

November 8, 2024  
File No. 27224044.00

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

Subject: 2024 Annual Water Quality Report,  
2024 Leachate Control System Performance Evaluation Report,  
& 2024 Landfill Gas Annual Report  
ADM-Clinton Landfill  
Permit No. 23-SDP-05-88C

Dear Mick:

SCS Engineers has completed the monitoring and evaluation for the ADM-Clinton Landfill for reporting year 2024. Our services were performed in general accordance with the requirements of the 1989 Iowa Administrative Code (IAC) 567-103 and the closure permit and subsequent amendment requirements for implementation of the Hydrologic Monitoring System Plan (HMSP). Please find enclosed a copy of the 2024 Annual Water Quality Report, the 2024 Leachate Control System Performance Evaluation Report, and the 2024 Landfill Gas Monitoring Report.

If you have any questions about these reports, please contact us as noted below.

Sincerely,



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Copies: Bobby Peropat, ADM Clinton



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

ADM-Clinton Landfill  
Solid Waste Permit No. 23-SDP-05-88C

Prepared for:

Archer-Daniels-Midland Company

**SCS ENGINEERS**

27224044.00 | November 2024

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# CERTIFICATION

Prepared by: Semir Omerovic

Date: 11/8/2024

Typed: Semir Omerovic

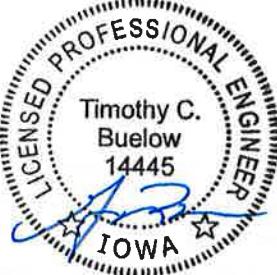
Reviewed by: Timothy C. Buelow

Date: 11/8/2024

Typed: Timothy C. Buelow, P.E.

Certification page (115.26(8)"d")

An annual report summarizing the effect of the facility on groundwater and surface water quality shall be submitted to the department each year. The summary is to be prepared by an engineer registered in the state of Iowa.

 <p>The seal is circular with a double-line border. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "IOWA" at the bottom, separated by stars. The inner circle contains the name "Timothy C. Buelow" and the license number "14445". A handwritten signature of Timothy C. Buelow is overlaid on the seal.</p>	<p>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.</p> <p><u>Timothy C. Buelow, P.E.</u></p> <p>License No. 14445</p> <p>My license renewal date is December 31, 2025.</p> <p>Pages or sheets covered by this seal:</p> <p>All except Appendix B-1.</p>
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# **EXECUTIVE SUMMARY**

## **ES.1 PERIOD OF REPORT COVERAGE**

SCS Engineers (SCS), on behalf of Archer-Daniels-Midland (ADM), has completed the required groundwater sampling for the ADM-Clinton Landfill (Landfill) for the calendar year 2024 reporting period. The purpose of this Annual Water Quality Report (AWQR) is to document and statistically evaluate the groundwater sampling results since the 2023 AWQR up to and including the spring and fall 2024 semi-annual sampling events. This AWQR was prepared in accordance with the requirements of the 1989 Iowa Administrative Code (IAC) 567-103, the site closure permit, and subsequent correspondence and amendment requirements for implementation of the Hydrologic Monitoring System Plan (HMS).

## **ES.2 REPORT PRIORITY**

The following summarizes report priorities associated with groundwater compliance at the Landfill:

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

## **ES.3 SITE STATUS AND APPLICABLE RULES**

- Landfill Status: Closed, Closure Permit.
- Types of waste accepted: Industrial.
- Applicable IAC rules: 1989 IAC 567-103.

## **ES.4 COMMENTS**

The following summarizes points of special emphasis:

- Groundwater analytical results during this reporting period were similar to the previous reporting period. Based on the monitoring results, the Landfill appears to have limited impact on groundwater quality downgradient of the site. However, because of the limited extent and nature of the impact, the stability of the concentrations in groundwater, the industrial nature of the surrounding area, and the local hydrogeologic conditions, it appears that no additional sampling or site assessment is warranted at this time.

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## **1.0 ACRONYMS/ABBREVIATIONS**

AL = Action Level

CCV = Continuing Calibration Verification

CL = Control Limit - Mean plus Two Standard Deviations

DNR = Iowa Department of Natural Resources

DO = Dissolved Oxygen

GWPS = Groundwater Protection Standard

GWQAP = Groundwater Quality Assessment Plan

LEL = Lower Explosive Limit

LCL = Lower Confidence Limit

LCS = Laboratory Control Sample

LN = Lognormal

M+/-2SD = Mean Plus/Minus Two Standard Deviations

MCL = EPA Maximum Contaminant Level

MDL = Method Detection Limit

N = Normal

NC = No Change

NM = Not Measured

ORP = Oxidation-Reduction Potential

PL = Prediction Limit

QA = Quality Assurance

QC = Quality Control

RL = Reporting Limit

SWS = DNR Statewide Standard for a Protected Groundwater Source

SSI = Statistically Significant Increase Above Background

SSL = Statistically Significant Level Above Groundwater Protection Standard

SSS = Site-Specific Standard (Site-Specific GWPS)

TSS = Total Suspended Solids

UCL = Upper Confidence Limit

VOC = Volatile Organic Compound

## **2.0 SITE BACKGROUND**

### **2.1 SITE LOCATION**

The ADM-Clinton Landfill (Landfill) is located on the south side of Highway 30 between Beaver Channel Parkway and the Mississippi River. The Landfill is situated in the north half of Section 23, T81N, R6E, in Clinton County, Iowa.

### **2.2 FACILITY**

The Landfill was operated by ADM from approximately 1982 to 1989. Before ADM, Clinton Corn performed filling activities at the Landfill site for an undetermined period. Fill materials placed in the Landfill have reportedly consisted of coal combustion residue, construction rubble, and river clarification solids generated during river water treatment for wet corn mill processing at the ADM plant.

Historically, fill material was placed at the Landfill site and on the properties adjoining to the northeast, northwest, and southwest. Fill material placed in these areas was of an unknown source and was not associated with ADM's landfilling activities.

### **2.3 GEOLOGY AND HYDROGEOLOGY OF THE SITE**

In the document titled ADM – Clinton Plant Existing Fly Ash Landfill Revised Hydrogeologic Investigation Report and Hydrologic Monitoring System Plan, dated November 20, 1992 by Terracon Environmental, Inc., hereafter referred to as the 1992 Revised HIR, the following geological description was provided:

*The site is situated in the valley of the Mississippi River and comprises an area considered floodplain prior to dike construction and landfill activities. Beaver Slough, an active meander arm of the Mississippi River, forms the eastern boundary of the site from northeast to the southwest. The site is located in the extreme eastern arm of a physiographic province known as the Iowa Erosional Surface (or the Iowan Surface). The Iowa Erosional Surface extends across most of northeast Iowa and is characterized by a maturely dissected pre-Illinoian glacial till plain. Typically overlying the glacial till is a Wisconsinian Age loess cover of approximately sixteen (16) feet. Topography of the region is generally undulating with low relief.*

*Where the site is not filled it is generally overlain with a thin layer of till. This till is encountered beneath the fill (both landfilled waste and levee fill). This layer ranges from approximately two (2) inches to ten (10) feet. The till overlies a thin spotty layer of brown sand observed in a number of borings. The thickness of this unit ranges from one (1) foot to fifteen (15) feet. Sand was observed in borings MW-1, MW-4, MW-6, MW-7, MW-10, and MW-16. Below the fill and sand unit, a weathered dolomitic limestone was encountered. The thickness of this layer was not determined as it extended beyond the deepest borings of fifty-five (55) feet.*

### **2.4 HYDROLOGY OF THE SITE**

According to the 1992 Revised HIR, the following hydrologic information was provided for the perched water table flow and potential leachate migration:

*The perched water table flow inside the landfill as interpolated from monitoring well data obtained on August 16, 1991, is depicted on Figure 12, Appendix A and is radially outward from the landfill. Temporal data provided in Table 3; Appendix B indicated that this radially outward flow pattern was present during the period that water elevations were recorded. Seasonal fluctuations in the perched water elevations are most likely due to varying amounts of rainfall, surface flow infiltration and the moisture content of landfilled materials.*

*The largest contributor of the perched liquid during the period that the landfill was being used was most likely the river mud that remained after river water had been clarified for plant use. This river mud generally contained approximately eighty percent (80%) moisture when it was deposited in the landfill as reported in the pending CPCP for the landfill. Final moisture content of the river mud is on the order of twenty-five percent (25%). Rain and groundwater infiltration, and surface runoff into the landfill also contributed to the liquid content of the landfill during the operational life of the landfill.*

*The perched liquid in the landfill can generally be characterized by definition as leachate although no current chemical laboratory analytical data is available to characterize its potential impact to groundwater quality beneath the landfill. Leachate, by definition, is generated by liquid that has entered the landfill as it moves down through the landfill.*

*Based on the observed anisotropy ( $K_h/K_v$ ) of the clay beneath the landfill, movement of the liquid through the landfill should be primarily horizontal rather than vertical. Using results of the laboratory and field hydraulic conductivity measurements of samples taken from MW-7A, the anisotropy in the clay was estimated to be on the order of 11,800/1. Based on this anisotropy and current groundwater movement at the landfill, the major potential pathway that liquid in the landfill would follow would be through the fill toward Beaver Slough. Other pathways include leachate seeps from the side slopes of the landfill. Leachate seeps have been noted at the landfill after heavy rainstorms.*

*The minimum five (5) foot separation as required in IAC 103.2(1)m(2) does not appear to exist at the site. Should leachate migration occur into the deeper bedrock aquifer and an impact to the groundwater beneath the landfill occurs, these occurrences should be detected in the perimeter monitoring wells during the routine post closure monitoring outlined in the Hydrologic Monitoring System Plan (HMS), Appendix H. If problems are detected, remedial measures can be implemented by ADM.*

*According to the 1992 Revised HIR, the following hydrologic information was provided for the shallow clay and sand units and bedrock aquifer:*

*Temporal groundwater fluctuations in the shallow sand unit and in the uppermost bedrock aquifer generally vary with the Mississippi River stage with seasonal fluctuations in monitoring wells MW-11 and MW-12 due to surface runoff.*

*Groundwater potentiometric contour maps as interpolated from August 16, 1991, data for the shallow sand unit and the bedrock aquifer are included as Figure 13 and Figure 14, Appendix A, respectively. General horizontal groundwater flow patterns in the shallow units and the deeper bedrock beneath the landfill appear to be*

southeasterly across the landfill during much of the study period (3/22/91 - 8/16/91) toward Beaver Slough.

A slight northerly horizontal component of flow was noted during the April 12, 1991, and the August 16, 1991 water level measurement sampling events at the northern tip of the landfill. The flow reversal during the April 12, 1991 event was most likely due to increased surface runoff causing the water level in MW-1 to rise faster than the water level in MW-11. The flow reversal during the August 16, 1991 event was most likely due to the water level in MW-11 falling as a result of relatively low rainfall infiltration while MW-1 continued to be influenced by up-flowing recharge from the underlying bedrock unit. Figure 13, Appendix A shows this northerly flow component at the extreme northern tip of the landfill for the August 16, 1991 data. Horizontal flow reversal to the north will tend to increase leachate migration in that direction during and following prolonged periods of heavy precipitation.

Vertical movement in the units beneath the landfill along the northwestern boundary at the site appears to be generally dependent on the same factors described as influencing horizontal flow in this area (i.e. seasonal variations in rainfall and/or surface drainage through the drainage ditch). Vertical movement along the northwestern boundary appears to be generally upward along this border during most of the water level measurement events as noted in well clusters MW-11/14 and MW-12/15. This upward flow path appears to be related to a gaining reach in the drainage channel that runs northward along the perimeter of the landfill in this area.

Vertical flow reversal has been noted during the March 25, 1991, water level measurement event in well cluster MW-11/14 and during the March water level measurement events in well cluster MW-12/15. This is believed to be due to excessive rainfall or large surface drainage events such as snowmelt runoff accumulating in the drainage ditch along the northwestern boundary of the landfill and causing a downward vertical movement as evidenced by the water level in the shallow wells (MW-11 and MW-12) apparently increasing faster than the water levels in the deeper wells.

Upward vertical flow along the northwestern boundary of the landfill in the bedrock should cause a groundwater barrier along this boundary. This groundwater barrier should impede leachate migration from the landfill horizontally along much of this barrier. Leachate migration should be detected within the proposed monitoring system should detectable leachate migration occur.

Stage fluctuation in Beaver Slough is expected to influence the piezometric levels in the bedrock and overlying units on the basis of increasing hydraulic delay effect as distance from the slough increases. During high water periods, the magnitude of the downward gradient over most of the landfill should diminish and perhaps temporarily reverse given a prolonged flood event. In the northern tip of the landfill the normal upward gradient could be exaggerated. The horizontal flow path could also temporarily reverse 180 degrees with generalized flow going to the northwest across the entire site.

When the slough potentiometric level is lower than the adjoining aquifer, most of the landfill would experience vertical downward gradients, but, because of the high anisotropy, the three-dimensional flow would remain primarily horizontal toward the slough. During these periods, the northern tip of the landfill could experience a

*reversal to a downward vertical gradient and horizontal flow in this area could also reverse toward the southeast, back beneath the landfill toward the slough. Both of these phenomena depend almost entirely on the stage of Beaver Slough and the adjoining Mississippi River.*

Notes:

1. The referenced figures and appendices contained in the above citations are not included in this report.
2. Referenced well clusters in the above citations have been renamed. Refer to Figure 4 of the 1992 ADM-Clinton Plant Existing Fly Ash Landfill Revised Hydrogeologic Investigation Report and Hydrologic Monitoring System Plan for the location of these monitoring well clusters.

## **3.0 FIGURES DISCUSSION**

The following figures are attached.

### **3.1 FIGURE 1 – APPROVED MONITORING NETWORK**

The Landfill property and hydrologic monitoring system plan (HMSP) network is depicted in **Figure 1**. **Figure 1** indicates the locations of each monitoring well and its respective monitoring program as of the beginning of this reporting period.

### **3.2 FIGURE 2 – UNCONSOLIDATED AQUIFER GROUNDWATER CONTOURS**

A groundwater contour map based on water levels measured in the unconsolidated aquifer and the Landfill piezometers during the July 2024 groundwater sampling event is included in **Figure 2**. When considering only the groundwater monitoring well water levels, **Figure 2** indicates a generally northerly flow direction away from the Mississippi River; however, incorporation of leachate levels into the contour development as shown in **Figure 2** indicates potential mounding at multiple locations, creating the appearance of localized areas of radial outward gradients within the fill area footprint. It should be noted that when considering the leachate elevations in the contour development, it is not known if the leachate elevations measured in the piezometers are the result of the intersection of perched leachate zones within the waste mass, a fully saturated waste mass in the vicinity of the monitoring points, or whether the leachate is in hydraulic communication with the groundwater.

### **3.3 FIGURE 3 – BEDROCK AQUIFER GROUNDWATER CONTOURS**

A groundwater contour map based on water levels measured in the bedrock aquifer during the July 2024 groundwater sampling event is included in **Figure 3**. **Figure 3** indicates a generally northerly flow direction away from the Mississippi River.

## **4.0 QA/QC SUMMARY**

Date indicates the date(s) of sampling.

### **4.1 APRIL 10, 2024 (2024 SPRING SAMPLING EVENT)**

Based on the QA review, no samples were rejected as unusable due to QC failures. In general, the quality of the analytical data for this sampling event does not appear to have been compromised by analytical irregularities (with the exception of the typical preservation issues that appear to be related to the basic nature of the samples) and results affected by QC anomalies are qualified with the appropriate data flags, which are listed in the laboratory report in **Appendix B-1**. Data validation documentation can be found in **Appendix B-2**.

### **4.2 JULY 17, 2024 (2024 FALL SAMPLING EVENT)**

Based on the QA review, no samples were rejected as unusable due to QC failures. In general, the quality of the analytical data for this sampling event does not appear to have been compromised by analytical irregularities (with the exception of the typical preservation issues that appear to be related to the basic nature of the samples) and results affected by QC anomalies are qualified with the appropriate data flags, which are listed in the laboratory report in **Appendix B-1**. Data validation documentation can be found in **Appendix B-2**.

## **5.0 DATA EVALUATION**

Statistical evaluation in accordance with requirements of the 1989 IAC 567-103.2(8)"d" was conducted for the groundwater analytical data collected during the 2024 semi-annual sampling events. The statistical evaluation for samples collected during the 2024 semi-annual sampling events is located in **Appendix D** of this report.

### **5.1 DATA EVALUATION**

Groundwater monitoring for the Landfill consists of sampling from two aquifers. The unconsolidated aquifer contains two upgradient monitoring wells located on the north and northeast sides of the Landfill and eight downgradient monitoring wells; one located on the southeast side, two located along the south side, two located on the southwest side, one located on the west side, and two located on the northwest side of the Landfill. The bedrock aquifer contains two upgradient monitoring wells located on the north and northeast sides of the Landfill and six downgradient monitoring wells; one located on the southeast side, two located along the south side, two located on the southwest side, and one located on the northwest side of the Landfill.

A total of 96 control limit exceedances were detected based on spring and fall 2024 sampling results as listed in **Table 1** compared to 82 control limit exceedances detected based on spring and fall 2023 sampling results reported in the 2023 AWQR, not counting total suspended solids or PAHs. Most of the control limit exceedances detected based on 2024 sampling results were attributed to the unconsolidated aquifer.

Exceedances of action or advisory levels were largely associated with arsenic, boron, cobalt, manganese, and nitrogen-ammonia as listed in **Table 9**. It should be noted that, in addition to the action or advisory level exceedances shown in **Table 9**, the action or advisory level for cobalt was exceeded in upgradient monitoring well MW-18 and the action or advisory level for manganese was exceeded in upgradient monitoring wells MW-2 and MW-17 based on a review of concentrations listed in the Summary of Groundwater Chemistry in **Appendix C**.

### **5.2 TRENDING IN MONITORING WELLS**

Statistically significant decreasing trends at a 99% confidence level ( $\alpha=0.01$ ) were identified in three monitoring well/constituent pairs by Mann-Kendall analysis during this reporting period. Statistically significant increasing trends at a 99% confidence level ( $\alpha=0.01$ ) were identified in three monitoring well/constituent pairs by Mann-Kendall analysis during this reporting period. The trend analysis is included in **Attachment A of Appendix D** of this report. The statistically significant trends were as follows:

Monitoring Point	Constituent	Trend
MW-5	Boron	Increasing
MW-5	Magnesium	Increasing
MW-9	Total Phenols	Decreasing
MW-12	Chloride	Decreasing
MW-12	Magnesium	Decreasing
MW-18	Sulfate	Increasing

Although not necessarily statistically significant, the Mann-Kendall statistics can provide an indication of general trending in the data. Trend indications for wells in the monitoring program are

shown in the table below. The statistics used to develop the general trending differ from the Mann-Kendall statistics used in the diagnostics section of the statistical evaluation in that a much lower trend threshold is applied for the general trending information ( $\alpha=0.20$  versus  $\alpha=0.01$ ). Trends classified as decreasing or increasing exhibited a statistically significant trend with 80% confidence using the most recent eight data points. Trends classified as stable did not exhibit a statistically significant trend with 80% confidence using the eight most recent data points. A summary of Mann-Kendall statistics by constituent in each monitoring point is included in **Appendix E** of this report.

Trending in Compliance Monitoring Wells					
Aquifer	Monitoring Well	Decreasing Trends	Stable Trends	Increasing Trends	Number of Constituents Evaluated
Unconsolidated Aquifer	MW-2 (u)	20.00%	70.00%	10.00%	10
	MW-18 (u)	0.00%	90.91%	9.09%	11
	MW-3	0.00%	81.82%	18.18%	11
	MW-5	9.09%	54.55%	36.36%	11
	MW-7	9.09%	90.91%	0.00%	11
	MW-9	22.22%	72.22%	5.56%	18
	MW-11	25.00%	56.25%	18.75%	16
	MW-13	0.00%	90.91%	9.09%	11
	MW-14	0.00%	60.00%	40.00%	10
	MW-16	20.00%	40.00%	40.00%	5
Bedrock Aquifer	MW-1 (u)	0.00%	100.00%	0.00%	6
	MW-17 (u)	0.00%	100.00%	0.00%	8
	MW-4	0.00%	66.67%	33.33%	6
	MW-6	41.67%	58.33%	0.00%	12
	MW-8	0.00%	71.43%	28.57%	7
	MW-10	10.00%	70.00%	20.00%	10
	MW-12	72.73%	18.18%	9.09%	11
	MW-15	0.00%	90.00%	10.00%	10
Combined	Site Wide	<b>14.67%</b>	<b>70.65%</b>	<b>14.67%</b>	<b>184</b>

(u) indicates an upgradient monitoring point.

Review of the Mann-Kendall statistics indicated that approximately 85% of the Mann-Kendall statistics were considered stable or decreasing following the 2024 annual statistical evaluation with one of the decreasing trends being pH. There were 28 monitoring well/constituent pairs with generally increasing trends. The monitoring well/constituent pairs with increasing trends and with decreasing pH trends are discussed in the following table.

Aquifer	Monitoring Well	Constituent Name	Comments
Unconsolidated Aquifer	MW-2 (u)	COD	Based on 5 actual detections and 3 non-detections. All concentrations were within historical range.

Aquifer	Monitoring Well	Constituent Name	Comments
	MW-18 (u)	Sulfate	Based on eight actual detections. Highest concentration of 82.6 mg/L measured in spring 2024.
	MW-3	Arsenic	Based on eight actual detections. Highest concentration of 0.0272 mg/L measured in fall 2024.
	MW-3	Chloride	Based on eight actual detections. Highest concentration of 420 mg/L measured in spring 2024.
	MW-5	Arsenic	Based on eight actual detections. Highest concentration of 0.051 mg/L measured in fall 2024.
	MW-5	Boron	Based on eight actual detections. All concentrations were within the historical range.
	MW-5	Cobalt	Based on eight actual detections. Highest concentration of 0.013 mg/L detected in fall 2024.
	MW-5	Magnesium	Based on eight actual detections. Highest concentration of 514 mg/L measured in fall 2024. These detections were below the historical maximum of 523 mg/L measured in fall 2018.
	MW-9	Cobalt	Based on four actual detections and four J flag detections. Highest concentration of 0.00547 mg/L measured in spring 2023.
	MW-11	Arsenic	Based on eight actual detections. Highest concentration of 0.0849 mg/L measured in fall 2023.
	MW-11	Boron	Based on six actual detections, one J flag detection, and one non-detection. Highest concentration of 1.74 mg/L measured in fall 2024.
	MW-11	Manganese	Based on eight actual detections. Highest concentration of 1.3 mg/L measured in fall 2024. These detections were below the historical maximum of 2.13 mg/L measured in fall 2018.
	MW-13	Chloride	Based on eight actual detections. All concentrations were within historical range.
	MW-14	Chloride	Based on eight actual detections. Highest concentration of 493 mg/L measured in fall 2023.
	MW-14	Magnesium	Based on eight actual detections. Highest concentration of 113 mg/L measured in fall 2023.
	MW-14	Specific Conductance	Based on eight measurements. All measurements were within the historical range.

Aquifer	Monitoring Well	Constituent Name	Comments
	MW-14	Sulfate	Based on eight actual detections. Highest concentration of 206 mg/L measured in fall 2024.
	MW-16	Chloride	Based on eight actual detections. Highest concentration of 360 mg/L measured in spring 2024.
	MW-16	Sulfate	Based on eight actual detections. Highest concentration of 436 mg/L measured in spring 2024.
Bedrock Aquifer	MW-4	Chloride	Based on eight actual detections. Highest concentration of 197 mg/L measured in fall 2023.
	MW-4	pH (decreasing)	Based on eight actual detections. Range of pH measurements between 6.92 and 7.73 S.U.
	MW-4	Specific Conductance	Based on eight measurements. All measurements were within the historical range.
	MW-8	Chloride	Based on eight actual detections. All concentrations were within the historical range.
	MW-8	Specific Conductance	Based on eight measurements. All measurements were within the historical range.
	MW-10	Boron	Based on eight actual detections. Highest concentration of 1.67 mg/L measured in fall 2024.
	MW-10	Iron	Based on four actual detections and two non-detections. Highest concentration of 1.4 mg/L measured in fall 2024.
	MW-12	Sulfate	Based on seven actual detections and one non-detection. Highest concentration of 23.2 mg/L measured in fall 2024.
	MW-12	pH	Based on eight measurements. All measurements were within the historical range.
	MW-15	COD	Based on three actual detections and five non-detections. All trend concentrations were within the historical range.

A total of 28 increasing constituent trends and one decreasing pH trend were measured at an 80% confidence level in 2024 compared to 21 increasing constituent trends and zero decreasing pH trends measured at an 80% confidence level in 2023, not including TSS. It should be noted that two of the increasing trends measured at 80% confidence level in 2024 were found in upgradient monitoring wells.

## **6.0 RECOMMENDATIONS**

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

Groundwater analytical results during this reporting period were similar to the previous reporting period. Based on the monitoring results, the Landfill appears to have limited impact on groundwater quality downgradient of the site. However, because of the limited extent and nature of the impact, the stability of the concentrations in groundwater, the industrial nature of the surrounding area, and the local hydrogeologic conditions, it appears that no additional sampling or site assessment is warranted at this time.

### **6.2 PROPOSED MONITORING**

The groundwater monitoring program is summarized in **Table 1**. No changes to the HMSP monitoring program are recommended at this time. It is recommended that sampling continue for calendar year 2025 as summarized in **Table 2**.

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

Monitoring well performance is summarized in **Table 4**. No changes to the monitoring wells are recommended at this time.

## Tables

- 1 Monitoring Program Summary
- 2 Monitoring Program Implementation Schedule
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- 8 Summary of Groundwater Chemistry
- 9 Historical Control and Action Level Exceedances
- 10 Groundwater Quality Assessment Plan Trend Analysis

**Table 1**  
**Monitoring Program Summary**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Monitoring Well	Formation	Current Monitoring Program	Change for Next Sampling Event	Control Limit Exceedances	Total Number of Samples in Each Monitoring Program Since January 1, 2018		
					Routine	Supplemental	Remedial Action
<b>Unconsolidated Aquifer</b>							
MW-2	Formation Info Not Found	Background	None	N/A	14	-	-
MW-18	Formation Info Not Found	Background	None	N/A	14	-	-
MW-3	Formation Info Not Found	Detection	None	Boron, Chloride, Cobalt, Iron, Magnesium, Manganese, Specific Conductance	13	-	-
MW-5	Formation Info Not Found	Detection	None	Arsenic, Boron, COD, Chloride, Cobalt, Iron, Magnesium, Manganese, Nitrogen-Ammonia, Specific Conductance, Sulfate	13	-	-
MW-7	Formation Info Not Found	Detection	None	Arsenic, Boron, COD, Chloride, Cobalt, Iron, Magnesium, Nitrogen-Ammonia, Specific Conductance	13	-	-
MW-9	Formation Info Not Found	Detection	None	Arsenic, Boron, COD, Magnesium, Manganese, Nitrogen-Ammonia, Specific Conductance, Sulfate	13	-	-
MW-11	Formation Info Not Found	Detection	None	Arsenic, Boron, COD, Chloride, Cobalt, Iron, Magnesium, Manganese, Nitrogen-Ammonia, Specific Conductance	14	-	-
MW-13	Formation Info Not Found	Detection	None	Arsenic, Boron, COD, Chloride, Iron, Magnesium, Manganese, Nitrogen-Ammonia, Specific Conductance, Sulfate	14	-	-
MW-14	Formation Info Not Found	Detection	None	Boron, Chloride, Magnesium, Manganese, Nitrogen-Ammonia, Specific Conductance, Sulfate	14	-	-
MW-16	Formation Info Not Found	Detection	None	Chloride, Sulfate	14	-	-
<b>Bedrock Aquifer</b>							
MW-1	Dolomitic Limestone	Background	None	N/A	13	-	-
MW-17	Dolomitic Limestone	Background	None	N/A	13	-	-
MW-4	Dolomitic Limestone	Detection	None	None	13	-	-
MW-6	Dolomitic Limestone	Detection	None	Arsenic, Boron, COD, Chloride, Cobalt, Iron, Magnesium, Nickel, Nitrogen-Ammonia, Specific Conductance, Sulfate	13	-	-
MW-8	Dolomitic Limestone	Detection	None	None	13	-	-
MW-10	Dolomitic Limestone	Detection	None	Boron, Cobalt, Iron, Nitrogen-Ammonia, Sulfate	13	-	-
MW-12	Dolomitic Limestone	Detection	None	Arsenic, Boron, COD, Chloride, Cobalt, Iron, Magnesium, Nitrogen-Ammonia, Specific Conductance	13	-	-
MW-15	Dolomitic Limestone	Detection	None	Arsenic, Boron, COD, Cobalt, Iron, Magnesium, Nitrogen-Ammonia, Sulfate	13	-	-

Notes: Control limit exceedances listed are based on at least one exceedance during the reporting period.

**Table 2**  
**Monitoring Program Implementation Schedule**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Regime	Monitoring Well	Recent Sampling Dates and Constituents		Upcoming Sampling Dates and Constituents	
		4/10/2024	7/17/2024	2025 Spring Event	2025 Fall Event
Unconsolidated Aquifer	MW-2 (u)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total Phenols	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total Phenols
	MW-18 (u)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total Phenols	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total Phenols
	MW-3	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS
	MW-5	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS
	MW-7	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total phenols, bis[2-ethylhexyl]phthalate	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total phenols, bis[2-ethylhexyl]phthalate
	MW-9	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total phenols, bis[2-ethylhexyl]phthalate, EPA 8260 (VOCs)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, Total phenols, bis[2-ethylhexyl]phthalate, EPA 8260 (VOCs)
	MW-11	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, EPA 8260 (VOCs)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, EPA 8260 (VOCs)
	MW-13	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS
	MW-14	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS
	MW-16	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS

Notes: Sampling for dissolved iron was replaced with sampling for total iron beginning in 2023.

