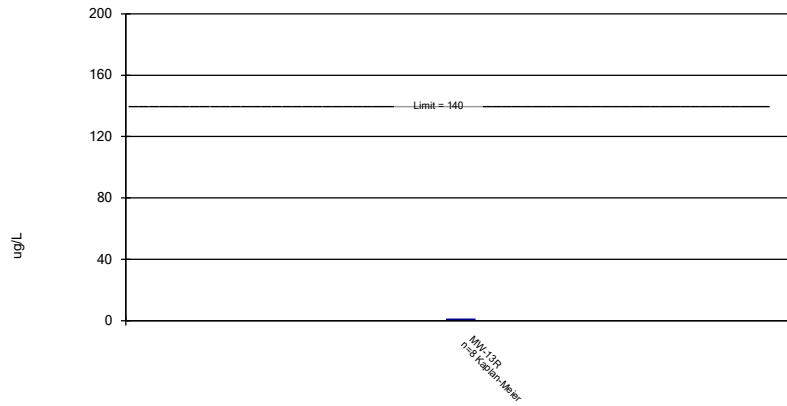
# Confidence Interval

Cherokee County Sanitary Landfill    Client: SCS Engineers    Data: CHRKE C-AM AZPOC-2024AWQR-AM    Printed 2/28/2025, 8:11 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>
1,1-Dichloroethane (ug/L)	MW-13R	1.047	0.1418	140	No	8	37.5	No	0.01	Param.
Acrylonitrile (ug/L)	MW-9R	18.1	2.5	10	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-10R	0.006129	0.0004393	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-12	0.0217	0.0008915	0.01	No	8	12.5	No	0.004	NP (normality)
Arsenic (mg/L)	MW-13R	0.0279	0.001	0.01	No	8	37.5	No	0.004	NP (normality)
Arsenic (mg/L)	MW-44	0.01309	0.004358	0.01	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-7	0.01763	0.01447	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-10R	0.1327	0.0887	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-12	0.678	0.0545	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	MW-13R	0.2856	0.06761	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-44	0.0331	0.0185	2	No	8	0	No	0.004	NP (normality)
Cadmium (mg/L)	MW-9R	0.0001556	0.0000683	0.0494	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	MW-12	0.000582	0.00004	0.0494	No	8	50	No	0.004	NP (normality)
Cadmium (mg/L)	MW-15C	0.0023	0.00005	0.0494	No	8	50	No	0.004	NP (normality)
Carbon Disulfide (ug/L)	MW-9R	3.615	0.5	700	No	8	12.5	No	0.004	NP (normality)
Chlorobenzene (ug/L)	MW-13R	3.081	0.6498	100	No	8	12.5	No	0.01	Param.
Chlorobenzene (ug/L)	MW-15C	1	0.5	100	No	8	87.5	No	0.004	NP (NDs)
Chloroethane (ug/L)	MW-15C	2	1.4	2800	No	8	87.5	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-7	1.169	0.7147	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-10R	1.681	0.3689	70	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW-7	0.0005505	0.0001387	0.0074	No	8	25	No	0.01	Param.
Cobalt (mg/L)	MW-9R	0.006447	0.002998	0.0074	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-10R	0.002579	0.001192	0.0074	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-12	0.00975	0.000247	0.0074	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	MW-13R	0.00775	0.003555	0.0074	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-15C	0.0005044	0.0001489	0.0074	No	8	0	No	0.01	Param.
Copper (mg/L)	MW-7	0.0025	0.0024	1.3	No	8	87.5	No	0.004	NP (NDs)
Copper (mg/L)	MW-10R	0.0025	0.001417	1.3	No	8	87.5	No	0.004	NP (NDs)
Copper (mg/L)	MW-13R	0.0025	0.00206	1.3	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-10R	0.001239	0.0004569	0.0222	No	8	0	No	0.01	Param.
Lead (mg/L)	MW-12	0.000627	0.0001524	0.0222	No	8	50	No	0.01	Param.
Nickel (mg/L)	MW-9R	0.02146	0.008296	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-10R	0.00796	0.004153	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-12	0.03822	0.009929	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-13R	0.01624	0.01353	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-15C	0.007476	0.005552	0.1	No	8	0	No	0.01	Param.
Selenium (mg/L)	MW-12	0.0191	0.00125	0.05	No	8	62.5	No	0.004	NP (NDs)
Styrene (ug/L)	MW-9R	0.969	0.5	100	No	8	87.5	No	0.004	NP (NDs)
Zinc (mg/L)	MW-15C	0.0426	0.01	2	No	8	87.5	No	0.004	NP (NDs)

### Parametric Confidence Interval

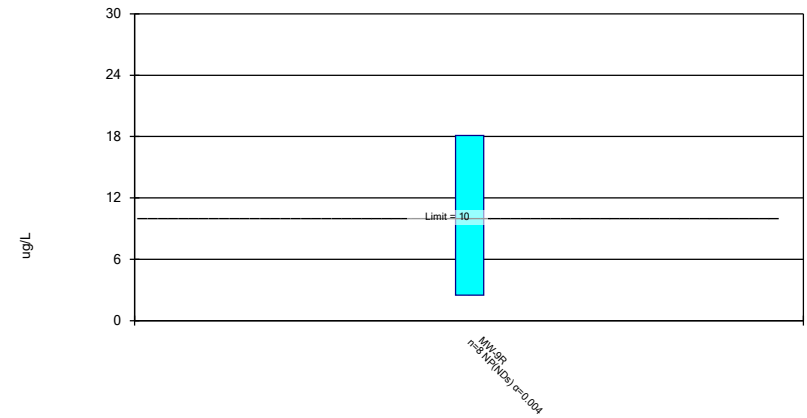
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: 1,1-Dichloroethane Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

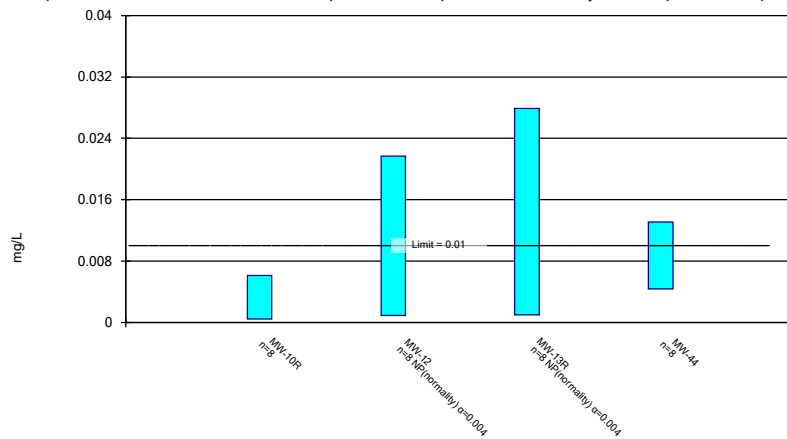
Compliance Limit is not exceeded.



Constituent: Acrylonitrile Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric and Non-Parametric (NP) Confidence Interval

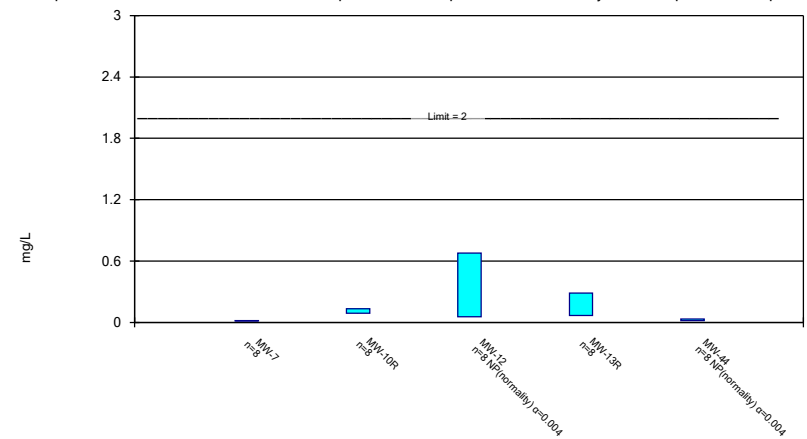
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric and Non-Parametric (NP) Confidence Interval

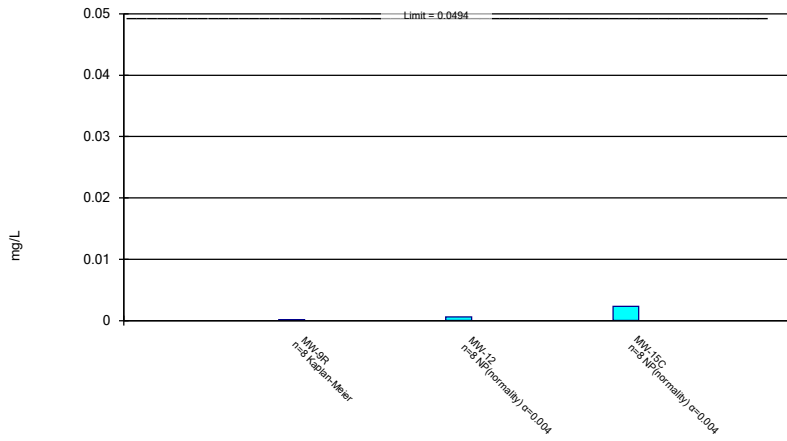
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Constituent: Barium Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric and Non-Parametric (NP) Confidence Interval

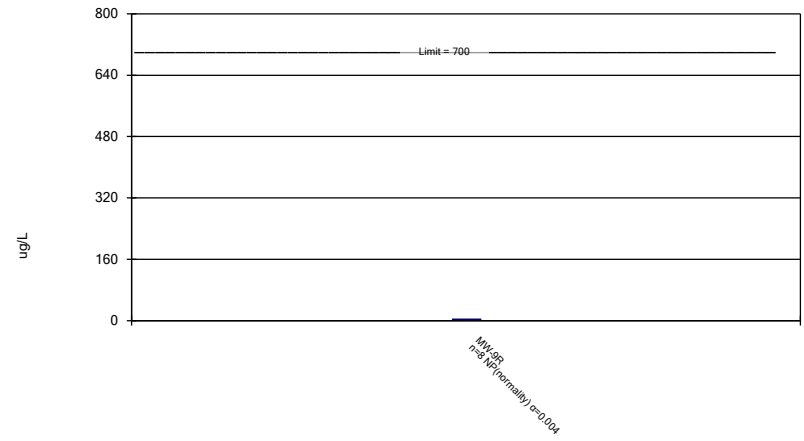
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Cadmium Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

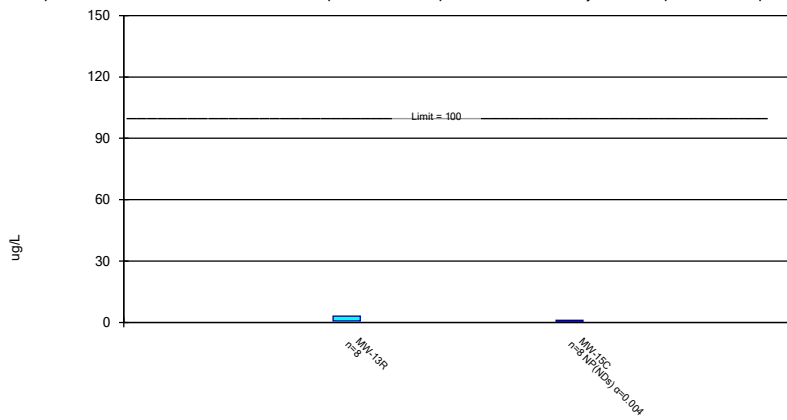
Compliance Limit is not exceeded.



Constituent: Carbon Disulfide Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric and Non-Parametric (NP) Confidence Interval

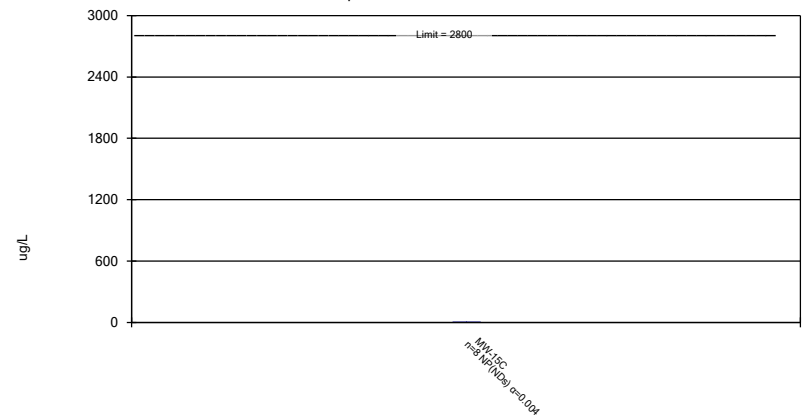
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chlorobenzene Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

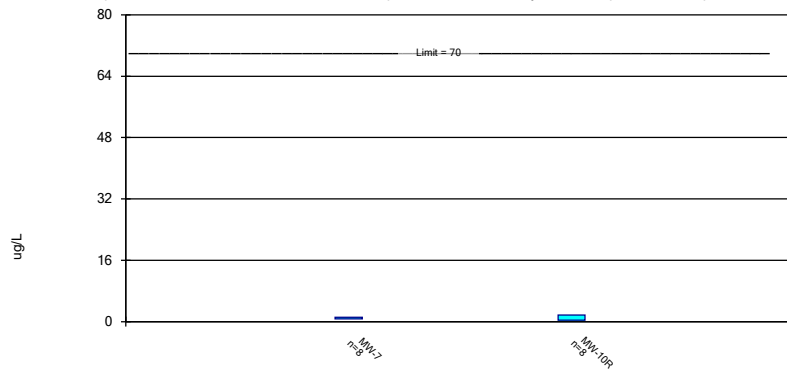


Constituent: Chloroethane Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM



### Parametric Confidence Interval

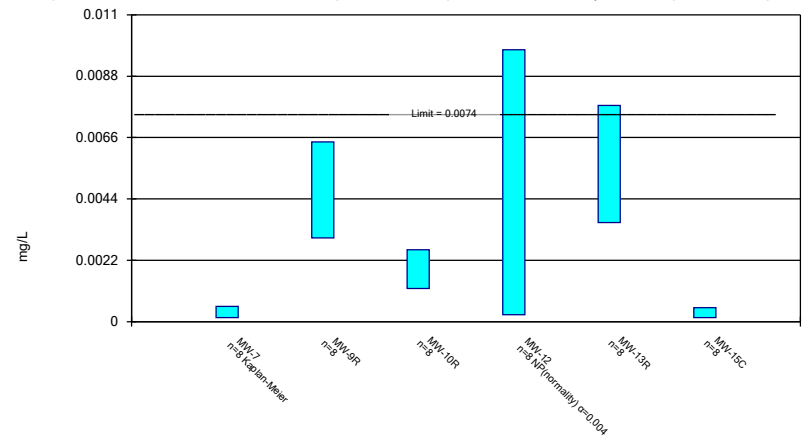
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric and Non-Parametric (NP) Confidence Interval

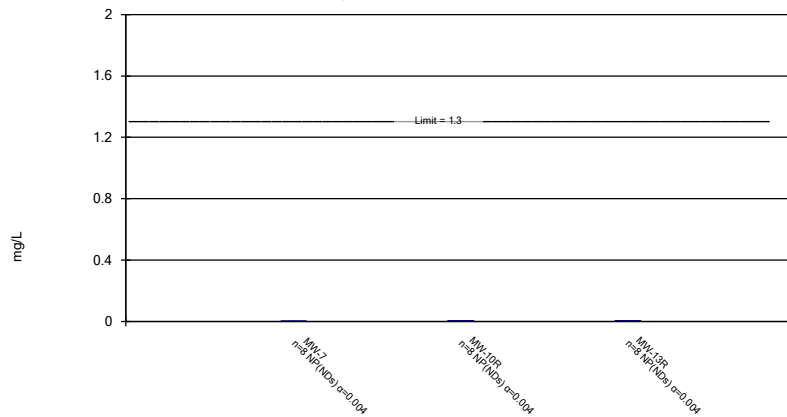
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Constituent: Cobalt Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

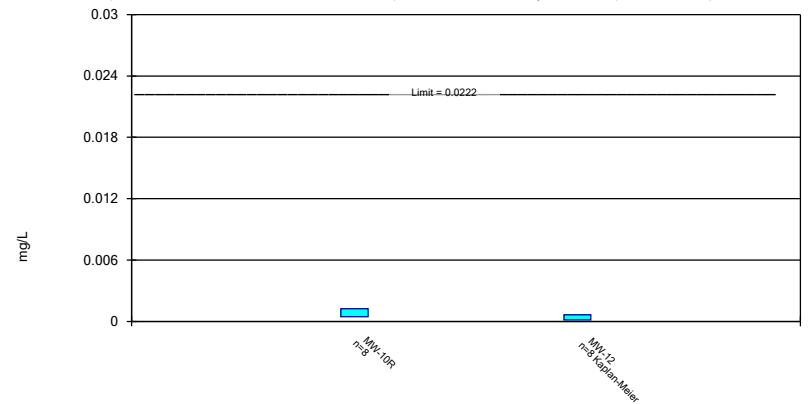
Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric Confidence Interval

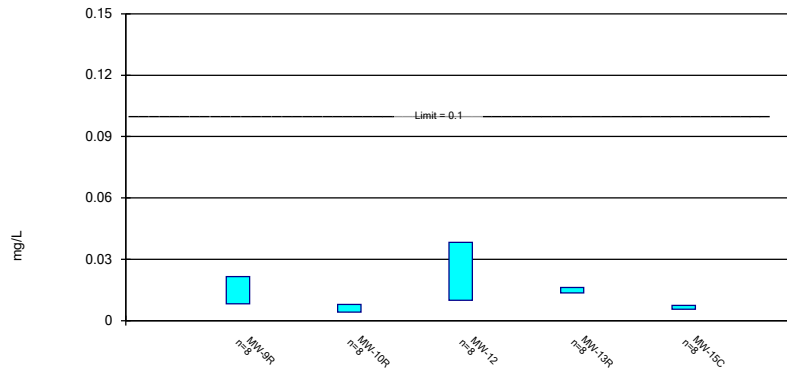
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Lead Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Parametric Confidence Interval

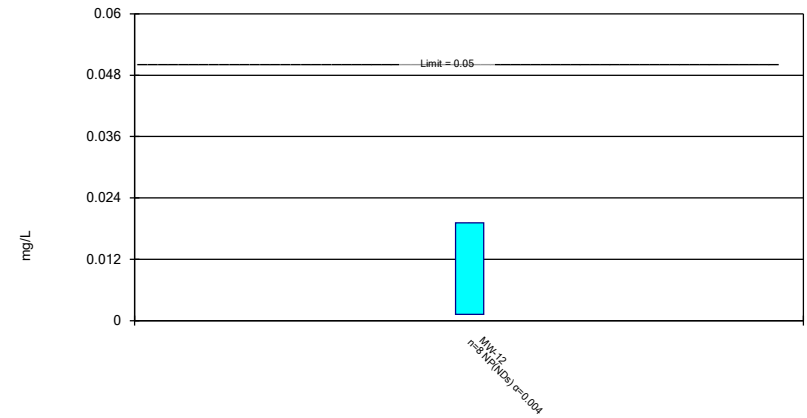
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

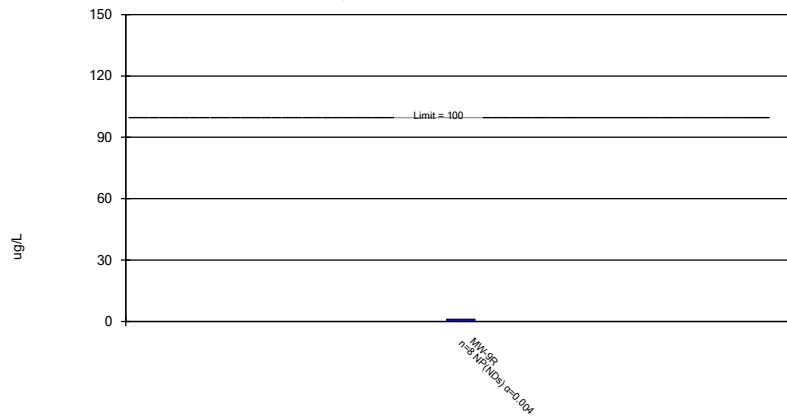
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

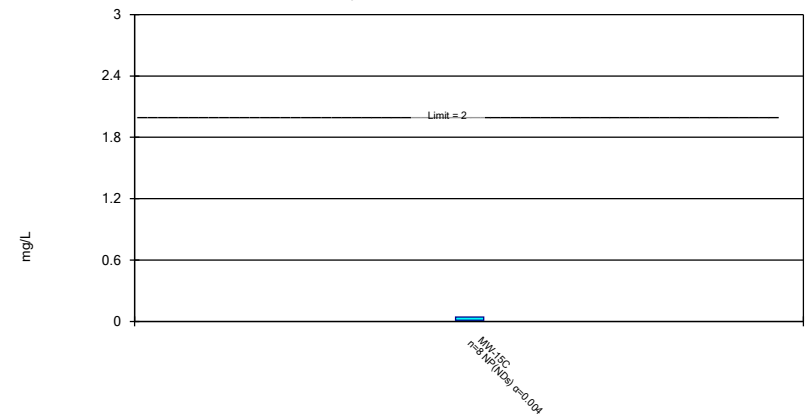
Compliance Limit is not exceeded.



Constituent: Styrene Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 2/28/2025 8:10 PM View: 2024AWQR-Confidence\_Interval  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

**Theil-Sen Summary Table and Graphs – Closed MSWLF Unit**

# Theil Sen/Trend Test

Cherokee County Sanitary Landfill

Client: SCS Engineers

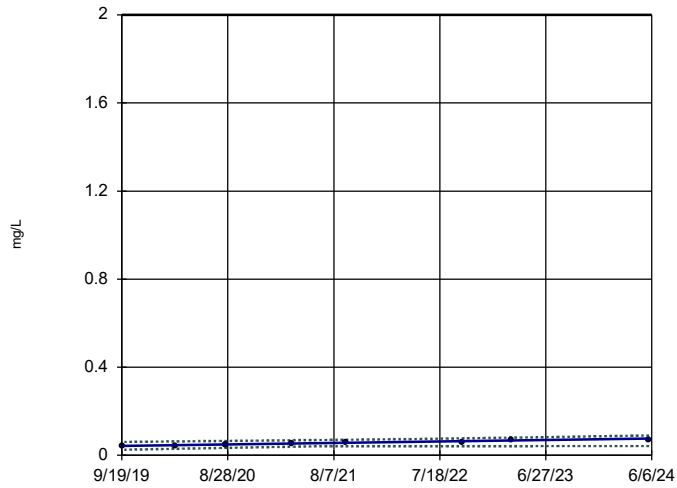
Data: CHRKE C-AM AZPOC-2024AWQR-AM

Printed 2/28/2025, 8:18 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>
Barium (mg/L)	MW-9R	0.007121	26	21	Yes	8	0	0.01	NP
Barium (mg/L)	MW-15C	-0.009629	-22	-21	Yes	8	0	0.01	NP
Cobalt (mg/L)	MW-44	-0.00039	-26	-21	Yes	8	0	0.01	NP
Trichloroethene (ug/L)	MW-7	-0.1407	-22	-21	Yes	8	0	0.01	NP

### Sen's Slope and 99% Confidence Band

MW-9R

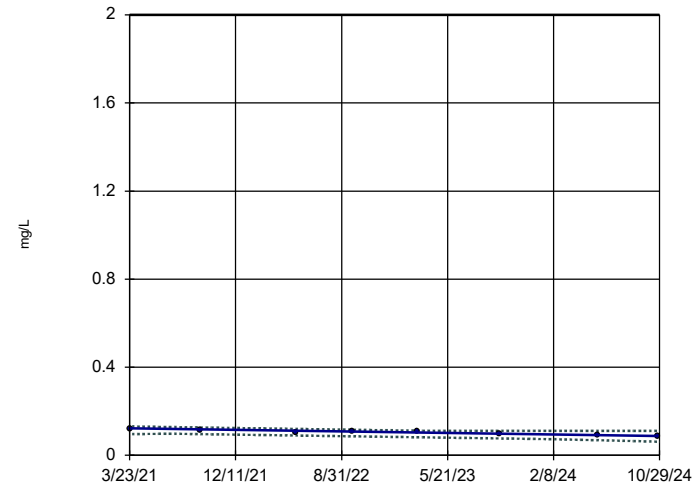


n = 8  
 Slope = 0.007121  
 units per year.  
 Mann-Kendall  
 statistic = 26  
 critical = 21  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).  
 Confidence band is  
 below GWPS mg/L (2).