**Table 2 - continued**  
**Monitoring Program Implementation Schedule**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No.23-SDP-05-88C**

Regime	Monitoring Well	Recent Sampling Dates and Constituents		Upcoming Sampling Dates and Constituents	
		4/10/2024	7/17/2024	2025 Spring Event	2025 Fall Event
Bedrock Aquifer	MW-1 (u)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS
	MW-17 (u)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS
	MW-4	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS
	MW-6	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, Ni, SO4), ORP, DO, TSS
	MW-8	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, SO4), ORP, DO, TSS
	MW-10	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS
	MW-12	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, EPA 8260 (VOCs)	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, Mn, SO4), ORP, DO, TSS, EPA 8260 (VOCs)
	MW-15	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, SO4), ORP, DO, TSS	IAC 103.2(4)"e", Total Inorganics(As, B, Co, Mg, SO4), ORP, DO, TSS
Leachate	Wet Well	Ammonia, Kjeldahl Nitrogen, Total Phenols, TSS, TS, CBOD, Nitrate, Chloride, Sulfate, Total Cyanide, EPA 8270D (SVOC's), EPA 8260C (VOC's), Total Inorganics (Al, AR, Bo, Cd, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Zn)	None	None	None

Notes: Wet well sampled once every two years.

Sampling for dissolved iron was replaced with sampling for total iron beginning in 2023.

DO - Dissolved Oxygen

ORP - Oxidation-Reduction Potential

TSS - Total Suspended Solids

VOC - Volatile Organic Compound

**Table 3**  
**Monitoring Well Maintenance and Performance Re-Evaluation Schedule**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

<b>Compliance with:</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
567 IAC 110.9(2)"a" high and low water levels (annually)	Completed	Completed	Included	Scheduled
567 IAC 110.9(2)"b" changes in the hydrologic setting and flow paths	Completed	Completed	Included	Scheduled
567 IAC 110.9(2)"c" well depths	Completed	Completed	Included	Scheduled
567 IAC 110.9(2)"d" well recharge rates <sup>(1)</sup>		Completed		Scheduled

Notes:

<sup>(1)</sup> In-situ permeability testing was replaced with biennial well recharge rate evaluation in DNR correspondence dated January 17, 2018 (Doc# 91298).

**Table 4**  
**Monitoring Well Performance and Maintenance Summary**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Regime	Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements	Maximum Depth Discrepancy (ft)
						7/17/2024	
Unconsolidated Aquifer	MW-2	584.49	580.83	14.5	Groundwater Level (ft)	3.59	
					Groundwater Elevation (Ft MSL)	580.90	
					Measured Well Depth (ft)	13.2	
					Submerged screen	Y	1.3
	MW-18	584.44	577.69	17.5	Groundwater Level (ft)	2.55	
					Groundwater Elevation (Ft MSL)	581.79	
					Measured Well Depth (ft)	17.7	-0.2
					Submerged screen	Y	
	MW-3	595.05	575.75	29.3	Groundwater Level (ft)	12.16	
					Groundwater Elevation (Ft MSL)	582.89	
					Measured Well Depth (ft)	26.2	
					Submerged screen	Y	3.1
	MW-5	596.17	579.56	27.5	Groundwater Level (ft)	13.56	
					Groundwater Elevation (Ft MSL)	582.61	
					Measured Well Depth (ft)	27.9	-0.4
					Submerged screen	Y	
	MW-7	595.15	575.77	30.0	Groundwater Level (ft)	15.48	
					Groundwater Elevation (Ft MSL)	579.67	
					Measured Well Depth (ft)	31.0	-1.0
					Submerged screen	Y	
	MW-9	594.20	574.44	30.8	Groundwater Level (ft)	11.80	
					Groundwater Elevation (Ft MSL)	582.40	
					Measured Well Depth (ft)	30.8	0.0
					Submerged screen	Y	
	MW-11	589.82	579.82	20.0	Groundwater Level (ft)	6.26	
					Groundwater Elevation (Ft MSL)	583.56	
					Measured Well Depth (ft)	20.0	0.0
					Submerged screen	Y	
	MW-13	589.93	577.53	23.2	Groundwater Level (ft)	8.73	
					Groundwater Elevation (Ft MSL)	581.20	
					Measured Well Depth (ft)	23.4	-0.2
					Submerged screen	Y	
	MW-14	587.06	580.06	17.0	Groundwater Level (ft)	5.42	
					Groundwater Elevation (Ft MSL)	581.64	
					Measured Well Depth (ft)	17.3	-0.3
					Submerged screen	Y	
	MW-16	585.06	579.00	17.0	Groundwater Level (ft)	4.84	
					Groundwater Elevation (Ft MSL)	580.22	
					Measured Well Depth (ft)	16.9	
					Submerged screen	Y	0.1

**Table 4 - continued**  
**Monitoring Well Performance and Maintenance Summary**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Regime	Well	Top of Casing	Top of Screen	Total Depth		Date of Measurements	Maximum Depth Discrepancy (ft)
						7/17/2024	
Bedrock Aquifer	MW-1	585.49	558.57	37.8	Groundwater Level (ft)	4.27	
					Groundwater Elevation (Ft MSL)	581.22	
					Measured Well Depth (ft)	37.6	
					Submerged screen	Y	0.2
	MW-17	582.74	557.31	37.8	Groundwater Level (ft)	1.99	
					Groundwater Elevation (Ft MSL)	580.75	
					Measured Well Depth (ft)	34.1	3.7
					Submerged screen	Y	
	MW-4	595.30	521.02	85.1	Groundwater Level (ft)	12.69	
					Groundwater Elevation (Ft MSL)	582.61	
					Measured Well Depth (ft)	75.8	9.3
					Submerged screen	Y	
	MW-6	596.22	553.98	53.0	Groundwater Level (ft)	13.94	
					Groundwater Elevation (Ft MSL)	582.28	
					Measured Well Depth (ft)	53.9	-0.9
					Submerged screen	Y	
	MW-8	595.19	535.36	70.5	Groundwater Level (ft)	12.18	
					Groundwater Elevation (Ft MSL)	583.01	
					Measured Well Depth (ft)	64.8	5.7
					Submerged screen	Y	
	MW-10	594.01	556.63	48.2	Groundwater Level (ft)	11.47	
					Groundwater Elevation (Ft MSL)	582.54	
					Measured Well Depth (ft)	48.3	-0.1
					Submerged screen	Y	
	MW-12	589.71	562.21	37.5	Groundwater Level (ft)	6.31	
					Groundwater Elevation (Ft MSL)	583.40	
					Measured Well Depth (ft)	37.4	0.1
					Submerged screen	Y	
	MW-15	586.43	557.93	38.5	Groundwater Level (ft)	4.41	
					Groundwater Elevation (Ft MSL)	582.02	
					Measured Well Depth (ft)	39.1	-0.6
					Submerged screen	Y	

Comments:

- 1) Measured well depths were less than 1.0 foot shallower than the installed depths where measured with the following exceptions:

**MW-2, MW-3, MW-4, MW-8, and MW-17:** These monitoring wells have consistently measured shallower than the installed depth; however, since the monitoring wells produce sufficient groundwater for sampling it is likely that the wells are functioning properly.

**Table 5**  
**Background and GWPS Summary**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

**Interwell Background/GWPS (Unconsolidated Aquifer: MW-2, MW-18)**

Constituent	Units	Samples	Detections	Background Level	Statistical Test	Action Level	Source
Arsenic	mg/L	36	19	0.03017	M+2SD	0.01 mg/L	MCL/SWS
Boron	mg/L	36	36	0.4426	M+2SD	6 mg/L	HAL
Chemical Oxygen Demand	mg/L	130	115	49.75	M+2SD		
Chloride	mg/L	130	130	73.28	M+2SD		
Cobalt	mg/L	36	32	0.00436	M+2SD	0.0021 mg/L	SWS
Iron	mg/L	12	8	1.964	M+2SD		
Magnesium	mg/L	36	36	38.09	M+2SD		
Manganese	mg/L	36	36	1.128	M+2SD	0.3 mg/L	MCL/SWS
Nitrogen, Ammonia	mg/L	130	108	5.367	M+2SD	30.0 mg/L	HAL
pH	S.U.	126	126	6.21 - 7.877	M+/-2SD		
Specific Conductance	µS/cm	130	130	1418	M+2SD		
Sulfate	mg/L	30	30	78.62	M+2SD		

**Interwell Background/GWPS (Bedrock Aquifer: MW-1, MW-17)**

Constituent	Units	Samples	Detections	Background Level	Statistical Test	Action Level	Source
Arsenic	mg/L	37	5	0.00117	M+2SD	0.01 mg/L	MCL/SWS
Boron	mg/L	37	35	1.1280	M+2SD	6 mg/L	HAL
Chemical Oxygen Demand	mg/L	101	46	19.18	M+2SD		
Chloride	mg/L	100	99	226.1	M+2SD		
Cobalt	mg/L	33	18	0.000560	M+2SD	0.0021 mg/L	SWS
Iron	mg/L	12	0	0.050	M+2SD		
Magnesium	mg/L	36	36	57.93	M+2SD		
Manganese	mg/L	36	18	1.134	M+2SD	0.3 mg/L	MCL/SWS
Nickel	mg/L	34	10	0.00499	M+2SD	0.1 mg/L	SWS
Nitrogen, Ammonia	mg/L	101	15	1.293	M+2SD	30.0 mg/L	HAL
pH	S.U.	101	101	6.23 - 7.77	M+/-2SD		
Specific Conductance	µS/cm	102	102	1597	M+2SD		
Sulfate	mg/L	29	28	70.10	M+2SD		

Notes:

- 1) Background levels based on calculated control limits or reporting limit, as applicable.

Acronyms/Abbreviations:

RL = Reporting Limit

MCL = EPA Maximum Contaminant Level

GWPS = Groundwater Protection Standard

PL = Prediction Limits

SSS = Site-Specific GWPS

HAL = Health Advisory Level

SWS = Statewide Standard

DWA = Drinking Water Advisory

SD = Standard Deviation

Comments:

- 1) **Water quality results and effectiveness of the statistical data evaluation criteria:** Statistical evaluations consist of control limits which consist of the standard deviation plus two standard deviations (plus and minus two standard deviations for pH).

- 2) **Changes to the previous statistical method during reporting period:** None.

**Table 6**  
**Summary of Well/Detected Constituent Pairs With No Immediately Preceding Control Limit Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

**Spring 2024 Sampling Event**

Well	Constituent	Units	Result	Background Standard
<b>Unconsolidated Aquifer</b>				
MW-3	Cobalt	mg/L	0.00454	0.00439
MW-7	Cobalt	mg/L	0.00571	0.00439
MW-13	Chloride	mg/L	97.1	73.46
	Sulfate	mg/L	82.8	78.47
MW-14	Sulfate	mg/L	185	78.47
MW-16	Chloride	mg/L	360	73.46
	Sulfate	mg/L	436	78.47
<b>Bedrock Aquifer</b>				
MW-6	Chloride	mg/L	317	225.4
MW-15	Arsenic	mg/L	0.102	0.001172
	Boron	mg/L	7.68	0.9976
	COD	mg/L	102	19.30
	Cobalt	mg/L	0.00183	0.0005694
	Iron	mg/L	19.6	0.05
	Nitrogen-Ammonia	mg/L	68.5	1.306

**Fall 2024 Sampling Event**

Well	Constituent	Units	Result	Background Standard
<b>Unconsolidated Aquifer</b>				
MW-7	Iron	mg/L	11.1	1.964
MW-14	Nitrogen-Ammonia	mg/L	11.5	5.367
<b>Bedrock Aquifer</b>				
MW-10	Boron	mg/L	1.67	1.128
	Cobalt	mg/L	0.00104	0.0005597
	Magnesium	mg/L	67.6	57.93

Note: Tables include control limit exceedances identified during the 2024 sampling events that were not identified as control limit exceedances in the previous year.

Comments:

- 1) **Problems with the current HMSP network:** None.
- 2) **Schedule to implement remedies:** Not applicable.
- 3) **Alternative constituent or sample frequency changes:** None.
- 4) **Significant changes to prediction limits:** None.

**Table 7**  
**Summary Table of Ongoing and Newly Identified Control Limit Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

**Key**

	Denotes ongoing control limit exceedances that were identified as control limit exceedances during this reporting period and the previous reporting period at least once during each reporting period.
	Denotes newly identified control limit exceedances in the 2024 reporting period. Newly identified is defined as occurring at least once in the current reporting period but not in the immediately preceding reporting period.

**Unconsolidated Aquifer**

Well	Constituent	Units	Most Recent Result	Fall 2024 Background Standard	Action Level/ Statewide Standard
MW-3	Boron	mg/L	4.03	0.4426	6
	Chloride	mg/L	298	73.28	-
	Cobalt	mg/L	0.000835	0.00436	0.0021
	Iron	mg/L	42.7	1.964	-
	Magnesium	mg/L	84.9	38.09	-
	Manganese	mg/L	5.69	1.128	0.3
	Specific Conductance	µS/cm	2,367	1,418	-
MW-5	Arsenic	mg/L	0.051	0.03017	0.01
	Boron	mg/L	22.4	0.4426	6
	COD	mg/L	217	49.75	-
	Chloride	mg/L	192	73.28	-
	Cobalt	mg/L	0.013	0.004364	0.0021
	Iron	mg/L	39.9	1.964	-
	Magnesium	mg/L	514	38.09	-
	Manganese	mg/L	2.2	1.128	0.3
	Nitrogen-Ammonia	mg/L	125	5.367	30
	Specific Conductance	µS/cm	6,040	1,418	-
MW-7	Sulfate	mg/L	840	78.62	-
	Arsenic	mg/L	0.0297	0.03017	0.01
	Boron	mg/L	31.6	0.4426	6
	COD	mg/L	305	49.75	-
	Chloride	mg/L	195	73.28	-
	Cobalt	mg/L	0.0042	0.00436	0.0021
	Iron	mg/L	11.1	1.964	-
	Magnesium	mg/L	240	38.09	-
	Nitrogen-Ammonia	mg/L	572	5.367	30
MW-9	Specific Conductance	µS/cm	7,002	1,418	-
	Arsenic	mg/L	0.0485	0.03017	0.01
	Boron	mg/L	12.9	0.4426	6
	COD	mg/L	280	49.75	-
	Magnesium	mg/L	251	38.09	-
	Manganese	mg/L	1.13	1.128	0.3
	Nitrogen-Ammonia	mg/L	389	5.367	30
	Specific Conductance	µS/cm	6,097	1,418	-
	Sulfate	mg/L	354	78.62	-

**Table 7 - continued**  
**Summary Table of Ongoing and Newly Identified Control Limit Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

**Unconsolidated Aquifer - continued**

Well	Constituent	Units	Most Recent Result	Fall 2024 Background Standard	Action Level/ Statewide Standard
MW-11	Arsenic	mg/L	0.0575	0.03017	0.01
	Boron	mg/L	1.74	0.4426	6
	COD	mg/L	122	49.75	-
	Chloride	mg/L	293	73.28	-
	Cobalt	mg/L	0.01	0.004364	0.0021
	Iron	mg/L	63.6	1.964	-
	Magnesium	mg/L	95.4	38.09	-
	Manganese	mg/L	1.3	1.128	0.3
	Nitrogen-Ammonia	mg/L	26.1	5.367	30
	Specific Conductance	µS/cm	2,446	1,418	-
MW-13	Arsenic	mg/L	0.0952	0.03017	0.01
	Boron	mg/L	9.79	0.4426	6
	COD	mg/L	114	49.75	-
	Chloride	mg/L	64.6	73.28	-
	Iron	mg/L	29.2	1.964	-
	Magnesium	mg/L	263	38.09	-
	Manganese	mg/L	1.71	1.128	0.3
	Nitrogen-Ammonia	mg/L	59.3	5.367	30
	Specific Conductance	µS/cm	3,480	1,418	-
	Sulfate	mg/L	<5	78.62	-
MW-14	Boron	mg/L	1.54	0.4426	6
	Chloride	mg/L	357	73.28	-
	Magnesium	mg/L	102	38.09	-
	Manganese	mg/L	1.14	1.128	0.3
	Nitrogen-Ammonia	mg/L	11.5	5.367	30
	Specific Conductance	µS/cm	2,324	1,418	-
	Sulfate	mg/L	206	78.62	-
MW-16	Chloride	mg/L	68.3	73.28	-
	Sulfate	mg/L	49.5	78.62	-

**Table 7 - continued**  
**Summary Table of Ongoing and Newly Identified Control Limit Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

**Bedrock Aquifer**

Well	Constituent	Units	Most Recent Result	Fall 2024 Background Standard	Action Level/ Statewide Standard
MW-6	Arsenic	mg/L	0.0238	0.001169	0.01
	Boron	mg/L	10	1.128	6
	COD	mg/L	46.9	19.18	-
	Chloride	mg/L	385	226.1	-
	Cobalt	mg/L	0.00143	0.0005597	0.0021
	Iron	mg/L	11.3	0.05	-
	Magnesium	mg/L	159	57.93	-
	Nickel	mg/L	0.018	0.004992	-
	Nitrogen-Ammonia	mg/L	167	1.293	30
	Specific Conductance	µS/cm	3,588	1,597	-
MW-10	Sulfate	mg/L	293	70.10	-
	Boron	mg/L	1.67	1.128	6
	Cobalt	mg/L	0.00104	0.0005597	0.0021
	Iron		1.4	0.05	-
	Magnesium	mg/L	67.6	57.93	-
	Nitrogen-Ammonia	mg/L	9.38	1.293	30
MW-12	Sulfate	mg/L	94	70.10	-
	Arsenic	mg/L	0.0704	0.001169	0.01
	Boron	mg/L	2.41	1.128	6
	COD	mg/L	28.7	19.18	-
	Chloride	mg/L	298	226.1	-
	Cobalt	mg/L	0.00175	0.0005597	0.0021
	Iron	mg/L	25	0.05	-
	Magnesium	mg/L	77.8	57.93	-
MW-15	Nitrogen-Ammonia	mg/L	17.7	1.293	30
	Specific Conductance	µS/cm	2,072	1,597	-
	Arsenic	mg/L	< 0.002	0.001169	0.01
	Boron	mg/L	0.215	1.128	6
	COD	mg/L	11.6	19.18	-
	Cobalt	mg/L	< 0.0005	0.0005597	0.0021
	Iron	mg/L	< 0.1	0.05	-
	Nitrogen-Ammonia	mg/L	< 0.2	1.293	30
	Sulfate	mg/L	86.1	70.10	-

Comments:

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

**Table 8**  
**Summary of Groundwater Chemistry**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

The Summary of Groundwater Chemistry is located in Appendix C.

**Table 9**  
**Historical Control Limit & Action Level Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Key

	Control Limit Exceedance
X	Action Level Exceedance

**Unconsolidated Aquifer**

Well	Constituent	2021	2022	2023	2024
MW-3	Arsenic	X	X	X	X
	Boron				
	Chloride				
	Cobalt	X	X		X
	Iron				
	Magnesium				
	Manganese	X	X	X	X
MW-5	Specific Conductance				
	Arsenic		X	X	X
	Boron	X	X	X	X
	COD				
	Chloride				
	Cobalt	X	X	X	X
	Iron				
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia	X	X	X	X
MW-7	Specific Conductance				
	Arsenic	X	X	X	X
	Boron	X	X	X	X
	COD				
	Chloride				
	Cobalt	X	X	X	X
	Iron				
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia	X	X	X	X
MW-9	Specific Conductance				
	Arsenic	X	X	X	X
	Benzene	X	X	NS	X
	Boron	X	X	X	X
	COD				
	Cobalt	X	X	X	X
	Iron				
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia	X	X		X
	Total Phenols			NS	

NS: Not Sampled

**Table 9 - continued**  
**Historical Control Limit & Action Level Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No.23-SDP-05-88C**

**Unconsolidated Aquifer - continued**

Well	Constituent	2021	2022	2023	2024
MW-11	Arsenic	X	X	X	X
	Boron				
	COD				
	Chloride				
	Cobalt	X	X		X
	Iron				
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia	X	X	X	
	Specific Conductance				
MW-13	Arsenic	X	X	X	X
	Boron	X	X	X	X
	COD				
	Chloride				
	Cobalt	X	X	X	
	Iron				
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia	X	X	X	X
	Specific Conductance				
MW-14	Sulfate				
	Boron				
	Chloride				
	Cobalt	X	X		
	Magnesium				
	Manganese	X	X	X	X
	Nitrogen-Ammonia				
MW-16	Specific Conductance				
	Sulfate				
	Boron				
MW-16	Chloride				
	Sulfate				

**Table 9 - continued**  
**Historical Control Limit & Action Level Exceedances**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No.23-SDP-05-88C**

**Bedrock Aquifer**

<b>Well</b>	<b>Constituent</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
MW-4	COD				
	Iron				
MW-6	Arsenic	X	X	X	X
	Boron	X	X	X	X
	COD				
	Chloride				
	Cobalt	X	X	X	
	Iron				
	Magnesium				
	Manganese				
	Nickel				
	Nitrogen-Ammonia	X	X	X	X
MW-8	Specific Conductance				
	Sulfate				
	COD				
MW-10	Iron				
	Nitrogen-Ammonia				
	Boron				
	Cobalt	X			
	Iron				
	Magnesium				
	Manganese	X	X		
MW-12	Nitrogen-Ammonia				
	Specific Conductance				
	Sulfate				
	Arsenic	X	X	X	X
	Boron				
	COD				
	Chloride				
	Cobalt	X	X		
	Iron				
	Magnesium				
MW-15	Manganese	X	X	X	
	Nickel				
	Nitrogen-Ammonia				
	Specific Conductance				
	Arsenic				X
	Boron				X
	COD				

Comments: None.

**Table 10**  
**Groundwater Quality Assessment Plan Trend Analysis**  
**2024 Annual Water Quality Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

See Appendix E for Mann-Kendall Trend Analysis

## Figures

- 1 Approved Monitoring Network
- 2 Unconsolidated Aquifer Groundwater Contours
- 3 Bedrock Aquifer Groundwater Contours



**SCS  
ENGINEERS**  
environmental consultants and contractors

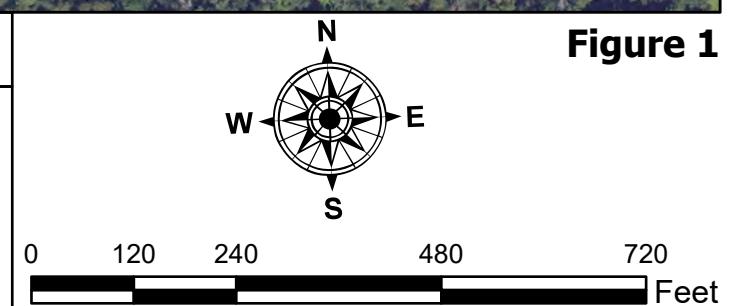
## Approved Monitoring Network

### Legend

- ▲ HMSP Monitoring Well Location
- △ Approximate Monitoring Well Location
- ▲ Approximate Location of Extraction Well

- ▲ Approximate Location of Leachate Piezometer
- Approximate Waste Boundary
- Approximate Property Boundary

ADM Clinton Landfill  
Clinton, Iowa  
Project No:  
27224044.00 Drawing  
Date: November 2024



**Figure 1**



# Unconsolidated Aquifer Groundwater Contours

# **SCS ENGINEERS**

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environmental consultants and contractors

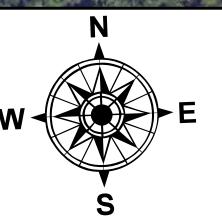
## Legend

## Approximate Groundwater Contours Based on Field Measurements Taken on July 17, 2024

- ▲ Approximate Monitoring Well Location
- ▲ Approximate Location of Extraction Well

- ▲ Approximate Location of Leachate Piezometer
- Approximate Waste Boundary
- Approximate Property Boundary

ADM Clinton Landfill  
Clinton, Iowa  
Project No: 27224044.00  
Drawing Date: November  
2024



## **Figure 2**

Esri, CGIAR, USGS, Esri, TomTom, Garmin, Foursquare, FAO, METI/NASA, USGS, USDA NAIP, Iowa State University GIS Facility



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environmental consultants and contractors

## Bedrock Aquifer Groundwater Contours

### Legend

Approximate Bedrock  
Groundwater Contours Based on  
Field Measurements Taken on  
July 17, 2024

Approximate Monitoring Well  
Location

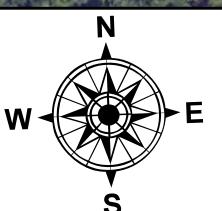
Approximate Location of  
Leachate Piezometer

Approximate Location of  
Extraction Well

Approximate Waste Boundary

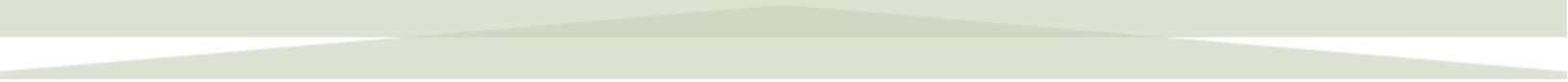
Approximate Property Boundary

ADM Clinton Landfill  
Clinton, Iowa  
Project No: 27224044.00  
Drawing Date: November  
2024



0 120 240 480 720  
Feet

Figure 3



## **Appendix A**

### **Field Sampling Forms**

## FORM FOR GROUNDWATER SAMPLING

## FORM FOR GROUNDWATER SAMPLING

## **FORM FOR GROUNDWATER SAMPLING**

## FORM FOR GROUNDWATER SAMPLING

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## FORM FOR GROUNDWATER SAMPLING

## FORM FOR GROUNDWATER SAMPLING

## **FORM FOR GROUNDWATER SAMPLING**

## Appendix B-1

### Laboratory Analytical Data Sheets

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 5/17/2024 12:49:05 PM Revision 1

## JOB DESCRIPTION

ADM Landfill Sampling Spring 2024

## JOB NUMBER

310-278908-1

# 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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Revision 1

Authorized for release by  
Mary Yang, Project Management Assistant I  
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(319)277-2401

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# Case Narrative

Client: SCS Engineers  
Project: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Job ID: 310-278908-1**

**Eurofins Cedar Falls**

## Job Narrative 310-278908-1

### REVISION

The report being provided is a revision of the original report sent on 4/26/2024. The report (revision 1) is being revised due to adding Manganese and removing Nickel from some samples per client request.

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 4/12/2024 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 3 coolers at receipt time were 0.3°C, 0.4°C and 0.8°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 310-419071 recovered above the upper control limit for Pentachlorophenol (39.7%D).The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The method blank for preparation batch 310-419017 and analytical batch 310-419071 contained Bis(2-ethylhexyl) phthalate above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

### **HPLC/IC**

Method 300\_ORGFMS: The following sample was analyzed outside of analytical holding time due to QC failure: Wet Well Leachate (310-278908-20).

Method 9056A\_ORGFM\_28D: The following samples were diluted due to the nature of the sample matrix: MW-7 (310-278908-7) and MW-11 (310-278908-11). Elevated reporting limits (RLs) are provided.

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

### **Metals**

Method 200.8\_CWA: The following sample was received with insufficient preservation: Wet Well Leachate (310-278908-20). The maximum amount of preservative was added by the laboratory, but the sample remained strongly basic. No further attempt was made to acidify the sample, as it would have diluted the sample. This does not meet regulatory requirements.

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: MW-5 (310-278908-5), MW-6 (310-278908-6), MW-9 (310-278908-9), MW-11 (310-278908-11) and MW-15 (310-278908-15). The sample(s) was preserved to the appropriate pH in the laboratory.

Method 6020B: The following sample was received with insufficient preservation: MW-7 (310-278908-7). The maximum amount of preservative was added by the laboratory, but the sample remained strongly basic. No further attempt was made to acidify the sample, as it would have diluted the sample. This does not meet regulatory requirements.

Eurofins Cedar Falls

## Case Narrative

Client: SCS Engineers  
Project: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

### Job ID: 310-278908-1 (Continued)

### Eurofins Cedar Falls

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

#### General Chemistry

Method 350.1: 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-7 (310-278908-7). The sample(s) was preserved to the appropriate pH in the laboratory.

Method SM5210B\_Calc: The following sample was received outside of holding time: Wet Well Leachate (310-278908-20).

Method SM5210B\_Calc: The USB dilution water D.O. depletion was greater than 0.2 mg/L. The associated sample results in batch 310-418663 are qualified and reported. The USB depletion was 0.815 mg/L.

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

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Eurofins Cedar Falls

# Case Narrative

Client: SCS Engineers  
Project: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Job ID: 310-278908-2**

**Eurofins Cedar Falls**

## Job Narrative 310-278908-2

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 4/12/2024 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 3 coolers at receipt time were 0.3°C, 0.4°C and 0.8°C.