Constituent: Barium Analysis Run 2/28/2025 8:16 PM View: 2024AWQR-Theil\_Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope and 99% Confidence Band

MW-15C

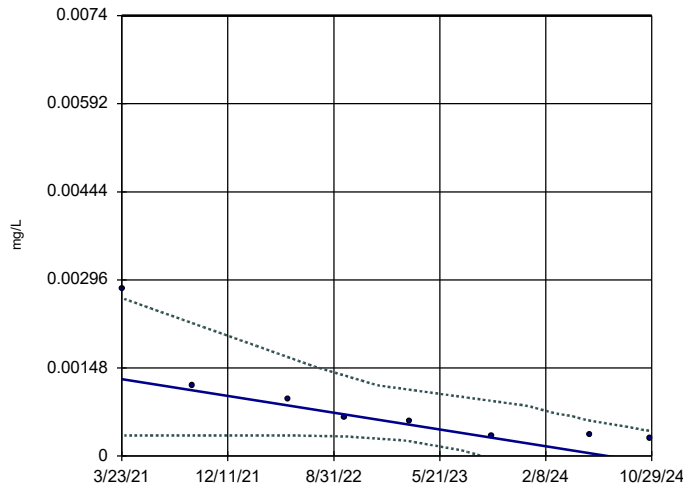


n = 8  
 Slope = -0.009629  
 units per year.  
 Mann-Kendall  
 statistic = -22  
 critical = -21  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).  
 Confidence band is  
 below GWPS mg/L (2).

Constituent: Barium Analysis Run 2/28/2025 8:16 PM View: 2024AWQR-Theil\_Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope and 99% Confidence Band

MW-44

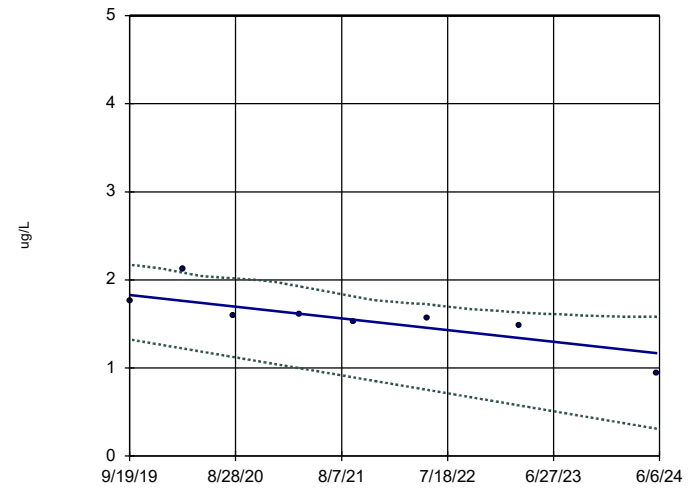


n = 8  
 Slope = -0.00039  
 units per year.  
 Mann-Kendall  
 statistic = -26  
 critical = -21  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).  
 Confidence band is  
 below SSGWPS mg/L  
 (0.0074).

Constituent: Cobalt Analysis Run 2/28/2025 8:16 PM View: 2024AWQR-Theil\_Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

### Sen's Slope and 99% Confidence Band

MW-7



n = 8  
 Slope = -0.1407  
 units per year.  
 Mann-Kendall  
 statistic = -22  
 critical = -21  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).  
 Confidence band is  
 below GWPS mg/L (5).

Constituent: Trichloroethene Analysis Run 2/28/2025 8:17 PM View: 2024AWQR-Theil\_Sen  
 Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-AM AZPOC-2024AWQR-AM

## Appendix E

# 2024 Leachate Control System Performance Evaluation Report

**2024 LEACHATE CONTROL SYSTEM PERFORMANCE EVALUATION REPORT**

**CHEROKEE COUNTY SANITARY LANDFILL**

**CHEROKEE, IOWA**

**SUBMITTAL DATE: MARCH 2025**

**PREPARED FOR:  
CHEROKEE COUNTY SOLID WASTE COMMISSION**

**PREPARED BY:  
SCS ENGINEERS**

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### Figures

FIGURE 1 LEACHATE CONTROL SYSTEM

### Attachments

ATTACHMENT A TABLE 12 – LEACHATE MANAGEMENT SUMMARY  
ATTACHMENT B HISTORICAL LEACHATE COLUMN THICKNESS TABLES AND GRAPHS  
ATTACHMENT C LEACHATE LABORATORY ANALYTICAL DATA SHEETS



## Section 1.0

# Leachate Control System

SCS Engineers (SCS), on behalf of the Cherokee County Solid Waste Commission (Commission), has prepared this Leachate Control System Performance Evaluation Report (LCSPER) for the Cherokee County Sanitary Landfill (Landfill). The purpose of this report is to evaluate the effectiveness of the leachate control system in place at the Landfill. This LCSPER was prepared in general accordance with the requirements of Iowa Administrative Code (IAC) 567-113.7"b"(14), the site operating permit and subsequent applicable permit revisions, and additional Iowa Department of Natural Resources (DNR) requirements. This LCSPER describes the leachate control system monitoring program, provides an evaluation of the effectiveness of the system, and, if necessary, provides recommendations for additional control measures. The reporting period is December 2023 to December 2024.

### 1.1 Location of Control System

The Landfill property is depicted in Figure 1, Leachate Control System. The Landfill is located north of Linden Street, adjacent to the southeastern city limits of the City of Cherokee. The legal description is W  $\frac{1}{2}$  of the SW  $\frac{1}{4}$ , Section 36, Township 92 North, Range 40 West, in Cherokee County, Iowa.

#### 1.1.1 Closed Unlined Area

The Closed MSWLF unit requires that leachate levels be maintained at a minimal practical head as it does not have a Subtitle D-compliant liner and does not have a leachate drainage layer. The leachate control monitoring system consists of three leachate piezometers: LM-1 (South), LM-2 (North), and LM-3 (Middle). Leachate piezometer LM-1 was approved to be abandoned by the DNR in correspondence dated April 18, 2017 (Doc #89136). The leachate control system consists of three extraction wells (EW-1, EW-2, and EW-3) along the ravine underlying the Original Landfill Area and Area B which discharge to the leachate lagoon west of Area B. The extraction wells were turned off in accordance with a request submitted November 12, 2021 (Doc #101679) and approved in the permit dated May 16, 2022 (Doc #103224). The leachate head levels are monitored using piezometers LM-2 (North) and LM-3 (Middle).

#### 1.1.2 Open Subtitle D Area

Phase A of the Open MSWLF unit was constructed with a bottom liner and a leachate collection system. The liner and leachate collection system of each cell slopes downward to the south end of the waste boundary where leachate gravity drains to a lift station, which then pumps the leachate to the leachate lagoon. The leachate head in the Phase A cells of the Open MSWLF unit is monitored by measuring the liquid depth in leachate piezometers LM-A1, LM-A2, LM-A3, LM-A4, LM-A5, and LM-A6. Pursuant to IAC 567-113.7(5)"b"(3), the *"MSWLF unit shall have a leachate collection system that maintains less than a 30-centimeter (i.e., 12-inch) depth of leachate over the liner."*

## 1.2 Effectiveness of the Leachate System

### 1.2.1 Closed Unlined Area

Table 12 in Attachment A provides monthly leachate column thicknesses for the closed unlined area of the Landfill. Table B.1 in Attachment B provides a table and graphs of the leachate measurement points for the period of record. The leachate column thickness in leachate piezometer LM-2 was within the historical range throughout this reporting period with thicknesses ranging from 9.8 feet to 15.0 feet. The leachate column thickness in leachate piezometer LM-3 remained steady throughout this reporting period, with little variation and with the measurements within the historical range with thicknesses ranging from 3.9 feet to 4.4 feet.

### 1.2.2 Open Subtitle D Area

Table 12 in Attachment A provides monthly leachate column thicknesses for the open Subtitle D area. Table B.1 in Attachment B provides a table and graphs of the leachate measurement points for the period of record.

The leachate column thicknesses in the Open MSWLF unit leachate piezometers LM-A1, LM-A2, LM-A3, LM-A4, LM-A5, LM-A6 remained below 12 inches throughout this reporting period.

## 1.3 Approved Changes to System

In August 2023, sluice gate valves that were no longer operable were removed from two Cell A outlets. The valves were replaced with butterfly valves in May 2024.

In September 2023, the three pumps in the lift station were removed for maintenance. Two of the pumps were cleaned, repaired, and reinstalled. The third pump was cleaned and reinstalled, but the pump did not function and repair was not possible. The third pump was replaced in May 2024 in conjunction with the valve replacement. The three pumps were cleaned and reinstalled after jetting of the lift station in August 2024.

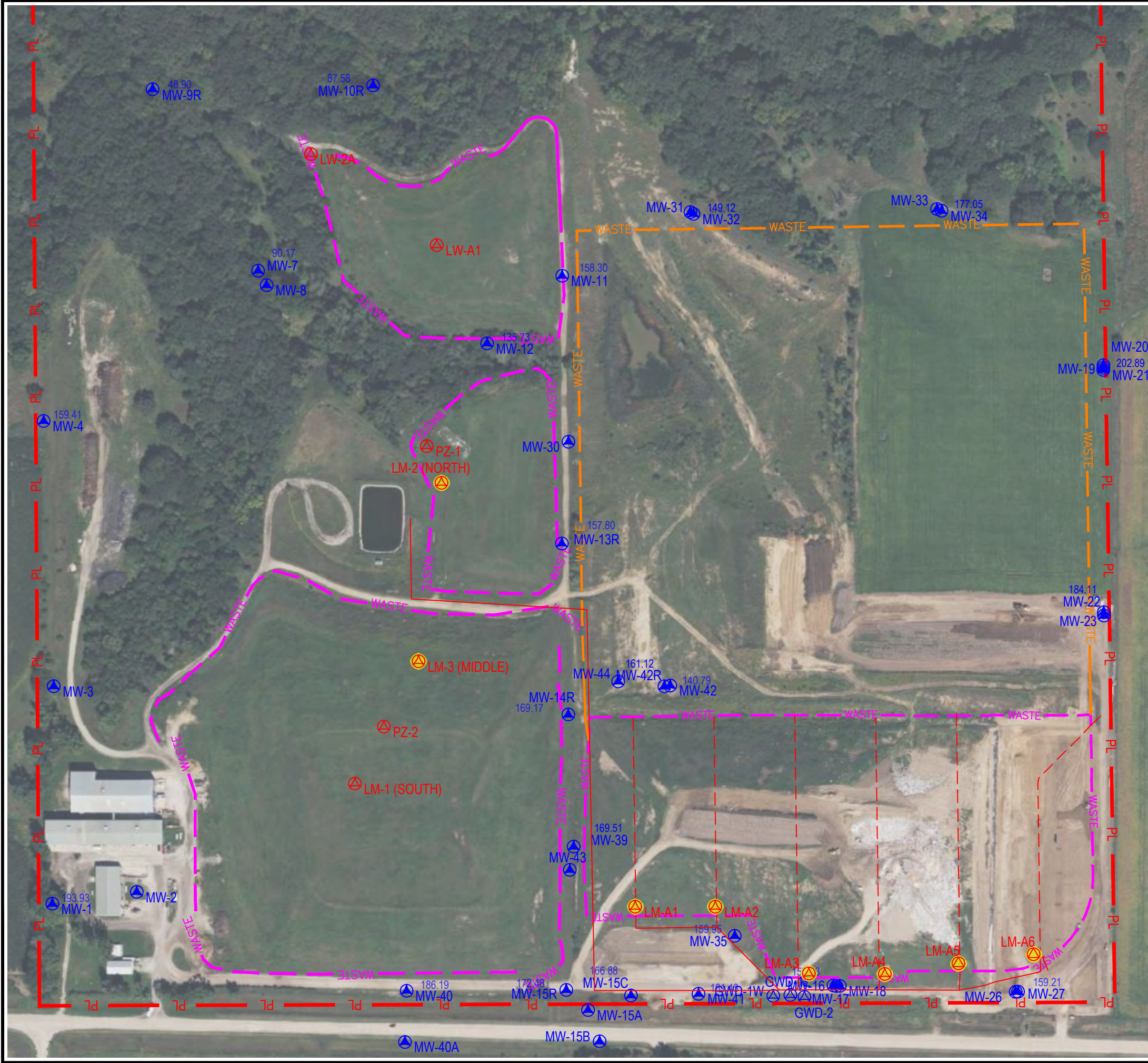
## 1.4 Proposed Changes to System

SCS recommends continuing to perform the following items to maintain the effectiveness of the leachate control system:

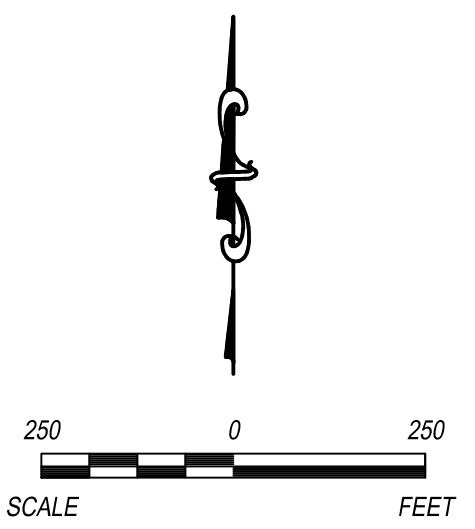
- Continue monthly monitoring of the leachate levels as required in the facility permit.
- Maintain good vegetation over the final cover and intermediate cover over the inactive areas.
- Continue operation and maintenance of the leachate control system in accordance with the approved Leachate Control System Plan.
- Continue recording the volume of leachate disposed of at the City of Cherokee publicly-owned treatment works (POTW). 1,549,200 gallons of leachate were hauled to the POTW during this reporting period. Leachate analytical testing results are included in Attachment C.
- Continue recording the volume of leachate recirculated in the Open MSWLF unit. 168,000 gallons of leachate were recirculated during this reporting period.
- Continue cleaning the leachate collection system once every three years, or more frequently if leachate head or the volume of leachate collected indicates cleaning is necessary. Cleaning of the leachate collection system last occurred in May 2023 and will occur next in 2026.



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- LEGEND
- ⊙ LPZ-1 LEACHATE MONITORING POINT
  - ⊙ MW-4C MONITORING WELL
  - ⊙ LFGW-1 LANDFILL GAS WELL
  - ⊙ LPZ-1 LEACHATE PIEZOMETER
  - ⊙ GV GAS VENT
  - CURRENT WASTE BOUNDARY
  - FUTURE WASTE BOUNDARY
  - APPROXIMATE PROPERTY BOUNDARY



	REVISIONS		
	REV.    DATE		
	△    △    △    △    △    △		
SHEET TITLE	<b>LEACHATE CONTROL SYSTEM</b>		
PROJECT TITLE	<b>CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT</b>		
CLIENT	<b>CHEROKEE COUNTY SOLID WASTE COMMISSION 1805 LINDEN ST CHEROKEE, IOWA</b>		
ENGINEER	<b>SCS ENGINEERS</b> 1680 ALL STATE COURT, SUITE 100 WEST DES MOINES, IOWA 50265 (515) 631-5160		
CADD FILE:	DRAWN BY:	CHECKED BY:	PROJECT NO.
223105.25	CJD	SAM	NO
DATE:	3/7/25		
FIGURE NO.	<b>1</b>		



**Attachment A**

**Table 12 - Leachate Management Summary**

**Table 12**  
**Leachate Management Summary**  
**2024 Leachate Control System Performance Evaluation Report**  
**Cherokee County Landfill**  
**Permit No. 18-SDP-01-75P**

Month	Unlined Cells - Column Thickness (ft)		Lined Cells - Maximum Head on Liner (ft)						Volume Recirculated (gal)	Discharged to City of Cherokee WWTP (gal)	Precipitation (in)
	LM-2	LM-3	LM-A1	LM-A2	LM-A3	LM-A4	LM-A5	LM-A6			
12/2023	9.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3		1.06
1/2024	9.8	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3		0.15
2/2024	10.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3		0.09
3/2024	10.5	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3		1.72
4/2024	13.1	3.9	0.1	0.2	0.4	0.0	0.2	0.3	0.3		NM
5/2024	15.0	4.1	0.7	0.3	0.1	0.1	0.8	0.3	0.3		0.67
6/2024	14.8	4.4	0.4	0.1	0.3	0.1	0.7	0.3	0.3		3.96
7/2024	14.4	4.4	0.1	0.0	0.3	0.1	0.1	0.2	0.1		3.82
8/2024	13.8	4.3	0.1	0.0	0.3	0.1	0.1	0.1	0.1		1.93
9/2024	13.9	4.4	0.0	0.0	0.2	0.1	0.1	0.1	0.1		0.35
10/2024	13.0	NM	0.0	0.0	0.2	0.1	0.1	0.0	0.0		0.70
11/2024	13.3	NM	0.0	0.3	0.2	0.1	0.1	0.0	0.0		3.37
12/2024	13.7	NM	0.0	0.0	0.0	0.1	0.1	0.0	0.0		0.20
<b>December 2023 - December 2024 Total Gallons</b>									168,000	1,549,200	18.02

Notes:

Leachate levels measured by Landfill staff.

NM - Not Measured.

Comments:

1. Reporting Period: December 2023 - December 2024.
2. Recommended Changes to Leachate Collection System: None.
3. Maintenance Performed on Leachate Collection System: See narrative.
4. Last Date of Cleaning and Inspection: May 2023.
5. Date for Next Cleaning and Inspection: Leachate line cleaning and inspection will be performed next in 2026.
6. Volume of Leachate Recirculated: 168,000 gallons of leachate were recirculated during this reporting period.
7. Volume of Leachate Treated On-Site: Leachate is not treated on-site at this facility.
8. Volume of Leachate Treated Off-Site: 1,549,200 gallons of leachate were transported for treatment off-site during this reporting period.
9. Precipitation data from [https://mesonet.agron.iastate.edu/ASOS/reports/mon\\_prec.php?year=2024](https://mesonet.agron.iastate.edu/ASOS/reports/mon_prec.php?year=2024) for Cherokee, Iowa.

## **Attachment B**

### **Historical Leachate Column Thickness Tables and Graphs**

**Table B.1**  
**HISTORICAL LEACHATE COLUMN THICKNESSES AND ELEVATIONS**  
**Cherokee County Sanitary Landfill**  
**Permit No. 18-SDP-01-75P**

Leachate Piezometer CONSTRUCTED WELL DEPTH	LM-2 (North)		LM-3 (Middle)		LM-A1 (South)		LM-A2 (South)		LM-A3 (South)		LM-A4 (South)		LM-A5 (South)		LM-A6 (South)	
	32.00		31.52		20.00		21.30		9.10		11.20		14.10			
Leachate Level & Leachate Column Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)	Leachate Level	Leachate Thickness (feet)
November-11	17.45	14.55	25.30	6.22	15.40	0.10	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
December-11	17.44	14.56	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NI	NA	NI	NA
January-12	14.50	17.50	24.80	6.72	15.50	0.00	15.00	0.50	5.52	0.00	6.00	0.00	NI	NA	NI	NA
February-12	14.50	17.50	24.10	7.42	14.95	0.55	14.75	0.75	5.52	0.00	6.00	0.00	NI	NA	NI	NA
March-12	17.50	14.50	24.35	7.17	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
April-12	17.65	14.35	24.70	6.82	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
May-12	17.60	14.40	25.90	5.62	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
June-12	18.00	14.00	26.00	5.52	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
July-12	18.10	13.90	26.20	5.32	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
August-12	18.80	13.20	26.15	5.37	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
September-12	19.30	12.70	26.35	5.17	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
October-12	19.40	12.60	26.65	4.87	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
November-12	22.00	10.00	26.40	5.12	15.50	0.00	15.50	0.00	5.55	-0.03	6.00	0.00	NI	NA	NI	NA
December-12	20.00	12.00	26.45	5.07	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
January-13	19.75	12.25	26.80	4.72	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
February-13	19.90	12.10	26.95	4.57	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
March-13	19.50	12.50	26.80	4.72	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
April-13	20.20	11.80	26.65	4.87	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
May-13	19.75	12.25	26.35	5.17	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
June-13	19.60	12.40	26.65	4.87	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
July-13	19.85	12.15	26.80	4.72	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
August-13	20.60	11.40	26.55	4.97	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
September-13	21.30	10.70	26.45	5.07	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
October-13	20.90	11.10	26.30	5.22	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
November-13	20.80	11.20	26.50	5.02	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
December-13	20.60	11.40	26.60	4.92	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
January-14	20.75	11.25	26.70	4.82	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
February-14	20.60	11.40	NA	NA	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
March-14	20.85	11.15	27.10	4.42	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
April-14	20.70	11.30	27.00	4.52	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
May-14	21.40	10.60	26.90	4.62	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
June-14	21.30	10.70	26.70	4.82	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
July-14	21.20	10.80	26.70	4.82	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
August-14	21.25	10.75	26.90	4.62	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
September-14	21.25	10.75	26.70	4.82	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
October-14	21.05	10.95	26.95	4.57	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
November-14	21.45	10.55	27.20	4.32	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
December-14	21.20	10.80	26.80	4.72	15.50	0.00	15.50	0.00	5.52	0.00	6.00	0.00	NI	NA	NI	NA
January-15	21.25	10.75	26.90	4.62	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
February-15	21.40	10.60	27.05	4.47	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
March-15	20.90	11.10	26.95	4.57	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
April-15	20.95	11.05	26.50	5.02	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
May-15	20.80	11.20	26.65	4.87	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
June-15	20.95	11.05	26.50	5.02	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
July-15	21.40	10.60	26.25	5.27	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
August-15	21.20	10.80	26.90	4.62	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
September-15	20.75	11.25	27.40	4.12	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
October-15	20.75	11.25	27.85	3.67	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
November-15	20.70	11.30	26.90	4.62	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
December-15	20.50	11.50	26.70	4.82	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
January-16	20.40	11.60	26.10	5.42	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
February-16	20.60	11.40	26.60	4.92	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
March-16	20.20	11.80	25.80	5.72	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
April-16	20.15	11.85	26.10	5.42	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
May-16	20.00	12.00	26.50	5.02	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
June-16	20.60	11.40	26.70	4.82	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
July-16	20.65	11.35	26.95	4.57	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
August-16	20.80	11.20	27.40	4.12	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
September-16	20.20	11.80	27.30	4.22	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	NI	NA	NI	NA
October-16	19.85	12.15	27.50	4.02	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
November-16	20.20	11.80	27.60	3.92	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
December-16	20.75	11.25	26.85	4.67	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA

**Table B.1**  
**HISTORICAL LEACHATE COLUMN THICKNESSES AND ELEVATIONS**  
**Cherokee County Sanitary Landfill**  
**Permit No. 18-SDP-01-75P**

Leachate Piezometer	LM-2 (North)		LM-3 (Middle)		LM-A1 (South)		LM-A2 (South)		LM-A3 (South)		LM-A4 (South)		LM-A5 (South)		LM-A6 (South)	
January-17	20.40	11.60	26.90	4.62	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
February-17	20.60	11.40	27.50	4.02	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
March-17	20.45	11.55	26.40	5.12	20.00	0.00	20.80	0.50	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
April-17	20.20	11.80	25.60	5.92	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
May-17	20.35	11.65	26.45	5.07	19.20	0.80	20.50	0.80	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
June-17	21.10	10.90	27.45	4.37	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
July-17	20.60	11.40	26.90	4.62	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
August-17	20.70	11.30	27.40	4.12	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
September-17	21.90	10.10	27.60	3.92	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
October-17	20.80	11.20	27.45	4.07	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
November-17	21.45	11.80	27.95	3.92	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
December-17	21.10	10.90	27.95	3.57	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
January-18	21.25	10.75	27.20	4.32	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
February-18	21.20	10.80	27.40	4.12	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
March-18	21.30	10.70	27.30	4.22	20.00	0.00	20.20	1.10	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
April-18	21.25	10.75	27.05	4.47	17.50	2.50	18.35	2.95	8.15	0.95	10.30	0.90	9.30	0.00	NI	NA
May-18	20.45	11.55	26.90	4.62	18.10	1.90	20.30	1.00	8.00	1.10	11.20	0.00	9.30	0.00	NI	NA
June-18	20.80	11.20	26.90	4.62	18.60	1.40	19.70	1.60	8.10	1.00	11.20	0.00	9.30	0.00	NI	NA
July-18	21.00	11.00	27.10	4.42	18.60	1.40	21.10	0.20	8.20	0.90	11.20	0.00	9.30	0.00	NI	NA
August-18	20.90	11.10	27.25	3.77	19.10	0.90	21.30	0.00	8.30	0.80	11.20	0.00	9.30	0.00	NI	NA
September-18	20.90	11.10	27.20	4.32	18.90	1.10	20.20	1.10	8.40	0.70	11.20	0.00	9.30	0.00	NI	NA
October-18	20.75	11.25	27.15	4.37	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
November-18	20.95	11.80	27.50	3.92	18.90	1.10	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
December-18	21.10	10.90	27.95	3.57	20.00	0.00	21.30	0.00	9.10	0.00	11.20	0.00	9.30	0.00	NI	NA
January-19	20.75	11.25	26.85	4.67	18.90	1.10	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
February-19	NM*	NA*	NM*	NA*	NM*	NA*	NM*	NA*	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
March-19	21.20	10.80	27.10	4.42	19.60	0.40	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
April-19	18.50	13.50	26.50	5.02	18.60	1.40	20.60	0.70	8.95	0.15	10.90	0.30	Dry	0.00	NI	NA
May-19	18.40	13.60	26.60	4.92	17.60	2.40	19.55	1.75	8.65	0.45	10.00	1.20	Dry	0.00	NI	NA
June-19	18.00	14.00	27.10	4.42	17.90	2.10	20.50	0.90	8.85	0.25	Dry	0.00	Dry	0.00	NI	NA
July-19	19.35	12.65	26.95	4.57	17.55	2.45	20.75	0.55	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
August-19	19.90	12.10	27.10	4.42	18.15	1.85	Dry	0.00	Dry	0.00	10.50	0.70	Dry	0.00	NI	NA
September-19	20.00	12.00	27.25	4.27	18.65	1.35	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
October-19	20.00	12.00	27.60	3.92	19.40	0.60	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
November-19	19.55	12.45	27.20	4.32	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
December-19	19.85	12.15	26.80	4.72	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
January-20	19.70	12.30	26.85	4.67	19.75	0.25	21.20	0.10	Dry	0.00	11.10	0.10	Dry	0.00	NI	NA
February-20	19.50	12.50	26.60	4.92	18.60	1.40	21.20	0.10	Dry	0.00	11.10	0.10	Dry	0.00	NI	NA
March-20	17.00	15.00	26.30	5.22	19.35	0.65	20.80	0.50	Dry	0.00	10.00	1.20	Dry	0.00	NI	NA
April-20	18.10	13.90	26.80	4.72	18.60	1.40	20.75	0.55	Dry	0.00	11.10	0.10	NA	NA	NI	NA
May-20	18.75	13.25	26.75	4.77	18.80	1.20	21.20	0.10	Dry	0.00	9.55	1.65	Dry	0.00	NI	NA
June-20	19.25	12.75	27.00	4.52	18.55	1.45	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
July-20	20.20	11.80	27.00	4.52	19.00	1.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
August-20	20.15	11.85	27.15	4.37	18.65	1.35	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
September-20	20.95	11.05	27.30	4.22	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
October-20	21.10	10.90	27.35	4.17	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
November-20	20.90	11.10	27.60	3.92	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
December-20	20.95	11.05	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
January-21	21.00	11.00	28.05	3.47	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
February-21	21.50	10.50	28.20	3.32	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
March-21	21.60	10.40	27.20	4.32	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
April-21	21.35	10.65	27.15	4.37	19.80	0.20	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
May-21	21.30	10.70	28.10	3.42	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
June-21	21.25	10.75	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
July-21	21.25	10.75	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
August-21	21.70	10.30	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
September-21	21.90	10.10	27.80	3.72	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
October-21	22.30	9.70	28.20	3.32	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NI	NA
November-21	21.45	10.55	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.60	0.05
December-21	21.60	10.40	27.70	3.82	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.60	0.05

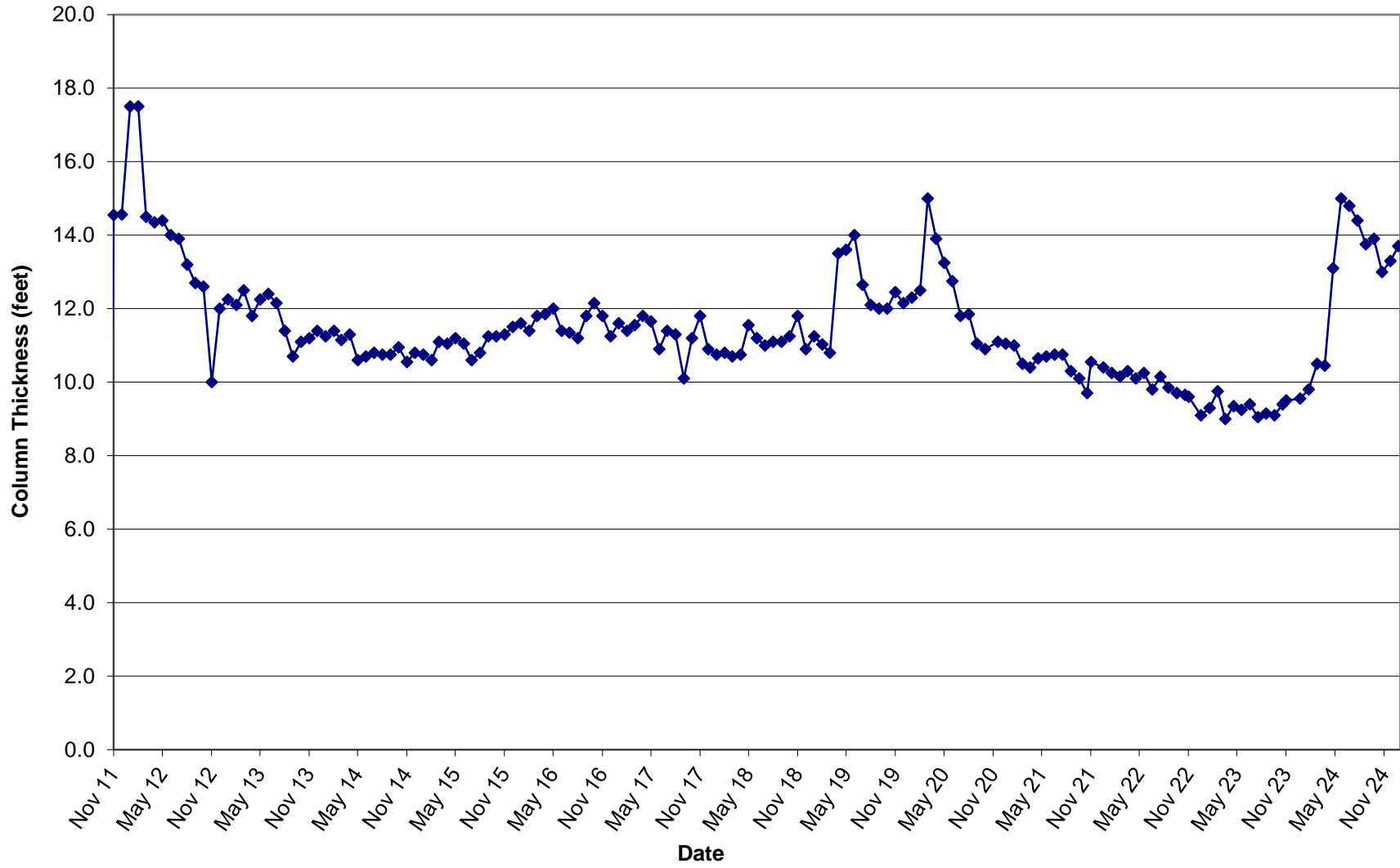


**Table B.1**  
**HISTORICAL LEACHATE COLUMN THICKNESSES AND ELEVATIONS**  
**Cherokee County Sanitary Landfill**  
**Permit No. 18-SDP-01-75P**

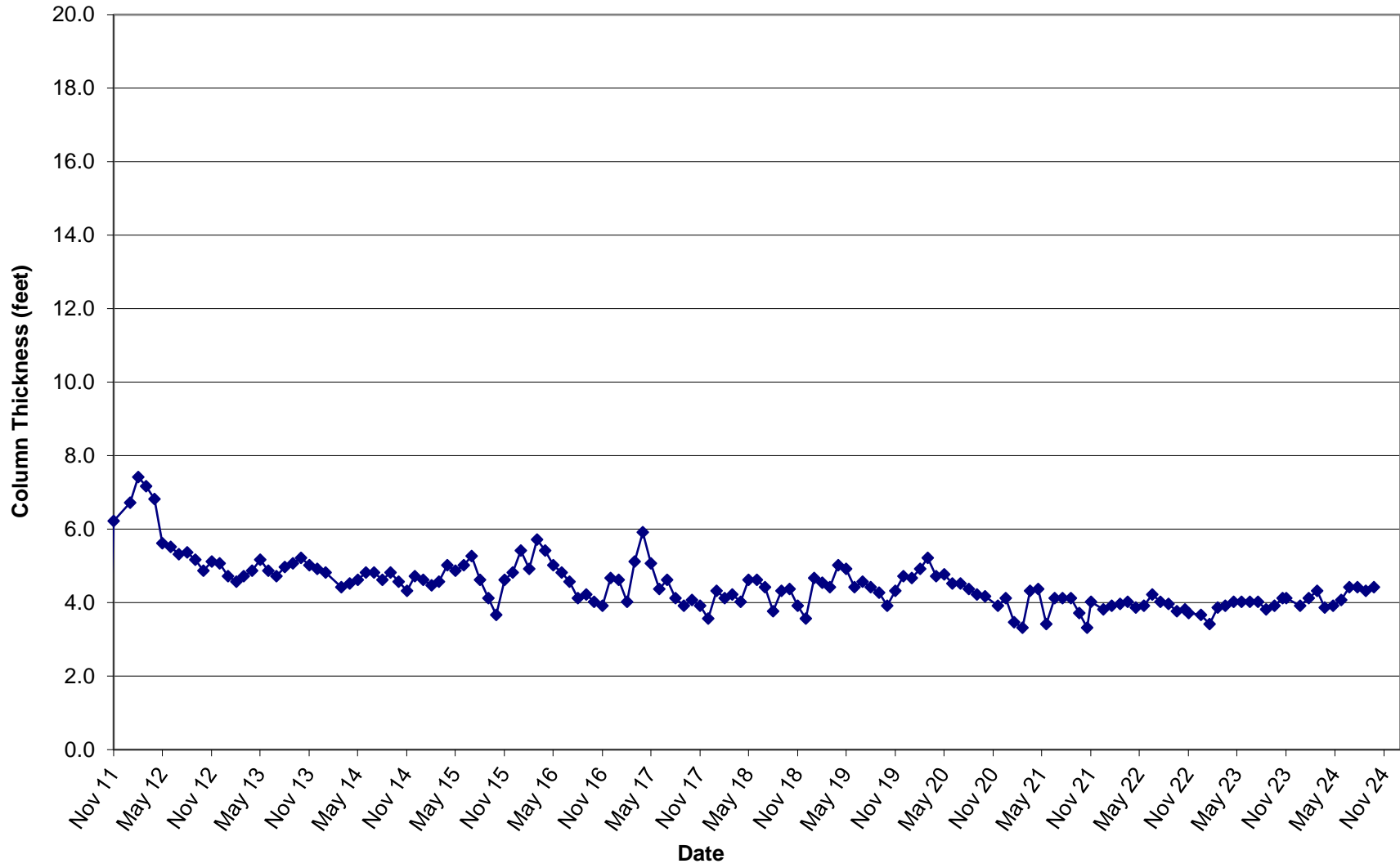
Leachate Piezometer	LM-2 (North)		LM-3 (Middle)		LM-A1 (South)		LM-A2 (South)		LM-A3 (South)		LM-A4 (South)		LM-A5 (South)		LM-A6 (South)	
January-22	21.75	10.25	27.60	3.92	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
February-22	21.85	10.15	27.55	3.97	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
March-22	21.70	10.30	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
April-22	21.90	10.10	27.65	3.87	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
May-22	21.75	10.25	27.60	3.92	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
June-22	22.20	9.80	27.30	4.22	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
July-22	21.85	10.15	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
August-22	22.15	9.85	27.55	3.97	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
September-22	22.30	9.70	27.75	3.77	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
October-22	22.35	9.65	27.70	3.82	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
November-22	22.40	9.60	27.80	3.72	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.40	0.03
December-22	22.90	9.10	27.85	3.67	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	0.60	0.05
January-23	22.70	9.30	28.10	3.42	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
February-23	22.25	9.75	27.65	3.87	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
March-23	23.00	9.00	27.60	3.92	Dry	0.00	21.00	0.30	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00
April-23	22.65	9.35	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	NM	NA
May-23	22.75	9.25	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	2.60	0.22
June-23	22.60	9.40	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	5.60	0.47
July-23	22.95	9.05	27.50	4.02	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.70	0.31
August-23	22.85	9.15	27.70	3.82	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.70	0.31
September-23	22.90	9.10	27.60	3.92	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.90	0.33
October-23	22.60	9.40	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	4.50	0.38
November-23	22.50	9.50	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.20	0.27
December-23	22.45	9.55	27.60	3.92	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.20	0.27
January-24	22.20	9.80	27.40	4.12	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.70	0.31
February-24	21.50	10.50	27.20	4.32	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.20	0.27
March-24	21.55	10.45	27.65	3.87	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	Dry	0.00	3.20	0.27
April-24	18.90	13.10	27.60	3.92	19.85	0.15	21.10	0.20	8.75	0.35	19.85	0.00	13.90	0.20	3.90	0.33
May-24	17.00	15.00	27.45	4.07	19.30	0.70	21.00	0.30	9.00	0.10	11.10	0.10	13.25	0.75	3.70	0.31
June-24	17.20	14.80	27.10	4.42	19.55	0.45	21.25	0.05	8.80	0.30	11.10	0.10	13.45	0.65	3.20	0.27
July-24	17.60	14.40	27.10	4.42	19.90	0.10	Dry	0.00	8.85	0.25	11.10	0.10	14.00	0.10	1.90	0.16
August-24	18.25	13.75	27.20	4.32	19.90	0.10	Dry	0.00	8.85	0.25	11.10	0.10	14.00	0.10	1.10	0.09
September-24	18.10	13.90	27.10	4.42	Dry	0.00	Dry	0.00	8.90	0.20	11.10	0.10	14.00	0.10	1.00	0.08
October-24	19.00	13.00	NA	NM	Dry	0.00	Dry	0.00	8.90	0.20	11.10	0.10	14.00	0.10	0.20	0.02
November-24	18.70	13.30	NA	NM	Dry	0.00	21.00	0.30	8.90	0.20	11.10	0.10	14.00	0.10	0.40	0.03
December-24	18.30	13.70	NA	NM	Dry	0.00	Dry	0.00	Dry	0.00	11.10	0.10	14.00	0.10	0.40	0.03

Measurements collected by Landfill staff.  
 \* Levels not available due to heavy snow blocking access to the piezometers.  
 Measurements from January through October 2011 not available.  
 LM-A1 was extended from 15.50 feet to 20.00 feet prior to January 2015.  
 LM-A2 was extended from 15.50 feet to 21.30 feet prior to January 2015.  
 LM-A3 was extended from 5.52 feet to 9.10 feet prior to January 2015.  
 LM-A4 was extended from 9.30 feet to 14.10 feet prior to May 2020.  
 LM-A5 was installed in 2016 and first measured in October 2016.  
 LM-A6 was installed in 2021 and measurements began in November 2021.

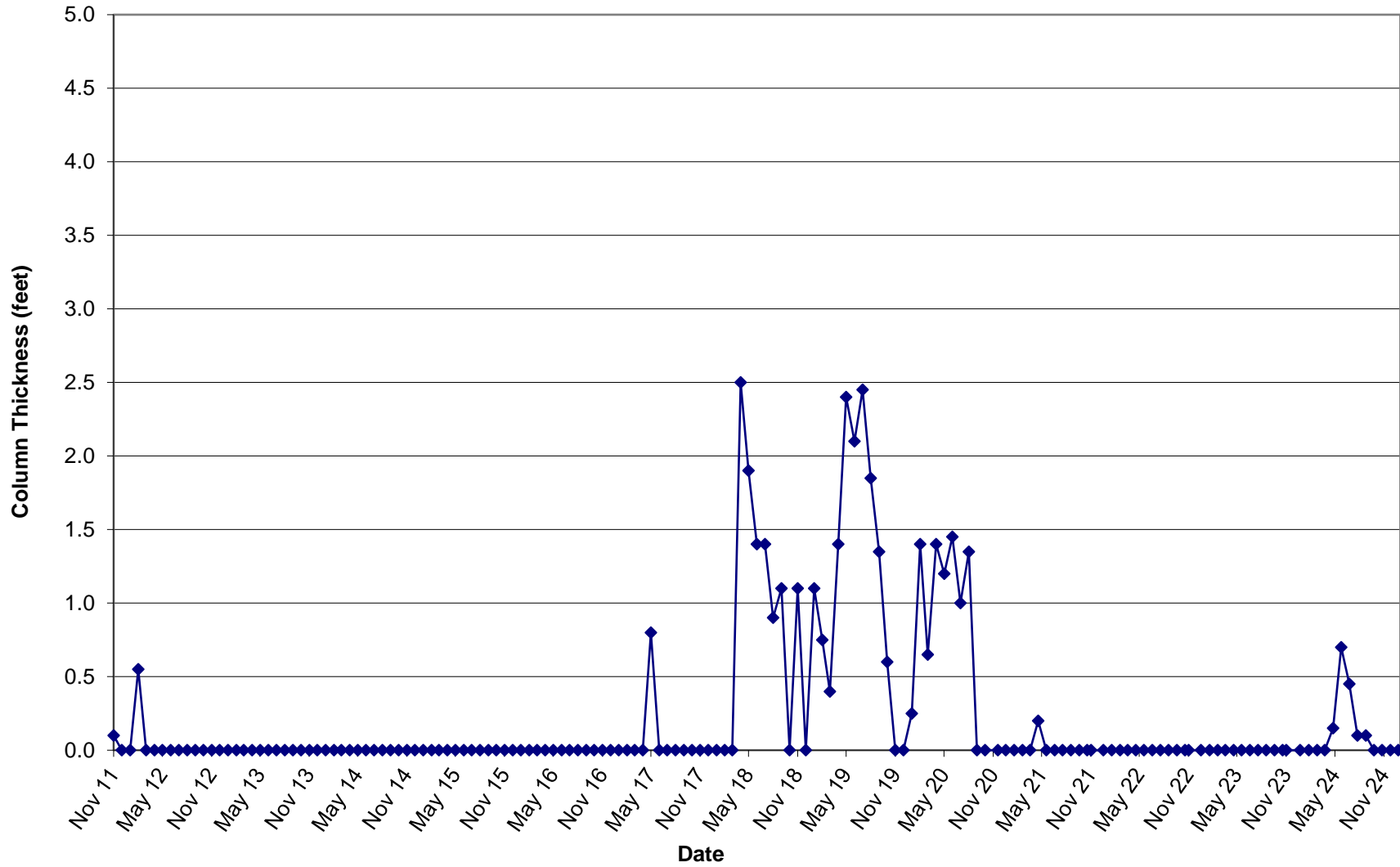
LM-2 (North) Historical Leachate Column Thicknesses



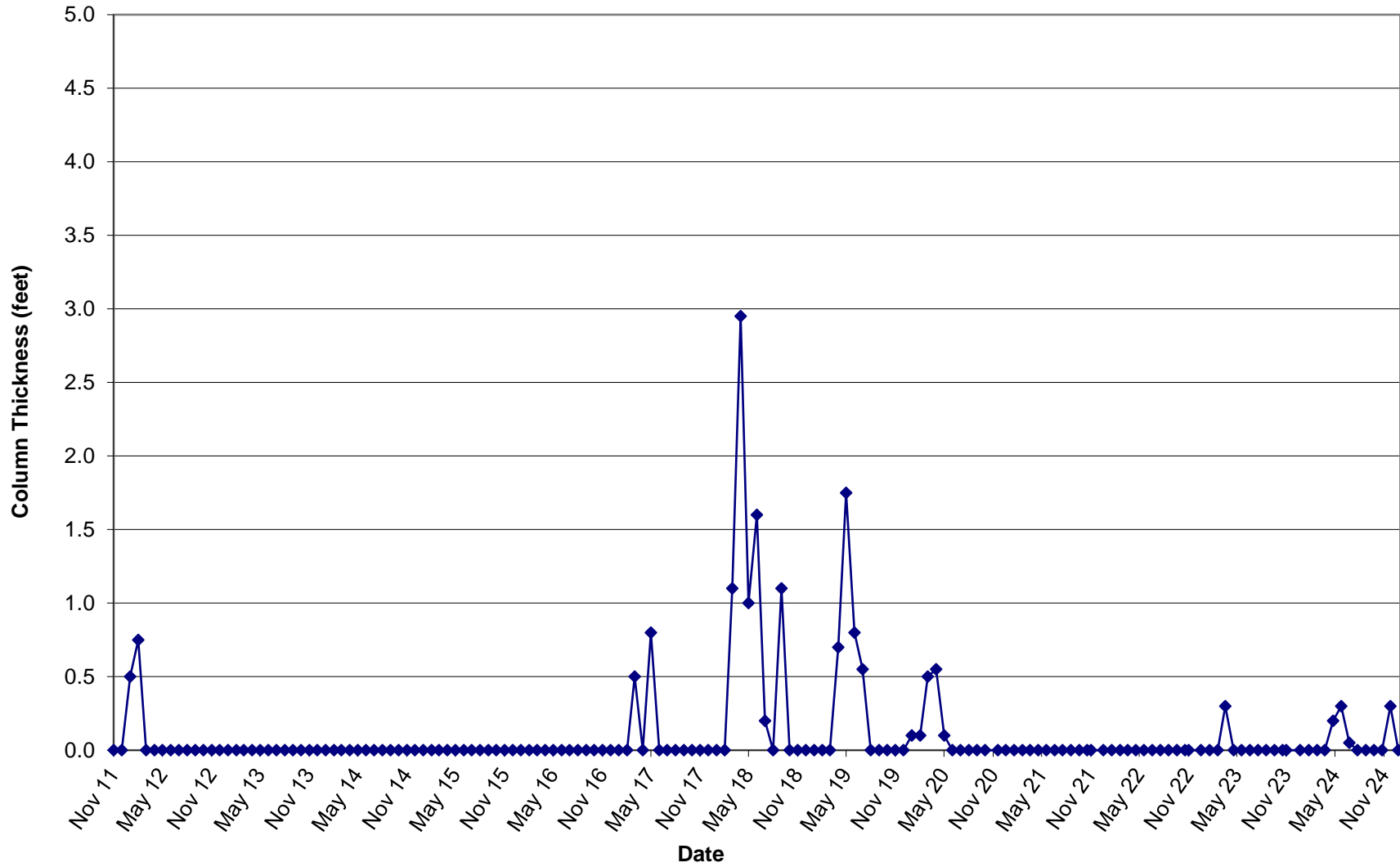
### LM-3 (Middle) Historical Leachate Column Thicknesses