### Metals

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

# Sample Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
310-278908-1	MW-1	Water	04/10/24 15:12	04/12/24 16:00	1
310-278908-2	MW-2	Water	04/10/24 14:44	04/12/24 16:00	2
310-278908-3	MW-3	Water	04/09/24 18:05	04/12/24 16:00	3
310-278908-4	MW-4	Water	04/09/24 18:33	04/12/24 16:00	4
310-278908-5	MW-5	Water	04/09/24 17:30	04/12/24 16:00	5
310-278908-6	MW-6	Water	04/09/24 16:50	04/12/24 16:00	6
310-278908-7	MW-7	Water	04/09/24 16:11	04/12/24 16:00	7
310-278908-8	MW-8	Water	04/09/24 15:34	04/12/24 16:00	8
310-278908-9	MW-9	Water	04/09/24 15:01	04/12/24 16:00	9
310-278908-10	MW-10	Water	04/09/24 14:17	04/12/24 16:00	10
310-278908-11	MW-11	Water	04/10/24 11:07	04/12/24 16:00	11
310-278908-12	MW-12	Water	04/10/24 10:41	04/12/24 16:00	12
310-278908-13	MW-13	Water	04/10/24 10:04	04/12/24 16:00	13
310-278908-14	MW-14	Water	04/10/24 11:41	04/12/24 16:00	14
310-278908-15	MW-15	Water	04/10/24 12:08	04/12/24 16:00	15
310-278908-16	MW-16	Water	04/10/24 12:55	04/12/24 16:00	
310-278908-17	MW-17	Water	04/10/24 13:26	04/12/24 16:00	
310-278908-18	MW-18	Water	04/10/24 13:43	04/12/24 16:00	
310-278908-19	MW-D	Water	04/10/24 12:55	04/12/24 16:00	
310-278908-20	Wet Well Leachate	Water	04/10/24 16:00	04/12/24 16:00	
310-278908-21	Trip Blank	Water	04/10/24 00:00	04/12/24 16:00	

# Detection Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Client Sample ID: MW-1

## Lab Sample ID: 310-278908-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	179		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	35.8		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.000786	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.112		0.100	0.0760	mg/L	1		6020B	Total/NA
Magnesium	47.2		0.500	0.150	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.50	J	1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-2

## Lab Sample ID: 310-278908-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	31.8		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	28.9		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.000605	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.224		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000264	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	28.2		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.0823		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	2.05		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	8.72		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	5.37		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-3

## Lab Sample ID: 310-278908-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	420		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	2.88	J	5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.0164		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	4.03		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00454		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	96.3		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	5.68		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	31.2		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	2.22		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	40.4		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	122		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-4

## Lab Sample ID: 310-278908-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	186		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	50.6		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.332		0.100	0.0760	mg/L	1		6020B	Total/NA
Iron	0.0535	J	0.100	0.0360	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.75	J	1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-5

## Lab Sample ID: 310-278908-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	166		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	965		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0509		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	20.1		2.00	1.52	mg/L	20		6020B	Total/NA
Cobalt	0.00805		0.000500	0.000170	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: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Client Sample ID: MW-5 (Continued)

## Lab Sample ID: 310-278908-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	463		10.0	3.00	mg/L	20		6020B	Total/NA
Manganese	2.43		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	38.9		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	71.4		7.50	3.75	mg/L	37.5		350.1	Total/NA
Chemical Oxygen Demand	141		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	108		7.50	5.55	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-6

## Lab Sample ID: 310-278908-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	317		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	412		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.0295		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	14.1		1.00	0.760	mg/L	10		6020B	Total/NA
Cobalt	0.00386		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	324		5.00	1.50	mg/L	10		6020B	Total/NA
Manganese	0.319		0.0100	0.00360	mg/L	1		6020B	Total/NA
Nickel	0.0458		0.00500	0.00210	mg/L	1		6020B	Total/NA
Iron	14.3		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	128		7.50	3.75	mg/L	37.5		350.1	Total/NA
Chemical Oxygen Demand	85.8		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	1850		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-7

## Lab Sample ID: 310-278908-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	168		5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.0446		0.0140	0.00371	mg/L	7		6020B	Total/NA
Boron	34.6		1.00	0.760	mg/L	10		6020B	Total/NA
Cobalt	0.00571		0.00350	0.00119	mg/L	7		6020B	Total/NA
Magnesium	321		3.50	1.05	mg/L	7		6020B	Total/NA
Manganese	0.463		0.100	0.0360	mg/L	10		6020B	Total/NA
Iron	0.583 J		1.00	0.360	mg/L	10		6020B	Total/NA
Ammonia	104		20.0	10.0	mg/L	100		350.1	Total/NA
Chemical Oxygen Demand	429		25.0	24.0	mg/L	5		5220D LL	Total/NA

## Client Sample ID: MW-8

## Lab Sample ID: 310-278908-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	176		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	50.2		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.772		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000382 J		0.000500	0.000170	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-9

## Lab Sample ID: 310-278908-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27.3		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	717		50.0	21.0	mg/L	50		9056A	Total/NA
Arsenic	0.0907		0.00800	0.00212	mg/L	4		6020B	Total/NA
Boron	11.4		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00286		0.00200	0.000680	mg/L	4		6020B	Total/NA
Magnesium	265		2.00	0.600	mg/L	4		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## **Client Sample ID: MW-9 (Continued)**

## **Lab Sample ID: 310-278908-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1.48		0.0400	0.0144	mg/L	4		6020B	Total/NA
Ammonia	326		18.8	9.38	mg/L		93.8	350.1	Total/NA
Chemical Oxygen Demand	511		25.0	24.0	mg/L		5	5220D LL	Total/NA
Total Suspended Solids	4.33	J	5.00	3.70	mg/L		1	I-3765-85	Total/NA

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

## **Lab Sample ID: 310-278908-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	49.3		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	121		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.519		0.100	0.0760	mg/L	1		6020B	Total/NA
Magnesium	51.4		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.209		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	0.206		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	0.195	J	0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	5.36		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	31.0		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## **Client Sample ID: MW-11**

## **Lab Sample ID: 310-278908-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	129		5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.0762		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	1.12		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.0194		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	97.8		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	1.04		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	69.4		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	32.1		1.88	0.938	mg/L	9.38		350.1	Total/NA
Chemical Oxygen Demand	156		25.0	24.0	mg/L	5		5220D LL	Total/NA
Total Suspended Solids	138		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## **Client Sample ID: MW-12**

## **Lab Sample ID: 310-278908-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	302		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	6.43		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.0895		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	1.87		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.00158		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	69.9		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.942		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	26.8		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	16.1		1.88	0.938	mg/L	9.38		350.1	Total/NA
Chemical Oxygen Demand	25.2		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	67.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

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

## **Lab Sample ID: 310-278908-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	97.1		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	82.8		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.288		0.100	0.0760	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: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

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

## Lab Sample ID: 310-278908-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	53.1		0.500	0.150	mg/L	1		6020B	Total/NA
Iron	0.0563	J	0.100	0.0360	mg/L	1		6020B	Total/NA
Total Suspended Solids	10.9		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-14

## Lab Sample ID: 310-278908-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	195		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	185		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.000738	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.774		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000196	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	84.0		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.0805		0.0100	0.00360	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	12.4		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	5.50		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-15

## Lab Sample ID: 310-278908-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	78.7		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	17.2		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.102		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	7.68		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00183		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	278		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	1.39		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	19.6		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	68.5		1.88	0.938	mg/L	9.38		350.1	Total/NA
Chemical Oxygen Demand	102		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	73.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-16

## Lab Sample ID: 310-278908-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	360		55.0	24.8	mg/L	55		9056A	Total/NA
Sulfate	436		55.0	23.1	mg/L	55		9056A	Total/NA
Arsenic	0.000982	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.338		0.100	0.0760	mg/L	1		6020B	Total/NA
Iron	0.0582	J	0.100	0.0360	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	5.36		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	24.8		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-17

## Lab Sample ID: 310-278908-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36.4		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	43.7		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.586		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000478	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	29.1		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	1.23		0.0100	0.00360	mg/L	1		6020B	Total/NA
Nickel	0.00600		0.00500	0.00210	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: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Client Sample ID: MW-17 (Continued)

## Lab Sample ID: 310-278908-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	32.5		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-18

## Lab Sample ID: 310-278908-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	41.3		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	82.6		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.00232		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.306		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000587		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	32.2		0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.146		0.0100	0.00360	mg/L	1		6020B	Total/NA
Iron	0.313		0.100	0.0360	mg/L	1		6020B	Total/NA
Ammonia	0.244		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	17.1		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	21.1		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-D

## Lab Sample ID: 310-278908-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28.2		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	39.5		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.000893 J		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.349		0.100	0.0760	mg/L	1		6020B	Total/NA
Iron	0.0667 J		0.100	0.0360	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	5.02		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	21.1		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: Wet Well Leachate

## Lab Sample ID: 310-278908-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.10 J		10.0	3.10	ug/L	1		8260D	Total/NA
Carbon disulfide	0.560 J		1.00	0.450	ug/L	1		8260D	Total/NA
Bis(2-ethylhexyl) phthalate	17.8 B		9.26	5.09	ug/L	1		8270E	Total/NA
3,3'-Dichlorobenzidine	1.84 J		9.26	1.30	ug/L	1		8270E	Total/NA
Di-n-octyl phthalate	10.3 J		18.5	6.48	ug/L	1		8270E	Total/NA
Chloride	239		5.00	2.25	mg/L	5		300.0	Total/NA
Nitrate as N	0.380 H		0.200	0.0780	mg/L	1		300.0	Total/NA
Sulfate	655		50.0	21.0	mg/L	50		300.0	Total/NA
Aluminum	0.274 J		0.350	0.147	mg/L	7		200.8	Total/NA
Arsenic	0.0927		0.0140	0.00371	mg/L	7		200.8	Total/NA
Boron	20.6		0.700	0.532	mg/L	7		200.8	Total/NA
Cadmium	0.000884		0.000200	0.000100	mg/L	1		200.8	Total/NA
Cobalt	0.00771		0.00350	0.00119	mg/L	7		200.8	Total/NA
Copper	0.139		0.0350	0.0126	mg/L	7		200.8	Total/NA
Iron	4.38		0.100	0.0360	mg/L	1		200.8	Total/NA
Lead	0.00200 J		0.00350	0.00182	mg/L	7		200.8	Total/NA
Magnesium	448		3.50	1.05	mg/L	7		200.8	Total/NA
Manganese	0.0959		0.0100	0.00360	mg/L	1		200.8	Total/NA
Nickel	0.0559		0.00500	0.00210	mg/L	1		200.8	Total/NA
Potassium	263		3.50	1.05	mg/L	7		200.8	Total/NA
Zinc	0.0706		0.0200	0.00970	mg/L	1		200.8	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## **Client Sample ID: Wet Well Leachate (Continued)**

## **Lab Sample ID: 310-278908-20**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.0330		0.0100	0.00350	mg/L	1		335.4	Total/NA
Ammonia	776		46.9	19.7	mg/L	9.38		350.1	Total/NA
Total Kjeldahl Nitrogen	754		50.0	28.5	mg/L	10		351.2	Total/NA
Phenols, Total	0.0391		0.0200	0.0100	mg/L	1		420.4	Total/NA
Total Suspended Solids	574		30.0	22.2	mg/L	1		I-3765-85	Total/NA
Total Solids	5900		1250	1130	mg/L	1		SM 2540B	Total/NA
Carbonaceous Biochemical Oxygen Demand	42.3	H b	3.00	3.00	mg/L	1		SM 5210B	Total/NA

## **Client Sample ID: Trip Blank**

## **Lab Sample ID: 310-278908-21**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.457	J	1.00	0.450	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-1**

**Lab Sample ID: 310-278908-1**

Date Collected: 04/10/24 15:12

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	179		5.00	2.25	mg/L			04/15/24 18:54	5
Sulfate	35.8		5.00	2.10	mg/L			04/15/24 18:54	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000786	J	0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 00:21	1
Boron	0.112		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 16:32	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 00:21	1
Magnesium	47.2		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 00:21	1
Manganese	<0.0100		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 00:21	1
Nickel	<0.00500		0.00500	0.00210	mg/L		04/16/24 09:00	04/23/24 00:21	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 00:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 17:45	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	1.50	J	1.88	1.39	mg/L			04/16/24 15:47	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-2**

**Lab Sample ID: 310-278908-2**

Date Collected: 04/10/24 14:44

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.8		5.00	2.25	mg/L			04/15/24 19:31	5
Sulfate	28.9		5.00	2.10	mg/L			04/15/24 19:31	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000605	J	0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 00:52	1
Boron	0.224		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 16:43	1
Cobalt	0.000264	J	0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 00:52	1
Magnesium	28.2		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 00:52	1
Manganese	0.0823		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 00:52	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 00:52	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	2.05		0.200	0.100	mg/L			04/16/24 17:48	1
Chemical Oxygen Demand (SM 5220D LL)	8.72		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	5.37		1.88	1.39	mg/L			04/16/24 15:47	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-3**

**Lab Sample ID: 310-278908-3**

Date Collected: 04/09/24 18:05

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	420		5.00	2.25	mg/L			04/15/24 20:07	5
Sulfate	2.88 J		5.00	2.10	mg/L			04/15/24 20:07	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0164		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 00:55	1
Boron	4.03		0.400	0.304	mg/L		04/16/24 09:00	04/23/24 16:45	4
Cobalt	0.00454		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 00:55	1
Magnesium	96.3		2.00	0.600	mg/L		04/16/24 09:00	04/24/24 15:30	4
Manganese	5.68		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 00:55	1
Iron	31.2		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 00:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	2.22		0.200	0.100	mg/L			04/16/24 17:48	1
Chemical Oxygen Demand (SM 5220D LL)	40.4		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	122		15.0	11.1	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-4**

**Lab Sample ID: 310-278908-4**

Date Collected: 04/09/24 18:33

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		5.00	2.25	mg/L			04/15/24 20:19	5
Sulfate	50.6		5.00	2.10	mg/L			04/15/24 20:19	5

## 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		04/16/24 09:00	04/23/24 00:59	1
Boron	0.332		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 16:47	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 00:59	1
Iron	0.0535 J		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 00:59	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 17:50	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	1.75 J		1.88	1.39	mg/L			04/15/24 13:50	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-5**

**Lab Sample ID: 310-278908-5**

Date Collected: 04/09/24 17:30

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166		5.00	2.25	mg/L			04/15/24 20:31	5
Sulfate	965		50.0	21.0	mg/L			04/16/24 09:48	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0509		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:02	1
Boron	20.1		2.00	1.52	mg/L		04/16/24 09:00	04/23/24 16:49	20
Cobalt	0.00805		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:02	1
Magnesium	463		10.0	3.00	mg/L		04/16/24 09:00	04/24/24 15:34	20
Manganese	2.43		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:02	1
Iron	38.9		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:02	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	71.4		7.50	3.75	mg/L			04/16/24 18:49	37.5
Chemical Oxygen Demand (SM 5220D LL)	141		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	108		7.50	5.55	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-6**

**Lab Sample ID: 310-278908-6**

Date Collected: 04/09/24 16:50

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	317		5.00	2.25	mg/L			04/15/24 20:43	5
Sulfate	412		5.00	2.10	mg/L			04/15/24 20:43	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0295		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:05	1
Boron	14.1		1.00	0.760	mg/L		04/16/24 09:00	04/23/24 16:51	10
Cobalt	0.00386		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:05	1
Magnesium	324		5.00	1.50	mg/L		04/16/24 09:00	04/24/24 15:37	10
Manganese	0.319		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:05	1
Nickel	0.0458		0.00500	0.00210	mg/L		04/16/24 09:00	04/23/24 01:05	1
Iron	14.3		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:05	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	128		7.50	3.75	mg/L			04/16/24 18:49	37.5
Chemical Oxygen Demand (SM 5220D LL)	85.8		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	1850		15.0	11.1	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-7**

**Lab Sample ID: 310-278908-7**

Date Collected: 04/09/24 16:11

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		5.00	2.25	mg/L			04/15/24 20:55	5
Sulfate	<5.00		5.00	2.10	mg/L			04/15/24 20:55	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0446		0.0140	0.00371	mg/L		04/16/24 09:00	04/24/24 15:41	7
Boron	34.6		1.00	0.760	mg/L		04/16/24 09:00	04/25/24 12:34	10
Cobalt	0.00571		0.00350	0.00119	mg/L		04/16/24 09:00	04/24/24 15:41	7
Magnesium	321		3.50	1.05	mg/L		04/16/24 09:00	04/24/24 15:41	7
Manganese	0.463		0.100	0.0360	mg/L		04/16/24 09:00	04/25/24 12:34	10
Iron	0.583 J		1.00	0.360	mg/L		04/16/24 09:00	04/25/24 12:34	10

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	104		20.0	10.0	mg/L			04/16/24 20:44	100
Chemical Oxygen Demand (SM 5220D LL)	429		25.0	24.0	mg/L			04/19/24 12:00	5
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-8**

**Lab Sample ID: 310-278908-8**

Date Collected: 04/09/24 15:34

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	176		5.00	2.25	mg/L			04/15/24 21:07	5
Sulfate	50.2		5.00	2.10	mg/L			04/15/24 21:07	5

## 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		04/16/24 09:00	04/23/24 01:12	1
Boron	0.772		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:05	1
Cobalt	0.000382 J		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:12	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 17:52	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			04/15/24 13:50	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-9**

**Lab Sample ID: 310-278908-9**

Date Collected: 04/09/24 15:01

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.3		5.00	2.25	mg/L			04/15/24 21:19	5
Sulfate	717		50.0	21.0	mg/L			04/16/24 10:00	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0907		0.00800	0.00212	mg/L		04/16/24 09:00	04/24/24 15:44	4
Boron	11.4		0.400	0.304	mg/L		04/16/24 09:00	04/24/24 15:44	4
Cobalt	0.00286		0.00200	0.000680	mg/L		04/16/24 09:00	04/24/24 15:44	4
Magnesium	265		2.00	0.600	mg/L		04/16/24 09:00	04/24/24 15:44	4
Manganese	1.48		0.0400	0.0144	mg/L		04/16/24 09:00	04/25/24 12:36	4
Iron	<0.400		0.400	0.144	mg/L		04/16/24 09:00	04/25/24 12:36	4

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	326		18.8	9.38	mg/L			04/16/24 18:28	93.8
Chemical Oxygen Demand (SM 5220D LL)	511		25.0	24.0	mg/L			04/19/24 12:00	5
Total Suspended Solids (USGS I-3765-85)	4.33 J		5.00	3.70	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-10**

**Lab Sample ID: 310-278908-10**

Date Collected: 04/09/24 14:17

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.3		5.00	2.25	mg/L			04/15/24 21:31	5
Sulfate	121		5.00	2.10	mg/L			04/15/24 21:31	5

## 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		04/16/24 09:00	04/23/24 01:33	1
Boron	0.519		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:09	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:33	1
Magnesium	51.4		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 01:33	1
Manganese	0.209		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:33	1
Iron	0.206		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.195	J	0.200	0.100	mg/L			04/16/24 17:54	1
Chemical Oxygen Demand (SM 5220D LL)	5.36		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	31.0		1.88	1.39	mg/L			04/15/24 13:50	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-11**

**Lab Sample ID: 310-278908-11**

Date Collected: 04/10/24 11:07

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		5.00	2.25	mg/L			04/15/24 21:43	5
Sulfate	<5.00		5.00	2.10	mg/L			04/15/24 21:43	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0762		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:36	1
Boron	1.12		0.400	0.304	mg/L		04/16/24 09:00	04/23/24 17:11	4
Cobalt	0.0194		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:36	1
Magnesium	97.8		2.00	0.600	mg/L		04/16/24 09:00	04/24/24 15:48	4
Manganese	1.04		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:36	1
Iron	69.4		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:36	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	32.1		1.88	0.938	mg/L			04/16/24 18:28	9.38
Chemical Oxygen Demand (SM 5220D LL)	156		25.0	24.0	mg/L			04/19/24 12:00	5
Total Suspended Solids (USGS I-3765-85)	138		15.0	11.1	mg/L			04/16/24 15:47	1

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-12**

**Lab Sample ID: 310-278908-12**

Date Collected: 04/10/24 10:41

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	302		5.00	2.25	mg/L			04/15/24 21:56	5
Sulfate	6.43		5.00	2.10	mg/L			04/15/24 21:56	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0895		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:43	1
Boron	1.87		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:15	1
Cobalt	0.00158		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:43	1
Magnesium	69.9		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 01:43	1
Manganese	0.942		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:43	1
Iron	26.8		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:43	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	16.1		1.88	0.938	mg/L			04/16/24 18:30	9.38
Chemical Oxygen Demand (SM 5220D LL)	25.2		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	67.3		5.00	3.70	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-13**

**Lab Sample ID: 310-278908-13**

Date Collected: 04/10/24 10:04

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.1		5.00	2.25	mg/L			04/15/24 22:32	5
Sulfate	82.8		5.00	2.10	mg/L			04/15/24 22:32	5

## 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		04/16/24 09:00	04/23/24 01:46	1
Boron	0.288		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:18	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:46	1
Magnesium	53.1		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 01:46	1
Manganese	<0.0100		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:46	1
Iron	0.0563 J		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:46	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 17:58	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	10.9		1.88	1.39	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-14**

**Lab Sample ID: 310-278908-14**

**Matrix: Water**

Date Collected: 04/10/24 11:41

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	195		5.00	2.25	mg/L			04/15/24 22:44	5
Sulfate	185		5.00	2.10	mg/L			04/15/24 22:44	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000738	J	0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:50	1
Boron	0.774		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:20	1
Cobalt	0.000196	J	0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:50	1
Magnesium	84.0		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 01:50	1
Manganese	0.0805		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:50	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:50	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 17:59	1
Chemical Oxygen Demand (SM 5220D LL)	12.4		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	5.50		1.88	1.39	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-15**

**Lab Sample ID: 310-278908-15**

Date Collected: 04/10/24 12:08

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.7		5.00	2.25	mg/L			04/15/24 22:56	5
Sulfate	17.2		5.00	2.10	mg/L			04/15/24 22:56	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.102		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:53	1
Boron	7.68		0.400	0.304	mg/L		04/16/24 09:00	04/23/24 17:22	4
Cobalt	0.00183		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:53	1
Magnesium	278		2.00	0.600	mg/L		04/16/24 09:00	04/24/24 15:55	4
Manganese	1.39		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 01:53	1
Iron	19.6		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	68.5		1.88	0.938	mg/L			04/16/24 18:30	9.38
Chemical Oxygen Demand (SM 5220D LL)	102		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	73.3		5.00	3.70	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-16**

**Lab Sample ID: 310-278908-16**

**Matrix: Water**

Date Collected: 04/10/24 12:55

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		55.0	24.8	mg/L			04/15/24 23:08	55
Sulfate	436		55.0	23.1	mg/L			04/15/24 23:08	55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000982	J	0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 01:57	1
Boron	0.338		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:33	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 01:57	1
Iron	0.0582	J	0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 01:57	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200	F1	0.200	0.100	mg/L			04/16/24 18:02	1
Chemical Oxygen Demand (SM 5220D LL)	5.36		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	24.8		1.88	1.39	mg/L			04/16/24 15:47	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-17**

**Lab Sample ID: 310-278908-17**

Date Collected: 04/10/24 13:26

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.4		5.00	2.25	mg/L			04/15/24 23:20	5
Sulfate	43.7		5.00	2.10	mg/L			04/15/24 23:20	5

## 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		04/16/24 09:00	04/23/24 02:00	1
Boron	0.586		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:35	1
Cobalt	0.000478 J		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 02:00	1
Magnesium	29.1		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 02:00	1
Manganese	1.23		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 02:00	1
Nickel	0.00600		0.00500	0.00210	mg/L		04/16/24 09:00	04/23/24 02:00	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 02:00	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 18:04	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	32.5		1.88	1.39	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-18**

**Lab Sample ID: 310-278908-18**

Date Collected: 04/10/24 13:43

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.3		5.00	2.25	mg/L			04/15/24 23:32	5
Sulfate	82.6		5.00	2.10	mg/L			04/15/24 23:32	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00232		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 02:03	1
Boron	0.306		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:37	1
Cobalt	0.000587		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 02:03	1
Magnesium	32.2		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 02:03	1
Manganese	0.146		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 02:03	1
Iron	0.313		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 02:03	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.244		0.200	0.100	mg/L			04/16/24 18:07	1
Chemical Oxygen Demand (SM 5220D LL)	17.1		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	21.1		1.88	1.39	mg/L			04/16/24 15:47	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-D**

**Lab Sample ID: 310-278908-19**

Date Collected: 04/10/24 12:55

Matrix: Water

Date Received: 04/12/24 16:00

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.2		5.00	2.25	mg/L			04/15/24 23:44	5
Sulfate	39.5		5.00	2.10	mg/L			04/15/24 23:44	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000893	J	0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 02:21	1
Boron	0.349		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 17:39	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 02:21	1
Iron	0.0667	J	0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 02:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			04/16/24 18:07	1
Chemical Oxygen Demand (SM 5220D LL)	5.02		5.00	4.80	mg/L			04/19/24 12:00	1
Total Suspended Solids (USGS I-3765-85)	21.1		1.88	1.39	mg/L			04/16/24 15:47	1

# Client Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Client Sample ID: Wet Well Leachate

Date Collected: 04/10/24 16:00

Date Received: 04/12/24 16:00

## Lab Sample ID: 310-278908-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.10	J	10.0	3.10	ug/L			04/23/24 19:35	1
Benzene	<0.500		0.500	0.220	ug/L			04/23/24 19:35	1
Bromobenzene	<1.00		1.00	0.340	ug/L			04/23/24 19:35	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			04/23/24 19:35	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			04/23/24 19:35	1
Bromoform	<5.00		5.00	0.780	ug/L			04/23/24 19:35	1
Bromomethane	<4.00		4.00	1.10	ug/L			04/23/24 19:35	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			04/23/24 19:35	1
Carbon disulfide	0.560	J	1.00	0.450	ug/L			04/23/24 19:35	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			04/23/24 19:35	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			04/23/24 19:35	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			04/23/24 19:35	1
Chloroethane	<4.00		4.00	0.790	ug/L			04/23/24 19:35	1
Chloroform	<3.00		3.00	1.30	ug/L			04/23/24 19:35	1
Chloromethane	<3.00		3.00	0.610	ug/L			04/23/24 19:35	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			04/23/24 19:35	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			04/23/24 19:35	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			04/23/24 19:35	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			04/23/24 19:35	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	1.20	ug/L			04/23/24 19:35	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			04/23/24 19:35	1
Dibromomethane	<1.00		1.00	0.330	ug/L			04/23/24 19:35	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			04/23/24 19:35	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			04/23/24 19:35	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			04/23/24 19:35	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			04/23/24 19:35	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			04/23/24 19:35	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			04/23/24 19:35	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			04/23/24 19:35	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			04/23/24 19:35	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			04/23/24 19:35	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			04/23/24 19:35	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			04/23/24 19:35	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			04/23/24 19:35	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			04/23/24 19:35	1
Hexane	<1.00		1.00	0.780	ug/L			04/23/24 19:35	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			04/23/24 19:35	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			04/23/24 19:35	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			04/23/24 19:35	1
Naphthalene	<5.00		5.00	3.00	ug/L			04/23/24 19:35	1
n-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 19:35	1
N-Propylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 19:35	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			04/23/24 19:35	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 19:35	1
Styrene	<1.00		1.00	0.370	ug/L			04/23/24 19:35	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 19:35	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			04/23/24 19:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			04/23/24 19:35	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			04/23/24 19:35	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Client Sample ID: Wet Well Leachate**

Date Collected: 04/10/24 16:00

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-20**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.00		1.00	0.430	ug/L			04/23/24 19:35	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			04/23/24 19:35	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			04/23/24 19:35	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			04/23/24 19:35	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			04/23/24 19:35	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			04/23/24 19:35	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			04/23/24 19:35	1
Trichloroethene	<1.00		1.00	0.430	ug/L			04/23/24 19:35	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			04/23/24 19:35	1
1,2,3-Trichloropropane	<5.00		5.00	0.590	ug/L			04/23/24 19:35	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			04/23/24 19:35	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			04/23/24 19:35	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			04/23/24 19:35	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			04/23/24 19:35	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)	103		80 - 120					04/23/24 19:35	1
Dibromofluoromethane (Surr)	105		73 - 130					04/23/24 19:35	1
Toluene-d8 (Surr)	99		80 - 120					04/23/24 19:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<9.26		9.26	0.593	ug/L			04/17/24 14:19	04/18/24 17:56
Acenaphthylene	<9.26		9.26	0.667	ug/L			04/17/24 14:19	04/18/24 17:56
Anthracene	<9.26		9.26	0.806	ug/L			04/17/24 14:19	04/18/24 17:56
Benzidine	<18.5		18.5	1.02	ug/L			04/17/24 14:19	04/18/24 17:56
Benzo[a]anthracene	<9.26		9.26	0.787	ug/L			04/17/24 14:19	04/18/24 17:56
Benzo[a]pyrene	<9.26		9.26	7.50	ug/L			04/17/24 14:19	04/18/24 17:56
Benzo[b]fluoranthene	<9.26		9.26	4.54	ug/L			04/17/24 14:19	04/18/24 17:56
Benzo[g,h,i]perylene	<9.26		9.26	5.83	ug/L			04/17/24 14:19	04/18/24 17:56
Benzoic acid	<92.6		92.6	15.7	ug/L			04/17/24 14:19	04/18/24 17:56
Benzo[k]fluoranthene	<9.26		9.26	2.04	ug/L			04/17/24 14:19	04/18/24 17:56
Benzyl alcohol	<9.26		9.26	1.20	ug/L			04/17/24 14:19	04/18/24 17:56
Bis(2-chloroethoxy)methane	<9.26		9.26	0.704	ug/L			04/17/24 14:19	04/18/24 17:56
Bis(2-chloroethyl)ether	<9.26		9.26	0.759	ug/L			04/17/24 14:19	04/18/24 17:56
bis (2-chloroisopropyl) ether	<9.26		9.26	0.500	ug/L			04/17/24 14:19	04/18/24 17:56
<b>Bis(2-ethylhexyl) phthalate</b>	<b>17.8</b>	<b>B</b>	9.26	5.09	ug/L			04/17/24 14:19	04/18/24 17:56
4-Bromophenyl phenyl ether	<9.26		9.26	0.648	ug/L			04/17/24 14:19	04/18/24 17:56
Butyl benzyl phthalate	<9.26		9.26	5.00	ug/L			04/17/24 14:19	04/18/24 17:56
Carbazole	<9.26		9.26	0.926	ug/L			04/17/24 14:19	04/18/24 17:56
4-Chloroaniline	<9.26		9.26	0.574	ug/L			04/17/24 14:19	04/18/24 17:56
4-Chloro-3-methylphenol	<9.26		9.26	0.778	ug/L			04/17/24 14:19	04/18/24 17:56
2-Chloronaphthalene	<9.26		9.26	0.593	ug/L			04/17/24 14:19	04/18/24 17:56
2-Chlorophenol	<9.26		9.26	0.500	ug/L			04/17/24 14:19	04/18/24 17:56
4-Chlorophenyl phenyl ether	<9.26		9.26	0.639	ug/L			04/17/24 14:19	04/18/24 17:56
Chrysene	<9.26		9.26	0.806	ug/L			04/17/24 14:19	04/18/24 17:56
Dibenzo(a,h)anthracene	<9.26		9.26	3.61	ug/L			04/17/24 14:19	04/18/24 17:56
Dibenzofuran	<9.26		9.26	0.685	ug/L			04/17/24 14:19	04/18/24 17:56
1,2-Dichlorobenzene	<9.26		9.26	0.574	ug/L			04/17/24 14:19	04/18/24 17:56
1,3-Dichlorobenzene	<9.26		9.26	0.593	ug/L			04/17/24 14:19	04/18/24 17:56

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# Client Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Client Sample ID: Wet Well Leachate