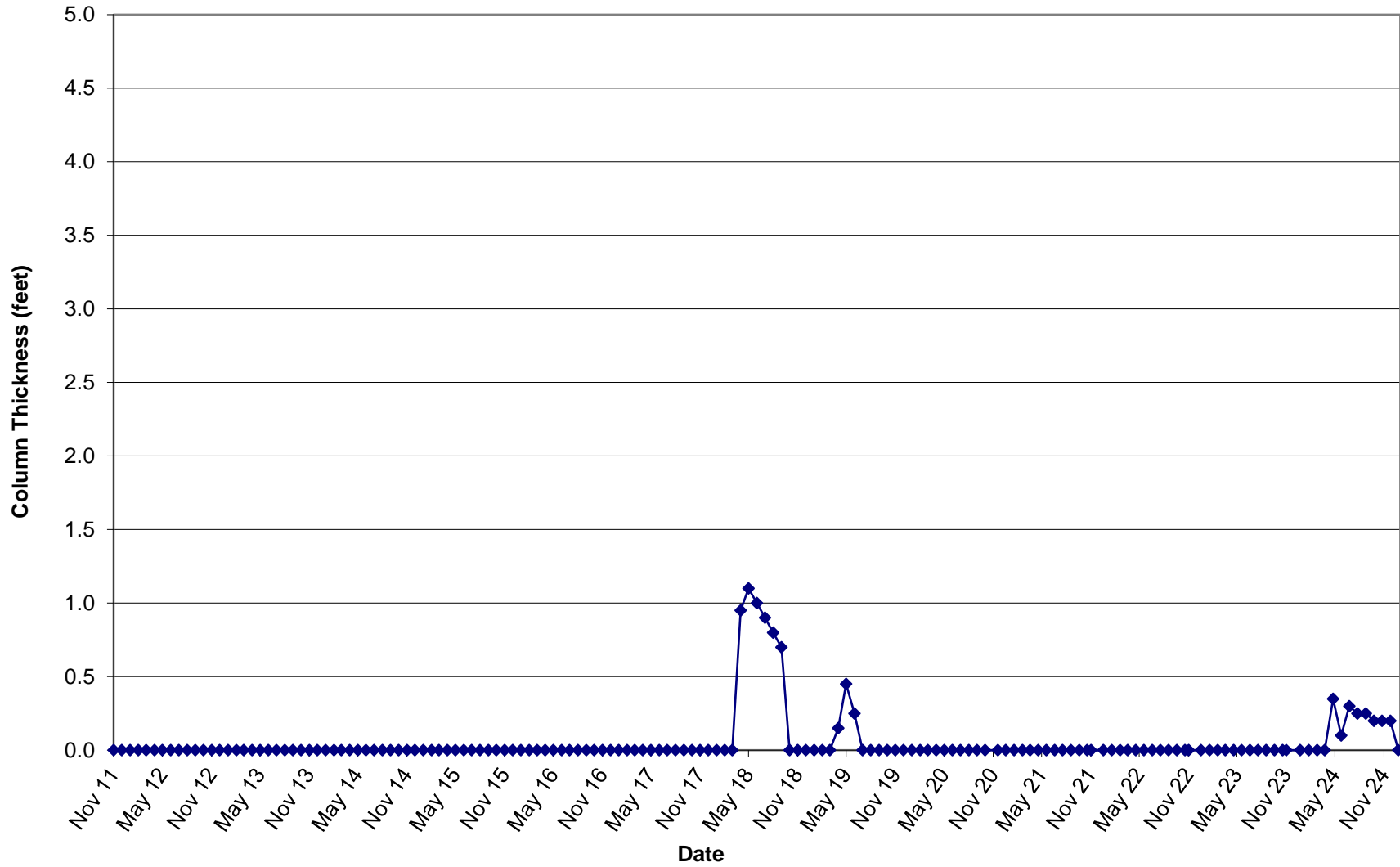
### LM-A1 Cell Historical Leachate Column Thicknesses



### LM-A2 Cell Historical Leachate Column Thicknesses

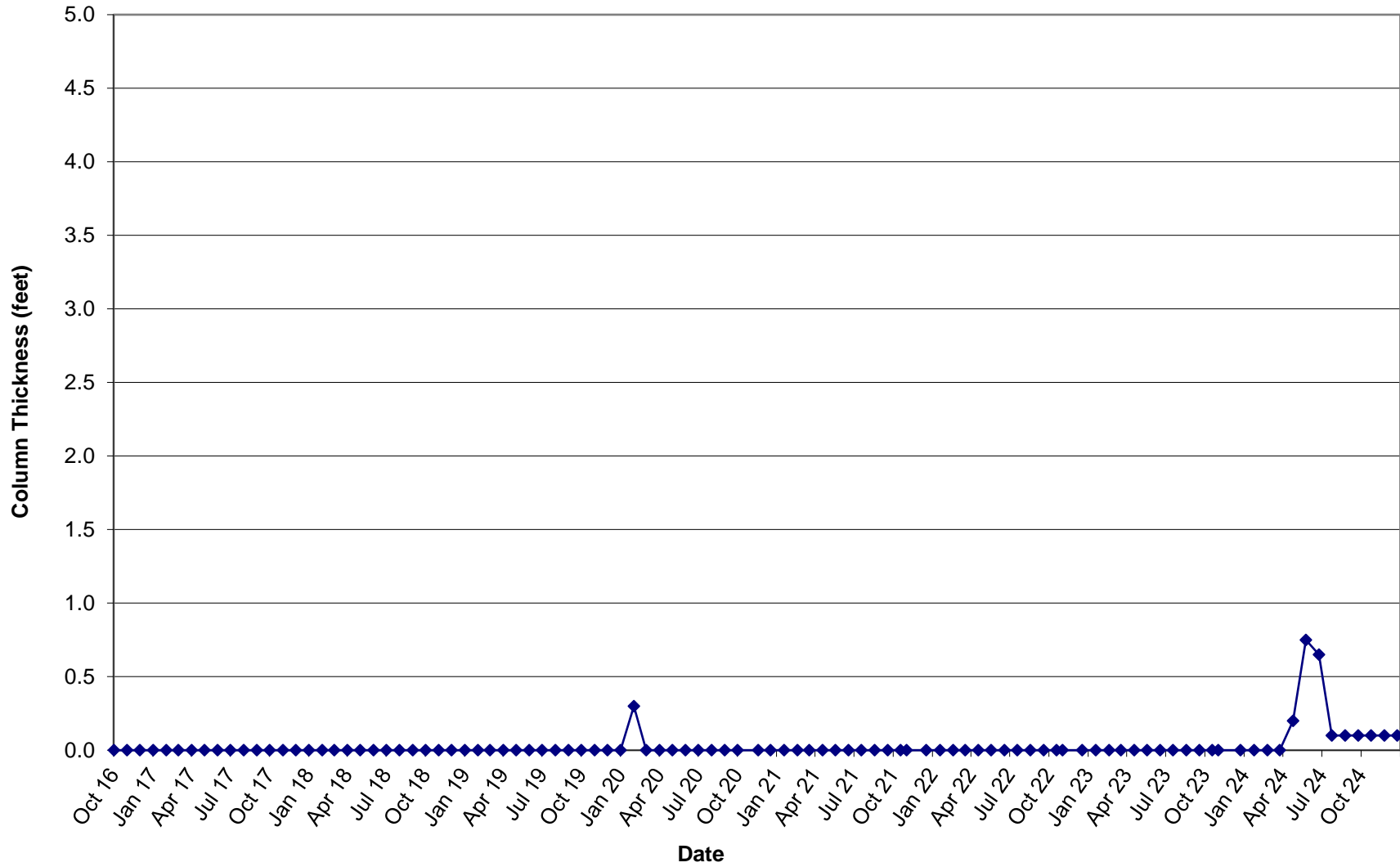


### LM-A3 Cell Historic Leachate Column Thicknesses



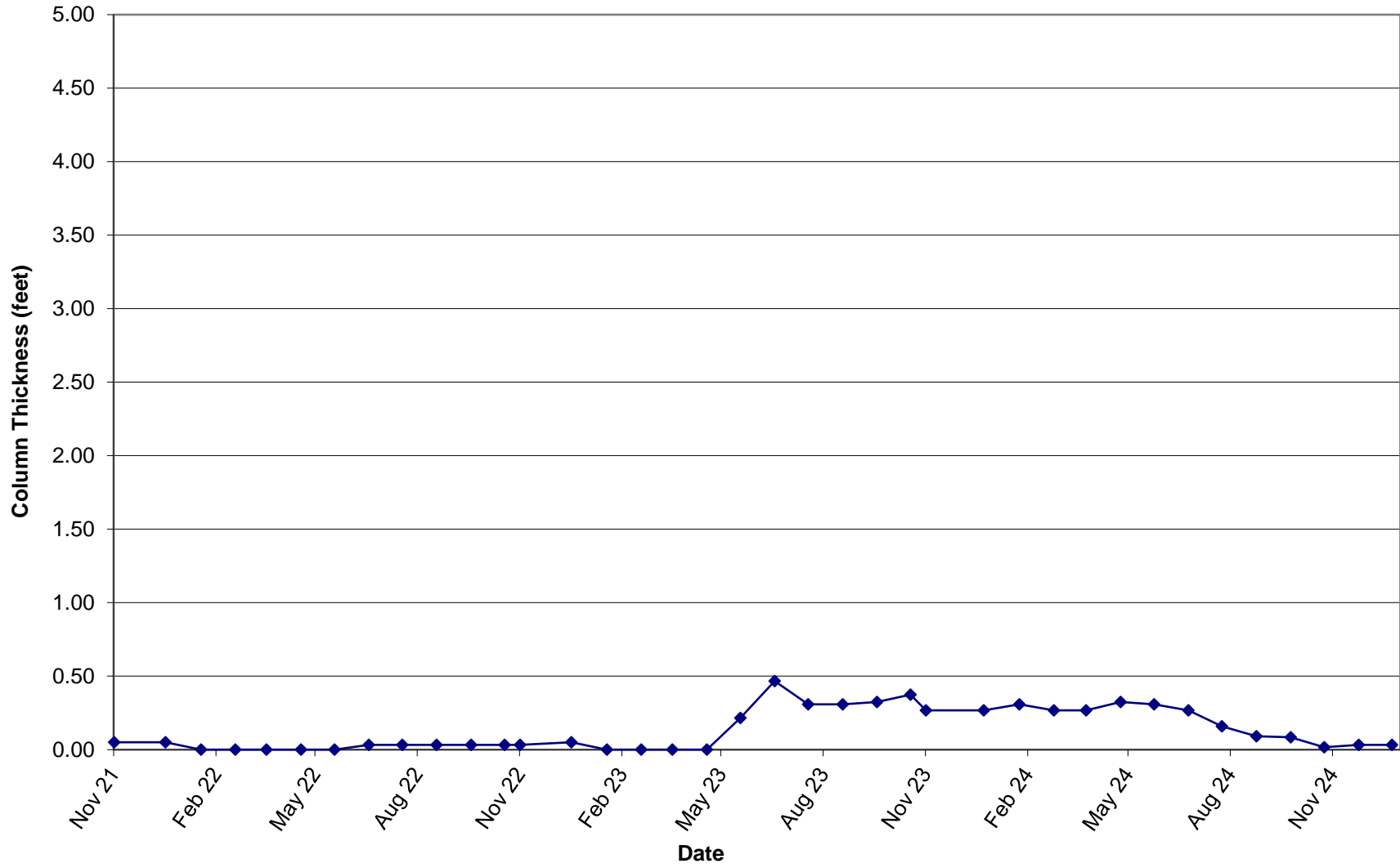


### LM-A5 Cell Historical Leachate Column Thicknesses





### LM-A6 Cell Historical Leachate Column Thicknesses



**Attachment C**

**Leachate Laboratory Analytical Data Sheets**



## Certificate of Analysis

Report Date: 4-1-2024  
Report Number: 24-092-0137  
Lab ID Number: 24010376

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 3-27-2024  
Date Received: 3-27-2024  
Contact: Brent Kach  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 3-27-2024 @ 10:15 by RS  
**Received:** 3-27-2024 @ 12:23 by SS (5.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	276	4-1-2024 8:48	HS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.  Upon receipt sample met requirements for analysis.

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

## Certificate of Analysis

Report Date: 4-1-2024  
Report Number: 24-092-0136  
Lab ID Number: 24010375

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 3-27-2024  
Date Received: 3-27-2024  
Contact: Brent Kach  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 3-26-2024 @ 12:15 by RS  
**Received:** 3-27-2024 @ 12:23 by SS (5.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	349	4-1-2024 8:48	HS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.  Upon receipt sample met requirements for analysis.

Respectfully submitted by  
  
**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 4-11-2024  
Report Number: 24-102-0133  
Lab ID Number: 24011989

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 4-5-2024  
Date Received: 4-5-2024  
Contact: Tony Agnitsch

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 4-5-2024 @ 11:25 by RS  
**Received:** 4-5-2024 @ 12:55 by SS (13.1°C)

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	281	4-11-2024 8:24	HS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
  
**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 4-11-2024  
Report Number: 24-102-0132  
Lab ID Number: 24011988

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 4-5-2024  
Date Received: 4-5-2024  
Contact: Tony Agnitsch

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 4-4-2024 @ 12:40 by RS  
**Received:** 4-5-2024 @ 12:55 by SS (13.1°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	272	4-11-2024 8:24	HS	CFR PAI-DK03

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C) and pH guidelines not met.

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 4-18-2024  
Report Number: 24-109-0225  
Lab ID Number: 24013018

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 4-10-2024  
Date Received: 4-15-2024  
Contact: Brent Kach

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 4-10-2024 @ 11:10 by LD  
**Received:** 4-15-2024 @ 10:59 by KH (9.0°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	296	4-18-2024 7:54	BG	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 4-18-2024  
Report Number: 24-109-0224  
Lab ID Number: 24013017

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 4-11-2024  
Date Received: 4-15-2024  
Contact: Brent Kach

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 4-11-2024 @ 12:35 by RS  
**Received:** 4-15-2024 @ 10:59 by KH (9.0°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	297	4-18-2024 7:54	BG	CFR PAI-DK03

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 5-8-2024  
Report Number: 24-129-0049  
Lab ID Number: 24015077

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 5-3-2024  
Date Received: 5-3-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 5-1-2024 @ 11:08 by RS  
**Received:** 5-3-2024 @ 13:10 by AO (13.1°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	287	5-7-2024 11:31	JS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 5-8-2024  
Report Number: 24-129-0048  
Lab ID Number: 24015076

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 5-3-2024  
Date Received: 5-3-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 5-3-2024 @ 11:35 by RS  
**Received:** 5-3-2024 @ 13:10 by AO (13.1°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	303	5-7-2024 11:31	JS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 5-22-2024  
Report Number: 24-143-0043  
Lab ID Number: 24016861

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 5-16-2024  
Date Received: 5-16-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 5-15-2024 @ 11:29 by LD  
**Received:** 5-16-2024 @ 12:58 by zw (16.3°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	215	5-21-2024 1:16	BG	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 5-29-2024  
Report Number: 24-150-0152  
Lab ID Number: 24017961

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 5-23-2024  
Date Received: 5-23-2024  
Contact: Tony Agnitsch  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 5-22-2024 @ 11:30 by LD  
**Received:** 5-23-2024 @ 15:10 by BR (14.3°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	236	5-29-2024 9:21	HS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 5-29-2024  
Report Number: 24-150-0151  
Lab ID Number: 24017960

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 5-23-2024  
Date Received: 5-23-2024  
Contact: Tony Agnitsch  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 5-23-2024 @ 11:04 by LD  
**Received:** 5-23-2024 @ 15:10 by BR (14.3°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	247	5-29-2024 9:21	HS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).
Total Kjeldahl Nitrogen analyzed in duplicate prior to reporting

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 6-19-2024  
Report Number: 24-171-0117  
Lab ID Number: 24020314

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 6-12-2024  
Date Received: 6-12-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 6-12-2024 @ 12:05 by RS  
**Received:** 6-12-2024 @ 13:49 by BR (6.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	314	6-19-2024 7:52	HS	CFR PAI-DK03

Comments
<p>Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.</p> <p>Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).</p>

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



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www.foundationanalytical.com

## Certificate of Analysis

Report Date: 6-19-2024  
Report Number: 24-171-0116  
Lab ID Number: 24020313

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 6-12-2024  
Date Received: 6-12-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 6-12-2024 @ 12:10 by RS  
**Received:** 6-12-2024 @ 13:49 by BR (6.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	317	6-19-2024 7:52	HS	CFR PAI-DK03

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

**\*\* End Certificate of Analysis \*\***

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

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## Certificate of Analysis

Report Date: 6-27-2024  
Report Number: 24-179-0131  
Lab ID Number: 24021432

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 6-21-2024  
Date Received: 6-21-2024  
Contact: Tony Agnitsch  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 6-21-2024 @ 10:30 by RS  
**Received:** 6-21-2024 @ 13:00 by SS (14.5°C)

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	164	6-27-2024 7:37	JS	CFR PAI-DK03

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 6-27-2024  
Report Number: 24-179-0130  
Lab ID Number: 24021431

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 6-21-2024  
Date Received: 6-21-2024  
Contact: Tony Agnitsch  
Submitted By: Rob Stines

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 6-20-2024 @ 11:30 by LD  
**Received:** 6-21-2024 @ 13:00 by SS (14.5°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	240	6-27-2024 7:37	JS	CFR PAI-DK03

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (TKN: 0-6°C).

Respectfully submitted by  
*Brittany Erickson*  
**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 7-17-2024  
Report Number: 24-199-0083  
Lab ID Number: 24023624

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 7-10-2024  
Date Received: 7-10-2024  
Contact: Tony Agnitsch  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate (4) Grab  
**Sampled:** 7-10-2024 @ 14:44 by LD  
**Received:** 7-10-2024 @ 15:34 by AO (13.4°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	280	7-16-2024 4:10	RT	CFR PAI-DK03

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met.

Respectfully submitted by  
*Brittany Erickson*  
**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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# Certificate of Analysis

Report Date: 7-17-2024  
Report Number: 24-199-0082  
Lab ID Number: 24023623

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 7-10-2024  
Date Received: 7-10-2024  
Contact: Tony Agnitsch  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate (3) Grab  
**Sampled:** 7-10-2024 @ 14:44 by LD  
**Received:** 7-10-2024 @ 15:34 by AO (13.4°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	340	7-12-2024 9:45	LA	SM 5210B - 2011
Total Suspended Solids (mg/L)	730	7-11-2024 7:53	JRS	SM 2540 D - 2011
pH	7.51	7-11-2024 9:06	BC	SM 4500-H B - 2011

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT maximum hold time exceeded (pH).

Respectfully submitted by  
*Brittany Erickson*  
**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 7-17-2024  
Report Number: 24-199-0081  
Lab ID Number: 24023622

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 7-10-2024  
Date Received: 7-10-2024  
Contact: Tony Agnitsch  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leacahte (2) Grab  
**Sampled:** 7-10-2024 @ 14:44 by LD  
**Received:** 7-10-2024 @ 15:34 by AO (13.4°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
Total Kjeldahl Nitrogen (mg/L)	264	7-16-2024 4:10	RT	CFR PAI-DK03

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met

Respectfully submitted by

*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

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## Certificate of Analysis

Report Date: 7-17-2024  
Report Number: 24-199-0080  
Lab ID Number: 24023621

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 7-10-2024  
Date Received: 7-10-2024  
Contact: Tony Agnitsch  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate (1) Grab  
**Sampled:** 7-10-2024 @ 14:44 by LD  
**Received:** 7-10-2024 @ 15:34 by AO (13.4°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	< 218	7-12-2024 9:42	LA	SM 5210B - 2011
Total Suspended Solids (mg/L)	105	7-11-2024 7:53	JRS	SM 2540 D - 2011
pH	7.49	7-11-2024 9:08	BC	SM 4500-H B - 2011

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT maximum hold time exceeded (pH)

**\*\* End Certificate of Analysis \*\***

Respectfully submitted by

*Brittany Erickson*

**Brittany Erickson**  
Quality Manager

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## Certificate of Analysis

Report Date: 7-22-2024  
Report Number: 24-204-0176  
Lab ID Number: 24024516

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 7-17-2024  
Date Received: 7-17-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 7-17-2024 @ 14:02 by LO  
**Received:** 7-17-2024 @ 14:44 by BR (13.5°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	245	7-17-2024 15:56	EB	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	274	7-22-2024 10:10	MM	CFR PAI-DK03
Total Suspended Solids (mg/L)	70	7-18-2024 9:19	EB	SM 2540 D - 2011
pH	7.32	7-17-2024 15:51	BC	SM 4500-H B - 2011

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (BOD: 0-6°C; pH: 0-6°C; TKN: 0-6°C; Total Suspended Solids: 0-6°C), pH guidelines not met and maximum hold time exceeded (pH).

Respectfully submitted by



**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 8-6-2024  
Report Number: 24-219-0207  
Lab ID Number: 24026375

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 8-1-2024  
Date Received: 8-1-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 7-31-2024 @ 14:56 by Unknown  
**Received:** 8-1-2024 @ 10:05 by zw (8.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	284	8-1-2024 13:50	SK	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	338	8-6-2024 7:51	RT	CFR PAI-DK03
Total Suspended Solids (mg/L)	51	8-6-2024 7:55	EB	SM 2540 D - 2011

**Comments**

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (BOD: 0-6°C; TKN: 0-6°C; Total Suspended Solids: 0-6°C).

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 8-6-2024  
Report Number: 24-219-0206  
Lab ID Number: 24026374

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 8-1-2024  
Date Received: 8-1-2024  
Contact: Cherokee Wastewater

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 7-30-2024 @ 14:35 by LO  
**Received:** 8-1-2024 @ 10:05 by zw (8.8°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	296	8-1-2024 13:24	SK	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	346	8-5-2024 7:54	RT	CFR PAI-DK03
Total Suspended Solids (mg/L)	89	8-6-2024 7:55	EB	SM 2540 D - 2011

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT sample temperature (BOD: 0-6°C; TKN: 0-6°C; Total Suspended Solids: 0-6°C).

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.





## Certificate of Analysis

Report Date: 8-26-2024  
Report Number: 24-239-0049  
Lab ID Number: 24029250

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 8-21-2024  
Date Received: 8-21-2024  
Contact: Tony Agnitsch  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 8-21-2024 @ 8:43 by LD  
**Received:** 8-21-2024 @ 9:03 by SS (7.2°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	< 58.5	8-21-2024 13:03	EB	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	120	8-26-2024 7:50	JS	CFR PAI-DK03
Total Suspended Solids (mg/L)	126	8-22-2024 7:54	EB	SM 2540 D - 2011
pH	8.23	8-21-2024 15:07	RT	SM 4500-H B - 2011

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met and maximum hold time exceeded (pH).
pH analyzed in duplicate prior to reporting

Respectfully submitted by

**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



**Foundation**  
Analytical Laboratory

723 Sleezer Road  
Cherokee, IA 51012  
Phone: 712-225-6989  
www.foundationanalytical.com

## Certificate of Analysis

Report Date: 9-4-2024  
Report Number: 24-248-0091  
Lab ID Number: 24030261

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 8-28-2024  
Date Received: 8-28-2024  
Contact: Cherokee Wastewater  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 8-28-2024 @ 13:34 by LD  
**Received:** 8-28-2024 @ 14:01 by zw (10.9°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	42.5	8-29-2024 7:47	EW	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	159	9-3-2024 7:54	HS	CFR PAI-DK03
Total Suspended Solids (mg/L)	41.7	8-30-2024 7:57	JRS	SM 2540 D - 2011
pH	7.97	8-28-2024 15:37	JRS	SM 4500-H B - 2011

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met and maximum hold time exceeded (pH).

**\*\* End Certificate of Analysis \*\***

Respectfully submitted by

**Brittany Erickson**  
Quality Manager

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 10-29-2024  
Report Number: 24-303-0061  
Lab ID Number: 24038260

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 10-23-2024  
Date Received: 10-23-2024  
Contact: Cherokee Wastewater  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 10-23-2024 @ 9:40 by LD  
**Received:** 10-23-2024 @ 10:00 by zw (10.8°C)

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	162	10-23-2024 14:04	EW	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	551	10-24-2024 7:32	JS	CFR PAI-DK03
Total Suspended Solids (mg/L)	230	10-24-2024 7:18	SW	SM 2540 D - 2011
pH	7.56	10-23-2024 13:38	AH	SM 4500-H B - 2011

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT maximum hold time exceeded (pH).

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 11-27-2024  
Report Number: 24-332-0034  
Lab ID Number: 24043026

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 11-21-2024  
Date Received: 11-21-2024  
Contact: Cherokee Wastewater  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 11-21-2024 @ 10:41 by LD  
**Received:** 11-21-2024 @ 11:02 by zw (5.6°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	44	11-22-2024 11:33	LA	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	316	11-26-2024 8:12	HS	CFR PAI-DK03
Total Suspended Solids (mg/L)	37	11-26-2024 8:01	JRS	SM 2540 D - 2011
pH	8.05	11-21-2024 16:55	JRS	SM 4500-H B - 2011

Comments
Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.
Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met and maximum hold time exceeded (pH).

Respectfully submitted by  
  
**Brittany Erickson**  
Quality Manager

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 12-2-2024  
Report Number: 24-337-0192  
Lab ID Number: 24043357

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 11-25-2024  
Date Received: 11-26-2024  
Contact: Cherokee Wastewater  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 11-25-2024 @ 14:02 by LD  
**Received:** 11-26-2024 @ 12:26 by SS (4.1°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	74.5	11-27-2024 9:17	EW	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	372	12-2-2024 7:52	MM	CFR PAI-DK03
Total Suspended Solids (mg/L)	92	12-2-2024 7:26	SK	SM 2540 D - 2011
pH	7.84	11-26-2024 14:55	BC	SM 4500-H B - 2011

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met and maximum hold time exceeded (pH).

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are + / - 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



## Certificate of Analysis

Report Date: 12-2-2024  
Report Number: 24-337-0193  
Lab ID Number: 24043358

Cherokee County Solid Waste Agency  
1805 Linden Street  
Cherokee, IA 51012

Date Submitted: 11-25-2024  
Date Received: 11-26-2024  
Contact: Cherokee Wastewater  
Submitted By: Luke Dobson

**Sample Description:** Landfill Leachate Grab  
**Sampled:** 11-26-2024 @ 11:54 by LD  
**Received:** 11-26-2024 @ 12:26 by SS (4.1°C)

Page 1 of 1

Test Requested	Result	Analysis Date / Time	Analyst	Method
BOD (mg/L)	72.3	11-27-2024 9:21	EW	SM 5210B - 2011
Total Kjeldahl Nitrogen (mg/L)	361	12-2-2024 7:52	MM	CFR PAI-DK03
Total Suspended Solids (mg/L)	84	12-2-2024 7:26	SK	SM 2540 D - 2011
pH	7.88	11-26-2024 14:55	BC	SM 4500-H B - 2011

### Comments

Foundation Analytical Lab (IDNR Lab #396, USEPA Lab #IA01138) is certified by the Iowa Department of Natural Resources for the testing of wastewater and drinking water.

Upon receipt sample met requirements for analysis EXCEPT pH guidelines not met and maximum hold time exceeded (pH).

Respectfully submitted by

**Molly Lundsgaard**  
Laboratory Administrator

**\*\* End Certificate of Analysis \*\***

Samples were received in acceptable condition unless denoted in the comments section of this report. Any temperature(s) recorded at receipt are +/- 1°C. All data for this report has been approved by Foundation Analytical Laboratory Management. The results depicted in this report apply to samples as submitted. It is not possible for Foundation Analytical Laboratory to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by Foundation Analytical Laboratory. As a mutual protection to clients, the public, and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

Appendix F  
2024 Landfill Gas Annual Report

**Table 13**  
**Gas Monitoring Summary**  
**2024 Gas Monitoring Report**  
**Cherokee County Landfill**  
**Permit No. 18-SDP-01-75P**

Monitoring Points				Methane Results (% LEL)									
Number	Name	Type	Description	11/29/2023	S (Y/N)*	3/20/2024	S (Y/N)*	6/26/2024	S (Y/N)*	9/18/2024	S (Y/N)*	12/18/2024	S (Y/N)*
GP-1	Subsurface gas probe	Subsurface	Southwest property boundary	0%	N	0%	N	0%	N	0%	N	0%	N
GP-2	Subsurface gas probe	Subsurface	East of HHW facility	100%	N	100%	N	100%	N	100%	N	100%	N
GP-3	Subsurface gas probe	Subsurface	Near MW-1	0%	N	0%	N	0%	N	0%	N	0%	N
GP-4	Subsurface gas probe	Subsurface	Northwest of Area A	0%	N	0%	N	0%	N	0%	N	0%	N
GP-5	Subsurface gas probe	Subsurface	Near MW-22/MW-23	0%	N	0%	N	0%	N	0%	N	0%	N
GP-6	Subsurface gas probe	Subsurface	Southeast property boundary	0%	N	0%	N	0%	N	0%	N	0%	N
GP-7	Subsurface gas probe	Subsurface	South of Cell A-1, along property boundary	0%	N	0%	N	0%	N	0%	N	0%	N
GP-8	Subsurface gas probe	Subsurface	South of GP-2, near southern property boundary	0%	N	0%	N	0%	N	0%	N	0%	N
B-1	Compressor Building	Indoor	Compressor Building - west-central in property	0%		0%		0%		0%		0%	
B-2	Recycling Building	Indoor	Recycling Building - southwest property corner	0%		0%		0%		0%		0%	
B-4	HHW Building	Indoor	HHW Building - southwest property corner	0%		0%		0%		0%		0%	
B-5	Storage Building	Indoor	Storage Building - southwest property corner	0%		0%		0%		0%		0%	
B-6	Scale Pit	Indoor	Scale Pit - southwest property corner	0%		0%		0%		0%		0%	

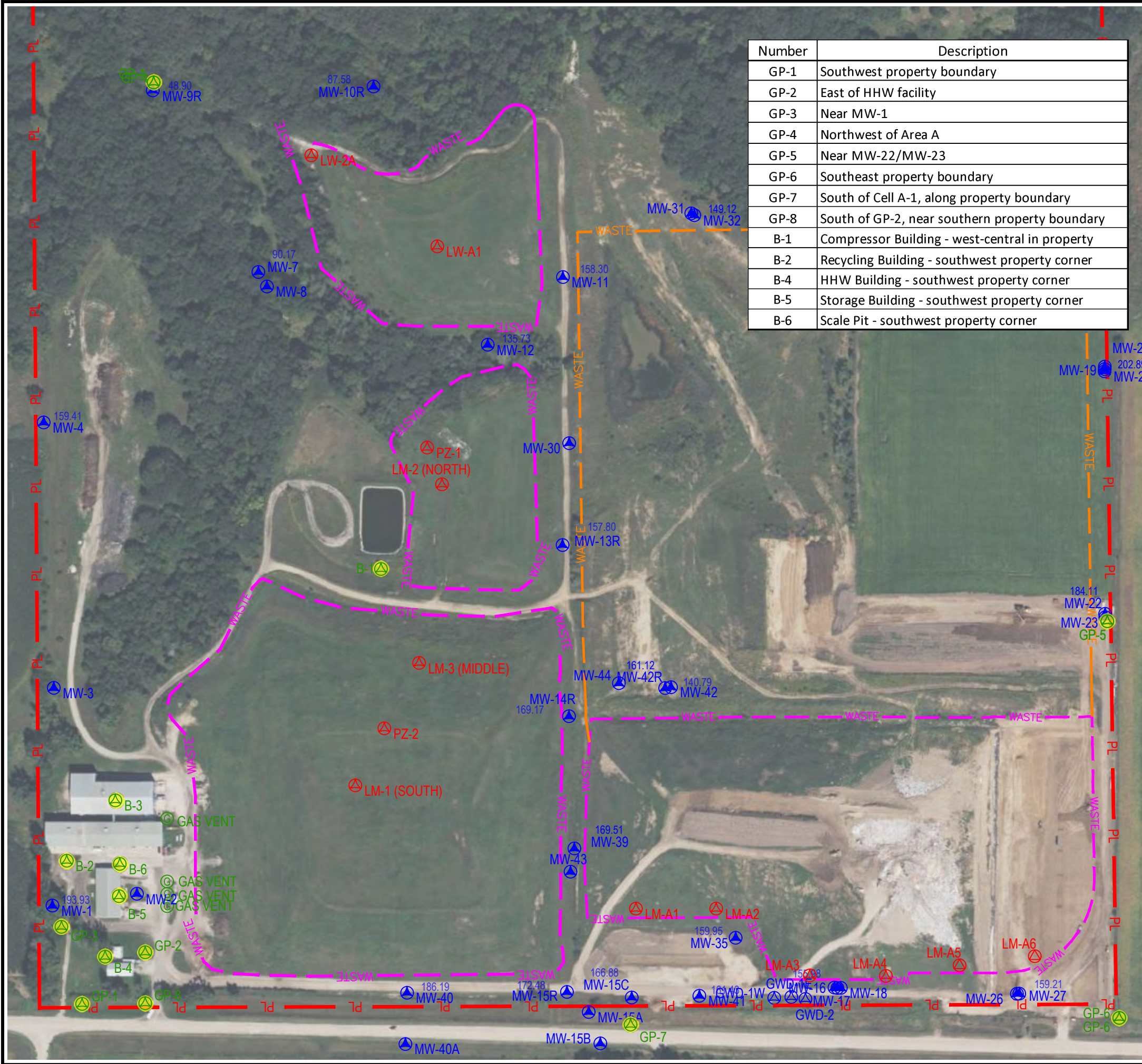
S(Y/N)\* - Was screen submerged, yes or no or blank is non-applicable

100% LEL measurements at monitoring point GP-2 were bracketed by non-detect measurements at the property boundary to the south (GP-8), southwest (GP-1), and west (GP-3) during each monitoring event.

\* - The top of screens for gas monitoring probes GP-1 through GP-6 range from 5.6 to 6.7 feet below ground surface. Groundwater levels through the majority of the site are greater than ten feet, indicating the screens of the gas monitoring probes are likely not submerged. Construction forms for gas monitoring probes GP-7 and GP-8 are unavailable.



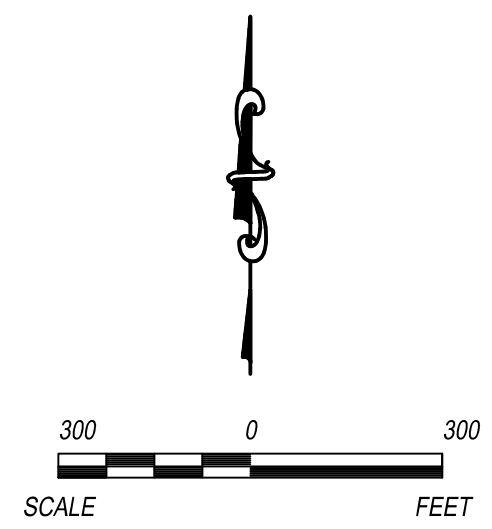
\\DES-F501\DES\MOINES\PROJECT\223105.25\AUTOCAD\2025 AWQR\MAP.DWG



Number	Description
GP-1	Southwest property boundary
GP-2	East of HHW facility
GP-3	Near MW-1
GP-4	Northwest of Area A
GP-5	Near MW-22/MW-23
GP-6	Southeast property boundary
GP-7	South of Cell A-1, along property boundary
GP-8	South of GP-2, near southern property boundary
B-1	Compressor Building - west-central in property
B-2	Recycling Building - southwest property corner
B-4	HHW Building - southwest property corner
B-5	Storage Building - southwest property corner
B-6	Scale Pit - southwest property corner

LEGEND

- ⊙ LFGW-1 METHANE MONITORING LOCATION
- ⊙ MW-4C MONITORING WELL
- ⊙ LFGW-1 LANDFILL GAS WELL
- ⊙ LPZ-1 LEACHATE PIEZOMETER
- ⊙ GV GAS VENT
- CURRENT WASTE BOUNDARY
- FUTURE WASTE BOUNDARY
- APPROXIMATE PROPERTY BOUNDARY

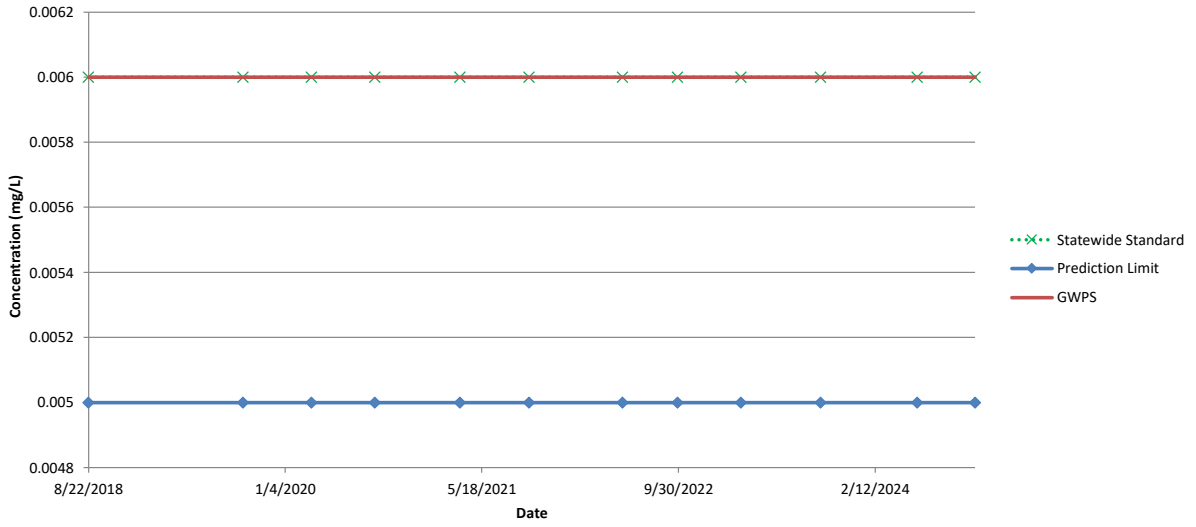


<p>REV. DATE</p> <p>Δ Δ Δ Δ Δ Δ Δ Δ</p>	<p>CK BY</p> <p>· · · · · · · ·</p>	<p>SHEET TITLE</p> <p><b>METHANE MONITORING NETWORK</b></p>
<p>CLIENT</p> <p><b>CHEROKEE COUNTY SOLID WASTE COMMISSION</b></p> <p>1805 LINDEN ST CHEROKEE, IOWA</p>		<p>PROJECT TITLE</p> <p><b>CHEROKEE COUNTY SANITARY LANDFILL 2024 ANNUAL WATER QUALITY REPORT</b></p>
<p><b>SCS ENGINEERS</b></p> <p>1680 ALL STATE COURT, SUITE 100 WEST DES MOINES, IOWA 50265 (515) 631-6160</p>		
<p>CADD FILE:</p> <p>223105.25 AWQR MAP.DWG</p>	<p>DATE:</p> <p>3/7/25</p>	<p>FIGURE NO.</p> <p style="font-size: 2em; font-weight: bold; text-align: center;">1</p>

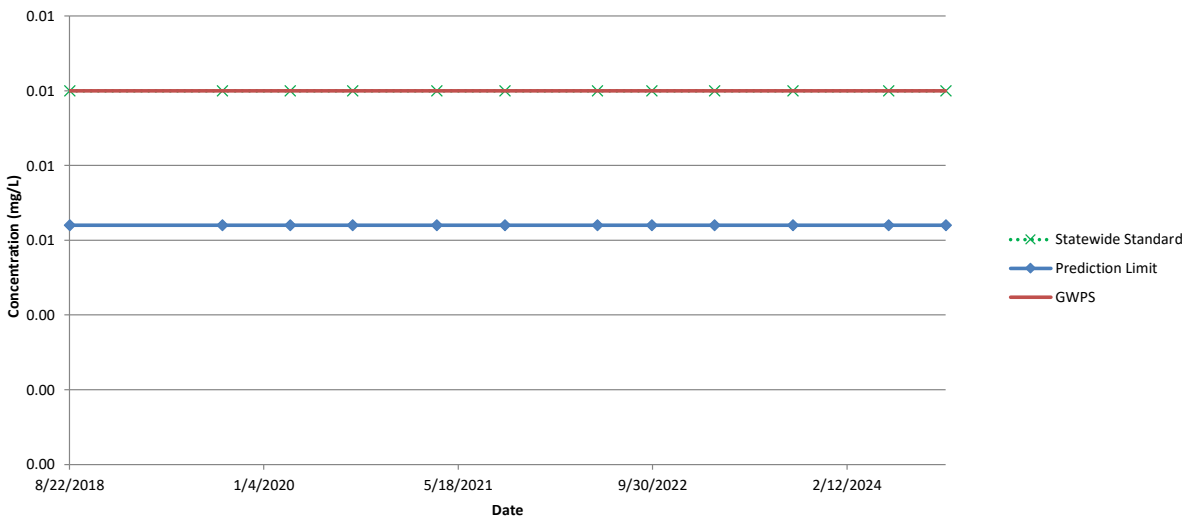


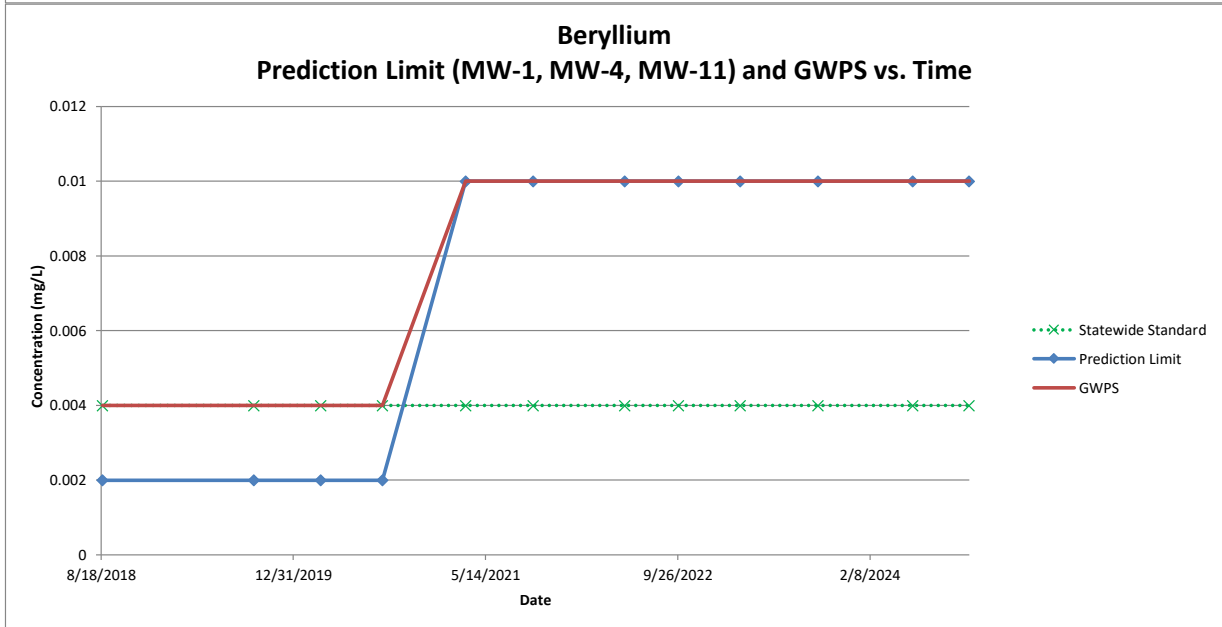
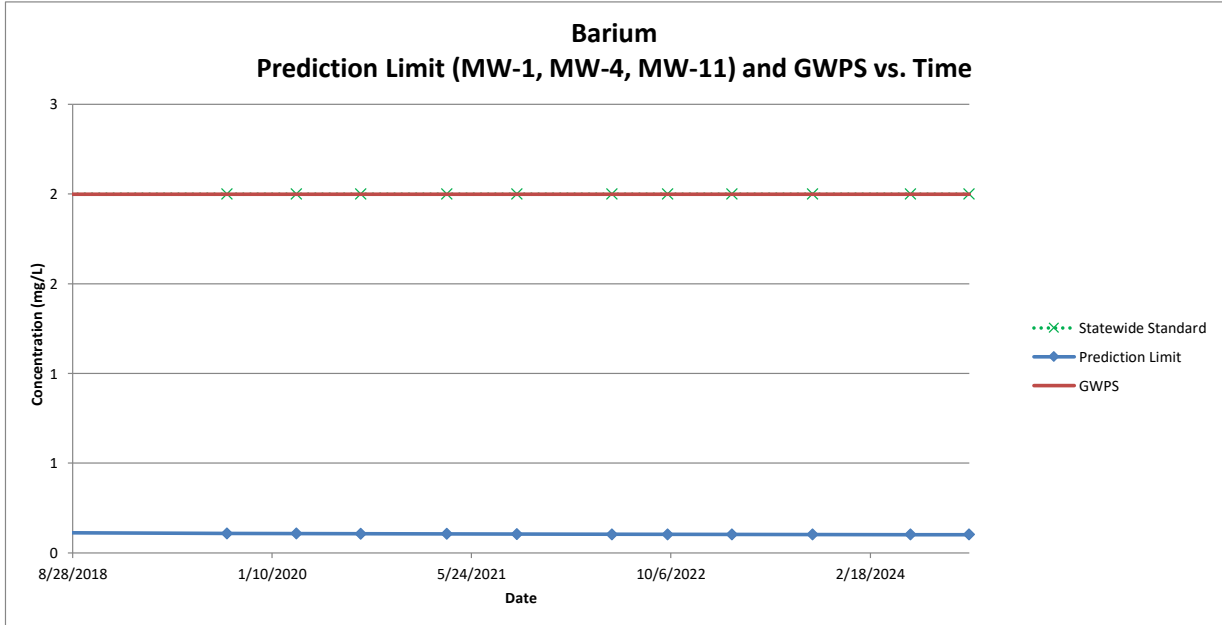
Appendix G  
Standards History Graphs