Date Collected: 04/10/24 16:00

Date Received: 04/12/24 16:00

## Lab Sample ID: 310-278908-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<9.26		9.26	0.593	ug/L	04/17/24 14:19	04/18/24 17:56		1
<b>3,3'-Dichlorobenzidine</b>	<b>1.84 J</b>		9.26	1.30	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4-Dichlorophenol	<9.26		9.26	0.787	ug/L	04/17/24 14:19	04/18/24 17:56		1
Diethyl phthalate	<9.26		9.26	1.57	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4-Dimethylphenol	<9.26		9.26	0.537	ug/L	04/17/24 14:19	04/18/24 17:56		1
Dimethyl phthalate	<9.26		9.26	0.926	ug/L	04/17/24 14:19	04/18/24 17:56		1
Di-n-butyl phthalate	<9.26		9.26	5.19	ug/L	04/17/24 14:19	04/18/24 17:56		1
4,6-Dinitro-2-methylphenol	<9.26		9.26	6.39	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4-Dinitrophenol	<18.5		18.5	12.0	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4-Dinitrotoluene	<9.26		9.26	5.93	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,6-Dinitrotoluene	<9.26		9.26	0.481	ug/L	04/17/24 14:19	04/18/24 17:56		1
<b>Di-n-octyl phthalate</b>	<b>10.3 J</b>		18.5	6.48	ug/L	04/17/24 14:19	04/18/24 17:56		1
Fluoranthene	<9.26		9.26	1.57	ug/L	04/17/24 14:19	04/18/24 17:56		1
Fluorene	<9.26		9.26	0.731	ug/L	04/17/24 14:19	04/18/24 17:56		1
Hexachlorobenzene	<9.26		9.26	0.648	ug/L	04/17/24 14:19	04/18/24 17:56		1
Hexachlorobutadiene	<9.26		9.26	0.796	ug/L	04/17/24 14:19	04/18/24 17:56		1
Hexachlorocyclopentadiene	<9.26		9.26	4.72	ug/L	04/17/24 14:19	04/18/24 17:56		1
Hexachloroethane	<9.26		9.26	0.898	ug/L	04/17/24 14:19	04/18/24 17:56		1
Indeno[1,2,3-cd]pyrene	<9.26		9.26	3.89	ug/L	04/17/24 14:19	04/18/24 17:56		1
Isophorone	<9.26		9.26	0.861	ug/L	04/17/24 14:19	04/18/24 17:56		1
2-Methylnaphthalene	<9.26		9.26	0.546	ug/L	04/17/24 14:19	04/18/24 17:56		1
2-Methylphenol	<9.26		9.26	0.602	ug/L	04/17/24 14:19	04/18/24 17:56		1
4-Methylphenol (and/or 3-Methylphenol)	<9.26		9.26	0.648	ug/L	04/17/24 14:19	04/18/24 17:56		1
Naphthalene	<9.26		9.26	5.65	ug/L	04/17/24 14:19	04/18/24 17:56		1
2-Nitroaniline	<9.26		9.26	5.46	ug/L	04/17/24 14:19	04/18/24 17:56		1
3-Nitroaniline	<9.26		9.26	2.50	ug/L	04/17/24 14:19	04/18/24 17:56		1
4-Nitroaniline	<9.26		9.26	1.20	ug/L	04/17/24 14:19	04/18/24 17:56		1
Nitrobenzene	<9.26		9.26	0.741	ug/L	04/17/24 14:19	04/18/24 17:56		1
2-Nitrophenol	<9.26		9.26	6.30	ug/L	04/17/24 14:19	04/18/24 17:56		1
4-Nitrophenol	<9.26		9.26	7.04	ug/L	04/17/24 14:19	04/18/24 17:56		1
N-Nitrosodimethylamine	<9.26		9.26	0.667	ug/L	04/17/24 14:19	04/18/24 17:56		1
N-Nitrosodi-n-propylamine	<9.26		9.26	0.852	ug/L	04/17/24 14:19	04/18/24 17:56		1
N-Nitrosodiphenylamine	<9.26		9.26	0.694	ug/L	04/17/24 14:19	04/18/24 17:56		1
Pentachlorophenol	<9.26		9.26	8.89	ug/L	04/17/24 14:19	04/18/24 17:56		1
Phenanthrene	<9.26		9.26	0.731	ug/L	04/17/24 14:19	04/18/24 17:56		1
Phenol	<9.26		9.26	1.02	ug/L	04/17/24 14:19	04/18/24 17:56		1
Pyrene	<9.26		9.26	0.731	ug/L	04/17/24 14:19	04/18/24 17:56		1
Pyridine	<9.26		9.26	1.48	ug/L	04/17/24 14:19	04/18/24 17:56		1
Total Cresols	<9.26		9.26	0.648	ug/L	04/17/24 14:19	04/18/24 17:56		1
1,2,4-Trichlorobenzene	<9.26		9.26	0.519	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4,5-Trichlorophenol	<9.26		9.26	4.91	ug/L	04/17/24 14:19	04/18/24 17:56		1
2,4,6-Trichlorophenol	<9.26		9.26	4.63	ug/L	04/17/24 14:19	04/18/24 17:56		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl (Surr)	89		39 - 118			04/17/24 14:19	04/18/24 17:56	1	
2-Fluorophenol (Surr)	77		25 - 110			04/17/24 14:19	04/18/24 17:56	1	
Nitrobenzene-d5 (Surr)	103		45 - 129			04/17/24 14:19	04/18/24 17:56	1	
Phenol-d5 (Surr)	78		21 - 110			04/17/24 14:19	04/18/24 17:56	1	
Terphenyl-d14 (Surr)	70		12 - 144			04/17/24 14:19	04/18/24 17:56	1	

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## Client Sample ID: Wet Well Leachate

Lab Sample ID: 310-278908-20

Date Collected: 04/10/24 16:00

Matrix: Water

Date Received: 04/12/24 16:00

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	97		27 - 136	04/17/24 14:19	04/18/24 17:56	1

### Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	239		5.00	2.25	mg/L			04/16/24 10:13	5
Nitrate as N	0.380	H	0.200	0.0780	mg/L			04/16/24 18:15	1
Sulfate	655		50.0	21.0	mg/L			04/16/24 11:20	50

### Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.274	J	0.350	0.147	mg/L		04/16/24 09:00	04/22/24 15:14	7
Arsenic	0.0927		0.0140	0.00371	mg/L		04/16/24 09:00	04/24/24 15:23	7
Boron	20.6		0.700	0.532	mg/L		04/16/24 09:00	04/22/24 15:14	7
Cadmium	0.000884		0.000200	0.000100	mg/L		04/16/24 09:00	04/19/24 13:43	1
Cobalt	0.00771		0.00350	0.00119	mg/L		04/16/24 09:00	04/24/24 15:23	7
Copper	0.139		0.0350	0.0126	mg/L		04/16/24 09:00	04/24/24 15:23	7
Iron	4.38		0.100	0.0360	mg/L		04/16/24 09:00	04/19/24 13:43	1
Lead	0.00200	J	0.00350	0.00182	mg/L		04/16/24 09:00	04/22/24 15:14	7
Magnesium	448		3.50	1.05	mg/L		04/16/24 09:00	04/22/24 15:14	7
Manganese	0.0959		0.0100	0.00360	mg/L		04/16/24 09:00	04/19/24 13:43	1
Nickel	0.0559		0.00500	0.00210	mg/L		04/16/24 09:00	04/19/24 13:43	1
Potassium	263		3.50	1.05	mg/L		04/16/24 09:00	04/22/24 15:14	7
Zinc	0.0706		0.0200	0.00970	mg/L		04/16/24 09:00	04/19/24 13:43	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (EPA 335.4)	0.0330		0.0100	0.00350	mg/L		04/18/24 09:38	04/18/24 17:55	1
Ammonia (EPA 350.1)	776		46.9	19.7	mg/L		04/23/24 09:31	04/23/24 21:40	9.38
Total Kjeldahl Nitrogen (EPA 351.2)	754		50.0	28.5	mg/L		04/16/24 05:01	04/16/24 10:28	10
Phenols, Total (EPA 420.4)	0.0391		0.0200	0.0100	mg/L		04/15/24 08:31	04/15/24 16:24	1
Total Suspended Solids (USGS I-3765-85)	574		30.0	22.2	mg/L			04/16/24 15:47	1
Total Solids (SM 2540B)	5900		1250	1130	mg/L			04/15/24 11:24	1
Carbonaceous Biochemical Oxygen Demand (SM 5210B)	42.3	H b	3.00	3.00	mg/L			04/13/24 10:23	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Client Sample ID: Trip Blank**

Date Collected: 04/10/24 00:00

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-21**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			04/23/24 14:19	1
Benzene	<0.500		0.500	0.220	ug/L			04/23/24 14:19	1
Bromobenzene	<1.00		1.00	0.340	ug/L			04/23/24 14:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			04/23/24 14:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			04/23/24 14:19	1
Bromoform	<5.00		5.00	0.780	ug/L			04/23/24 14:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			04/23/24 14:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			04/23/24 14:19	1
<b>Carbon disulfide</b>	<b>0.457 J</b>		1.00	0.450	ug/L			04/23/24 14:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			04/23/24 14:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			04/23/24 14:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			04/23/24 14:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			04/23/24 14:19	1
Chloroform	<3.00		3.00	1.30	ug/L			04/23/24 14:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			04/23/24 14:19	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			04/23/24 14:19	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			04/23/24 14:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			04/23/24 14:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			04/23/24 14:19	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	1.20	ug/L			04/23/24 14:19	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			04/23/24 14:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			04/23/24 14:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			04/23/24 14:19	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			04/23/24 14:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			04/23/24 14:19	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			04/23/24 14:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			04/23/24 14:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			04/23/24 14:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			04/23/24 14:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			04/23/24 14:19	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			04/23/24 14:19	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			04/23/24 14:19	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			04/23/24 14:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			04/23/24 14:19	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			04/23/24 14:19	1
Hexane	<1.00		1.00	0.780	ug/L			04/23/24 14:19	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			04/23/24 14:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			04/23/24 14:19	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			04/23/24 14:19	1
Naphthalene	<5.00		5.00	3.00	ug/L			04/23/24 14:19	1
n-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 14:19	1
N-Propylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 14:19	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			04/23/24 14:19	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 14:19	1
Styrene	<1.00		1.00	0.370	ug/L			04/23/24 14:19	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 14:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			04/23/24 14:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			04/23/24 14:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			04/23/24 14:19	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## Client Sample ID: Trip Blank

Lab Sample ID: 310-278908-21

Date Collected: 04/10/24 00:00

Matrix: Water

Date Received: 04/12/24 16:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.00		1.00	0.430	ug/L			04/23/24 14:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			04/23/24 14:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			04/23/24 14:19	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			04/23/24 14:19	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			04/23/24 14:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			04/23/24 14:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			04/23/24 14:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			04/23/24 14:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			04/23/24 14:19	1
1,2,3-Trichloropropane	<5.00		5.00	0.590	ug/L			04/23/24 14:19	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			04/23/24 14:19	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			04/23/24 14:19	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			04/23/24 14:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			04/23/24 14:19	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)		107		80 - 120				04/23/24 14:19	1
Dibromofluoromethane (Surr)		102		73 - 130				04/23/24 14:19	1
Toluene-d8 (Surr)		96		80 - 120				04/23/24 14:19	1

# Definitions/Glossary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## 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.

### GC/MS Semi VOA

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

### HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
b	Result Detected in the Unseeded Control blank (USB).
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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

## Definitions/Glossary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

### Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Surrogate Summary

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## 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)
310-278908-20	Wet Well Leachate	103	105	99
310-278908-21	Trip Blank	107	102	96
LCS 310-419585/6	Lab Control Sample	101	94	102
LCS 310-419585/7	Lab Control Sample	106	106	98
MB 310-419585/5	Method Blank	103	103	99

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (39-118)	2FP (25-110)	NBZ (45-129)	PHL (21-110)	TPHL (12-144)	TBP (27-136)
310-278908-20	Wet Well Leachate	89	77	103	78	70	97
LCS 310-419017/2-A	Lab Control Sample	98	79	109	57	108	102
LCSD 310-419017/3-A	Lab Control Sample Dup	102	83	110	59	113	107
MB 310-419017/1-A	Method Blank	100	79	114	62	111	91

### Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPHL = Terphenyl-d14 (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

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# QC Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

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

**Lab Sample ID: MB 310-419585/5**

**Matrix: Water**

**Analysis Batch: 419585**

**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			04/23/24 13:11	1
Benzene	<0.500		0.500	0.220	ug/L			04/23/24 13:11	1
Bromobenzene	<1.00		1.00	0.340	ug/L			04/23/24 13:11	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			04/23/24 13:11	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			04/23/24 13:11	1
Bromoform	<5.00		5.00	0.780	ug/L			04/23/24 13:11	1
Bromomethane	<4.00		4.00	1.10	ug/L			04/23/24 13:11	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			04/23/24 13:11	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			04/23/24 13:11	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			04/23/24 13:11	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			04/23/24 13:11	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			04/23/24 13:11	1
Chloroethane	<4.00		4.00	0.790	ug/L			04/23/24 13:11	1
Chloroform	<3.00		3.00	1.30	ug/L			04/23/24 13:11	1
Chloromethane	<3.00		3.00	0.610	ug/L			04/23/24 13:11	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			04/23/24 13:11	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			04/23/24 13:11	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			04/23/24 13:11	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			04/23/24 13:11	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	1.20	ug/L			04/23/24 13:11	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			04/23/24 13:11	1
Dibromomethane	<1.00		1.00	0.330	ug/L			04/23/24 13:11	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			04/23/24 13:11	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			04/23/24 13:11	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			04/23/24 13:11	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			04/23/24 13:11	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			04/23/24 13:11	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			04/23/24 13:11	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			04/23/24 13:11	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			04/23/24 13:11	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			04/23/24 13:11	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			04/23/24 13:11	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			04/23/24 13:11	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			04/23/24 13:11	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			04/23/24 13:11	1
Hexane	<1.00		1.00	0.780	ug/L			04/23/24 13:11	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			04/23/24 13:11	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			04/23/24 13:11	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			04/23/24 13:11	1
Naphthalene	<5.00		5.00	3.00	ug/L			04/23/24 13:11	1
n-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 13:11	1
N-Propylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 13:11	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			04/23/24 13:11	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			04/23/24 13:11	1
Styrene	<1.00		1.00	0.370	ug/L			04/23/24 13:11	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			04/23/24 13:11	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			04/23/24 13:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			04/23/24 13:11	1

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID:** MB 310-419585/5

**Matrix:** Water

**Analysis Batch:** 419585

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Tetrachloroethene	<1.00		1.00		0.480	ug/L				04/23/24 13:11	1
Toluene	<1.00		1.00		0.430	ug/L				04/23/24 13:11	1
trans-1,2-Dichloroethene	<1.00		1.00		0.270	ug/L				04/23/24 13:11	1
trans-1,3-Dichloropropene	<5.00		5.00		0.560	ug/L				04/23/24 13:11	1
1,2,3-Trichlorobenzene	<5.00		5.00		0.900	ug/L				04/23/24 13:11	1
1,2,4-Trichlorobenzene	<5.00		5.00		0.750	ug/L				04/23/24 13:11	1
1,1,1-Trichloroethane	<1.00		1.00		0.190	ug/L				04/23/24 13:11	1
1,1,2-Trichloroethane	<1.00		1.00		0.450	ug/L				04/23/24 13:11	1
Trichloroethylene	<1.00		1.00		0.430	ug/L				04/23/24 13:11	1
Trichlorofluoromethane	<4.00		4.00		0.380	ug/L				04/23/24 13:11	1
1,2,3-Trichloropropane	<5.00		5.00		0.590	ug/L				04/23/24 13:11	1
1,2,4-Trimethylbenzene	<1.00		1.00		0.420	ug/L				04/23/24 13:11	1
1,3,5-Trimethylbenzene	<1.00		1.00		0.370	ug/L				04/23/24 13:11	1
Vinyl chloride	<1.00		1.00		0.180	ug/L				04/23/24 13:11	1
Xylenes, Total	<3.00		3.00		0.400	ug/L				04/23/24 13:11	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	103		80 - 120						04/23/24 13:11	1	
Dibromofluoromethane (Surr)	103		73 - 130						04/23/24 13:11	1	
Toluene-d8 (Surr)	99		80 - 120						04/23/24 13:11	1	

**Lab Sample ID:** LCS 310-419585/6

**Matrix:** Water

**Analysis Batch:** 419585

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

Analyte	Spike Added	LCN	LCN	Result	Qualifier	Unit	D	%Rec	%Rec	Limits
		Added	Result							
Acetone	40.0		37.14			ug/L		93	50 - 150	
Benzene	20.0		19.39			ug/L		97	72 - 124	
Bromobenzene	20.0		19.14			ug/L		96	72 - 120	
Bromochloromethane	20.0		20.98			ug/L		105	73 - 130	
Bromodichloromethane	20.0		18.94			ug/L		95	74 - 122	
Bromoform	20.0		15.85			ug/L		79	61 - 122	
2-Butanone (MEK)	40.0		34.90			ug/L		87	50 - 150	
Carbon disulfide	20.0		23.11			ug/L		116	59 - 135	
Carbon tetrachloride	20.0		18.33			ug/L		92	67 - 132	
Chlorobenzene	20.0		20.09			ug/L		100	76 - 120	
Chlorodibromomethane	20.0		18.65			ug/L		93	71 - 121	
Chloroform	20.0		19.71			ug/L		99	72 - 125	
2-Chlorotoluene	20.0		19.23			ug/L		96	73 - 121	
4-Chlorotoluene	20.0		19.79			ug/L		99	72 - 121	
cis-1,2-Dichloroethene	20.0		19.96			ug/L		100	74 - 123	
cis-1,3-Dichloropropene	20.0		20.18			ug/L		101	71 - 125	
1,2-Dibromo-3-Chloropropane	20.0		19.98			ug/L		100	50 - 150	
1,2-Dibromoethane (EDB)	20.0		18.60			ug/L		93	75 - 125	
Dibromomethane	20.0		17.56			ug/L		88	74 - 125	
1,2-Dichlorobenzene	20.0		19.80			ug/L		99	74 - 120	
1,3-Dichlorobenzene	20.0		19.63			ug/L		98	72 - 120	
1,4-Dichlorobenzene	20.0		19.50			ug/L		97	72 - 120	

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCS 310-419585/6**

**Matrix: Water**

**Analysis Batch: 419585**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethane	20.0	18.16		ug/L		91	70 - 127
1,2-Dichloroethane	20.0	18.09		ug/L		90	71 - 125
1,1-Dichloroethene	20.0	22.95		ug/L		115	63 - 132
1,2-Dichloropropane	20.0	19.59		ug/L		98	73 - 124
1,3-Dichloropropane	20.0	17.14		ug/L		86	72 - 125
2,2-Dichloropropane	20.0	20.87		ug/L		104	50 - 150
1,1-Dichloropropene	20.0	21.17		ug/L		106	69 - 132
Ethylbenzene	20.0	18.91		ug/L		95	74 - 122
Hexachlorobutadiene	20.0	21.03		ug/L		105	50 - 150
Hexane	20.0	25.75		ug/L		129	45 - 150
Isopropylbenzene	20.0	19.67		ug/L		98	73 - 125
Methylene Chloride	20.0	20.05		ug/L		100	50 - 150
Methyl tert-butyl ether	20.0	20.27		ug/L		101	68 - 130
Naphthalene	20.0	18.65		ug/L		93	50 - 150
n-Butylbenzene	20.0	20.68		ug/L		103	67 - 131
N-Propylbenzene	20.0	20.14		ug/L		101	72 - 126
p-Isopropyltoluene	20.0	20.41		ug/L		102	70 - 127
sec-Butylbenzene	20.0	20.39		ug/L		102	70 - 127
Styrene	20.0	19.83		ug/L		99	74 - 121
tert-Butylbenzene	20.0	20.55		ug/L		103	72 - 124
1,1,1,2-Tetrachloroethane	20.0	17.88		ug/L		89	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.07		ug/L		90	68 - 124
Tetrachloroethene	20.0	21.60		ug/L		108	71 - 130
Toluene	20.0	19.10		ug/L		96	74 - 123
trans-1,2-Dichloroethene	20.0	20.89		ug/L		104	70 - 126
trans-1,3-Dichloropropene	20.0	19.04		ug/L		95	69 - 123
1,2,3-Trichlorobenzene	20.0	19.72		ug/L		99	50 - 150
1,2,4-Trichlorobenzene	20.0	20.62		ug/L		103	68 - 124
1,1,1-Trichloroethane	20.0	19.80		ug/L		99	73 - 129
1,1,2-Trichloroethane	20.0	19.91		ug/L		100	73 - 123
Trichloroethene	20.0	18.97		ug/L		95	72 - 126
1,2,3-Trichloropropane	20.0	21.65		ug/L		108	65 - 127
1,2,4-Trimethylbenzene	20.0	19.85		ug/L		99	73 - 124
1,3,5-Trimethylbenzene	20.0	20.11		ug/L		101	73 - 123
Xylenes, Total	40.0	39.49		ug/L		99	73 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	94		73 - 130
Toluene-d8 (Surr)	102		80 - 120

**Lab Sample ID: LCS 310-419585/7**

**Matrix: Water**

**Analysis Batch: 419585**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bromomethane	20.0	14.70		ug/L		74	23 - 150
Chloroethane	20.0	19.66		ug/L		98	54 - 136

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCS 310-419585/7**

**Matrix: Water**

**Analysis Batch: 419585**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloromethane	20.0	18.93		ug/L	95	38 - 150	
Dichlorodifluoromethane	20.0	24.27		ug/L	121	39 - 150	
Trichlorofluoromethane	20.0	22.63		ug/L	113	54 - 149	
Vinyl chloride	20.0	21.11		ug/L	106	56 - 140	
Surrogate	%Recovery	LCS	LCS				
4-Bromofluorobenzene (Surr)	106		80 - 120				
Dibromofluoromethane (Surr)	106		73 - 130				
Toluene-d8 (Surr)	98		80 - 120				

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

**Lab Sample ID: MB 310-419017/1-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 419017**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<10.0		10.0	0.640	ug/L	04/17/24 14:19	04/18/24 14:25		1
Acenaphthylene	<10.0		10.0	0.720	ug/L	04/17/24 14:19	04/18/24 14:25		1
Anthracene	<10.0		10.0	0.870	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzidine	<20.0		20.0	1.10	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzo[b]fluoranthene	<10.0		10.0	4.90	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzoic acid	<100		100	17.0	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L	04/17/24 14:19	04/18/24 14:25		1
Benzyl alcohol	<10.0		10.0	1.30	ug/L	04/17/24 14:19	04/18/24 14:25		1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L	04/17/24 14:19	04/18/24 14:25		1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L	04/17/24 14:19	04/18/24 14:25		1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L	04/17/24 14:19	04/18/24 14:25		1
Bis(2-ethylhexyl) phthalate	7.457 J		10.0	5.50	ug/L	04/17/24 14:19	04/18/24 14:25		1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L	04/17/24 14:19	04/18/24 14:25		1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L	04/17/24 14:19	04/18/24 14:25		1
Carbazole	<10.0		10.0	1.00	ug/L	04/17/24 14:19	04/18/24 14:25		1
4-Chloroaniline	<10.0		10.0	0.620	ug/L	04/17/24 14:19	04/18/24 14:25		1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L	04/17/24 14:19	04/18/24 14:25		1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L	04/17/24 14:19	04/18/24 14:25		1
2-Chlorophenol	<10.0		10.0	0.540	ug/L	04/17/24 14:19	04/18/24 14:25		1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L	04/17/24 14:19	04/18/24 14:25		1
Chrysene	<10.0		10.0	0.870	ug/L	04/17/24 14:19	04/18/24 14:25		1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L	04/17/24 14:19	04/18/24 14:25		1
Dibenzofuran	<10.0		10.0	0.740	ug/L	04/17/24 14:19	04/18/24 14:25		1
1,2-Dichlorobenzene	<10.0		10.0	0.620	ug/L	04/17/24 14:19	04/18/24 14:25		1
1,3-Dichlorobenzene	<10.0		10.0	0.640	ug/L	04/17/24 14:19	04/18/24 14:25		1
1,4-Dichlorobenzene	<10.0		10.0	0.640	ug/L	04/17/24 14:19	04/18/24 14:25		1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L	04/17/24 14:19	04/18/24 14:25		1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L	04/17/24 14:19	04/18/24 14:25		1
Diethyl phthalate	<10.0		10.0	1.70	ug/L	04/17/24 14:19	04/18/24 14:25		1

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID:** MB 310-419017/1-A

**Matrix:** Water

**Analysis Batch:** 419071

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 419017

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	<10.0		10.0		0.580	ug/L		04/17/24 14:19	04/18/24 14:25		1
Dimethyl phthalate	<10.0		10.0		1.00	ug/L		04/17/24 14:19	04/18/24 14:25		1
Di-n-butyl phthalate	<10.0		10.0		5.60	ug/L		04/17/24 14:19	04/18/24 14:25		1
4,6-Dinitro-2-methylphenol	<10.0		10.0		6.90	ug/L		04/17/24 14:19	04/18/24 14:25		1
2,4-Dinitrophenol	<20.0		20.0		13.0	ug/L		04/17/24 14:19	04/18/24 14:25		1
2,4-Dinitrotoluene	<10.0		10.0		6.40	ug/L		04/17/24 14:19	04/18/24 14:25		1
2,6-Dinitrotoluene	<10.0		10.0		0.520	ug/L		04/17/24 14:19	04/18/24 14:25		1
Di-n-octyl phthalate	<20.0		20.0		7.00	ug/L		04/17/24 14:19	04/18/24 14:25		1
Fluoranthene	<10.0		10.0		1.70	ug/L		04/17/24 14:19	04/18/24 14:25		1
Fluorene	<10.0		10.0		0.790	ug/L		04/17/24 14:19	04/18/24 14:25		1
Hexachlorobenzene	<10.0		10.0		0.700	ug/L		04/17/24 14:19	04/18/24 14:25		1
Hexachlorobutadiene	<10.0		10.0		0.860	ug/L		04/17/24 14:19	04/18/24 14:25		1
Hexachlorocyclopentadiene	<10.0		10.0		5.10	ug/L		04/17/24 14:19	04/18/24 14:25		1
Hexachloroethane	<10.0		10.0		0.970	ug/L		04/17/24 14:19	04/18/24 14:25		1
Indeno[1,2,3-cd]pyrene	<10.0		10.0		4.20	ug/L		04/17/24 14:19	04/18/24 14:25		1
Isophorone	<10.0		10.0		0.930	ug/L		04/17/24 14:19	04/18/24 14:25		1
2-Methylnaphthalene	<10.0		10.0		0.590	ug/L		04/17/24 14:19	04/18/24 14:25		1
2-Methylphenol	<10.0		10.0		0.650	ug/L		04/17/24 14:19	04/18/24 14:25		1
4-Methylphenol (and/or	<10.0		10.0		0.700	ug/L		04/17/24 14:19	04/18/24 14:25		1
3-Methylphenol)											
Naphthalene	<10.0		10.0		6.10	ug/L		04/17/24 14:19	04/18/24 14:25		1
2-Nitroaniline	<10.0		10.0		5.90	ug/L		04/17/24 14:19	04/18/24 14:25		1
3-Nitroaniline	<10.0		10.0		2.70	ug/L		04/17/24 14:19	04/18/24 14:25		1
4-Nitroaniline	<10.0		10.0		1.30	ug/L		04/17/24 14:19	04/18/24 14:25		1
Nitrobenzene	<10.0		10.0		0.800	ug/L		04/17/24 14:19	04/18/24 14:25		1
2-Nitrophenol	<10.0		10.0		6.80	ug/L		04/17/24 14:19	04/18/24 14:25		1
4-Nitrophenol	<10.0		10.0		7.60	ug/L		04/17/24 14:19	04/18/24 14:25		1
N-Nitrosodimethylamine	<10.0		10.0		0.720	ug/L		04/17/24 14:19	04/18/24 14:25		1
N-Nitrosodi-n-propylamine	<10.0		10.0		0.920	ug/L		04/17/24 14:19	04/18/24 14:25		1
N-Nitrosodiphenylamine	<10.0		10.0		0.750	ug/L		04/17/24 14:19	04/18/24 14:25		1
Pentachlorophenol	<10.0		10.0		9.60	ug/L		04/17/24 14:19	04/18/24 14:25		1
Phenanthrene	<10.0		10.0		0.790	ug/L		04/17/24 14:19	04/18/24 14:25		1
Phenol	<10.0		10.0		1.10	ug/L		04/17/24 14:19	04/18/24 14:25		1
Pyrene	<10.0		10.0		0.790	ug/L		04/17/24 14:19	04/18/24 14:25		1
Pyridine	<10.0		10.0		1.60	ug/L		04/17/24 14:19	04/18/24 14:25		1
Total Cresols	<10.0		10.0		0.700	ug/L		04/17/24 14:19	04/18/24 14:25		1
1,2,4-Trichlorobenzene	<10.0		10.0		0.560	ug/L		04/17/24 14:19	04/18/24 14:25		1
2,4,5-Trichlorophenol	<10.0		10.0		5.30	ug/L		04/17/24 14:19	04/18/24 14:25		1
2,4,6-Trichlorophenol	<10.0		10.0		5.00	ug/L		04/17/24 14:19	04/18/24 14:25		1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl (Surr)	100		100		39 - 118		04/17/24 14:19	04/18/24 14:25	1
2-Fluorophenol (Surr)	79		79		25 - 110		04/17/24 14:19	04/18/24 14:25	1
Nitrobenzene-d5 (Surr)	114		114		45 - 129		04/17/24 14:19	04/18/24 14:25	1
Phenol-d5 (Surr)	62		62		21 - 110		04/17/24 14:19	04/18/24 14:25	1
Terphenyl-d14 (Surr)	111		111		12 - 144		04/17/24 14:19	04/18/24 14:25	1
2,4,6-Tribromophenol (Surr)	91		91		27 - 136		04/17/24 14:19	04/18/24 14:25	1

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCS 310-419017/2-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 419017**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	93.73		ug/L		94	43 - 110
Acenaphthylene	100	97.66		ug/L		98	40 - 110
Anthracene	100	107.0		ug/L		107	51 - 120
Benzo[a]anthracene	100	103.7		ug/L		104	51 - 123
Benzo[a]pyrene	100	99.70		ug/L		100	48 - 125
Benzo[b]fluoranthene	100	115.2		ug/L		115	49 - 129
Benzo[g,h,i]perylene	100	99.21		ug/L		99	43 - 139
Benzo[k]fluoranthene	100	111.0		ug/L		111	47 - 130
Benzyl alcohol	100	103.5		ug/L		104	39 - 128
Bis(2-chloroethoxy)methane	100	111.1		ug/L		111	48 - 121
Bis(2-chloroethyl)ether	100	104.7		ug/L		105	43 - 123
bis (2-chloroisopropyl) ether	100	98.18		ug/L		98	34 - 123
Bis(2-ethylhexyl) phthalate	100	118.9		ug/L		119	43 - 143
4-Bromophenyl phenyl ether	100	109.6		ug/L		110	45 - 119
Butyl benzyl phthalate	100	113.0		ug/L		113	46 - 135
Carbazole	100	100.0		ug/L		100	51 - 126
4-Chloroaniline	100	104.8		ug/L		105	21 - 139
4-Chloro-3-methylphenol	100	94.34		ug/L		94	49 - 130
2-Chloronaphthalene	100	100.2		ug/L		100	37 - 110
2-Chlorophenol	100	101.0		ug/L		101	44 - 117
4-Chlorophenyl phenyl ether	100	91.75		ug/L		92	44 - 116
Chrysene	100	100.2		ug/L		100	51 - 125
Dibenz(a,h)anthracene	100	106.1		ug/L		106	38 - 149
Dibenzo furan	100	92.13		ug/L		92	45 - 112
1,2-Dichlorobenzene	100	82.38		ug/L		82	33 - 110
1,3-Dichlorobenzene	100	73.70		ug/L		74	31 - 110
1,4-Dichlorobenzene	100	72.88		ug/L		73	32 - 110
2,4-Dichlorophenol	100	102.7		ug/L		103	41 - 124
Diethyl phthalate	100	93.44		ug/L		93	43 - 135
2,4-Dimethylphenol	100	105.7		ug/L		106	31 - 142
Dimethyl phthalate	100	101.8		ug/L		102	43 - 129
Di-n-butyl phthalate	100	118.9		ug/L		119	50 - 133
4,6-Dinitro-2-methylphenol	200	200.7		ug/L		100	22 - 143
2,4-Dinitrophenol	200	128.8		ug/L		64	10 - 138
2,4-Dinitrotoluene	100	104.6		ug/L		105	47 - 137
2,6-Dinitrotoluene	100	109.2		ug/L		109	51 - 130
Di-n-octyl phthalate	100	112.3		ug/L		112	34 - 150
Fluoranthene	100	104.7		ug/L		105	47 - 128
Fluorene	100	88.86		ug/L		89	45 - 119
Hexachlorobenzene	100	111.9		ug/L		112	48 - 119
Hexachlorobutadiene	100	87.86		ug/L		88	32 - 110
Hexachlorocyclopentadiene	100	66.86		ug/L		67	10 - 110
Hexachloroethane	100	75.42		ug/L		75	31 - 110
Indeno[1,2,3-cd]pyrene	100	117.5		ug/L		118	37 - 150
Isophorone	100	104.2		ug/L		104	50 - 125
2-Methylnaphthalene	100	87.99		ug/L		88	33 - 110
2-Methylphenol	100	103.2		ug/L		103	47 - 118
4-Methylphenol (and/or 3-Methylphenol)	100	98.02		ug/L		98	46 - 117

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCS 310-419017/2-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 419017**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	100	85.42		ug/L	85	38 - 110	
2-Nitroaniline	100	103.4		ug/L	103	50 - 135	
3-Nitroaniline	100	98.47		ug/L	98	42 - 139	
4-Nitroaniline	100	84.38		ug/L	84	31 - 145	
Nitrobenzene	100	100.6		ug/L	101	47 - 116	
2-Nitrophenol	100	115.4		ug/L	115	41 - 129	
4-Nitrophenol	200	102.6		ug/L	51	18 - 110	
N-Nitrosodimethylamine	100	84.01		ug/L	84	37 - 110	
N-Nitrosodi-n-propylamine	100	108.3		ug/L	108	45 - 130	
N-Nitrosodiphenylamine	100	109.4		ug/L	109	49 - 121	
Pentachlorophenol	200	200.4		ug/L	100	26 - 133	
Phenanthrene	100	102.0		ug/L	102	51 - 117	
Phenol	100	58.14		ug/L	58	29 - 110	
Pyrene	100	114.5		ug/L	115	48 - 127	
Pyridine	200	115.0		ug/L	58	10 - 110	
1,2,4-Trichlorobenzene	100	86.36		ug/L	86	33 - 110	
2,4,5-Trichlorophenol	100	96.47		ug/L	96	35 - 133	
2,4,6-Trichlorophenol	100	107.0		ug/L	107	28 - 139	

**LCS LCS**

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl (Surr)	98		39 - 118
2-Fluorophenol (Surr)	79		25 - 110
Nitrobenzene-d5 (Surr)	109		45 - 129
Phenol-d5 (Surr)	57		21 - 110
Terphenyl-d14 (Surr)	108		12 - 144
2,4,6-Tribromophenol (Surr)	102		27 - 136

**Lab Sample ID: LCSD 310-419017/3-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 419017**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	100	92.06		ug/L	92	43 - 110		2	35
Acenaphthylene	100	96.20		ug/L	96	40 - 110		2	35
Anthracene	100	104.0		ug/L	104	51 - 120		3	35
Benzo[a]anthracene	100	104.5		ug/L	105	51 - 123		1	35
Benzo[a]pyrene	100	99.16		ug/L	99	48 - 125		1	35
Benzo[b]fluoranthene	100	119.0		ug/L	119	49 - 129		3	35
Benzo[g,h,i]perylene	100	96.88		ug/L	97	43 - 139		2	35
Benzo[k]fluoranthene	100	104.4		ug/L	104	47 - 130		6	35
Benzyl alcohol	100	102.7		ug/L	103	39 - 128		1	35
Bis(2-chloroethoxy)methane	100	110.4		ug/L	110	48 - 121		1	35
Bis(2-chloroethyl)ether	100	103.8		ug/L	104	43 - 123		1	35
bis (2-chloroisopropyl) ether	100	98.24		ug/L	98	34 - 123		0	35
Bis(2-ethylhexyl) phthalate	100	119.5		ug/L	120	43 - 143		1	35
4-Bromophenyl phenyl ether	100	109.9		ug/L	110	45 - 119		0	35
Butyl benzyl phthalate	100	111.0		ug/L	111	46 - 135		2	35
Carbazole	100	95.80		ug/L	96	51 - 126		4	35

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

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

**Lab Sample ID: LCSD 310-419017/3-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 419017**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chloroaniline	100	107.4		ug/L		107	21 - 139	2	35
4-Chloro-3-methylphenol	100	95.46		ug/L		95	49 - 130	1	35
2-Chloronaphthalene	100	107.3		ug/L		107	37 - 110	7	35
2-Chlorophenol	100	101.9		ug/L		102	44 - 117	1	35
4-Chlorophenyl phenyl ether	100	92.67		ug/L		93	44 - 116	1	35
Chrysene	100	98.16		ug/L		98	51 - 125	2	35
Dibenz(a,h)anthracene	100	104.4		ug/L		104	38 - 149	2	35
Dibenzofuran	100	90.93		ug/L		91	45 - 112	1	35
1,2-Dichlorobenzene	100	82.98		ug/L		83	33 - 110	1	35
1,3-Dichlorobenzene	100	73.46		ug/L		73	31 - 110	0	35
1,4-Dichlorobenzene	100	73.25		ug/L		73	32 - 110	1	35
2,4-Dichlorophenol	100	101.0		ug/L		101	41 - 124	2	35
Diethyl phthalate	100	92.26		ug/L		92	43 - 135	1	35
2,4-Dimethylphenol	100	106.2		ug/L		106	31 - 142	0	35
Dimethyl phthalate	100	101.6		ug/L		102	43 - 129	0	35
Di-n-butyl phthalate	100	116.4		ug/L		116	50 - 133	2	35
4,6-Dinitro-2-methylphenol	200	197.2		ug/L		99	22 - 143	2	35
2,4-Dinitrophenol	200	109.4		ug/L		55	10 - 138	16	35
2,4-Dinitrotoluene	100	102.1		ug/L		102	47 - 137	2	35
2,6-Dinitrotoluene	100	109.7		ug/L		110	51 - 130	0	35
Di-n-octyl phthalate	100	113.2		ug/L		113	34 - 150	1	35
Fluoranthene	100	101.8		ug/L		102	47 - 128	3	35
Fluorene	100	89.05		ug/L		89	45 - 119	0	35
Hexachlorobenzene	100	114.8		ug/L		115	48 - 119	3	35
Hexachlorobutadiene	100	88.84		ug/L		89	32 - 110	1	35
Hexachlorocyclopentadiene	100	70.67		ug/L		71	10 - 110	6	35
Hexachloroethane	100	77.10		ug/L		77	31 - 110	2	35
Indeno[1,2,3-cd]pyrene	100	115.8		ug/L		116	37 - 150	2	35
Isophorone	100	100.9		ug/L		101	50 - 125	3	35
2-Methylnaphthalene	100	87.53		ug/L		88	33 - 110	1	35
2-Methylphenol	100	104.0		ug/L		104	47 - 118	1	35
4-Methylphenol (and/or 3-Methylphenol)	100	98.57		ug/L		99	46 - 117	1	35
Naphthalene	100	82.99		ug/L		83	38 - 110	3	35
2-Nitroaniline	100	102.3		ug/L		102	50 - 135	1	35
3-Nitroaniline	100	95.76		ug/L		96	42 - 139	3	35
4-Nitroaniline	100	84.63		ug/L		85	31 - 145	0	35
Nitrobenzene	100	99.25		ug/L		99	47 - 116	1	35
2-Nitrophenol	100	115.2		ug/L		115	41 - 129	0	35
4-Nitrophenol	200	103.5		ug/L		52	18 - 110	1	35
N-Nitrosodimethylamine	100	81.16		ug/L		81	37 - 110	3	35
N-Nitrosodi-n-propylamine	100	105.7		ug/L		106	45 - 130	2	35
N-Nitrosodiphenylamine	100	109.1		ug/L		109	49 - 121	0	35
Pentachlorophenol	200	197.9		ug/L		99	26 - 133	1	35
Phenanthrene	100	100.8		ug/L		101	51 - 117	1	35
Phenol	100	57.36		ug/L		57	29 - 110	1	35
Pyrene	100	114.3		ug/L		114	48 - 127	0	35
Pyridine	200	143.3		ug/L		72	10 - 110	22	35
1,2,4-Trichlorobenzene	100	85.41		ug/L		85	33 - 110	1	35

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCSD 310-419017/3-A**

**Matrix: Water**

**Analysis Batch: 419071**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 419017**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	100	95.23		ug/L		95	35 - 133	1	35
2,4,6-Trichlorophenol	100	107.5		ug/L		107	28 - 139	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Fluorobiphenyl (Surr)	102		39 - 118
2-Fluorophenol (Surr)	83		25 - 110
Nitrobenzene-d5 (Surr)	110		45 - 129
Phenol-d5 (Surr)	59		21 - 110
Terphenyl-d14 (Surr)	113		12 - 144
2,4,6-Tribromophenol (Surr)	107		27 - 136

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID: MB 310-418881/3**

**Matrix: Water**

**Analysis Batch: 418881**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00	0.450	mg/L			04/15/24 18:30	1
Sulfate	<1.00		1.00	0.420	mg/L			04/15/24 18:30	1

**Lab Sample ID: LCS 310-418881/4**

**Matrix: Water**

**Analysis Batch: 418881**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.07		mg/L		101	90 - 110
Sulfate	10.0	10.54		mg/L		105	90 - 110

**Lab Sample ID: 310-278908-1 MS**

**Matrix: Water**

**Analysis Batch: 418881**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	179		25.0	201.6	4	mg/L		89	80 - 120
Sulfate	35.8		25.0	61.69		mg/L		103	80 - 120

**Lab Sample ID: 310-278908-1 MSD**

**Matrix: Water**

**Analysis Batch: 418881**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	179		25.0	201.1	4	mg/L		87	80 - 120	0	15
Sulfate	35.8		25.0	61.53		mg/L		103	80 - 120	0	15

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# QC Sample Results

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 310-418779/1-A**

**Matrix: Water**

**Analysis Batch: 419401**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 418779**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<0.0500		0.0500	0.0210	mg/L		04/16/24 09:00	04/19/24 12:55	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		04/16/24 09:00	04/19/24 12:55	1
Boron	<0.100		0.100	0.0760	mg/L		04/16/24 09:00	04/19/24 12:55	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		04/16/24 09:00	04/19/24 12:55	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/19/24 12:55	1
Copper	<0.00500		0.00500	0.00180	mg/L		04/16/24 09:00	04/19/24 12:55	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/19/24 12:55	1
Lead	<0.000500		0.000500	0.000260	mg/L		04/16/24 09:00	04/19/24 12:55	1
Magnesium	<0.500		0.500	0.150	mg/L		04/16/24 09:00	04/19/24 12:55	1
Manganese	<0.0100		0.0100	0.00360	mg/L		04/16/24 09:00	04/19/24 12:55	1
Nickel	<0.00500		0.00500	0.00210	mg/L		04/16/24 09:00	04/19/24 12:55	1
Potassium	<0.500		0.500	0.150	mg/L		04/16/24 09:00	04/19/24 12:55	1
Zinc	<0.0200		0.0200	0.00970	mg/L		04/16/24 09:00	04/19/24 12:55	1

**Lab Sample ID: LCS 310-418779/2-A**

**Matrix: Water**

**Analysis Batch: 419401**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 418779**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	0.200	0.1942		mg/L		97	85 - 115
Arsenic	0.200	0.1887		mg/L		94	85 - 115
Boron	0.200	0.1896		mg/L		95	85 - 115
Cadmium	0.100	0.08910		mg/L		89	85 - 115
Cobalt	0.100	0.1021		mg/L		102	85 - 115
Copper	0.200	0.1902		mg/L		95	85 - 115
Iron	0.200	0.1974		mg/L		99	85 - 115
Lead	0.200	0.1935		mg/L		97	85 - 115
Magnesium	2.00	1.904		mg/L		95	85 - 115
Manganese	0.100	0.09201		mg/L		92	85 - 115
Nickel	0.200	0.1863		mg/L		93	85 - 115
Potassium	2.00	1.907		mg/L		95	85 - 115
Zinc	0.200	0.1815		mg/L		91	85 - 115

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

**Lab Sample ID: MB 310-418780/1-A**

**Matrix: Water**

**Analysis Batch: 419537**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		04/16/24 09:00	04/23/24 00:15	1
Boron	<0.100		0.100	0.0760	mg/L		04/16/24 09:00	04/23/24 00:15	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		04/16/24 09:00	04/23/24 00:15	1
Magnesium	<0.500		0.500	0.150	mg/L		04/16/24 09:00	04/23/24 00:15	1
Manganese	<0.0100		0.0100	0.00360	mg/L		04/16/24 09:00	04/23/24 00:15	1
Nickel	<0.00500		0.00500	0.00210	mg/L		04/16/24 09:00	04/23/24 00:15	1
Iron	<0.100		0.100	0.0360	mg/L		04/16/24 09:00	04/23/24 00:15	1

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: LCS 310-418780/2-A**

**Matrix: Water**

**Analysis Batch: 419537**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.1888		mg/L		94	80 - 120
Boron	0.200	0.1847		mg/L		92	80 - 120
Cobalt	0.100	0.09278		mg/L		93	80 - 120
Magnesium	2.00	1.831		mg/L		92	80 - 120
Manganese	0.100	0.09353		mg/L		94	80 - 120
Nickel	0.200	0.1850		mg/L		93	80 - 120
Iron	0.200	0.1839		mg/L		92	80 - 120

**Lab Sample ID: 310-278908-1 MS**

**Matrix: Water**

**Analysis Batch: 419537**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.000786	J	0.200	0.1953		mg/L		97	75 - 125
Cobalt	<0.000500		0.100	0.08867		mg/L		89	75 - 125
Magnesium	47.2		2.00	47.89	4	mg/L		35	75 - 125
Manganese	<0.0100		0.100	0.09257		mg/L		93	75 - 125
Nickel	<0.00500		0.200	0.1738		mg/L		87	75 - 125
Iron	<0.100		0.200	0.1808		mg/L		90	75 - 125

**Lab Sample ID: 310-278908-1 MS**

**Matrix: Water**

**Analysis Batch: 419651**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	0.112		0.200	0.3017		mg/L		95	75 - 125

**Lab Sample ID: 310-278908-1 MSD**

**Matrix: Water**

**Analysis Batch: 419537**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.000786	J	0.200	0.1918		mg/L		96	75 - 125	2	20
Cobalt	<0.000500		0.100	0.08528		mg/L		85	75 - 125	4	20
Magnesium	47.2		2.00	47.72	4	mg/L		27	75 - 125	0	20
Manganese	<0.0100		0.100	0.09018		mg/L		90	75 - 125	3	20
Nickel	<0.00500		0.200	0.1687		mg/L		84	75 - 125	3	20
Iron	<0.100		0.200	0.1820		mg/L		91	75 - 125	1	20

**Lab Sample ID: 310-278908-1 MSD**

**Matrix: Water**

**Analysis Batch: 419651**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	0.112		0.200	0.3001		mg/L		94	75 - 125	1	20

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

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

**Lab Sample ID: 310-278908-11 DU**

**Matrix: Water**

**Analysis Batch: 419537**

**Client Sample ID: MW-11**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Arsenic	0.0762		0.07559		mg/L		0.8	20
Cobalt	0.0194		0.01889		mg/L		3	20
Manganese	1.04		1.020		mg/L		2	20
Nickel	0.00999		0.009670		mg/L		3	20
Iron	69.4		67.69		mg/L		3	20

**Lab Sample ID: 310-278908-11 DU**

**Matrix: Water**

**Analysis Batch: 419651**

**Client Sample ID: MW-11**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Boron	1.12		0.8589	F5	mg/L		27	20

**Lab Sample ID: 310-278908-11 DU**

**Matrix: Water**

**Analysis Batch: 419808**

**Client Sample ID: MW-11**

**Prep Type: Total/NA**

**Prep Batch: 418780**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Magnesium	97.8		90.06		mg/L		8	20

## Method: 335.4 - Cyanide, Total

**Lab Sample ID: MB 310-419112/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 419203**

**Prep Batch: 419112**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0100		0.0100	0.00350	mg/L		04/18/24 09:38	04/18/24 17:43	1

**Lab Sample ID: LCS 310-419112/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 419203**

**Prep Batch: 419112**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.200	0.1940		mg/L	97	90 - 110	

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID: MB 310-418900/118**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 418900**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.200		0.200	0.100	mg/L		04/16/24 18:00		1

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## **Method: 350.1 - Nitrogen, Ammonia (Continued)**

**Lab Sample ID: MB 310-418900/90**

**Matrix: Water**

**Analysis Batch: 418900**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.200		0.200	0.100	mg/L			04/16/24 17:38	1

**Lab Sample ID: LCS 310-418900/119**

**Matrix: Water**

**Analysis Batch: 418900**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ammonia	8.55	8.401		mg/L		98	90 - 110

**Lab Sample ID: LCS 310-418900/91**

**Matrix: Water**

**Analysis Batch: 418900**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ammonia	8.55	8.540		mg/L		100	90 - 110

**Lab Sample ID: 310-278908-16 MS**

**Matrix: Water**

**Analysis Batch: 418900**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Ammonia	<0.200	F1	1.00	0.8120	F1	mg/L		81	90 - 110

**Lab Sample ID: 310-278908-16 MSD**

**Matrix: Water**

**Analysis Batch: 418900**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Ammonia	<0.200	F1	1.00	0.8123	F1	mg/L		81	90 - 110	0	10

**Lab Sample ID: MB 310-419551/1-A**

**Matrix: Water**

**Analysis Batch: 419635**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.500		0.500	0.210	mg/L		04/23/24 09:31	04/23/24 20:59	1

**Lab Sample ID: LCS 310-419551/2-A**

**Matrix: Water**

**Analysis Batch: 419635**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ammonia	4.00	3.656		mg/L		91	90 - 110

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Client Sample ID: MW-16**

**Prep Type: Total/NA**

**Client Sample ID: MW-16**

**Prep Type: Total/NA**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 419551**

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## Method: 351.2 - Nitrogen, Total Kjeldahl

**Lab Sample ID:** MB 310-418800/1-A

**Matrix:** Water

**Analysis Batch:** 418861

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 418800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	<1.00		1.00	0.570	mg/L		04/16/24 05:01	04/16/24 09:56	1

**Lab Sample ID:** LCS 310-418800/2-A

**Matrix:** Water

**Analysis Batch:** 418861

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 418800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Kjeldahl Nitrogen	8.01	7.830		mg/L		98	90 - 110

## Method: 420.4 - Phenolics, Total Recoverable

**Lab Sample ID:** MB 310-418693/1-A

**Matrix:** Water

**Analysis Batch:** 418790

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 418693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	<0.0200		0.0200	0.0100	mg/L		04/15/24 08:31	04/15/24 16:18	1

**Lab Sample ID:** LCS 310-418693/2-A

**Matrix:** Water

**Analysis Batch:** 418790

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 418693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenols, Total	0.100	0.09440		mg/L		94	90 - 110

## Method: 5220D LL - COD

**Lab Sample ID:** MB 310-419269/32

**Matrix:** Water

**Analysis Batch:** 419269

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<5.00		5.00	4.80	mg/L		04/19/24 12:00		1

**Lab Sample ID:** MB 310-419269/60

**Matrix:** Water

**Analysis Batch:** 419269

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<5.00		5.00	4.80	mg/L		04/19/24 12:00		1

**Lab Sample ID:** LCS 310-419269/33

**Matrix:** Water

**Analysis Batch:** 419269

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chemical Oxygen Demand	125	122.8		mg/L		98	85 - 115

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## Method: 5220D LL - COD (Continued)

**Lab Sample ID: LCS 310-419269/63**

**Matrix: Water**

**Analysis Batch: 419269**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	124.5		mg/L	99		85 - 115

**Lab Sample ID: 310-278908-2 MS**

**Matrix: Water**

**Analysis Batch: 419269**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	8.72		50.0	66.94		mg/L	116		80 - 148

**Lab Sample ID: 310-278908-2 MSD**

**Matrix: Water**

**Analysis Batch: 419269**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	8.72		50.0	64.92		mg/L	112		80 - 148	3	10

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

**Lab Sample ID: MB 310-418767/1**

**Matrix: Water**

**Analysis Batch: 418767**

**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			04/15/24 13:50	1

**Lab Sample ID: LCS 310-418767/2**

**Matrix: Water**

**Analysis Batch: 418767**

**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	100.0		mg/L	100		75 - 116

**Lab Sample ID: MB 310-418893/1**

**Matrix: Water**

**Analysis Batch: 418893**

**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			04/16/24 15:47	1

**Lab Sample ID: LCS 310-418893/2**

**Matrix: Water**

**Analysis Batch: 418893**

**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	94.00		mg/L	94		75 - 116

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## Method: SM 2540B - Solids, Total

**Lab Sample ID:** MB 310-418741/1

**Matrix:** Water

**Analysis Batch:** 418741

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	<50.0		50.0	45.0	mg/L			04/15/24 11:24	1

**Lab Sample ID:** LCS 310-418741/2

**Matrix:** Water

**Analysis Batch:** 418741

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec Limits
Total Solids	1000	1054		mg/L	105	89 - 115

## Method: SM 5210B - BOD, 5-Day

**Lab Sample ID:** USB 310-418663/1

**Matrix:** Water

**Analysis Batch:** 418663

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand	<3.00		3.00	3.00	mg/L			04/13/24 09:51	1

**Lab Sample ID:** LCS 310-418663/2

**Matrix:** Water

**Analysis Batch:** 418663

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec Limits
Carbonaceous Biochemical Oxygen Demand	198	217.0		mg/L	110	76 - 126

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## GC/MS VOA

### Analysis Batch: 419585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	8260D	
310-278908-21	Trip Blank	Total/NA	Water	8260D	
MB 310-419585/5	Method Blank	Total/NA	Water	8260D	
LCS 310-419585/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-419585/7	Lab Control Sample	Total/NA	Water	8260D	

## GC/MS Semi VOA

### Prep Batch: 419017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	3510C	
MB 310-419017/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-419017/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-419017/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 419071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	8270E	419017
MB 310-419017/1-A	Method Blank	Total/NA	Water	8270E	419017
LCS 310-419017/2-A	Lab Control Sample	Total/NA	Water	8270E	419017
LCSD 310-419017/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	419017

## HPLC/IC

### Analysis Batch: 418881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	9056A	
310-278908-2	MW-2	Total/NA	Water	9056A	
310-278908-3	MW-3	Total/NA	Water	9056A	
310-278908-4	MW-4	Total/NA	Water	9056A	
310-278908-5	MW-5	Total/NA	Water	9056A	
310-278908-5	MW-5	Total/NA	Water	9056A	
310-278908-6	MW-6	Total/NA	Water	9056A	
310-278908-7	MW-7	Total/NA	Water	9056A	
310-278908-8	MW-8	Total/NA	Water	9056A	
310-278908-9	MW-9	Total/NA	Water	9056A	
310-278908-9	MW-9	Total/NA	Water	9056A	
310-278908-10	MW-10	Total/NA	Water	9056A	
310-278908-11	MW-11	Total/NA	Water	9056A	
310-278908-12	MW-12	Total/NA	Water	9056A	
310-278908-13	MW-13	Total/NA	Water	9056A	
310-278908-14	MW-14	Total/NA	Water	9056A	
310-278908-15	MW-15	Total/NA	Water	9056A	
310-278908-16	MW-16	Total/NA	Water	9056A	
310-278908-17	MW-17	Total/NA	Water	9056A	
310-278908-18	MW-18	Total/NA	Water	9056A	
310-278908-19	MW-D	Total/NA	Water	9056A	
310-278908-20	Wet Well Leachate	Total/NA	Water	300.0	
310-278908-20	Wet Well Leachate	Total/NA	Water	300.0	
MB 310-418881/3	Method Blank	Total/NA	Water	9056A	
LCS 310-418881/4	Lab Control Sample	Total/NA	Water	9056A	
310-278908-1 MS	MW-1	Total/NA	Water	9056A	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## HPLC/IC (Continued)

### Analysis Batch: 418881 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1 MSD	MW-1	Total/NA	Water	9056A	

### Analysis Batch: 419008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	300.0	

## Metals

### Prep Batch: 418779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	200.8	
MB 310-418779/1-A	Method Blank	Total/NA	Water	200.8	
LCS 310-418779/2-A	Lab Control Sample	Total/NA	Water	200.8	

### Prep Batch: 418780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	3005A	
310-278908-2	MW-2	Total/NA	Water	3005A	
310-278908-3	MW-3	Total/NA	Water	3005A	
310-278908-4	MW-4	Total/NA	Water	3005A	
310-278908-5	MW-5	Total/NA	Water	3005A	
310-278908-6	MW-6	Total/NA	Water	3005A	
310-278908-7	MW-7	Total/NA	Water	3005A	
310-278908-8	MW-8	Total/NA	Water	3005A	
310-278908-9	MW-9	Total/NA	Water	3005A	
310-278908-10	MW-10	Total/NA	Water	3005A	
310-278908-11	MW-11	Total/NA	Water	3005A	
310-278908-12	MW-12	Total/NA	Water	3005A	
310-278908-13	MW-13	Total/NA	Water	3005A	
310-278908-14	MW-14	Total/NA	Water	3005A	
310-278908-15	MW-15	Total/NA	Water	3005A	
310-278908-16	MW-16	Total/NA	Water	3005A	
310-278908-17	MW-17	Total/NA	Water	3005A	
310-278908-18	MW-18	Total/NA	Water	3005A	
310-278908-19	MW-D	Total/NA	Water	3005A	
MB 310-418780/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-418780/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-278908-1 MS	MW-1	Total/NA	Water	3005A	
310-278908-1 MSD	MW-1	Total/NA	Water	3005A	
310-278908-11 DU	MW-11	Total/NA	Water	3005A	

### Analysis Batch: 419401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	200.8	418779
MB 310-418779/1-A	Method Blank	Total/NA	Water	200.8	418779
LCS 310-418779/2-A	Lab Control Sample	Total/NA	Water	200.8	418779

### Analysis Batch: 419536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	200.8	418779

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Metals

### Analysis Batch: 419537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	6020B	418780
310-278908-2	MW-2	Total/NA	Water	6020B	418780
310-278908-3	MW-3	Total/NA	Water	6020B	418780
310-278908-4	MW-4	Total/NA	Water	6020B	418780
310-278908-5	MW-5	Total/NA	Water	6020B	418780
310-278908-6	MW-6	Total/NA	Water	6020B	418780
310-278908-8	MW-8	Total/NA	Water	6020B	418780
310-278908-10	MW-10	Total/NA	Water	6020B	418780
310-278908-11	MW-11	Total/NA	Water	6020B	418780
310-278908-12	MW-12	Total/NA	Water	6020B	418780
310-278908-13	MW-13	Total/NA	Water	6020B	418780
310-278908-14	MW-14	Total/NA	Water	6020B	418780
310-278908-15	MW-15	Total/NA	Water	6020B	418780
310-278908-16	MW-16	Total/NA	Water	6020B	418780
310-278908-17	MW-17	Total/NA	Water	6020B	418780
310-278908-18	MW-18	Total/NA	Water	6020B	418780
310-278908-19	MW-D	Total/NA	Water	6020B	418780
MB 310-418780/1-A	Method Blank	Total/NA	Water	6020B	418780
LCS 310-418780/2-A	Lab Control Sample	Total/NA	Water	6020B	418780
310-278908-1 MS	MW-1	Total/NA	Water	6020B	418780
310-278908-1 MSD	MW-1	Total/NA	Water	6020B	418780
310-278908-11 DU	MW-11	Total/NA	Water	6020B	418780