### Antimony Prediction Limit (MW-1, MW-4, MW-11) and GWPS vs. Time

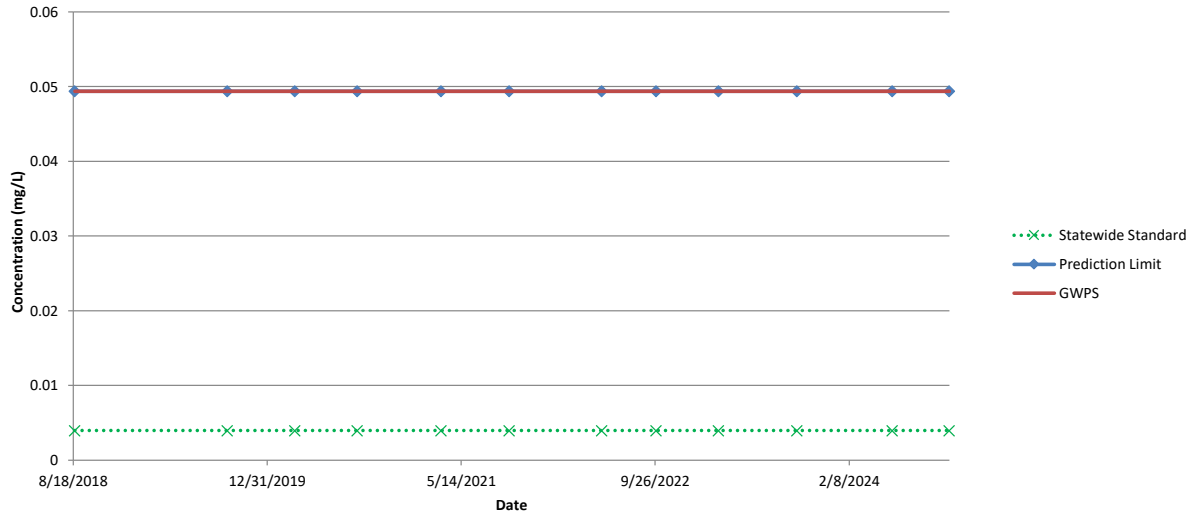


### Arsenic Prediction Limit (MW-1, MW-4, MW-11) and GWPS vs. Time

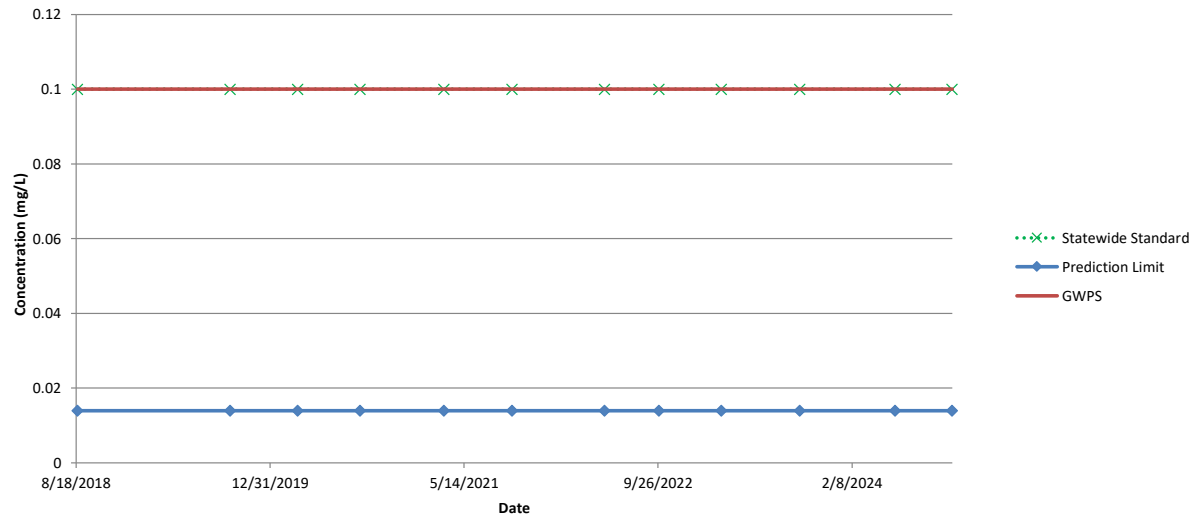


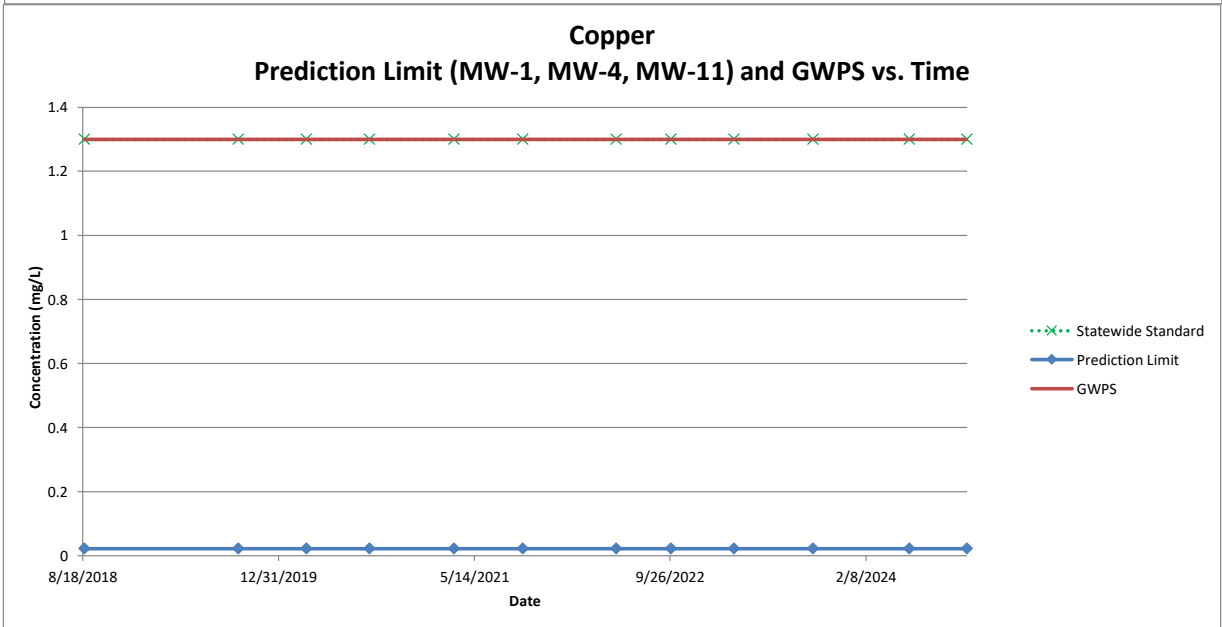
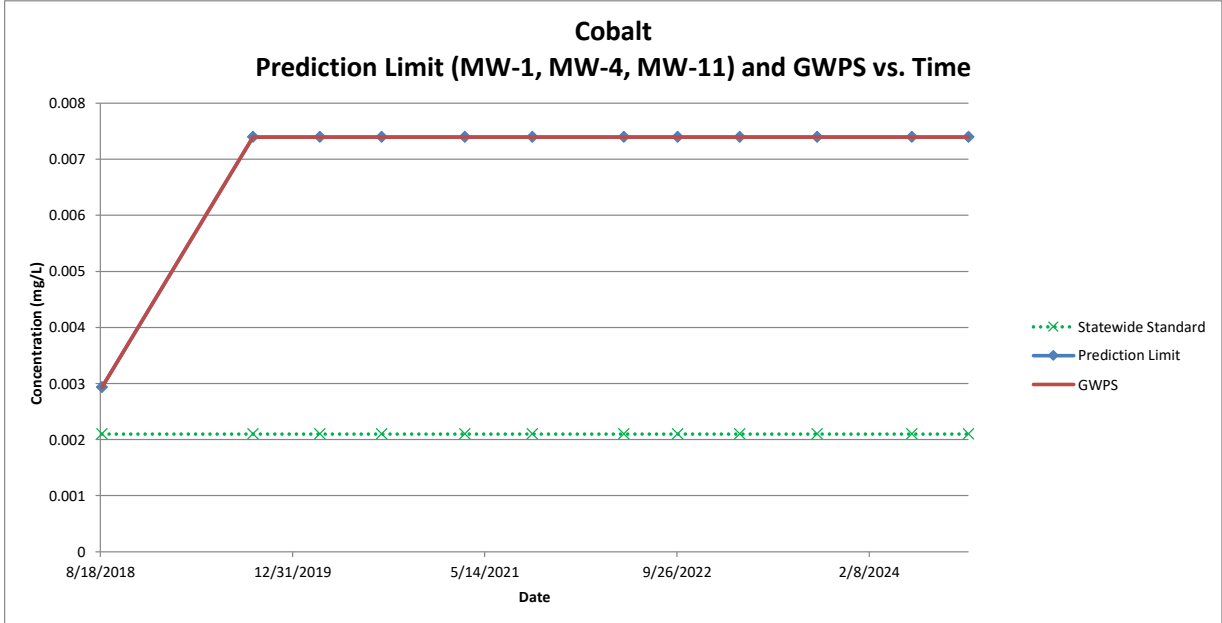


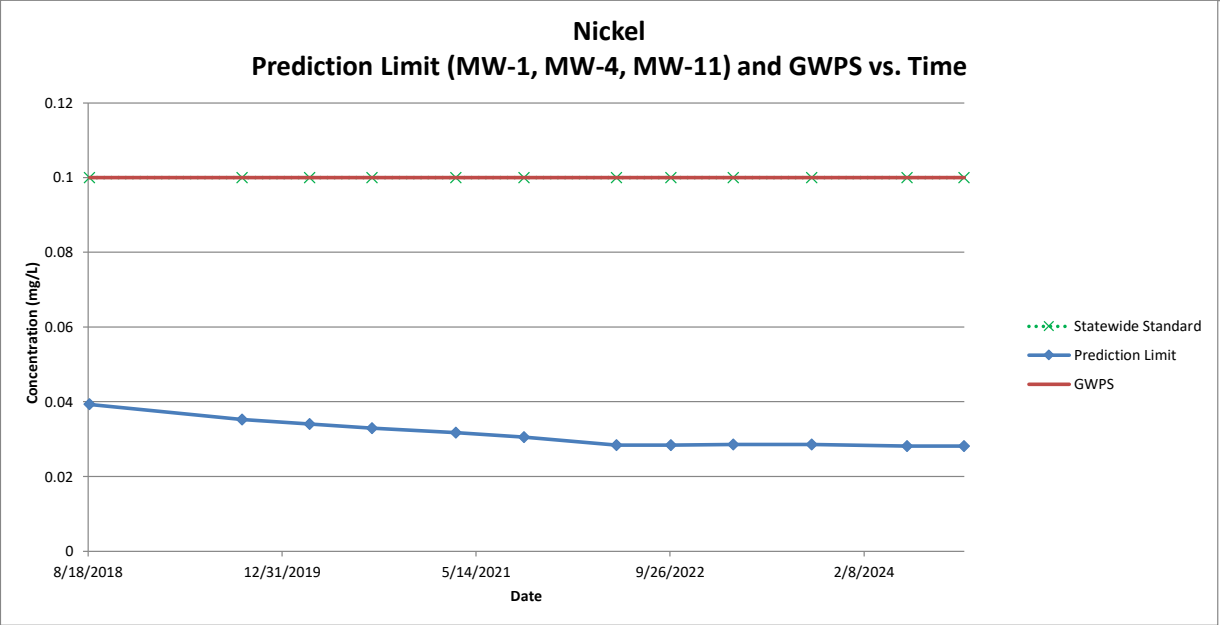
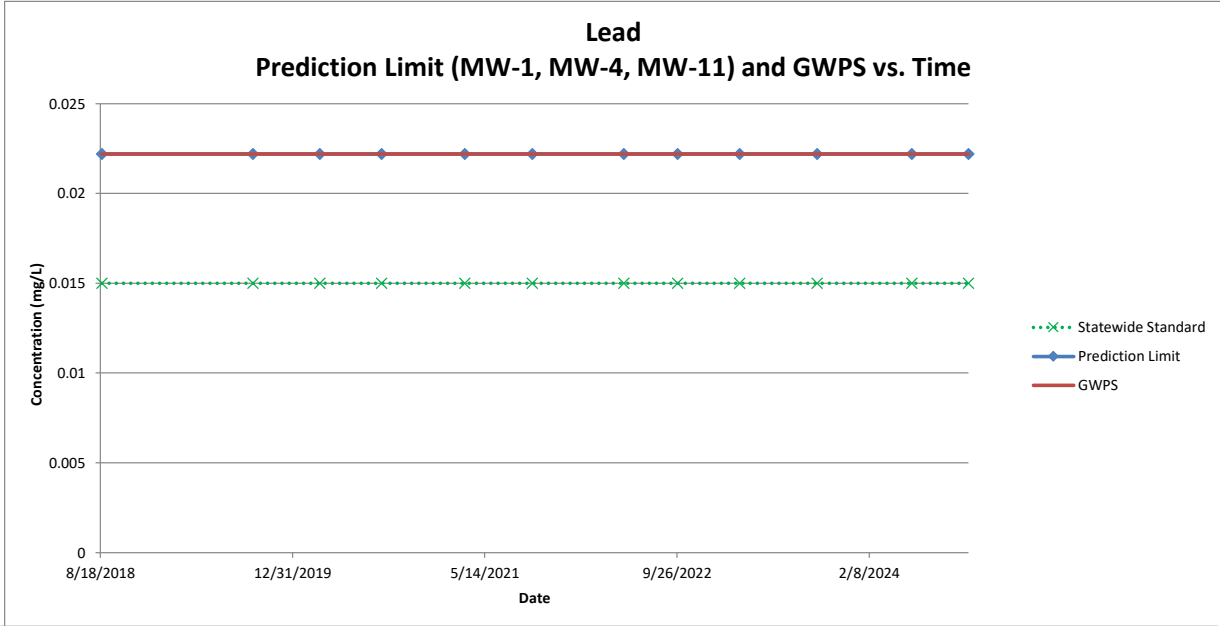
**Cadmium**  
**Prediction Limit (MW-1, MW-4, MW-11) and GWPS vs. Time**

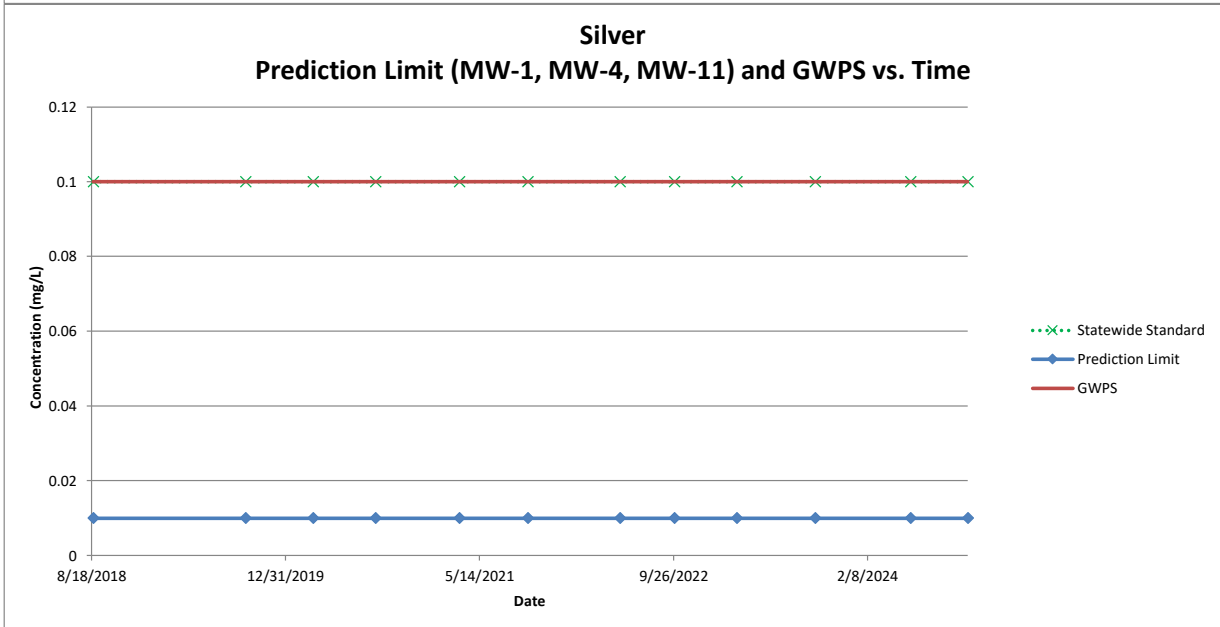
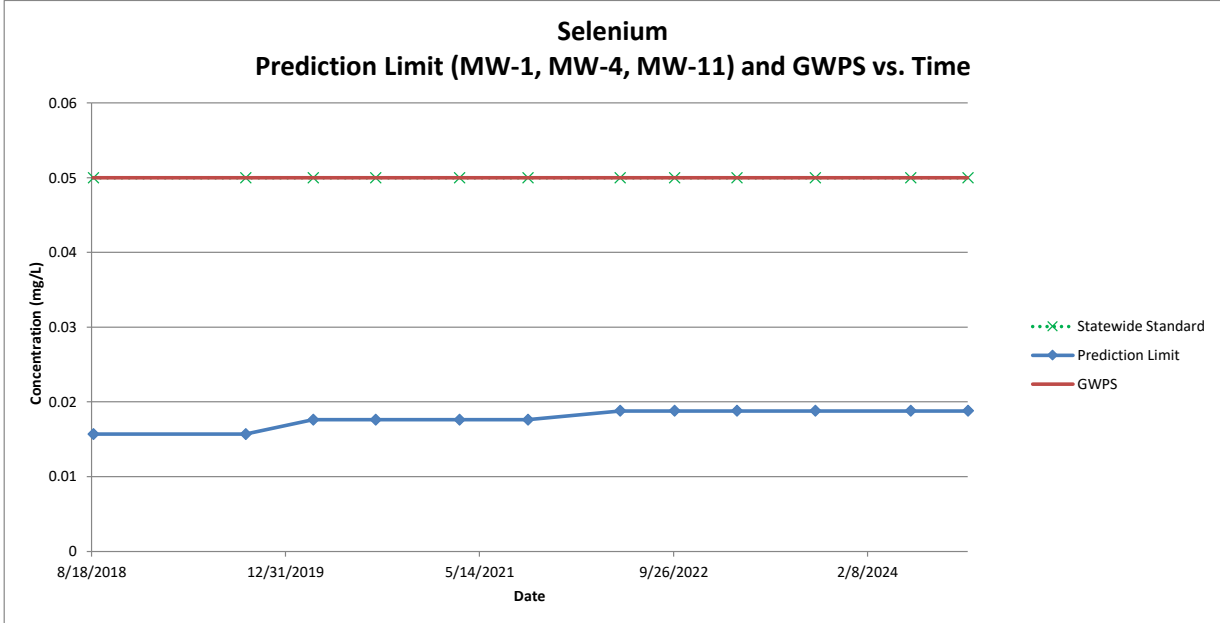


**Chromium**  
**Prediction Limit (MW-1, MW-4, MW-11) and GWPS vs. Time**

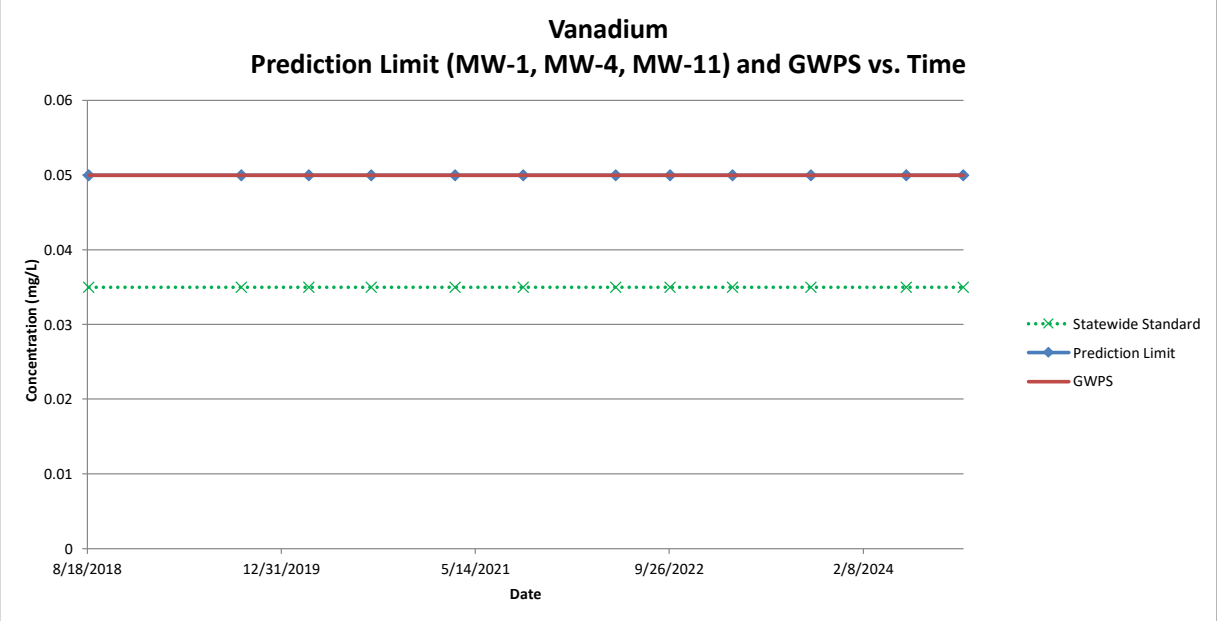
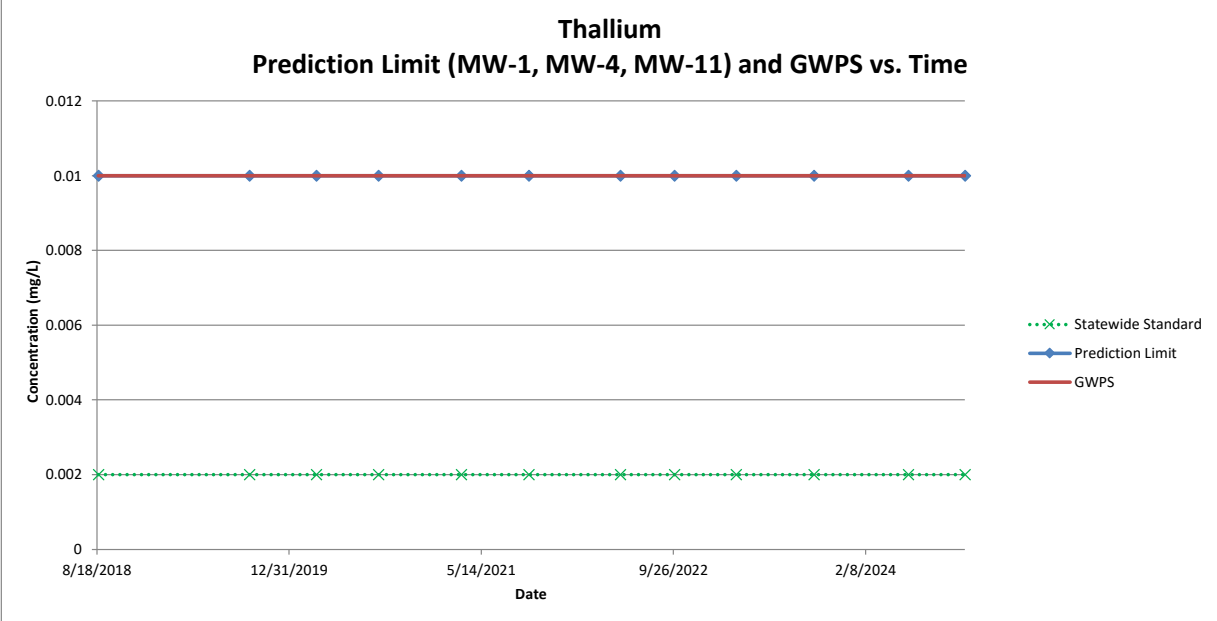




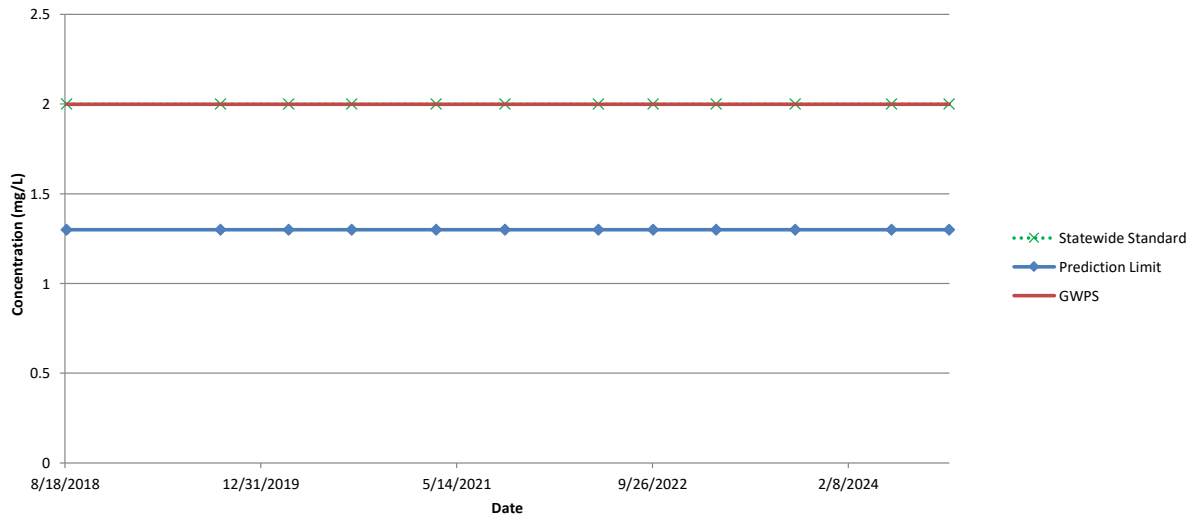








### Zinc Prediction Limit (MW-1, MW-4, MW-11) and GWPS vs. Time



## Appendix H

### Mann-Kendall Trend Test Summary Table and Graphs – Source Wells

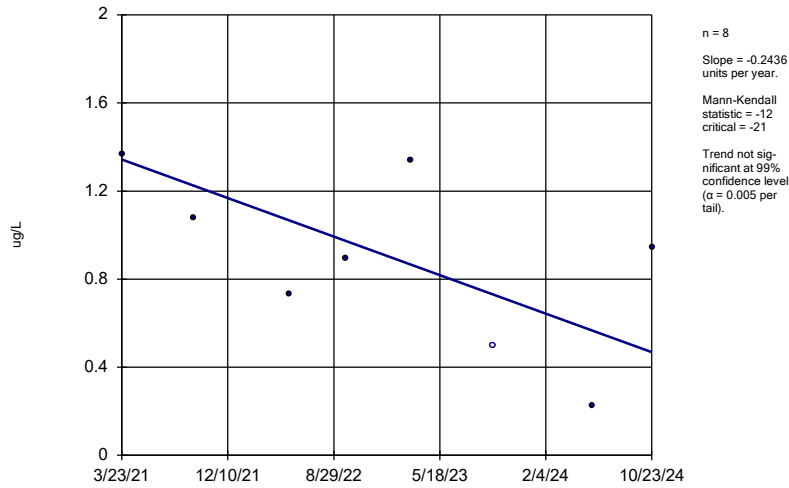
# Source Wells Trend Test

Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM Printed 2/28/2025, 5:46 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>
1,1-Dichloroethane (ug/L)	MW-14R	-0.2436	-12	-21	No	8	12.5	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW-15R	0.4563	17	21	No	8	25	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW-39	0.9539	7	21	No	8	12.5	0.01	NP
Acetone (ug/L)	MW-39	0	0	21	No	8	50	0.01	NP
Arsenic (mg/L)	MW-15R	0.001434	0	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-39	0.0006633	8	21	No	8	0	0.01	NP
Barium (mg/L)	MW-14R	0.002124	2	21	No	8	0	0.01	NP
Barium (mg/L)	MW-15R	-0.00965	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-39	-0.2141	-6	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-14R	0.004601	1	21	No	8	25	0.01	NP
Benzene (ug/L)	MW-15R	0.2312	14	21	No	8	12.5	0.01	NP
Benzene (ug/L)	MW-39	-0.1169	-8	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-14R	-0.000005396	-6	-21	No	8	25	0.01	NP
Cadmium (mg/L)	MW-15R	-0.00003762	-7	-21	No	8	37.5	0.01	NP
Carbon Disulfide (ug/L)	MW-39	0	-1	-21	No	8	75	0.01	NP
Chlorobenzene (ug/L)	MW-15R	0.4937	12	21	No	8	0	0.01	NP
Chlorobenzene (ug/L)	MW-39	-0.07903	0	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-14R	-0.06112	-11	-21	No	8	25	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-39	-0.1874	-16	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-14R	-0.001656	-8	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-15R	-0.002403	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-39	-0.004083	-14	-21	No	8	0	0.01	NP
Lead (mg/L)	MW-15R	-0.000008369	-6	-21	No	8	50	0.01	NP
Lead (mg/L)	MW-39	0.0000226	2	21	No	8	12.5	0.01	NP
Nickel (mg/L)	MW-14R	-0.004176	-14	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-15R	-0.007529	-17	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-39	-0.006188	-16	-21	No	8	0	0.01	NP
Thallium (mg/L)	MW-14R	0	3	21	No	8	87.5	0.01	NP
Vinyl Chloride (ug/L)	MW-15R	0	9	21	No	8	75	0.01	NP
Vinyl Chloride (ug/L)	MW-39	-0.929	-15	-21	No	8	25	0.01	NP

### Sen's Slope Estimator

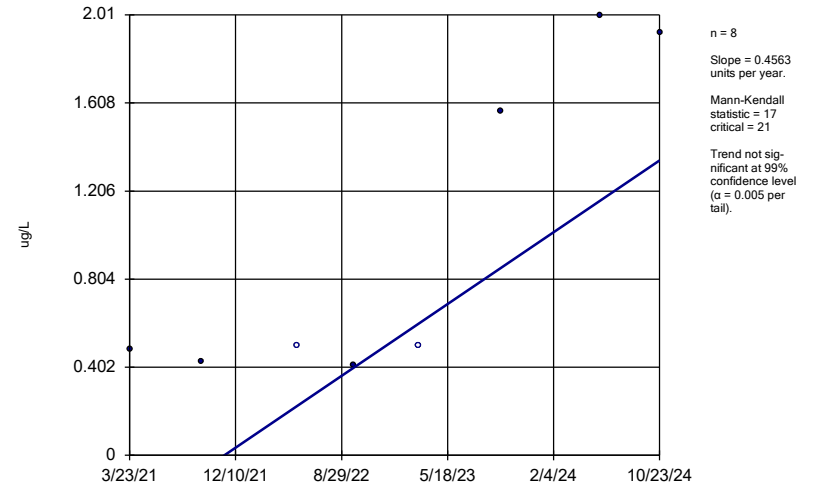
MW-14R



Constituent: 1,1-Dichloroethane Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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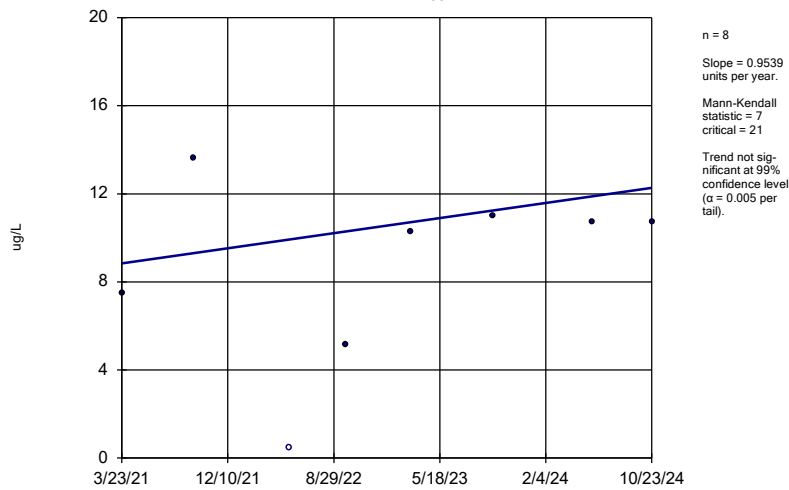
MW-15R



Constituent: 1,4-Dichlorobenzene Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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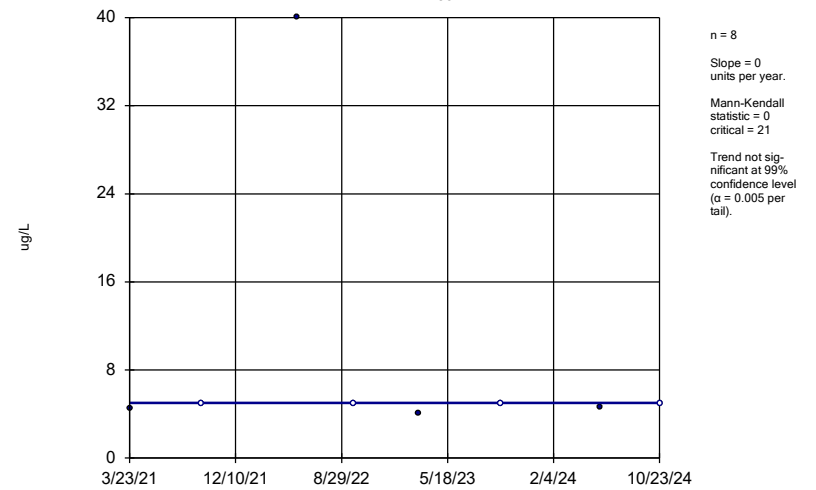
MW-39



Constituent: 1,4-Dichlorobenzene Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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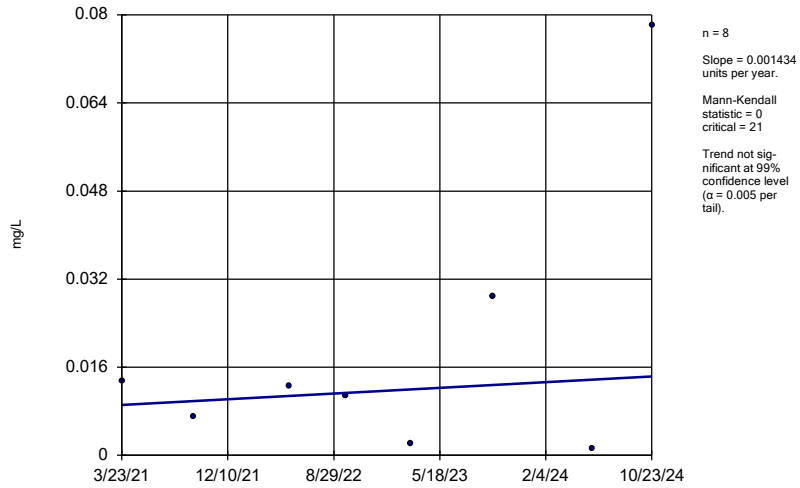
MW-39



Constituent: Acetone Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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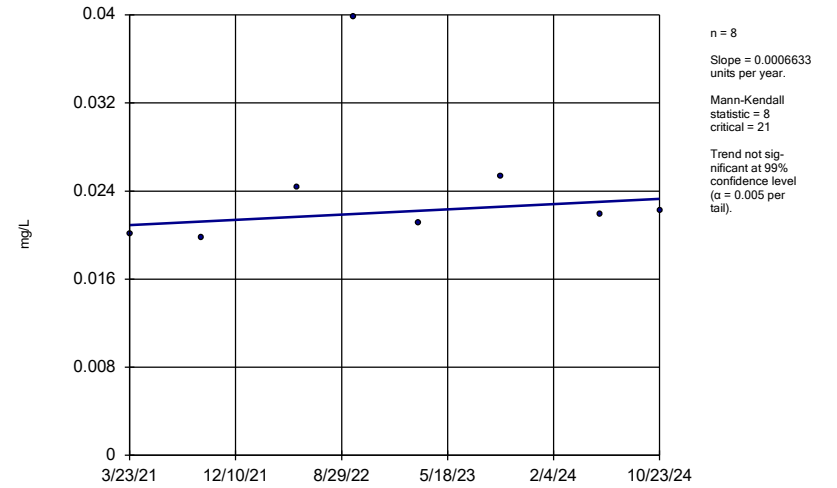
MW-15R



Constituent: Arsenic Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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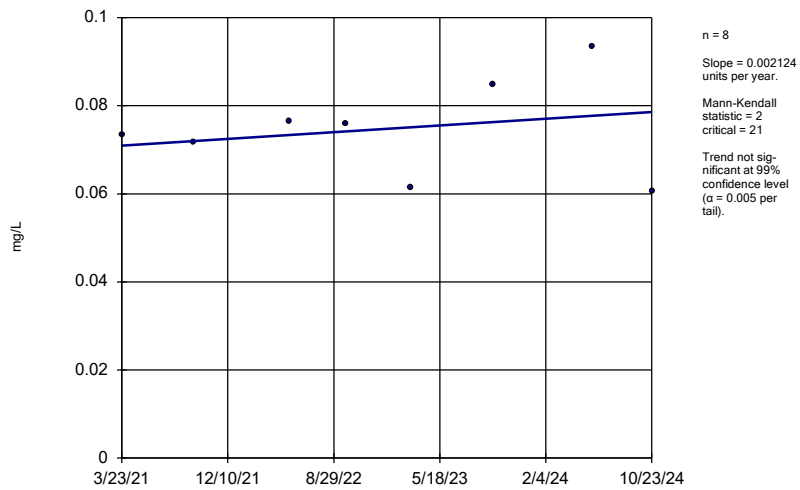
MW-39



Constituent: Arsenic Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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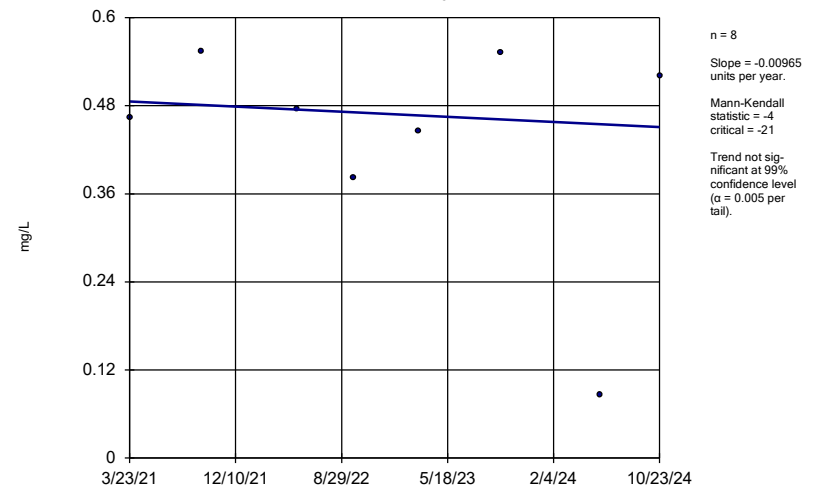
MW-14R



Constituent: Barium Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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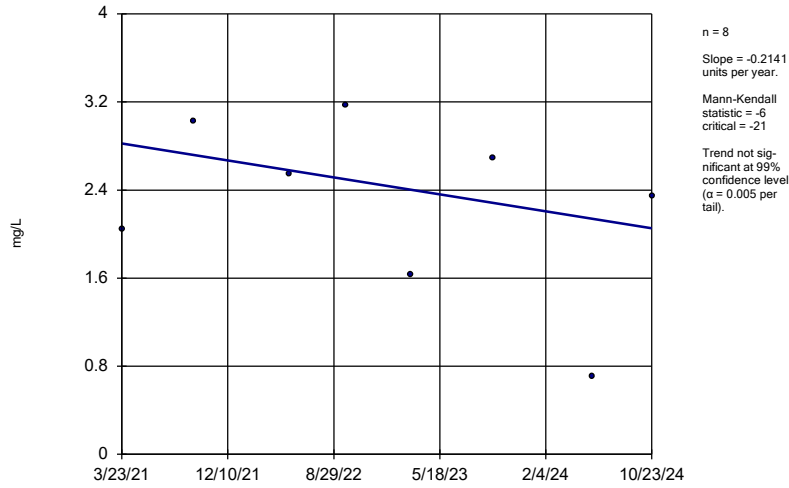
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Constituent: Barium Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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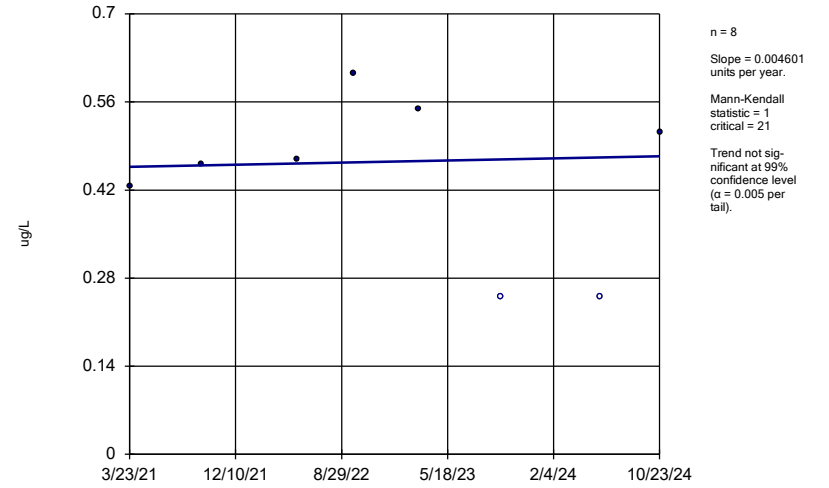
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Constituent: Barium Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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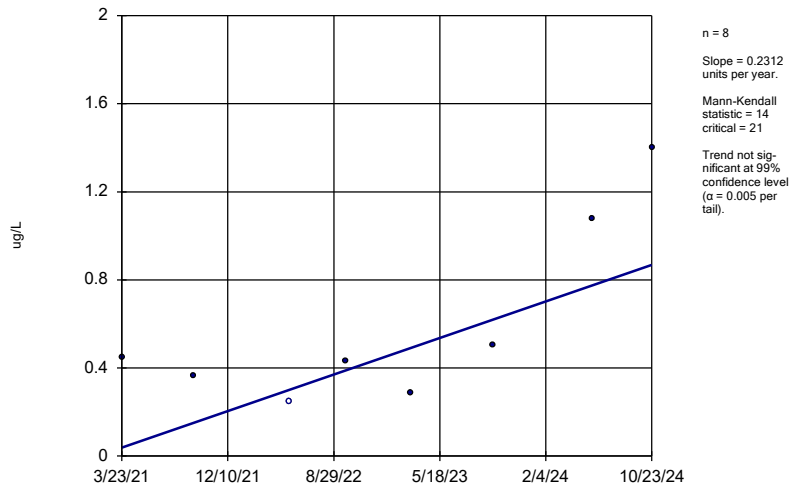
MW-14R



Constituent: Benzene Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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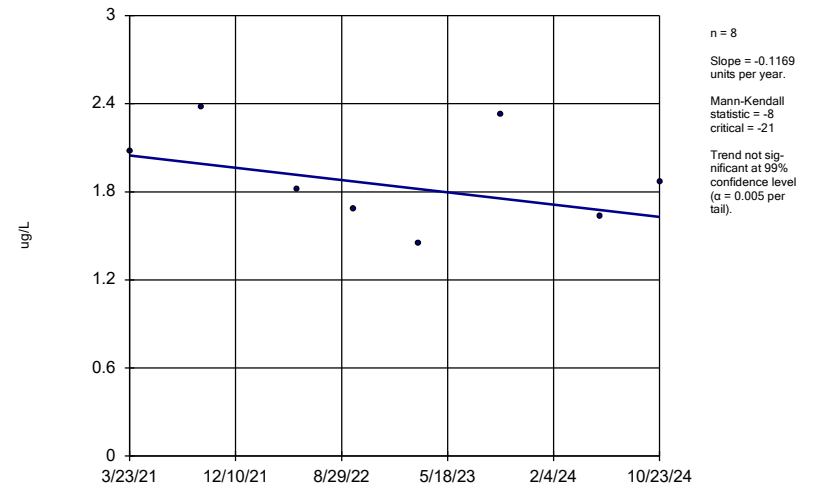
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Constituent: Benzene Analysis Run 2/28/2025 5:42 PM View: 2024AWQR-Mann\_Kendall  
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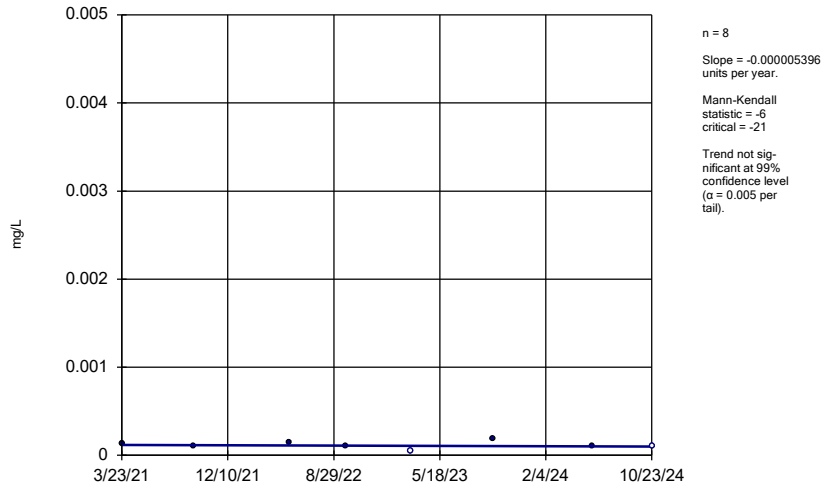
MW-39