### Analysis Batch: 419651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	6020B	418780
310-278908-2	MW-2	Total/NA	Water	6020B	418780
310-278908-3	MW-3	Total/NA	Water	6020B	418780
310-278908-4	MW-4	Total/NA	Water	6020B	418780
310-278908-5	MW-5	Total/NA	Water	6020B	418780
310-278908-6	MW-6	Total/NA	Water	6020B	418780
310-278908-8	MW-8	Total/NA	Water	6020B	418780
310-278908-10	MW-10	Total/NA	Water	6020B	418780
310-278908-11	MW-11	Total/NA	Water	6020B	418780
310-278908-12	MW-12	Total/NA	Water	6020B	418780
310-278908-13	MW-13	Total/NA	Water	6020B	418780
310-278908-14	MW-14	Total/NA	Water	6020B	418780
310-278908-15	MW-15	Total/NA	Water	6020B	418780
310-278908-16	MW-16	Total/NA	Water	6020B	418780
310-278908-17	MW-17	Total/NA	Water	6020B	418780
310-278908-18	MW-18	Total/NA	Water	6020B	418780
310-278908-19	MW-D	Total/NA	Water	6020B	418780
310-278908-1 MS	MW-1	Total/NA	Water	6020B	418780
310-278908-1 MSD	MW-1	Total/NA	Water	6020B	418780
310-278908-11 DU	MW-11	Total/NA	Water	6020B	418780

### Analysis Batch: 419808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-3	MW-3	Total/NA	Water	6020B	418780
310-278908-5	MW-5	Total/NA	Water	6020B	418780
310-278908-6	MW-6	Total/NA	Water	6020B	418780

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## Metals (Continued)

### Analysis Batch: 419808 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-7	MW-7	Total/NA	Water	6020B	418780
310-278908-9	MW-9	Total/NA	Water	6020B	418780
310-278908-11	MW-11	Total/NA	Water	6020B	418780
310-278908-15	MW-15	Total/NA	Water	6020B	418780
310-278908-20	Wet Well Leachate	Total/NA	Water	200.8	418779
310-278908-11 DU	MW-11	Total/NA	Water	6020B	418780

### Analysis Batch: 419880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-7	MW-7	Total/NA	Water	6020B	418780
310-278908-9	MW-9	Total/NA	Water	6020B	418780

## General Chemistry

### Analysis Batch: 418663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	SM 5210B	418663
USB 310-418663/1	Method Blank	Total/NA	Water	SM 5210B	418663
LCS 310-418663/2	Lab Control Sample	Total/NA	Water	SM 5210B	418663

### Prep Batch: 418693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	Distill/Phenol	418693
MB 310-418693/1-A	Method Blank	Total/NA	Water	Distill/Phenol	418693
LCS 310-418693/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	418693

### Analysis Batch: 418741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	SM 2540B	418741
MB 310-418741/1	Method Blank	Total/NA	Water	SM 2540B	418741
LCS 310-418741/2	Lab Control Sample	Total/NA	Water	SM 2540B	418741

### Analysis Batch: 418767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-3	MW-3	Total/NA	Water	I-3765-85	418767
310-278908-4	MW-4	Total/NA	Water	I-3765-85	418767
310-278908-5	MW-5	Total/NA	Water	I-3765-85	418767
310-278908-6	MW-6	Total/NA	Water	I-3765-85	418767
310-278908-7	MW-7	Total/NA	Water	I-3765-85	418767
310-278908-8	MW-8	Total/NA	Water	I-3765-85	418767
310-278908-9	MW-9	Total/NA	Water	I-3765-85	418767
310-278908-10	MW-10	Total/NA	Water	I-3765-85	418767
MB 310-418767/1	Method Blank	Total/NA	Water	I-3765-85	418767
LCS 310-418767/2	Lab Control Sample	Total/NA	Water	I-3765-85	418767

### Analysis Batch: 418790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	420.4	418790
MB 310-418693/1-A	Method Blank	Total/NA	Water	420.4	418790
LCS 310-418693/2-A	Lab Control Sample	Total/NA	Water	420.4	418790

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## General Chemistry

### Prep Batch: 418800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	351.2	
MB 310-418800/1-A	Method Blank	Total/NA	Water	351.2	
LCS 310-418800/2-A	Lab Control Sample	Total/NA	Water	351.2	

### Analysis Batch: 418861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	351.2	418800
MB 310-418800/1-A	Method Blank	Total/NA	Water	351.2	418800
LCS 310-418800/2-A	Lab Control Sample	Total/NA	Water	351.2	418800

### Analysis Batch: 418893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	I-3765-85	
310-278908-2	MW-2	Total/NA	Water	I-3765-85	
310-278908-11	MW-11	Total/NA	Water	I-3765-85	
310-278908-12	MW-12	Total/NA	Water	I-3765-85	
310-278908-13	MW-13	Total/NA	Water	I-3765-85	
310-278908-14	MW-14	Total/NA	Water	I-3765-85	
310-278908-15	MW-15	Total/NA	Water	I-3765-85	
310-278908-16	MW-16	Total/NA	Water	I-3765-85	
310-278908-17	MW-17	Total/NA	Water	I-3765-85	
310-278908-18	MW-18	Total/NA	Water	I-3765-85	
310-278908-19	MW-D	Total/NA	Water	I-3765-85	
310-278908-20	Wet Well Leachate	Total/NA	Water	I-3765-85	
MB 310-418893/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-418893/2	Lab Control Sample	Total/NA	Water	I-3765-85	

### Analysis Batch: 418900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	350.1	
310-278908-2	MW-2	Total/NA	Water	350.1	
310-278908-3	MW-3	Total/NA	Water	350.1	
310-278908-4	MW-4	Total/NA	Water	350.1	
310-278908-5	MW-5	Total/NA	Water	350.1	
310-278908-6	MW-6	Total/NA	Water	350.1	
310-278908-7	MW-7	Total/NA	Water	350.1	
310-278908-8	MW-8	Total/NA	Water	350.1	
310-278908-9	MW-9	Total/NA	Water	350.1	
310-278908-10	MW-10	Total/NA	Water	350.1	
310-278908-11	MW-11	Total/NA	Water	350.1	
310-278908-12	MW-12	Total/NA	Water	350.1	
310-278908-13	MW-13	Total/NA	Water	350.1	
310-278908-14	MW-14	Total/NA	Water	350.1	
310-278908-15	MW-15	Total/NA	Water	350.1	
310-278908-16	MW-16	Total/NA	Water	350.1	
310-278908-17	MW-17	Total/NA	Water	350.1	
310-278908-18	MW-18	Total/NA	Water	350.1	
310-278908-19	MW-D	Total/NA	Water	350.1	
MB 310-418900/118	Method Blank	Total/NA	Water	350.1	
MB 310-418900/90	Method Blank	Total/NA	Water	350.1	
LCS 310-418900/119	Lab Control Sample	Total/NA	Water	350.1	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## General Chemistry (Continued)

### Analysis Batch: 418900 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-418900/91	Lab Control Sample	Total/NA	Water	350.1	
310-278908-16 MS	MW-16	Total/NA	Water	350.1	
310-278908-16 MSD	MW-16	Total/NA	Water	350.1	

### Prep Batch: 419112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	Distill/CN	
MB 310-419112/1-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 310-419112/2-A	Lab Control Sample	Total/NA	Water	Distill/CN	

### Analysis Batch: 419203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	335.4	419112
MB 310-419112/1-A	Method Blank	Total/NA	Water	335.4	419112
LCS 310-419112/2-A	Lab Control Sample	Total/NA	Water	335.4	419112

### Analysis Batch: 419269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-1	MW-1	Total/NA	Water	5220D LL	
310-278908-2	MW-2	Total/NA	Water	5220D LL	
310-278908-3	MW-3	Total/NA	Water	5220D LL	
310-278908-4	MW-4	Total/NA	Water	5220D LL	
310-278908-5	MW-5	Total/NA	Water	5220D LL	
310-278908-6	MW-6	Total/NA	Water	5220D LL	
310-278908-7	MW-7	Total/NA	Water	5220D LL	
310-278908-8	MW-8	Total/NA	Water	5220D LL	
310-278908-9	MW-9	Total/NA	Water	5220D LL	
310-278908-10	MW-10	Total/NA	Water	5220D LL	
310-278908-11	MW-11	Total/NA	Water	5220D LL	
310-278908-12	MW-12	Total/NA	Water	5220D LL	
310-278908-13	MW-13	Total/NA	Water	5220D LL	
310-278908-14	MW-14	Total/NA	Water	5220D LL	
310-278908-15	MW-15	Total/NA	Water	5220D LL	
310-278908-16	MW-16	Total/NA	Water	5220D LL	
310-278908-17	MW-17	Total/NA	Water	5220D LL	
310-278908-18	MW-18	Total/NA	Water	5220D LL	
310-278908-19	MW-D	Total/NA	Water	5220D LL	
MB 310-419269/32	Method Blank	Total/NA	Water	5220D LL	
MB 310-419269/60	Method Blank	Total/NA	Water	5220D LL	
LCS 310-419269/33	Lab Control Sample	Total/NA	Water	5220D LL	
LCS 310-419269/63	Lab Control Sample	Total/NA	Water	5220D LL	
310-278908-2 MS	MW-2	Total/NA	Water	5220D LL	
310-278908-2 MSD	MW-2	Total/NA	Water	5220D LL	

### Prep Batch: 419551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	Distill/Ammonia	
MB 310-419551/1-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 310-419551/2-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

## General Chemistry

### Analysis Batch: 419635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-278908-20	Wet Well Leachate	Total/NA	Water	350.1	419551
MB 310-419551/1-A	Method Blank	Total/NA	Water	350.1	419551
LCS 310-419551/2-A	Lab Control Sample	Total/NA	Water	350.1	419551

# Lab Chronicle

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-1**

Date Collected: 04/10/24 15:12

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 18:54
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 00:21
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 16:32
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:45
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-2**

Date Collected: 04/10/24 14:44

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 19:31
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 00:52
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 16:43
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:48
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-3**

Date Collected: 04/09/24 18:05

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 20:07
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 00:55
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419808	NFT2	EET CF	04/24/24 15:30
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419651	NFT2	EET CF	04/23/24 16:45
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:48
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-4**

Date Collected: 04/09/24 18:33

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 20:19
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 00:59
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 16:47
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:50
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-5**

Date Collected: 04/09/24 17:30

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 20:31
Total/NA	Analysis	9056A		50	418881	QTZ5	EET CF	04/16/24 09:48
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:02
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		20	419808	NFT2	EET CF	04/24/24 15:34
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		20	419651	NFT2	EET CF	04/23/24 16:49
Total/NA	Analysis	350.1		37.5	418900	ZJX4	EET CF	04/16/24 18:49
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-6**

Date Collected: 04/09/24 16:50

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 20:43
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:05
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		10	419808	NFT2	EET CF	04/24/24 15:37
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		10	419651	NFT2	EET CF	04/23/24 16:51
Total/NA	Analysis	350.1		37.5	418900	ZJX4	EET CF	04/16/24 18:49
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-7**

Date Collected: 04/09/24 16:11

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 20:55
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		7	419808	NFT2	EET CF	04/24/24 15:41
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		10	419880	NFT2	EET CF	04/25/24 12:34
Total/NA	Analysis	350.1		100	418900	ZJX4	EET CF	04/16/24 20:44
Total/NA	Analysis	5220D LL		5	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-8**

Date Collected: 04/09/24 15:34

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 21:07
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:12
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:05
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:52
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-9**

Date Collected: 04/09/24 15:01

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 21:19
Total/NA	Analysis	9056A		50	418881	QTZ5	EET CF	04/16/24 10:00
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419808	NFT2	EET CF	04/24/24 15:44
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419880	NFT2	EET CF	04/25/24 12:36
Total/NA	Analysis	350.1		93.8	418900	ZJX4	EET CF	04/16/24 18:28
Total/NA	Analysis	5220D LL		5	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-10**

Date Collected: 04/09/24 14:17

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 21:31

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-10**

Date Collected: 04/09/24 14:17

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:33
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:09
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:54
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418767	ENB7	EET CF	04/15/24 13:50

**Client Sample ID: MW-11**

Date Collected: 04/10/24 11:07

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 21:43
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:36
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419808	NFT2	EET CF	04/24/24 15:48
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419651	NFT2	EET CF	04/23/24 17:11
Total/NA	Analysis	350.1		9.38	418900	ZJX4	EET CF	04/16/24 18:28
Total/NA	Analysis	5220D LL		5	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-12**

Date Collected: 04/10/24 10:41

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-12**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 21:56
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:43
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:15
Total/NA	Analysis	350.1		9.38	418900	ZJX4	EET CF	04/16/24 18:30
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-13**

Date Collected: 04/10/24 10:04

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-13**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 22:32

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# Lab Chronicle

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Client Sample ID: MW-13**

Date Collected: 04/10/24 10:04

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-13**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:46
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:18
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:58
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-14**

Date Collected: 04/10/24 11:41

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-14**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 22:44
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:50
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:20
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 17:59
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-15**

Date Collected: 04/10/24 12:08

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-15**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 22:56
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:53
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419808	NFT2	EET CF	04/24/24 15:55
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		4	419651	NFT2	EET CF	04/23/24 17:22
Total/NA	Analysis	350.1		9.38	418900	ZJX4	EET CF	04/16/24 18:30
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-16**

Date Collected: 04/10/24 12:55

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-16**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		55	418881	QTZ5	EET CF	04/15/24 23:08

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# Lab Chronicle

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

**Client Sample ID: MW-16**

Date Collected: 04/10/24 12:55

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-16**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 01:57
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:33
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 18:02
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-17**

Date Collected: 04/10/24 13:26

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-17**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 23:20
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 02:00
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:35
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 18:04
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-18**

Date Collected: 04/10/24 13:43

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-18**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 23:32
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 02:03
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:37
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 18:07
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: MW-D**

Date Collected: 04/10/24 12:55

Date Received: 04/12/24 16:00

**Lab Sample ID: 310-278908-19**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	418881	QTZ5	EET CF	04/15/24 23:44
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419537	A6US	EET CF	04/23/24 02:21

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

**Client Sample ID: MW-D**

**Lab Sample ID: 310-278908-19**

**Matrix: Water**

Date Collected: 04/10/24 12:55

Date Received: 04/12/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			418780	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	6020B		1	419651	NFT2	EET CF	04/23/24 17:39
Total/NA	Analysis	350.1		1	418900	ZJX4	EET CF	04/16/24 18:07
Total/NA	Analysis	5220D LL		1	419269	D7CP	EET CF	04/19/24 12:00
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47

**Client Sample ID: Wet Well Leachate**

**Lab Sample ID: 310-278908-20**

**Matrix: Water**

Date Collected: 04/10/24 16:00

Date Received: 04/12/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419585	FE5V	EET CF	04/23/24 19:35
Total/NA	Prep	3510C			419017	JT8P	EET CF	04/17/24 14:19
Total/NA	Analysis	8270E		1	419071	L0FS	EET CF	04/18/24 17:56
Total/NA	Analysis	300.0		5	418881	QTZ5	EET CF	04/16/24 10:13
Total/NA	Analysis	300.0		50	418881	QTZ5	EET CF	04/16/24 11:20
Total/NA	Analysis	300.0		1	419008	QTZ5	EET CF	04/16/24 18:15
Total/NA	Prep	200.8			418779	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	200.8		7	419808	NFT2	EET CF	04/24/24 15:23
Total/NA	Prep	200.8			418779	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	200.8		1	419401	DHM5	EET CF	04/19/24 13:43
Total/NA	Prep	200.8			418779	QTZ5	EET CF	04/16/24 09:00
Total/NA	Analysis	200.8		7	419536	NFT2	EET CF	04/22/24 15:14
Total/NA	Prep	Distill/CN			419112	WZC8	EET CF	04/18/24 09:38
Total/NA	Analysis	335.4		1	419203	ZJX4	EET CF	04/18/24 17:55
Total/NA	Prep	Distill/Ammonia			419551	MQ8M	EET CF	04/23/24 09:31
Total/NA	Analysis	350.1		9.38	419635	ZJX4	EET CF	04/23/24 21:40
Total/NA	Prep	351.2			418800	W9YR	EET CF	04/16/24 05:01
Total/NA	Analysis	351.2		10	418861	ENB7	EET CF	04/16/24 10:28
Total/NA	Prep	Distill/Phenol			418693	ENB7	EET CF	04/15/24 08:31
Total/NA	Analysis	420.4		1	418790	ZJX4	EET CF	04/15/24 16:24
Total/NA	Analysis	I-3765-85		1	418893	A4XP	EET CF	04/16/24 15:47
Total/NA	Analysis	SM 2540B		1	418741	HE7K	EET CF	04/15/24 11:24
Total/NA	Analysis	SM 5210B		1	418663	A3GU	EET CF	04/13/24 10:23

**Client Sample ID: Trip Blank**

**Lab Sample ID: 310-278908-21**

**Matrix: Water**

Date Collected: 04/10/24 00:00

Date Received: 04/12/24 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	419585	FE5V	EET CF	04/23/24 14:19

## Laboratory References:

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

Eurofins Cedar Falls

# Accreditation/Certification Summary

Client: SCS Engineers

Job ID: 310-278908-1

Project/Site: ADM Landfill Sampling Spring 2024

## 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		Water	1,2,3-Trichlorobenzene
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Bromobenzene
8260D		Water	Hexane
8260D		Water	p-Isopropyltoluene
8260D		Water	sec-Butylbenzene
8260D		Water	tert-Butylbenzene
8270E	3510C	Water	Benzoic acid
8270E	3510C	Water	Pyridine
8270E	3510C	Water	Total Cresols

# Method Summary

Client: SCS Engineers

Project/Site: ADM Landfill Sampling Spring 2024

Job ID: 310-278908-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
300.0	Anions, Ion Chromatography	EPA	EET CF
9056A	Anions, Ion Chromatography	SW846	EET CF
200.8	Metals (ICP/MS)	EPA	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
335.4	Cyanide, Total	EPA	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
420.4	Phenolics, Total Recoverable	EPA	EET CF
5220D LL	COD	SM	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2540B	Solids, Total	SM	EET CF
SM 5210B	BOD, 5-Day	SM	EET CF
200.8	Preparation, Total Metals	EPA	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
351.2	Nitrogen, Total Kjeldahl	EPA	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
Distill/Ammonia	Distillation, Ammonia	None	EET CF
Distill/CN	Distillation, Cyanide	None	EET CF
Distill/Phenol	Distillation, Phenolics	None	EET CF

## Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

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

## Laboratory References:

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



### Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: <u>SJS</u> City/State: <u>West Des Moines IA</u> Project:				
Receipt Information				
Date/Time Received:	DATE <u>4/12/24</u>	TIME <u>1600</u>	Received By <u>JP</u>	
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other:				
Condition of Cooler/Containers				
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID:				
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler # <u>1</u> of <u>3</u>				
Cooler Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Sample Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓				
Temperature Record				
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE				
Thermometer ID: <u>Y</u> Correction Factor (°C): <u>0</u>				
<b>• Temp Blank Temperature</b> – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C): <u>0.9</u> Corrected Temp (°C): <u>0.9</u>				
<b>• Sample Container Temperature</b>				
Container(s) used:	<u>CONTAINER 1</u> <u>250 ml</u> <u>p1</u> <u>↔</u>		<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>0.4</u> <u>↓</u>		<u>0.9</u> <u>↓</u>	
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE: If yes, contact PM before proceeding. If no, proceed with login				
Additional Comments				



Environment Testing  
America

Place COC scanning label  
here

Cooler/Sample Receipt and Temperature Log Form

**Client Information**

Client JCS

City/State: West Des Moines IA Project:

**Receipt Information**

Date/Time Received: 4/12/24 1600 Received By: JCS

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

**Condition of Cooler/Containers**

Sample(s) received in Cooler?  Yes  No If yes: Cooler ID: \_\_\_\_\_

Multiple Coolers?  Yes  No If yes: Cooler # 3 of 3

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

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

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

**Temperature Record**

Coolant:  Wet ice  Blue ice  Dry ice  Other: \_\_\_\_\_  NONE

Thermometer ID: Y Correction Factor (°C): 0

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

Uncorrected Temp (°C): 0.3 Corrected Temp (°C): 0.3

\* Sample Container Temperature

Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>
--------------------	--------------------	--------------------

Uncorrected Temp (°C):

Corrected Temp (°C):

**Exceptions Noted**

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

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

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

**Additional Comments**



Environment Testing  
America

Place COC scanning label  
here

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

**Client Information**

Client: SES

City/State: CITY West Des Moines STATE IA

Project:

**Receipt Information**

Date/Time Received: DATE 4/12/24 TIME 1600 Received By: SPB

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

**Condition of Cooler/Containers**

Sample(s) received in Cooler?  Yes  No If yes: Cooler ID.

Multiple Coolers?  Yes  No If yes: Cooler # 3 of 3

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

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

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

**Temperature Record**

Coolant:  Wet ice  Blue ice  Dry ice  Other: \_\_\_\_\_  NONE

Thermometer ID: Y Correction Factor (°C): 0

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

Uncorrected Temp (°C): 0.8 Corrected Temp (°C): 0.8

• **Sample Container Temperature**

Container(s) used:	CARRIER 1	CARRIER 2
--------------------	-----------	-----------

Uncorrected Temp (°C):

Corrected Temp (°C):

**Exceptions Noted**

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

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

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

**Additional Comments**



Project Name ADM Landfill Sampling Spring 2024

Site ADM Landfill

P O #

West Des Moines, Iowa 50225

515-334-6154

ext. 525

.com

Other \_\_\_\_\_

2 weeks

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Environment Testing  
America

310-278908 Chain of Custody

## Cooler/Sample Receipt and Temperature Log Form

## Client Information

Client: SCS

City/State: West Des Moines IA

Project:

## Receipt Information

Date/Time Received: DATE 4/12/24 TIME 1600 Received By: SB

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

## Condition of Cooler/Containers

Sample(s) received in Cooler?  Yes  No If yes: Cooler ID: \_\_\_\_\_Multiple Coolers?  Yes  No If yes: Cooler # 1 of 3Cooler Custody Seals Present?  Yes  No If yes: Cooler custody seals intact?  Yes  NoSample Custody Seals Present?  Yes  No If yes: Sample custody seals intact?  Yes  NoTrip Blank Present?  Yes  No If yes: Which VOA samples are in cooler? ↓

## Temperature Record

Coolant:  Wet ice  Blue ice  Dry ice  Other: \_\_\_\_\_  NONE

Thermometer ID: Y Correction Factor (°C): 0

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

Uncorrected Temp (°C): 0.9 Corrected Temp (°C): 0.9

## • Sample Container Temperature

Container(s) used:	CONTAINER 1 280 ml p1 ↗	CONTAINER 2 0.9 ↓
Uncorrected Temp (°C):	0.4	
Corrected Temp (°C):		

## Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling?  Yes  No  
a) If yes: Is there evidence that the chilling process began?  Yes  No2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised?  
(e.g., bulging septa, broken/cracked bottles, frozen solid?)  Yes  No

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

## Additional Comments



Environment Testing  
America

Place COC scanning label  
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS			
City/State:	CTY West Des Moines IA	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 4/12/24	TIME 1600	Received By: SPB
Delivery Type:	<input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # _____ of 3
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? ↓  _____
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE		
Thermometer ID:	Y	Correction Factor (°C):	0
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	0.3	Corrected Temp (°C):	0.3
• Sample Container Temperature			
Container(s) used:	CONTAINER 1		CONTAINER 2
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
_____ _____ _____			



**Environment Testing  
America**

Place COC scanning label  
here

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

<b>Client Information</b>			
Client: <u>SCS</u>			
City/State:	<u>West Des Moines</u>	STATE	<u>IA</u>
Project:			
<b>Receipt Information</b>			
Date/Time Received:	<u>4/12/24</u>	TIME	<u>1600</u>
Received By:	<u>SPB</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>3</u> of <u>3</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? ↓  _____
<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>Y</u>	Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>0.8</u>	Corrected Temp (°C): <u>0.8</u>	
• Sample Container Temperature			
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>			
_____			
_____			
_____			

Eurofins TestAmerica Cedar Falls  
3019 Venture Way  
Cedar Falls IA 50613-6507  
phone 319 277 2401 fax 319 277 2425

### Chain of Custody Record



Client Contact		Project Manager		Site Contact		Carrier		Date		COC No		
Client Name	Cell	Email	Project Manager	Analysis Turnaround Time	Lab Contact						COCs	
Kevin Jensen SCS Engineers				<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS  <input type="checkbox"/> Other _____							Sampler For Lab Use Only Walk-In Client Lab Sampling	
650 All-State Court Suite 100 West Des Moines Iowa 50225 515-631-5154 S. 100 C. 20 - 2. C. M. Project Name ADM Landfill Sampling Spring 2024 Site ADM Landfill P O #				<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> day <sup>s</sup> <input type="checkbox"/> day							Job / SDG No	
Sample Identification		Sample Date	Sample Time	Sample Type c-c Cont.	Matrix	# of Cont.					Total Metals See Below (1)	
Vet W. Ills. hate		4-10	1600	G	H2O		x	x	x	x	EPA 8260C (VOCS) EPA 8270D (SVOC's)	
Preservation Used		1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other									Total Cyanide	
Comments		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(s) to dispose of the sample										
<input type="checkbox"/> Non-Haz. and		<input type="checkbox"/> Skin Irritant <input type="checkbox"/> Eye Irritant <input type="checkbox"/> Flammable										
Special Instructions/QC Requirements & Comments												
(1) Total Metals Aluminum Arsenic Boron Cadmium Cobalt Copper Iron Lead Magnesium Nickel Potassium Zinc												
Custody Seal intact		<input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No		Cooler Temp (°C)		Obs d	Confd	Therm ID No			
Reinquished by		<i>Hanmer Both</i>	Company	SCS	Date/Time	8/12-10	Received by	<i>Eurofins</i>	Company	Company	Date/Time	
Reinquished by			Company		Date/Time		Received in Laboratory by	<i>Eurofins</i>	Company	Company	Date/Time	

Form No CA-C-WL002 Rev 4.23 dated 4/16/2019

## Eurofins TestAmerica Chain of Custody Record

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EST[Am]erica Des Mones S<sup>2</sup>  
Client Contact  
Project Manager  
Regulatory Program  
□ DK □ NPOE □ FQCA □ Other  
Groundwater  
Site Contact  
Email  
Cell:  
Analysis Turnaround Time  
□ CALENDAR DAY □ WORKING DAYS  
Other \_\_\_\_\_  
2 weeks  
1 -ext day  
1 day  
P.O. #

Sample Identification	Sample Date	Sample Time	Sample Type	C-Code	Matrix	10 <sup>6</sup> Com.	Site Contact		Date	Carrier		COC No			
							Lab Contact								
MW 1	4-10-21	1512	G	H2O											
MW 2	4-9-21	1444	G												
MW 3	4-9-21	1805	G												
MW 4	4-9-21	1933	G												
MW 5	4-9-21	1730	G												
MW 6	4-9-21	1650	G												
MW 7	4-9-21	1611	G												
MW 8	4-9-21	1534	G												
MW 9	4-9-21	1501	G												
MW 10	4-9-21	1417	G												
MW 11	4-10-21	1107	G												
MW 12	4-10-21	1041	G												
MW 13	4-10-21	1504	G												
MW 14	4-10-21	1141	G												
MW 15	4-10-21	1208	G												
MW 16	4-10-21	1255	G												
MW 17	4-10-21	1326	G												
MW 18	4-10-21	1343	G												
MW D	4-10-21	1255	G												
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH 6=Other														Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Possible Hazard Identification Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comment Section. If the lab is to dispose of the sample															
<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Corrosive		<input type="checkbox"/> Explosive		<input type="checkbox"/> Toxic		<input type="checkbox"/> Infectious		<input type="checkbox"/> Radioactive		<input type="checkbox"/> Other	
Special Instructions/QC Requirements & Comments <i>Iced</i>															
<input type="checkbox"/> Custody Seals intact		<input type="checkbox"/> Yes		<input type="checkbox"/> No		<input type="checkbox"/> Custody Seal No		<input type="checkbox"/> Cooler Temp ( C )		<input type="checkbox"/> Obs d.		<input type="checkbox"/> Corrd		<input type="checkbox"/> Therm ID No	
Relinquished by <i>Kanner Roth</i>		Company <i>SCS</i>		Company <i>SCS</i>		Date/Time <i>4/12-14</i>		Received by <i>Eurofins</i>		Date/Time <i>4/12-14</i>		Custodian <i>Eurofins</i>		Date/Time <i>4/12-14 17:00</i>	
Relinquished by		Company		Company		Date/Time		Received by		Date/Time		Company		Date/Time	
Relinquished by		Company		Company		Date/Time		Received in Laboratory by		Date/Time		Company		Date/Time	

Form No CA-C-WI-002 Rev 4.23 dated 4/16/2019

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## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-278908-1

**Login Number:** 278908

**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: Kevin Jensen  
SCS Engineers  
1690 All State Court  
Suite 100  
West Des Moines, Iowa 50265

Generated 8/27/2024 2:39:51 PM Revision 1

## JOB DESCRIPTION

Archer Daniels Midland Landfill

## JOB NUMBER

310-286332-1

# Eurofins Cedar Falls

## Job Notes

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

## Authorization



Generated  
8/27/2024 2:39:51 PM  
Revision 1

Authorized for release by  
Samuel Miller, Project Management Assistant I  
[Samuel.Miller@et.eurofinsus.com](mailto:Samuel.Miller@et.eurofinsus.com)  
Designee for  
Mary Yang, Client Service Manager  
[Mary.Yang@ET.EurofinsUS.com](mailto:Mary.Yang@ET.EurofinsUS.com)  
(319)595-2025

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# Case Narrative

Client: SCS Engineers  
Project: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Job ID: 310-286332-1**

**Eurofins Cedar Falls**

## Job Narrative 310-286332-1

### REVISION

The report being provided is a revision of the original report sent on 8/5/2024. The report (revision 1) is being revised due to Client requested only Bis[2-ethylhexyl]phthalate for samples MW-7 and MW09.

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

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

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

### **Receipt**

The samples were received on 7/19/2024 5:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.4°C, 1.4°C, 3.8°C and 5.0°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-9 (310-286332-8).