Constituent: Benzene Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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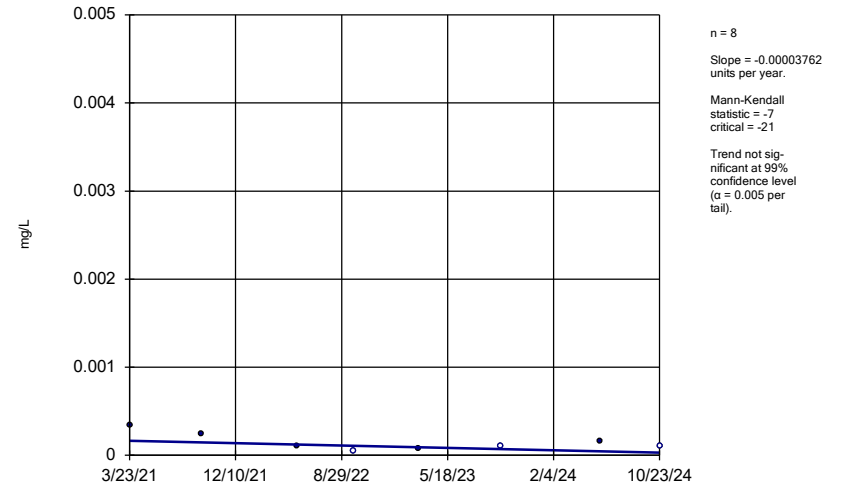
MW-14R



Constituent: Cadmium Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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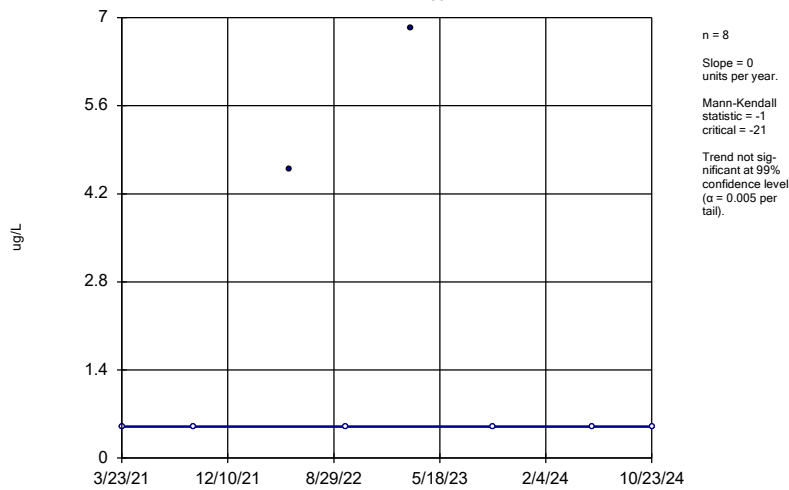
MW-15R



Constituent: Cadmium Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM

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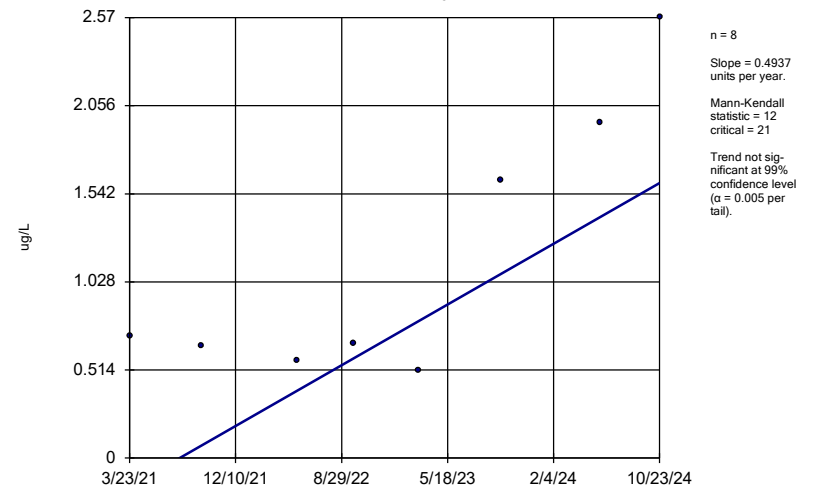
MW-39



Constituent: Carbon Disulfide Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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MW-15R

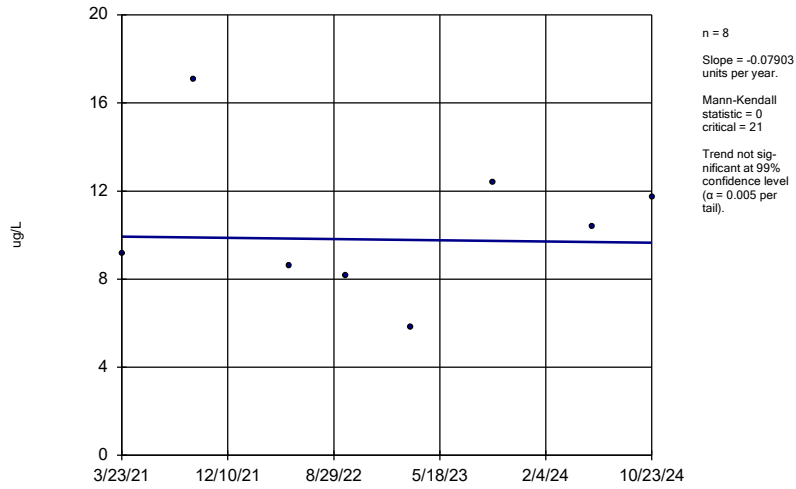


Constituent: Chlorobenzene Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
Cherokee County Sanitary Landfill Client: SCS Engineers Data: CHRKE C-SOURCE-2024AWQR-AM



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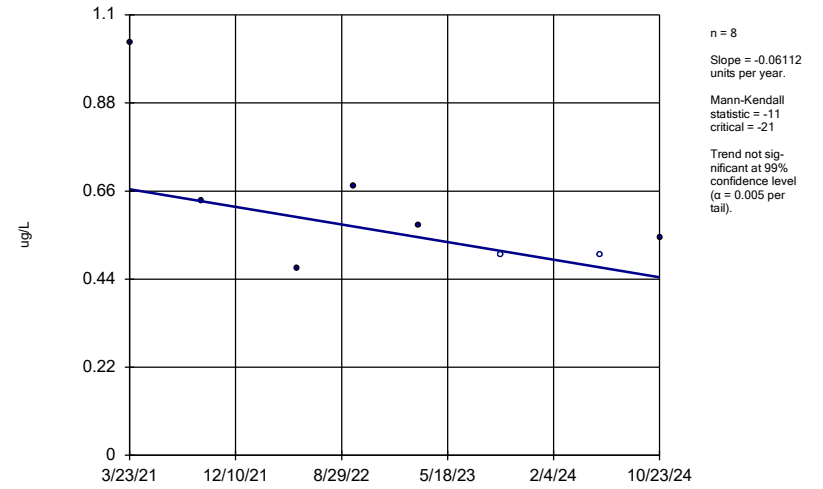
MW-39



Constituent: Chlorobenzene Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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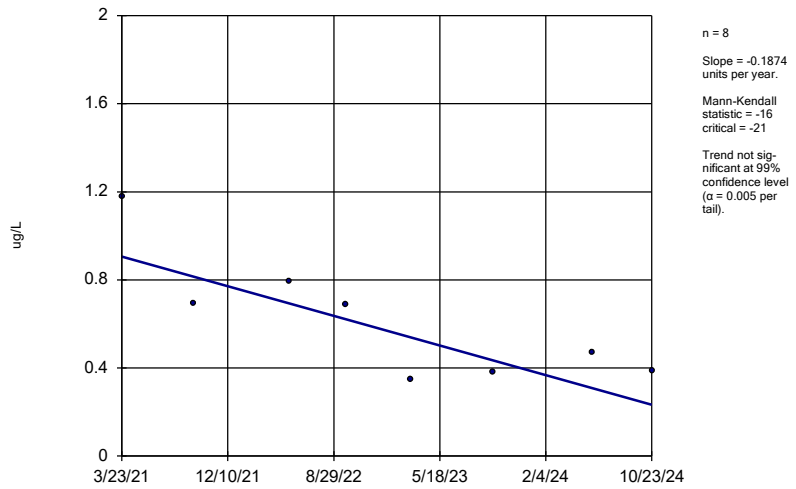
MW-14R



Constituent: cis-1,2-Dichloroethene Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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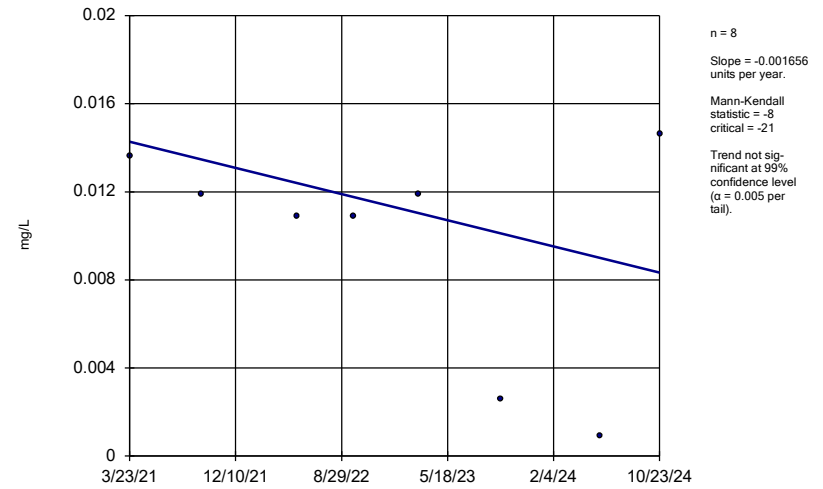
MW-39



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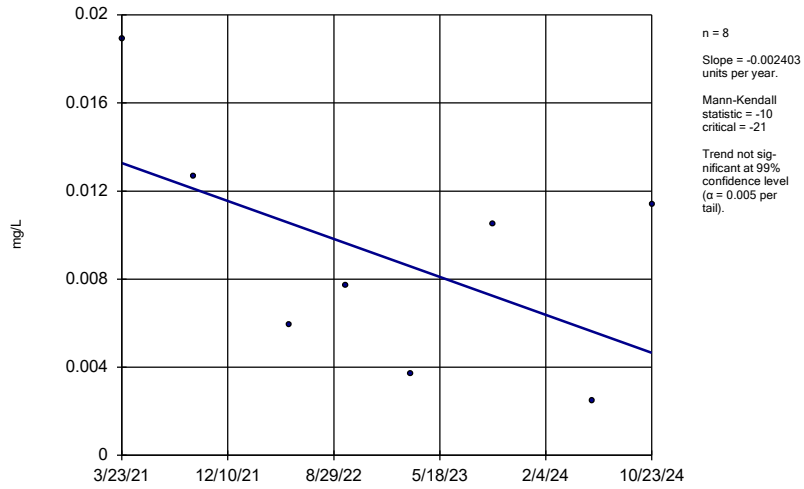
MW-14R



Constituent: Cobalt Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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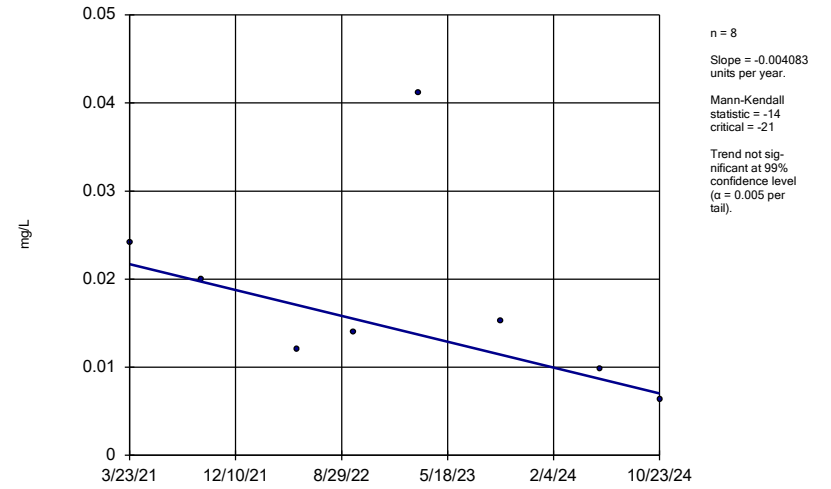
MW-15R



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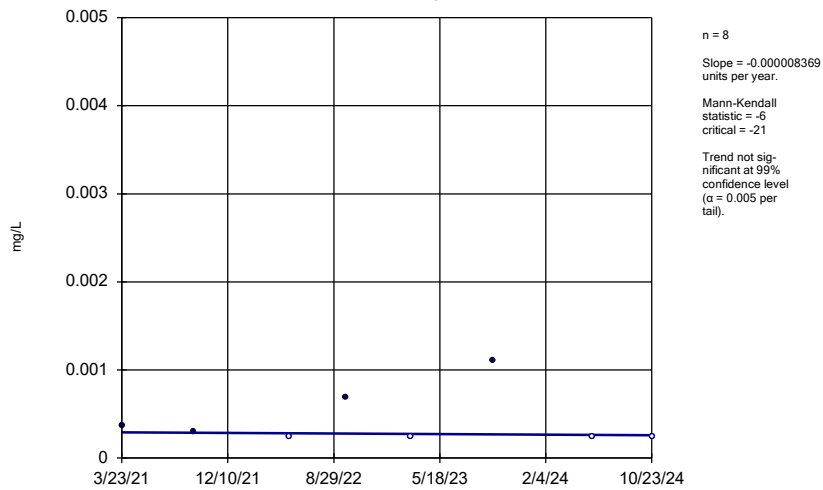
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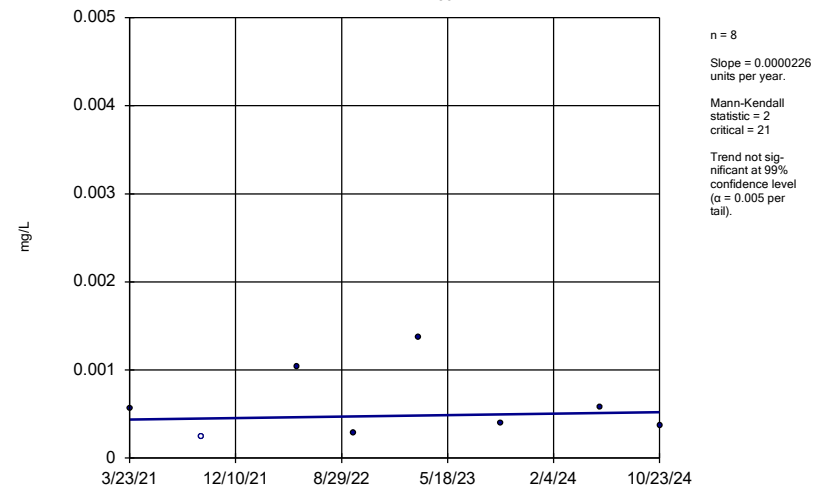
MW-15R



Constituent: Lead Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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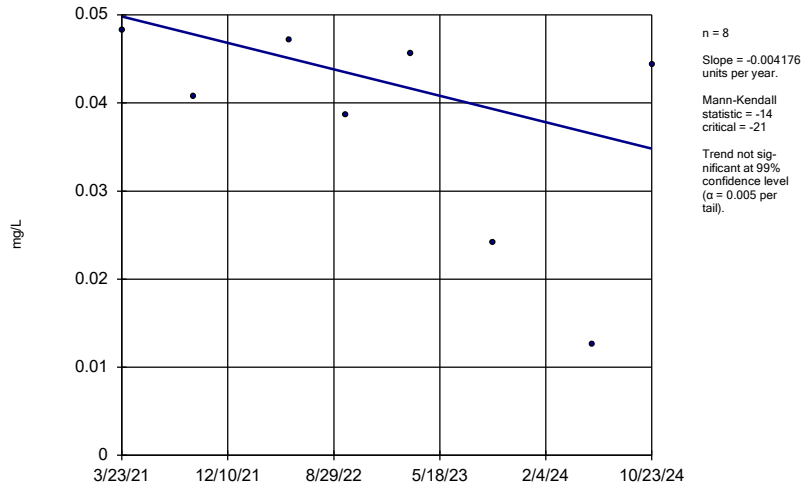
MW-39



Constituent: Lead Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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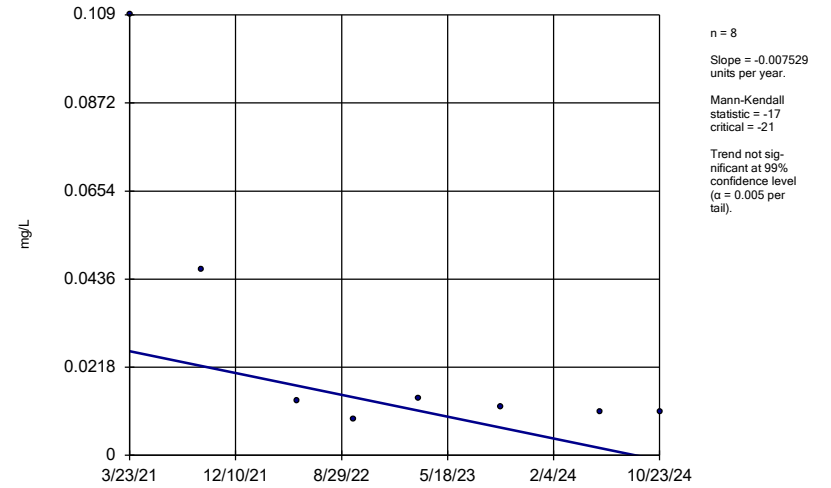
MW-14R



Constituent: Nickel Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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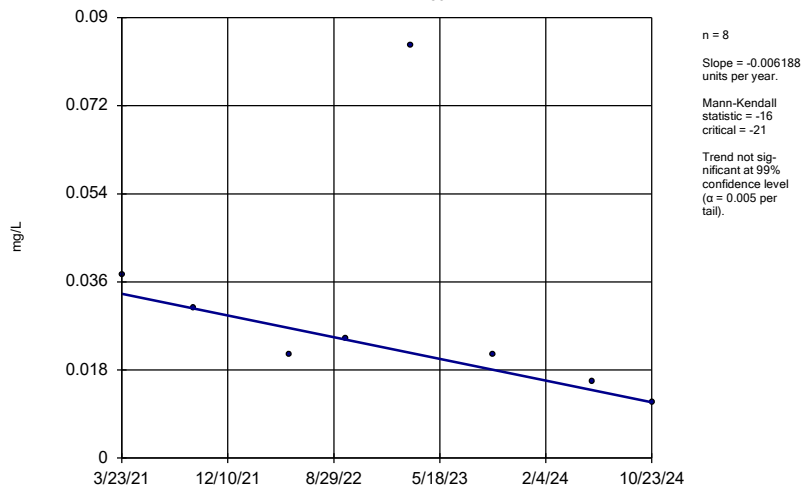
MW-15R



Constituent: Nickel Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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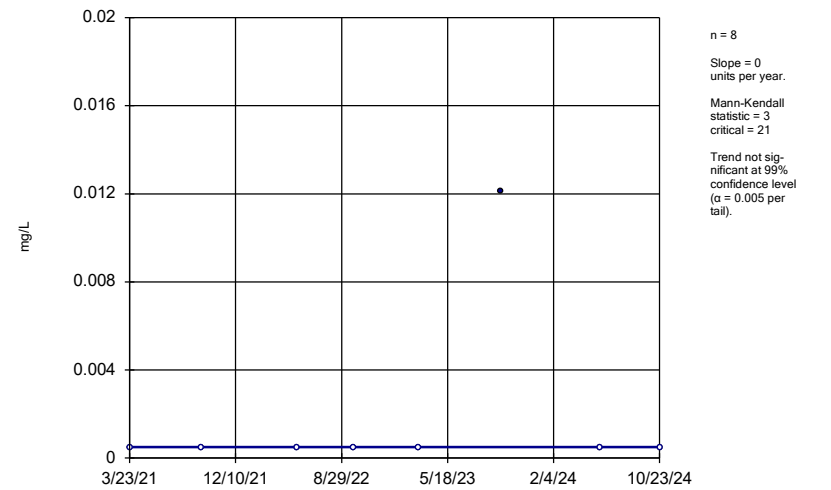
MW-39



Constituent: Nickel Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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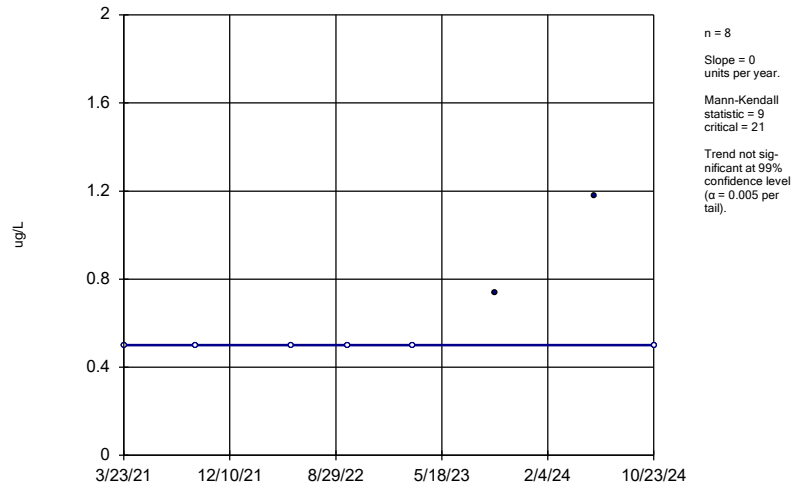
MW-14R



Constituent: Thallium Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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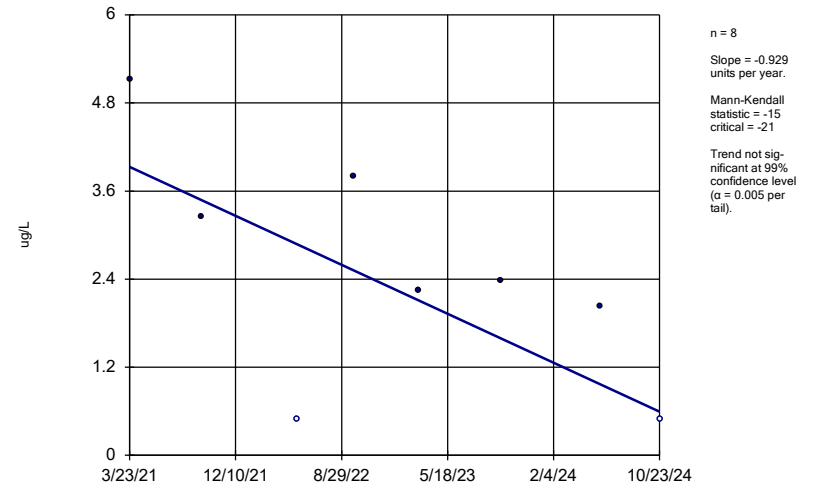
MW-15R



Constituent: Vinyl Chloride Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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MW-39



Constituent: Vinyl Chloride Analysis Run 2/28/2025 5:43 PM View: 2024AWQR-Mann\_Kendall  
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