Method 8260D: The method blank for analytical batch 310-428392 contained Hexane above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-analysis of samples was not performed.

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 310-428188 recovered above the upper control limit for 3-Nitroaniline (21.1%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E\_SIM: Internal standard (ISTD) response for the following samples were outside of acceptance limits: MW-9 (310-286332-8) and MW-11 (310-286332-10). The ISTD failed low causing the data to be biased high. The affected analytes were non-detects therefore the data has been reported.

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

### **HPLC/IC**

Method 9056A\_ORGFM\_28D: The following samples were diluted due to the nature of the sample matrix: MW-3 (310-286332-5), MW-7 (310-286332-7), MW-11 (310-286332-10) and MW-13 (310-286332-12). Elevated reporting limits (RLs) are provided.

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

### **Metals**

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: MW-5 (310-286332-6), MW-7 (310-286332-7), MW-9 (310-286332-8) and MW-13 (310-286332-12). 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.

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## Case Narrative

Client: SCS Engineers  
Project: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Job ID: 310-286332-1 (Continued)**

**Eurofins Cedar Falls**

### 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: Archer Daniels Midland Landfill

Job ID: 310-286332-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
310-286332-1	MW-1	Water	07/17/24 15:02	07/19/24 17:30	1
310-286332-2	MW-6	Water	07/18/24 09:14	07/19/24 17:30	2
310-286332-3	MW-17	Water	07/17/24 13:16	07/19/24 17:30	3
310-286332-4	MW-2	Water	07/17/24 15:54	07/19/24 17:30	4
310-286332-5	MW-3	Water	07/16/24 14:25	07/19/24 17:30	5
310-286332-6	MW-5	Water	07/16/24 16:17	07/19/24 17:30	6
310-286332-7	MW-7	Water	07/16/24 17:23	07/19/24 17:30	7
310-286332-8	MW-9	Water	07/17/24 19:01	07/19/24 17:30	8
310-286332-9	MW-10	Water	07/17/24 18:03	07/19/24 17:30	9
310-286332-10	MW-11	Water	07/17/24 11:52	07/19/24 17:30	10
310-286332-11	MW-12	Water	07/17/24 10:51	07/19/24 17:30	11
310-286332-12	MW-13	Water	07/17/24 16:58	07/19/24 17:30	12
310-286332-13	MW-14	Water	07/17/24 09:51	07/19/24 17:30	13
310-286332-14	MW-18	Water	07/17/24 14:11	07/19/24 17:30	14
310-286332-15	MW-4	Water	07/16/24 15:26	07/19/24 17:30	15
310-286332-16	MW-8	Water	07/16/24 18:24	07/19/24 17:30	
310-286332-17	MW-16	Water	07/17/24 12:33	07/19/24 17:30	
310-286332-18	MW-D	Water	07/16/24 15:26	07/19/24 17:30	
310-286332-19	MW-15	Water	07/17/24 09:13	07/19/24 17:30	
310-286332-26	Trip Blank 1	Water	07/17/24 00:00	07/19/24 17:30	
310-286332-28	Trip Blank 3	Water	07/17/24 00:00	07/19/24 17:30	

# Detection Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Client Sample ID: MW-1

## Lab Sample ID: 310-286332-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	183		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	33.0		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	0.0859	J	0.100	0.0760	mg/L	1		6020B	Total/NA
Magnesium	50.1	B	0.500	0.150	mg/L	1		6020B	Total/NA

## Client Sample ID: MW-6

## Lab Sample ID: 310-286332-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	385		20.0	9.00	mg/L	20		9056A	Total/NA
Sulfate	293		20.0	8.40	mg/L	20		9056A	Total/NA
Arsenic	0.0238		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	10.0		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00143		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	11.3		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	159		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	0.244		0.0100	0.00360	mg/L	1		6020B	Total/NA
Nickel	0.0180	J	0.0200	0.00840	mg/L	4		6020B	Total/NA
Ammonia	167		7.50	3.75	mg/L	37.5		350.1	Total/NA
Chemical Oxygen Demand	46.9		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	210		7.50	5.55	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-17

## Lab Sample ID: 310-286332-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	71.6		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	51.0		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	1.55		0.100	0.0760	mg/L	1		6020B	Total/NA
Magnesium	29.0	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.109		0.0100	0.00360	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	8.06		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	1.88		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-2

## Lab Sample ID: 310-286332-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	30.1		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	22.9		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	0.251		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000434	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	0.0789	J	0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	27.2	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	1.20		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	1.95		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	10.5		5.00	4.80	mg/L	1		5220D LL	Total/NA

## Client Sample ID: MW-3

## Lab Sample ID: 310-286332-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	298		5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.0272		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	3.81		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000835		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	42.7		0.100	0.0360	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

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# Detection Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Client Sample ID: MW-3 (Continued)

## Lab Sample ID: 310-286332-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	84.9	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	5.69		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	3.08		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	43.8		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	87.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-5

## Lab Sample ID: 310-286332-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	192		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	840		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.0510		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	22.4		0.700	0.532	mg/L	7		6020B	Total/NA
Cobalt	0.0130		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	39.9		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	514		3.50	1.05	mg/L	7		6020B	Total/NA
Manganese	2.20		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	125		7.50	3.75	mg/L	37.5		350.1	Total/NA
Chemical Oxygen Demand	217		50.0	48.0	mg/L	10		5220D LL	Total/NA
Total Suspended Solids	104		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-7

## Lab Sample ID: 310-286332-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	195		5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.0297		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	31.6		1.00	0.760	mg/L	10		6020B	Total/NA
Cobalt	0.00420		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	11.1		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	240		5.00	1.50	mg/L	10		6020B	Total/NA
Manganese	0.709		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	572		20.0	10.0	mg/L	100		350.1	Total/NA
Chemical Oxygen Demand	305		50.0	48.0	mg/L	10		5220D LL	Total/NA
Total Suspended Solids	45.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-9

## Lab Sample ID: 310-286332-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.95		0.500	0.220	ug/L	1		8260D	Total/NA
Carbon disulfide	1.10		1.00	0.450	ug/L	1		8260D	Total/NA
Toluene	6.36		1.00	0.430	ug/L	1		8260D	Total/NA
Chloride	38.9		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	354		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.0485		0.0140	0.00371	mg/L	7		6020B	Total/NA
Boron	12.9		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00349 J		0.00350	0.00119	mg/L	7		6020B	Total/NA
Iron	0.0497 J		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	251 B		3.50	1.05	mg/L	7		6020B	Total/NA
Manganese	1.13		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	389		20.0	10.0	mg/L	100		350.1	Total/NA
Chemical Oxygen Demand	280		50.0	48.0	mg/L	10		5220D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Detection Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Client Sample ID: MW-10

## Lab Sample ID: 310-286332-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	76.3		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	94.0		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.000736	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	1.67		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.00104		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	1.40		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	67.6	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.279		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	9.38		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	18.2		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	715		5.00	3.70	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-11

## Lab Sample ID: 310-286332-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.50	J	10.0	3.10	ug/L	1		8260D	Total/NA
Acenaphthene	0.149	J	0.200	0.0490	ug/L	1		8270E SIM	Total/NA
Fluorene	0.0781	J	0.200	0.0430	ug/L	1		8270E SIM	Total/NA
Chloride	293		5.00	2.25	mg/L	5		9056A	Total/NA
Arsenic	0.0575		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	1.74		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.0100		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	63.6		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	95.4		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	1.30		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	26.1		1.88	0.938	mg/L	9.38		350.1	Total/NA
Chemical Oxygen Demand	122		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	138		15.0	11.1	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-12

## Lab Sample ID: 310-286332-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	298		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	23.2		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.0704		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	2.41		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.00175		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	25.0		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	77.8	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.930		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	17.7		1.88	0.938	mg/L	9.38		350.1	Total/NA
Chemical Oxygen Demand	28.7		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	52.5		3.75	2.78	mg/L	1		I-3765-85	Total/NA

## Client Sample ID: MW-13

## Lab Sample ID: 310-286332-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	64.6		10.0	4.50	mg/L	10		9056A	Total/NA
Arsenic	0.0952		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	9.79		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00239		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	29.2		0.100	0.0360	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: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

## **Lab Sample ID: 310-286332-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	263		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	1.71		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	59.3		1.88	0.938	mg/L		9.38	350.1	Total/NA
Chemical Oxygen Demand	114		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	79.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

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

## **Lab Sample ID: 310-286332-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	357		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	206		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.000948	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	1.54		0.400	0.304	mg/L	4		6020B	Total/NA
Cobalt	0.00107		0.000500	0.000170	mg/L	1		6020B	Total/NA
Magnesium	102		2.00	0.600	mg/L	4		6020B	Total/NA
Manganese	1.14		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	11.5		1.88	0.938	mg/L		9.38	350.1	Total/NA
Chemical Oxygen Demand	22.8		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	15.0		1.88	1.39	mg/L	1		I-3765-85	Total/NA

## **Client Sample ID: MW-18**

## **Lab Sample ID: 310-286332-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	39.2		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	60.7		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.00503		0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.383		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.00267		0.000500	0.000170	mg/L	1		6020B	Total/NA
Iron	2.02		0.100	0.0360	mg/L	1		6020B	Total/NA
Magnesium	33.9	B	0.500	0.150	mg/L	1		6020B	Total/NA
Manganese	0.274		0.0100	0.00360	mg/L	1		6020B	Total/NA
Ammonia	2.63		0.200	0.100	mg/L	1		350.1	Total/NA
Chemical Oxygen Demand	29.1		5.00	4.80	mg/L	1		5220D LL	Total/NA
Total Suspended Solids	10.3		2.50	1.85	mg/L	1		I-3765-85	Total/NA

## **Client Sample ID: MW-4**

## **Lab Sample ID: 310-286332-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	177		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	49.6		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	0.342		0.100	0.0760	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	8.41		5.00	4.80	mg/L	1		5220D LL	Total/NA

## **Client Sample ID: MW-8**

## **Lab Sample ID: 310-286332-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	146		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	47.5		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	0.358		0.100	0.0760	mg/L	1		6020B	Total/NA
Cobalt	0.000225	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	6.31		5.00	4.80	mg/L	1		5220D LL	Total/NA

This Detection Summary does not include radiochemical test results.

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# Detection Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## **Client Sample ID: MW-16**

## **Lab Sample ID: 310-286332-17**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	68.3		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	49.5		10.0	4.20	mg/L	10		9056A	Total/NA
Arsenic	0.000670	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Boron	0.264		0.100	0.0760	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	12.6		5.00	4.80	mg/L	1		5220D LL	Total/NA

## **Client Sample ID: MW-D**

## **Lab Sample ID: 310-286332-18**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	180		10.0	4.50	mg/L	10		9056A	Total/NA
Sulfate	48.0		10.0	4.20	mg/L	10		9056A	Total/NA
Boron	0.320		0.100	0.0760	mg/L	1		6020B	Total/NA

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

## **Lab Sample ID: 310-286332-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	90.1		5.00	2.25	mg/L	5		9056A	Total/NA
Sulfate	86.1		5.00	2.10	mg/L	5		9056A	Total/NA
Boron	0.215		0.100	0.0760	mg/L	1		6020B	Total/NA
Magnesium	51.7	B	0.500	0.150	mg/L	1		6020B	Total/NA
Chemical Oxygen Demand	11.6		5.00	4.80	mg/L	1		5220D LL	Total/NA

## **Client Sample ID: Trip Blank 1**

## **Lab Sample ID: 310-286332-26**

No Detections.

## **Client Sample ID: Trip Blank 3**

## **Lab Sample ID: 310-286332-28**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-1**

Date Collected: 07/17/24 15:02

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-1**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183		10.0	4.50	mg/L			08/01/24 18:55	10
Sulfate	33.0		10.0	4.20	mg/L			08/01/24 18:55	10

## 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		07/24/24 09:30	07/25/24 12:57	1
Boron	0.0859	J	0.100	0.0760	mg/L		07/24/24 09:30	07/25/24 12:57	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 12:57	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 12:57	1
Magnesium	50.1	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 12:57	1
Manganese	<0.0100		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 12:57	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/24/24 09:30	07/26/24 20:13	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200	F1	0.200	0.100	mg/L			07/31/24 17:02	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/23/24 08:42	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-6**

Date Collected: 07/18/24 09:14  
Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-2**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	385		20.0	9.00	mg/L			08/01/24 19:38	20
Sulfate	293		20.0	8.40	mg/L			08/01/24 19:38	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0238		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:08	1
Boron	10.0		0.400	0.304	mg/L		07/24/24 09:30	07/26/24 20:24	4
Cobalt	0.00143		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:08	1
Iron	11.3		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:08	1
Magnesium	159		2.00	0.600	mg/L		07/24/24 09:30	07/26/24 20:24	4
Manganese	0.244		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:08	1
Nickel	0.0180 J		0.0200	0.00840	mg/L		07/24/24 09:30	07/26/24 20:24	4

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	167		7.50	3.75	mg/L			07/31/24 18:02	37.5
Chemical Oxygen Demand (SM 5220D LL)	46.9		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	210		7.50	5.55	mg/L			07/23/24 16:15	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-17**

Date Collected: 07/17/24 13:16

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-3**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71.6		10.0	4.50	mg/L			08/01/24 19:52	10
Sulfate	51.0		10.0	4.20	mg/L			08/01/24 19:52	10

## 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		07/24/24 09:30	07/25/24 13:10	1
Boron	1.55		0.100	0.0760	mg/L		07/24/24 09:30	07/25/24 13:10	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:10	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:10	1
Magnesium	29.0	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 13:10	1
Manganese	0.109		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:10	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/24/24 09:30	07/26/24 20:27	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:04	1
Chemical Oxygen Demand (SM 5220D LL)	8.06		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	1.88		1.88	1.39	mg/L			07/23/24 11:38	1

# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-2**

Date Collected: 07/17/24 15:54

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-4**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.1		10.0	4.50	mg/L			08/01/24 20:06	10
Sulfate	22.9		10.0	4.20	mg/L			08/01/24 20:06	10

## 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		07/24/24 09:30	07/25/24 13:21	1
Boron	0.251		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 20:31	1
Cobalt	0.000434 J		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:21	1
Iron	0.0789 J		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:21	1
Magnesium	27.2 B		0.500	0.150	mg/L		07/24/24 09:30	07/25/24 13:21	1
Manganese	1.20		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:21	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	1.95		0.200	0.100	mg/L			07/31/24 17:05	1
Chemical Oxygen Demand (SM 5220D LL)	10.5		5.00	4.80	mg/L			07/25/24 09:46	1
Phenols, Total (SW846 9066)	<0.0200		0.0200	0.0100	mg/L		07/24/24 08:44	07/24/24 17:33	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/23/24 11:38	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-3**

**Lab Sample ID: 310-286332-5**

**Matrix: Water**

Date Collected: 07/16/24 14:25  
Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	298		5.00	2.25	mg/L			08/01/24 20:20	5
Sulfate	<5.00		5.00	2.10	mg/L			08/01/24 20:20	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0272		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:24	1
Boron	3.81		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 20:35	1
Cobalt	0.000835		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:24	1
Iron	42.7		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:24	1
Magnesium	84.9	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 13:24	1
Manganese	5.69		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:24	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	3.08		0.200	0.100	mg/L			07/31/24 17:06	1
Chemical Oxygen Demand (SM 5220D LL)	43.8		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	87.3		5.00	3.70	mg/L			07/22/24 16:45	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-5**

Date Collected: 07/16/24 16:17

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-6**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		10.0	4.50	mg/L			08/01/24 20:34	10
Sulfate	840		10.0	4.20	mg/L			08/01/24 20:34	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0510		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:26	1
Boron	22.4		0.700	0.532	mg/L		07/24/24 09:30	07/26/24 20:38	7
Cobalt	0.0130		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:26	1
Iron	39.9		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:26	1
Magnesium	514		3.50	1.05	mg/L		07/24/24 09:30	07/26/24 20:38	7
Manganese	2.20		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:26	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	125		7.50	3.75	mg/L			07/31/24 18:02	37.5
Chemical Oxygen Demand (SM 5220D LL)	217		50.0	48.0	mg/L			07/25/24 09:46	10
Total Suspended Solids (USGS I-3765-85)	104		5.00	3.70	mg/L			07/22/24 16:45	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

**Client Sample ID: MW-7**

**Lab Sample ID: 310-286332-7**

Date Collected: 07/16/24 17:23

Matrix: Water

Date Received: 07/19/24 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.4		10.4	5.73	ug/L		07/23/24 12:44	07/24/24 18:46	1
<b>Surrogate</b>									
Nitrobenzene-d5 (Surr)	100		45 - 129				07/23/24 12:44	07/24/24 18:46	1
2-Fluorobiphenyl (Surr)	77		39 - 118				07/23/24 12:44	07/24/24 18:46	1
Terphenyl-d14 (Surr)	69		12 - 144				07/23/24 12:44	07/24/24 18:46	1

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	195		5.00	2.25	mg/L			08/01/24 20:48	5
Sulfate	<5.00		5.00	2.10	mg/L			08/01/24 20:48	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0297		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:28	1
Boron	31.6		1.00	0.760	mg/L		07/24/24 09:30	07/26/24 20:42	10
Cobalt	0.00420		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:28	1
Iron	11.1		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:28	1
Magnesium	240		5.00	1.50	mg/L		07/24/24 09:30	07/26/24 20:42	10
Manganese	0.709		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:28	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	572		20.0	10.0	mg/L			07/31/24 18:50	100
Chemical Oxygen Demand (SM 5220D LL)	305		50.0	48.0	mg/L			07/25/24 09:46	10
Phenols, Total (SW846 9066)	<0.0200		0.0200	0.0100	mg/L		07/24/24 08:44	07/24/24 17:33	1
Total Suspended Solids (USGS I-3765-85)	45.3		5.00	3.70	mg/L			07/22/24 16:45	1

# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-9**

Date Collected: 07/17/24 19:01

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-8**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/25/24 13:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/25/24 13:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/25/24 13:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/25/24 13:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/25/24 13:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/25/24 13:36	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/25/24 13:36	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/25/24 13:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/25/24 13:36	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/25/24 13:36	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/25/24 13:36	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/25/24 13:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/25/24 13:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/25/24 13:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/25/24 13:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/25/24 13:36	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/25/24 13:36	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/25/24 13:36	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/25/24 13:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/25/24 13:36	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/25/24 13:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/25/24 13:36	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/25/24 13:36	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/25/24 13:36	1
Acetone	<10.0		10.0	3.10	ug/L			07/25/24 13:36	1
<b>Benzene</b>	<b>9.95</b>		0.500	0.220	ug/L			07/25/24 13:36	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/25/24 13:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/25/24 13:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/25/24 13:36	1
Bromoform	<5.00		5.00	0.780	ug/L			07/25/24 13:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/25/24 13:36	1
<b>Carbon disulfide</b>	<b>1.10</b>		1.00	0.450	ug/L			07/25/24 13:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/25/24 13:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/25/24 13:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/25/24 13:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/25/24 13:36	1
Chloroform	<3.00		3.00	1.30	ug/L			07/25/24 13:36	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/25/24 13:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/25/24 13:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/25/24 13:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/25/24 13:36	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/25/24 13:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/25/24 13:36	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/25/24 13:36	1
Hexane	<1.00		1.00	0.780	ug/L			07/25/24 13:36	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/25/24 13:36	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/25/24 13:36	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/25/24 13:36	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/25/24 13:36	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-9**

Date Collected: 07/17/24 19:01

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-8**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/25/24 13:36	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/25/24 13:36	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/25/24 13:36	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/25/24 13:36	1
Styrene	<1.00		1.00	0.370	ug/L			07/25/24 13:36	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/25/24 13:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/25/24 13:36	1
<b>Toluene</b>	<b>6.36</b>		1.00	0.430	ug/L			07/25/24 13:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/25/24 13:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/25/24 13:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/25/24 13:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/25/24 13:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/25/24 13:36	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/25/24 13:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Dibromofluoromethane (Surr)</i>	100		73 - 130					07/25/24 13:36	1
<i>Toluene-d8 (Surr)</i>	100		80 - 120					07/25/24 13:36	1
<i>4-Bromofluorobenzene (Surr)</i>	103		80 - 120					07/25/24 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.208		0.208	0.0510	ug/L		07/24/24 16:06	07/26/24 05:55	1
Acenaphthylene	<0.208		0.208	0.0656	ug/L		07/24/24 16:06	07/26/24 05:55	1
Anthracene	<0.208		0.208	0.0635	ug/L		07/24/24 16:06	07/26/24 05:55	1
Benzo[a]anthracene	<0.208		0.208	0.0896	ug/L		07/24/24 16:06	07/26/24 05:55	1
Benzo[a]pyrene	<0.208		0.208	0.125	ug/L		07/24/24 16:06	07/26/24 05:55	1
Benzo[b]fluoranthene	<0.208		0.208	0.104	ug/L		07/24/24 16:06	07/26/24 05:55	1
Benzo[g,h,i]perylene	<0.208		0.208	0.125	ug/L		07/24/24 16:06	07/26/24 05:55	1
Benzo[k]fluoranthene	<0.208		0.208	0.115	ug/L		07/24/24 16:06	07/26/24 05:55	1
Chrysene	<0.208		0.208	0.0760	ug/L		07/24/24 16:06	07/26/24 05:55	1
Dibenz(a,h)anthracene	<0.208		0.208	0.135	ug/L		07/24/24 16:06	07/26/24 05:55	1
Fluoranthene	<0.208		0.208	0.125	ug/L		07/24/24 16:06	07/26/24 05:55	1
Fluorene	<0.208		0.208	0.0448	ug/L		07/24/24 16:06	07/26/24 05:55	1
Indeno[1,2,3-cd]pyrene	<0.208		0.208	0.115	ug/L		07/24/24 16:06	07/26/24 05:55	1
Naphthalene	<0.521 *3		0.521	0.271	ug/L		07/24/24 16:06	07/26/24 05:55	1
Phenanthrene	<0.208		0.208	0.104	ug/L		07/24/24 16:06	07/26/24 05:55	1
Pyrene	<0.208		0.208	0.0979	ug/L		07/24/24 16:06	07/26/24 05:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.4		10.4	5.73	ug/L		07/23/24 12:44	07/24/24 19:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Nitrobenzene-d5 (Surr)</i>	90		45 - 129				07/23/24 12:44	07/24/24 19:12	1
<i>2-Fluorobiphenyl (Surr)</i>	71		39 - 118				07/23/24 12:44	07/24/24 19:12	1
<i>Terphenyl-d14 (Surr)</i>	65		12 - 144				07/23/24 12:44	07/24/24 19:12	1

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.9		10.0	4.50	mg/L			08/01/24 21:02	10

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-9**

Date Collected: 07/17/24 19:01

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-8**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	354		10.0	4.20	mg/L			08/01/24 21:02	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0485		0.0140	0.00371	mg/L		07/24/24 09:30	07/31/24 14:01	7
Boron	12.9		0.400	0.304	mg/L		07/24/24 09:30	07/26/24 20:46	4
Cobalt	0.00349 J		0.00350	0.00119	mg/L		07/24/24 09:30	07/31/24 14:01	7
Iron	0.0497 J		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:30	1
Magnesium	251 B		3.50	1.05	mg/L		07/24/24 09:30	07/29/24 11:41	7
Manganese	1.13		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:30	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	389		20.0	10.0	mg/L			07/31/24 18:51	100
Chemical Oxygen Demand (SM 5220D LL)	280		50.0	48.0	mg/L			07/25/24 09:46	10
Phenols, Total (SW846 9066)	<0.0208		0.0208	0.0104	mg/L		07/24/24 08:44	07/24/24 17:34	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/23/24 11:38	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-10**

Date Collected: 07/17/24 18:03

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-9**

Matrix: Water

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.3		10.0	4.50	mg/L			08/01/24 21:44	10
Sulfate	94.0		10.0	4.20	mg/L			08/01/24 21:44	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000736	J	0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:33	1
Boron	1.67		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:04	1
Cobalt	0.00104		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:33	1
Iron	1.40		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:33	1
Magnesium	67.6	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 13:33	1
Manganese	0.279		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	9.38		0.200	0.100	mg/L			07/31/24 17:11	1
Chemical Oxygen Demand (SM 5220D LL)	18.2		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	715		5.00	3.70	mg/L			07/23/24 11:38	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-11**

Date Collected: 07/17/24 11:52

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-10**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/24/24 12:32	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/24/24 12:32	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/24/24 12:32	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/24/24 12:32	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/24/24 12:32	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/24 12:32	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/24/24 12:32	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/24/24 12:32	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/24/24 12:32	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/24/24 12:32	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/24/24 12:32	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/24/24 12:32	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/24/24 12:32	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/24/24 12:32	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/24/24 12:32	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/24/24 12:32	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/24/24 12:32	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/24/24 12:32	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/24/24 12:32	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/24/24 12:32	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/24/24 12:32	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/24/24 12:32	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/24/24 12:32	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/24/24 12:32	1
<b>Acetone</b>	<b>4.50</b>	<b>J</b>	10.0	3.10	ug/L			07/24/24 12:32	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/24 12:32	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/24/24 12:32	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/24/24 12:32	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/24/24 12:32	1
Bromoform	<5.00		5.00	0.780	ug/L			07/24/24 12:32	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/24/24 12:32	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/24/24 12:32	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/24/24 12:32	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/24/24 12:32	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/24/24 12:32	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/24/24 12:32	1
Chloroform	<3.00		3.00	1.30	ug/L			07/24/24 12:32	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/24/24 12:32	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/24 12:32	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/24/24 12:32	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/24/24 12:32	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/24/24 12:32	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/24/24 12:32	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/24/24 12:32	1
Hexane	<1.00		1.00	0.780	ug/L			07/24/24 12:32	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/24/24 12:32	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/24/24 12:32	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/24/24 12:32	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/24/24 12:32	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-11**

Date Collected: 07/17/24 11:52

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-10**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 12:32	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 12:32	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/24/24 12:32	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 12:32	1
Styrene	<1.00		1.00	0.370	ug/L			07/24/24 12:32	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 12:32	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/24/24 12:32	1
Toluene	<1.00		1.00	0.430	ug/L			07/24/24 12:32	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/24/24 12:32	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/24/24 12:32	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/24/24 12:32	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/24/24 12:32	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/24/24 12:32	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/24/24 12:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	101		73 - 130					07/24/24 12:32	1
Toluene-d8 (Surr)	101		80 - 120					07/24/24 12:32	1
4-Bromofluorobenzene (Surr)	102		80 - 120					07/24/24 12:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acenaphthene</b>	<b>0.149 J</b>		0.200	0.0490	ug/L			07/24/24 16:06	07/26/24 06:14
Acenaphthylene	<0.200		0.200	0.0630	ug/L			07/24/24 16:06	07/26/24 06:14
Anthracene	<0.200		0.200	0.0610	ug/L			07/24/24 16:06	07/26/24 06:14
Benzo[a]anthracene	<0.200		0.200	0.0860	ug/L			07/24/24 16:06	07/26/24 06:14
Benzo[a]pyrene	<0.200		0.200	0.120	ug/L			07/24/24 16:06	07/26/24 06:14
Benzo[b]fluoranthene	<0.200		0.200	0.100	ug/L			07/24/24 16:06	07/26/24 06:14
Benzo[g,h,i]perylene	<0.200		0.200	0.120	ug/L			07/24/24 16:06	07/26/24 06:14
Benzo[k]fluoranthene	<0.200		0.200	0.110	ug/L			07/24/24 16:06	07/26/24 06:14
Chrysene	<0.200		0.200	0.0730	ug/L			07/24/24 16:06	07/26/24 06:14
Dibenz(a,h)anthracene	<0.200		0.200	0.130	ug/L			07/24/24 16:06	07/26/24 06:14
Fluoranthene	<0.200		0.200	0.120	ug/L			07/24/24 16:06	07/26/24 06:14
<b>Fluorene</b>	<b>0.0781 J</b>		0.200	0.0430	ug/L			07/24/24 16:06	07/26/24 06:14
Indeno[1,2,3-cd]pyrene	<0.200		0.200	0.110	ug/L			07/24/24 16:06	07/26/24 06:14
Naphthalene	<0.500 *3		0.500	0.260	ug/L			07/24/24 16:06	07/26/24 06:14
Phenanthrene	<0.200		0.200	0.100	ug/L			07/24/24 16:06	07/26/24 06:14
Pyrene	<0.200		0.200	0.0940	ug/L			07/24/24 16:06	07/26/24 06:14

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>293</b>		5.00	2.25	mg/L			08/01/24 21:58	5
Sulfate	<5.00		5.00	2.10	mg/L			08/01/24 21:58	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.0575</b>		0.00200	0.000530	mg/L			07/24/24 09:30	07/25/24 13:35
<b>Boron</b>	<b>1.74</b>		0.400	0.304	mg/L			07/24/24 09:30	07/26/24 21:08
<b>Cobalt</b>	<b>0.0100</b>		0.000500	0.000170	mg/L			07/24/24 09:30	07/25/24 13:35
<b>Iron</b>	<b>63.6</b>		0.100	0.0360	mg/L			07/24/24 09:30	07/25/24 13:35

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-11**

**Lab Sample ID: 310-286332-10**

Date Collected: 07/17/24 11:52

Matrix: Water

Date Received: 07/19/24 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	95.4		2.00	0.600	mg/L		07/24/24 09:30	07/26/24 21:08	4
Manganese	1.30		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:35	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	26.1		1.88	0.938	mg/L		07/31/24 17:41	9.38	
Chemical Oxygen Demand (SM 5220D LL)	122		5.00	4.80	mg/L		07/25/24 09:46	1	
Total Suspended Solids (USGS I-3765-85)	138		15.0	11.1	mg/L		07/23/24 08:42	1	

# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-12**

Date Collected: 07/17/24 10:51

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-11**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/24/24 12:10	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/24/24 12:10	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/24/24 12:10	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/24/24 12:10	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/24/24 12:10	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/24 12:10	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/24/24 12:10	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/24/24 12:10	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/24/24 12:10	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/24/24 12:10	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/24/24 12:10	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/24/24 12:10	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/24/24 12:10	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/24/24 12:10	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/24/24 12:10	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/24/24 12:10	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/24/24 12:10	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/24/24 12:10	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/24/24 12:10	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/24/24 12:10	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/24/24 12:10	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/24/24 12:10	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/24/24 12:10	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/24/24 12:10	1
Acetone	<10.0		10.0	3.10	ug/L			07/24/24 12:10	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/24 12:10	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/24/24 12:10	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/24/24 12:10	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/24/24 12:10	1
Bromoform	<5.00		5.00	0.780	ug/L			07/24/24 12:10	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/24/24 12:10	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/24/24 12:10	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/24/24 12:10	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/24/24 12:10	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/24/24 12:10	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/24/24 12:10	1
Chloroform	<3.00		3.00	1.30	ug/L			07/24/24 12:10	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/24/24 12:10	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/24 12:10	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/24/24 12:10	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/24/24 12:10	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/24/24 12:10	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/24/24 12:10	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/24/24 12:10	1
Hexane	<1.00		1.00	0.780	ug/L			07/24/24 12:10	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/24/24 12:10	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/24/24 12:10	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/24/24 12:10	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/24/24 12:10	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-12**

Date Collected: 07/17/24 10:51

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-11**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 12:10	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 12:10	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/24/24 12:10	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 12:10	1
Styrene	<1.00		1.00	0.370	ug/L			07/24/24 12:10	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 12:10	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/24/24 12:10	1
Toluene	<1.00		1.00	0.430	ug/L			07/24/24 12:10	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/24/24 12:10	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/24/24 12:10	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/24/24 12:10	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/24/24 12:10	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/24/24 12:10	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/24/24 12:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Dibromofluoromethane (Surr)	102		73 - 130					07/24/24 12:10	1
Toluene-d8 (Surr)	99		80 - 120					07/24/24 12:10	1
4-Bromofluorobenzene (Surr)	101		80 - 120					07/24/24 12:10	1

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	298		5.00	2.25	mg/L			08/01/24 22:12	5
Sulfate	23.2		5.00	2.10	mg/L			08/01/24 22:12	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0704		0.00200	0.000530	mg/L			07/24/24 09:30	07/25/24 13:37
Boron	2.41		0.100	0.0760	mg/L			07/24/24 09:30	07/26/24 21:11
Cobalt	0.00175		0.000500	0.000170	mg/L			07/24/24 09:30	07/25/24 13:37
Iron	25.0		0.100	0.0360	mg/L			07/24/24 09:30	07/25/24 13:37
Magnesium	77.8	B	0.500	0.150	mg/L			07/24/24 09:30	07/25/24 13:37
Manganese	0.930		0.0100	0.00360	mg/L			07/24/24 09:30	07/25/24 13:37

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	17.7		1.88	0.938	mg/L			07/31/24 17:42	9.38
Chemical Oxygen Demand (SM 5220D LL)	28.7		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	52.5		3.75	2.78	mg/L			07/23/24 08:42	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-13**

**Lab Sample ID: 310-286332-12**

**Matrix: Water**

Date Collected: 07/17/24 16:58  
Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.6		10.0	4.50	mg/L			08/01/24 22:27	10
Sulfate	<5.00		5.00	2.10	mg/L			08/02/24 13:07	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0952		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:41	1
Boron	9.79		0.400	0.304	mg/L		07/24/24 09:30	07/26/24 21:18	4
Cobalt	0.00239		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:41	1
Iron	29.2		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:41	1
Magnesium	263		2.00	0.600	mg/L		07/24/24 09:30	07/26/24 21:18	4
Manganese	1.71		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:41	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	59.3		1.88	0.938	mg/L			07/31/24 17:43	9.38
Chemical Oxygen Demand (SM 5220D LL)	114		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	79.3		5.00	3.70	mg/L			07/23/24 11:38	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-14**

**Lab Sample ID: 310-286332-13**

**Matrix: Water**

Date Collected: 07/17/24 09:51  
Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	357		10.0	4.50	mg/L			08/01/24 22:41	10
Sulfate	206		10.0	4.20	mg/L			08/01/24 22:41	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000948	J	0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:53	1
Boron	1.54		0.400	0.304	mg/L		07/24/24 09:30	07/26/24 21:22	4
Cobalt	0.00107		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:53	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:53	1
Magnesium	102		2.00	0.600	mg/L		07/24/24 09:30	07/26/24 21:22	4
Manganese	1.14		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	11.5		1.88	0.938	mg/L			07/31/24 17:43	9.38
Chemical Oxygen Demand (SM 5220D LL)	22.8		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	15.0		1.88	1.39	mg/L			07/23/24 11:38	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-18**

**Lab Sample ID: 310-286332-14**

**Matrix: Water**

Date Collected: 07/17/24 14:11  
Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.2		10.0	4.50	mg/L			08/01/24 22:55	10
Sulfate	60.7		10.0	4.20	mg/L			08/01/24 22:55	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00503		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 13:55	1
Boron	0.383		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:26	1
Cobalt	0.00267		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:55	1
Iron	2.02		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:55	1
Magnesium	33.9	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 13:55	1
Manganese	0.274		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 13:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	2.63		0.200	0.100	mg/L			07/31/24 17:14	1
Chemical Oxygen Demand (SM 5220D LL)	29.1		5.00	4.80	mg/L			07/25/24 09:46	1
Phenols, Total (SW846 9066)	<0.0192		0.0192	0.00960	mg/L		07/24/24 08:44	07/24/24 17:35	1
Total Suspended Solids (USGS I-3765-85)	10.3		2.50	1.85	mg/L			07/23/24 08:42	1

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# Client Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

**Client Sample ID: MW-4**

**Lab Sample ID: 310-286332-15**

Date Collected: 07/16/24 15:26

Matrix: Water

Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	177		10.0	4.50	mg/L			08/01/24 23:09	10
Sulfate	49.6		10.0	4.20	mg/L			08/01/24 23:09	10

## 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		07/24/24 09:30	07/25/24 13:57	1
Boron	0.342		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:29	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:57	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:57	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:16	1
Chemical Oxygen Demand (SM 5220D LL)	8.41		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/22/24 16:45	1

# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-8**

**Lab Sample ID: 310-286332-16**

**Matrix: Water**

Date Collected: 07/16/24 18:24  
Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	146		10.0	4.50	mg/L			08/01/24 23:23	10
Sulfate	47.5		10.0	4.20	mg/L			08/01/24 23:23	10

## 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		07/24/24 09:30	07/25/24 13:59	1
Boron	0.358		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:33	1
Cobalt	0.000225 J		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 13:59	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 13:59	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:16	1
Chemical Oxygen Demand (SM 5220D LL)	6.31		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/22/24 16:45	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

**Client Sample ID: MW-16**

**Lab Sample ID: 310-286332-17**

Date Collected: 07/17/24 12:33

Matrix: Water

Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.3		10.0	4.50	mg/L			08/01/24 23:37	10
Sulfate	49.5		10.0	4.20	mg/L			08/01/24 23:37	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.000670	J	0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 14:02	1
Boron	0.264		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:37	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 14:02	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 14:02	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:19	1
Chemical Oxygen Demand (SM 5220D LL)	12.6		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/23/24 11:38	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

**Client Sample ID: MW-D**

**Lab Sample ID: 310-286332-18**

Date Collected: 07/16/24 15:26

Matrix: Water

Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		10.0	4.50	mg/L			08/01/24 23:51	10
Sulfate	48.0		10.0	4.20	mg/L			08/01/24 23:51	10

## 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		07/24/24 09:30	07/25/24 14:04	1
Boron	0.320		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:55	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 14:04	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 14:04	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:19	1
Chemical Oxygen Demand (SM 5220D LL)	<5.00		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/22/24 16:45	1

# Client Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

**Client Sample ID: MW-15**

**Lab Sample ID: 310-286332-19**

Date Collected: 07/17/24 09:13

Matrix: Water

Date Received: 07/19/24 17:30

## Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.1		5.00	2.25	mg/L			08/02/24 00:05	5
Sulfate	86.1		5.00	2.10	mg/L			08/02/24 00:05	5

## 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		07/24/24 09:30	07/25/24 14:06	1
Boron	0.215		0.100	0.0760	mg/L		07/24/24 09:30	07/26/24 21:59	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 14:06	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 14:06	1
Magnesium	51.7	B	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 14:06	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	<0.200		0.200	0.100	mg/L			07/31/24 17:21	1
Chemical Oxygen Demand (SM 5220D LL)	11.6		5.00	4.80	mg/L			07/25/24 09:46	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	1.39	mg/L			07/23/24 08:42	1

# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: Trip Blank 1**

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-26**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/24/24 06:32	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/24/24 06:32	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/24/24 06:32	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/24/24 06:32	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/24/24 06:32	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/24 06:32	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/24/24 06:32	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/24/24 06:32	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/24/24 06:32	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/24/24 06:32	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/24/24 06:32	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/24/24 06:32	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/24/24 06:32	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/24/24 06:32	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/24/24 06:32	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/24/24 06:32	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/24/24 06:32	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/24/24 06:32	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/24/24 06:32	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/24/24 06:32	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/24/24 06:32	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/24/24 06:32	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/24/24 06:32	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/24/24 06:32	1
Acetone	<10.0		10.0	3.10	ug/L			07/24/24 06:32	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/24 06:32	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/24/24 06:32	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/24/24 06:32	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/24/24 06:32	1
Bromoform	<5.00		5.00	0.780	ug/L			07/24/24 06:32	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/24/24 06:32	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/24/24 06:32	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/24/24 06:32	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/24/24 06:32	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/24/24 06:32	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/24/24 06:32	1
Chloroform	<3.00		3.00	1.30	ug/L			07/24/24 06:32	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/24/24 06:32	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/24 06:32	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/24/24 06:32	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/24/24 06:32	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/24/24 06:32	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/24/24 06:32	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/24/24 06:32	1
Hexane	<1.00		1.00	0.780	ug/L			07/24/24 06:32	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/24/24 06:32	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/24/24 06:32	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/24/24 06:32	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/24/24 06:32	1

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# Client Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Client Sample ID: Trip Blank 1

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

## Lab Sample ID: 310-286332-26

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 06:32	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 06:32	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/24/24 06:32	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 06:32	1
Styrene	<1.00		1.00	0.370	ug/L			07/24/24 06:32	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 06:32	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/24/24 06:32	1
Toluene	<1.00		1.00	0.430	ug/L			07/24/24 06:32	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/24/24 06:32	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/24/24 06:32	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/24/24 06:32	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/24/24 06:32	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/24/24 06:32	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/24/24 06:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		73 - 130					07/24/24 06:32	1
Toluene-d8 (Surr)	97		80 - 120					07/24/24 06:32	1
4-Bromofluorobenzene (Surr)	104		80 - 120					07/24/24 06:32	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: Trip Blank 3**

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-28**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/24/24 06:54	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/24/24 06:54	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/24/24 06:54	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/24/24 06:54	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/24/24 06:54	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/24 06:54	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/24/24 06:54	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/24/24 06:54	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/24/24 06:54	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/24/24 06:54	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/24/24 06:54	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/24/24 06:54	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/24/24 06:54	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/24/24 06:54	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/24/24 06:54	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/24/24 06:54	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/24/24 06:54	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/24/24 06:54	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/24/24 06:54	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/24/24 06:54	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/24/24 06:54	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/24/24 06:54	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/24/24 06:54	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/24/24 06:54	1
Acetone	<10.0		10.0	3.10	ug/L			07/24/24 06:54	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/24 06:54	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/24/24 06:54	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/24/24 06:54	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/24/24 06:54	1
Bromoform	<5.00		5.00	0.780	ug/L			07/24/24 06:54	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/24/24 06:54	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/24/24 06:54	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/24/24 06:54	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/24/24 06:54	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/24/24 06:54	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/24/24 06:54	1
Chloroform	<3.00		3.00	1.30	ug/L			07/24/24 06:54	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/24/24 06:54	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/24 06:54	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/24/24 06:54	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/24/24 06:54	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/24/24 06:54	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/24/24 06:54	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/24/24 06:54	1
Hexane	<1.00		1.00	0.780	ug/L			07/24/24 06:54	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/24/24 06:54	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/24/24 06:54	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/24/24 06:54	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/24/24 06:54	1

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# Client Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: Trip Blank 3**

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-28**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 06:54	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 06:54	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/24/24 06:54	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/24/24 06:54	1
Styrene	<1.00		1.00	0.370	ug/L			07/24/24 06:54	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/24/24 06:54	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/24/24 06:54	1
Toluene	<1.00		1.00	0.430	ug/L			07/24/24 06:54	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/24/24 06:54	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/24/24 06:54	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/24/24 06:54	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/24/24 06:54	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/24/24 06:54	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/24/24 06:54	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130					07/24/24 06:54	1
Toluene-d8 (Surr)	100		80 - 120					07/24/24 06:54	1
4-Bromofluorobenzene (Surr)	104		80 - 120					07/24/24 06:54	1

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# Definitions/Glossary

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## 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.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Surrogate Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (73-130)	TOL (80-120)	BFB (80-120)
310-286332-8	MW-9	100	100	103
310-286332-10	MW-11	101	101	102
310-286332-11	MW-12	102	99	101
310-286332-26	Trip Blank 1	99	97	104
310-286332-28	Trip Blank 3	101	100	104
LCS 310-428134/6	Lab Control Sample	101	99	101
LCS 310-428134/7	Lab Control Sample	99	99	102
LCS 310-428392/10	Lab Control Sample	102	99	102
LCS 310-428392/8	Lab Control Sample	100	100	99
MB 310-428134/5	Method Blank	100	98	100
MB 310-428392/7	Method Blank	101	100	103

### Surrogate Legend

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		NBZ (45-129)	FBP (39-118)	TPHL (12-144)
310-286332-7	MW-7	100	77	69
310-286332-8	MW-9	90	71	65
LCS 310-428138/2-A	Lab Control Sample	94	77	90
LCSD 310-428138/3-A	Lab Control Sample Dup	92	74	87
MB 310-428138/1-A	Method Blank	101	85	93

### Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)

FBP = 2-Fluorobiphenyl (Surr)

TPHL = Terphenyl-d14 (Surr)

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: MB 310-428134/5**

**Matrix: Water**

**Analysis Batch: 428134**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/24/24 04:39	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/24/24 04:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/24/24 04:39	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/24/24 04:39	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/24/24 04:39	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/24 04:39	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/24/24 04:39	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/24/24 04:39	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/24/24 04:39	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/24/24 04:39	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/24/24 04:39	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/24/24 04:39	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/24/24 04:39	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/24/24 04:39	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/24/24 04:39	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/24/24 04:39	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/24/24 04:39	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/24/24 04:39	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/24/24 04:39	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/24/24 04:39	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/24/24 04:39	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/24/24 04:39	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/24/24 04:39	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/24/24 04:39	1
Acetone	<10.0		10.0	3.10	ug/L			07/24/24 04:39	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/24 04:39	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/24/24 04:39	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/24/24 04:39	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/24/24 04:39	1
Bromoform	<5.00		5.00	0.780	ug/L			07/24/24 04:39	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/24/24 04:39	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/24/24 04:39	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/24/24 04:39	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/24/24 04:39	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/24/24 04:39	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/24/24 04:39	1
Chloroform	<3.00		3.00	1.30	ug/L			07/24/24 04:39	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/24/24 04:39	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/24 04:39	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/24/24 04:39	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/24/24 04:39	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/24/24 04:39	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/24/24 04:39	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/24/24 04:39	1
Hexane	<1.00		1.00	0.780	ug/L			07/24/24 04:39	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/24/24 04:39	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/24/24 04:39	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/24/24 04:39	1

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID:** MB 310-428134/5

**Matrix:** Water

**Analysis Batch:** 428134

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Naphthalene	<5.00		5.00		3.00	ug/L			07/24/24 04:39		1
n-Butylbenzene	<1.00		1.00		0.440	ug/L			07/24/24 04:39		1
n-Propylbenzene	<1.00		1.00		0.390	ug/L			07/24/24 04:39		1
p-Isopropyltoluene	<1.00		1.00		0.330	ug/L			07/24/24 04:39		1
sec-Butylbenzene	<1.00		1.00		0.440	ug/L			07/24/24 04:39		1
Styrene	<1.00		1.00		0.370	ug/L			07/24/24 04:39		1
tert-Butylbenzene	<1.00		1.00		0.390	ug/L			07/24/24 04:39		1
Tetrachloroethene	<1.00		1.00		0.480	ug/L			07/24/24 04:39		1
Toluene	<1.00		1.00		0.430	ug/L			07/24/24 04:39		1
trans-1,2-Dichloroethene	<1.00		1.00		0.270	ug/L			07/24/24 04:39		1
trans-1,3-Dichloropropene	<5.00		5.00		0.560	ug/L			07/24/24 04:39		1
Trichloroethene	<1.00		1.00		0.430	ug/L			07/24/24 04:39		1
Trichlorofluoromethane	<4.00		4.00		0.380	ug/L			07/24/24 04:39		1
Vinyl chloride	<1.00		1.00		0.180	ug/L			07/24/24 04:39		1
Xylenes, Total	<3.00		3.00		0.400	ug/L			07/24/24 04:39		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
	Result	Qualifier									
Dibromofluoromethane (Surr)	100		73 - 130						07/24/24 04:39		1
Toluene-d8 (Surr)	98		80 - 120						07/24/24 04:39		1
4-Bromofluorobenzene (Surr)	100		80 - 120						07/24/24 04:39		1

**Lab Sample ID:** LCS 310-428134/6

**Matrix:** Water

**Analysis Batch:** 428134

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

Analyte	Spike Added	LC S	LC S	Unit	D	%Rec	%Rec
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	20.0	18.46		ug/L		92	71 - 120
1,1,1-Trichloroethane	20.0	21.35		ug/L		107	73 - 129
1,1,2,2-Tetrachloroethane	20.0	18.64		ug/L		93	68 - 124
1,1,2-Trichloroethane	20.0	19.99		ug/L		100	73 - 123
1,1-Dichloroethane	20.0	19.58		ug/L		98	70 - 127
1,1-Dichloroethene	20.0	21.15		ug/L		106	63 - 132
1,1-Dichloropropene	20.0	21.06		ug/L		105	69 - 132
1,2,3-Trichlorobenzene	20.0	18.26		ug/L		91	50 - 150
1,2,3-Trichloropropane	20.0	19.04		ug/L		95	65 - 127
1,2,4-Trichlorobenzene	20.0	18.30		ug/L		91	68 - 124
1,2,4-Trimethylbenzene	20.0	20.16		ug/L		101	73 - 124
1,2-Dibromo-3-chloropropane	20.0	16.33		ug/L		82	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.52		ug/L		98	75 - 125
1,2-Dichlorobenzene	20.0	19.19		ug/L		96	74 - 120
1,2-Dichloroethane	20.0	19.11		ug/L		96	71 - 125
1,2-Dichloropropane	20.0	20.02		ug/L		100	73 - 124
1,3,5-Trimethylbenzene	20.0	20.22		ug/L		101	73 - 123
1,3-Dichlorobenzene	20.0	19.38		ug/L		97	72 - 120
1,3-Dichloropropane	20.0	19.38		ug/L		97	72 - 125
1,4-Dichlorobenzene	20.0	18.30		ug/L		92	72 - 120
2,2-Dichloropropane	20.0	18.81		ug/L		94	50 - 150
2-Butanone (MEK)	40.0	36.66		ug/L		92	50 - 150

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428134/6**

**Matrix: Water**

**Analysis Batch: 428134**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2-Chlorotoluene	20.0	20.00	ug/L		100	73 - 121	
4-Chlorotoluene	20.0	19.47	ug/L		97	72 - 121	
Acetone	40.0	38.92	ug/L		97	50 - 150	
Benzene	20.0	19.87	ug/L		99	72 - 124	
Bromobenzene	20.0	19.17	ug/L		96	72 - 120	
Bromochloromethane	20.0	20.55	ug/L		103	73 - 130	
Bromodichloromethane	20.0	19.11	ug/L		96	74 - 122	
Bromoform	20.0	17.70	ug/L		88	61 - 122	
Carbon disulfide	20.0	19.89	ug/L		99	59 - 135	
Carbon tetrachloride	20.0	18.62	ug/L		93	67 - 132	
Chlorobenzene	20.0	18.88	ug/L		94	76 - 120	
Chlorodibromomethane	20.0	18.88	ug/L		94	71 - 121	
Chloroform	20.0	19.53	ug/L		98	72 - 125	
cis-1,2-Dichloroethene	20.0	19.61	ug/L		98	74 - 123	
cis-1,3-Dichloropropene	20.0	19.36	ug/L		97	71 - 125	
Dibromomethane	20.0	19.58	ug/L		98	74 - 125	
Ethylbenzene	20.0	19.86	ug/L		99	74 - 122	
Hexachlorobutadiene	20.0	17.89	ug/L		89	50 - 150	
Hexane	20.0	17.50	ug/L		87	45 - 150	
Isopropylbenzene	20.0	20.26	ug/L		101	73 - 125	
Methyl tert-butyl ether	20.0	19.22	ug/L		96	68 - 130	
Methylene chloride	20.0	19.78	ug/L		99	50 - 150	
Naphthalene	20.0	18.84	ug/L		94	50 - 150	
n-Butylbenzene	20.0	18.15	ug/L		91	67 - 131	
n-Propylbenzene	20.0	20.42	ug/L		102	72 - 126	
p-Isopropyltoluene	20.0	20.26	ug/L		101	70 - 127	
sec-Butylbenzene	20.0	20.38	ug/L		102	70 - 127	
Styrene	20.0	20.09	ug/L		100	74 - 121	
tert-Butylbenzene	20.0	20.59	ug/L		103	72 - 124	
Tetrachloroethene	20.0	19.07	ug/L		95	71 - 130	
Toluene	20.0	19.70	ug/L		98	74 - 123	
trans-1,2-Dichloroethene	20.0	20.47	ug/L		102	70 - 126	
trans-1,3-Dichloropropene	20.0	17.30	ug/L		86	69 - 123	
Trichloroethene	20.0	20.37	ug/L		102	72 - 126	
Xylenes, Total	40.0	40.26	ug/L		101	73 - 123	

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

**Lab Sample ID: LCS 310-428134/7**

**Matrix: Water**

**Analysis Batch: 428134**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bromomethane	20.0	17.28	ug/L		86	23 - 150	
Chloroethane	20.0	19.43	ug/L		97	54 - 136	

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428134/7**

**Matrix: Water**

**Analysis Batch: 428134**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloromethane	20.0	19.83		ug/L	99	38 - 150	
Dichlorodifluoromethane	20.0	17.41		ug/L	87	39 - 150	
Trichlorofluoromethane	20.0	19.33		ug/L	97	54 - 149	
Vinyl chloride	20.0	19.67		ug/L	98	56 - 140	

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

**Lab Sample ID: MB 310-428392/7**

**Matrix: Water**

**Analysis Batch: 428392**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/25/24 11:20	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/25/24 11:20	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/25/24 11:20	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/25/24 11:20	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/25/24 11:20	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/25/24 11:20	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/25/24 11:20	1
1,2,3-Trichlorobenzene	<5.00		5.00	0.900	ug/L			07/25/24 11:20	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/25/24 11:20	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/25/24 11:20	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.420	ug/L			07/25/24 11:20	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/25/24 11:20	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/25/24 11:20	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/25/24 11:20	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/25/24 11:20	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/25/24 11:20	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.370	ug/L			07/25/24 11:20	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/25/24 11:20	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/25/24 11:20	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/25/24 11:20	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/25/24 11:20	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/25/24 11:20	1
2-Chlorotoluene	<1.00		1.00	0.280	ug/L			07/25/24 11:20	1
4-Chlorotoluene	<1.00		1.00	0.290	ug/L			07/25/24 11:20	1
Acetone	<10.0		10.0	3.10	ug/L			07/25/24 11:20	1
Benzene	<0.500		0.500	0.220	ug/L			07/25/24 11:20	1
Bromobenzene	<1.00		1.00	0.340	ug/L			07/25/24 11:20	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/25/24 11:20	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/25/24 11:20	1
Bromoform	<5.00		5.00	0.780	ug/L			07/25/24 11:20	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/25/24 11:20	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/25/24 11:20	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/25/24 11:20	1

Eurofins Cedar Falls

# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID:** MB 310-428392/7

**Matrix:** Water

**Analysis Batch:** 428392

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/25/24 11:20	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/25/24 11:20	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/25/24 11:20	1
Chloroform	<3.00		3.00	1.30	ug/L			07/25/24 11:20	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/25/24 11:20	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/25/24 11:20	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/25/24 11:20	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/25/24 11:20	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/25/24 11:20	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/25/24 11:20	1
Hexachlorobutadiene	<5.00		5.00	1.40	ug/L			07/25/24 11:20	1
Hexane	0.7849	J	1.00	0.780	ug/L			07/25/24 11:20	1
Isopropylbenzene	<1.00		1.00	0.350	ug/L			07/25/24 11:20	1
Methyl tert-butyl ether	<1.00		1.00	0.490	ug/L			07/25/24 11:20	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/25/24 11:20	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/25/24 11:20	1
n-Butylbenzene	<1.00		1.00	0.440	ug/L			07/25/24 11:20	1
n-Propylbenzene	<1.00		1.00	0.390	ug/L			07/25/24 11:20	1
p-Isopropyltoluene	<1.00		1.00	0.330	ug/L			07/25/24 11:20	1
sec-Butylbenzene	<1.00		1.00	0.440	ug/L			07/25/24 11:20	1
Styrene	<1.00		1.00	0.370	ug/L			07/25/24 11:20	1
tert-Butylbenzene	<1.00		1.00	0.390	ug/L			07/25/24 11:20	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/25/24 11:20	1
Toluene	<1.00		1.00	0.430	ug/L			07/25/24 11:20	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/25/24 11:20	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/25/24 11:20	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/25/24 11:20	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/25/24 11:20	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/25/24 11:20	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/25/24 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		73 - 130		07/25/24 11:20	1
Toluene-d8 (Surr)	100		80 - 120		07/25/24 11:20	1
4-Bromofluorobenzene (Surr)	103		80 - 120		07/25/24 11:20	1

**Lab Sample ID:** LCS 310-428392/10

**Matrix:** Water

**Analysis Batch:** 428392

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

Analyte	Spike Added	LCS			%Rec	Limits
		Result	Qualifier	Unit		
Bromomethane	20.0	16.15		ug/L	81	23 - 150
Chloroethane	20.0	18.28		ug/L	91	54 - 136
Chloromethane	20.0	17.98		ug/L	90	38 - 150
Dichlorodifluoromethane	20.0	15.07		ug/L	75	39 - 150
Trichlorofluoromethane	20.0	17.64		ug/L	88	54 - 149
Vinyl chloride	20.0	17.82		ug/L	89	56 - 140

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428392/10**

**Matrix: Water**

**Analysis Batch: 428392**

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

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

**Lab Sample ID: LCS 310-428392/8**

**Matrix: Water**

**Analysis Batch: 428392**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.95		ug/L		95	71 - 120
1,1,1-Trichloroethane	20.0	22.14		ug/L		111	73 - 129
1,1,2,2-Tetrachloroethane	20.0	19.81		ug/L		99	68 - 124
1,1,2-Trichloroethane	20.0	20.46		ug/L		102	73 - 123
1,1-Dichloroethane	20.0	20.48		ug/L		102	70 - 127
1,1-Dichloroethene	20.0	21.96		ug/L		110	63 - 132
1,1-Dichloropropene	20.0	21.89		ug/L		109	69 - 132
1,2,3-Trichlorobenzene	20.0	18.20		ug/L		91	50 - 150
1,2,3-Trichloropropane	20.0	19.97		ug/L		100	65 - 127
1,2,4-Trichlorobenzene	20.0	18.63		ug/L		93	68 - 124
1,2,4-Trimethylbenzene	20.0	20.67		ug/L		103	73 - 124
1,2-Dibromo-3-chloropropane	20.0	17.70		ug/L		88	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.93		ug/L		100	75 - 125
1,2-Dichlorobenzene	20.0	19.87		ug/L		99	74 - 120
1,2-Dichloroethane	20.0	19.47		ug/L		97	71 - 125
1,2-Dichloropropane	20.0	21.11		ug/L		106	73 - 124
1,3,5-Trimethylbenzene	20.0	20.66		ug/L		103	73 - 123
1,3-Dichlorobenzene	20.0	19.69		ug/L		98	72 - 120
1,3-Dichloropropane	20.0	19.56		ug/L		98	72 - 125
1,4-Dichlorobenzene	20.0	18.59		ug/L		93	72 - 120
2,2-Dichloropropane	20.0	22.41		ug/L		112	50 - 150
2-Butanone (MEK)	40.0	40.76		ug/L		102	50 - 150
2-Chlorotoluene	20.0	20.40		ug/L		102	73 - 121
4-Chlorotoluene	20.0	19.82		ug/L		99	72 - 121
Acetone	40.0	41.05		ug/L		103	50 - 150
Benzene	20.0	20.69		ug/L		103	72 - 124
Bromobenzene	20.0	19.53		ug/L		98	72 - 120
Bromochloromethane	20.0	20.86		ug/L		104	73 - 130
Bromodichloromethane	20.0	19.75		ug/L		99	74 - 122
Bromoform	20.0	19.24		ug/L		96	61 - 122
Carbon disulfide	20.0	20.41		ug/L		102	59 - 135
Carbon tetrachloride	20.0	19.89		ug/L		99	67 - 132
Chlorobenzene	20.0	19.62		ug/L		98	76 - 120
Chlorodibromomethane	20.0	20.09		ug/L		100	71 - 121
Chloroform	20.0	19.81		ug/L		99	72 - 125
cis-1,2-Dichloroethene	20.0	20.39		ug/L		102	74 - 123
cis-1,3-Dichloropropene	20.0	20.76		ug/L		104	71 - 125
Dibromomethane	20.0	19.76		ug/L		99	74 - 125
Ethylbenzene	20.0	20.76		ug/L		104	74 - 122

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

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

**Lab Sample ID:** LCS 310-428392/8

**Matrix:** Water

**Analysis Batch:** 428392

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Hexachlorobutadiene	20.0	18.58		ug/L	93	50 - 150	
Hexane	20.0	19.69		ug/L	98	45 - 150	
Isopropylbenzene	20.0	21.39		ug/L	107	73 - 125	
Methyl tert-butyl ether	20.0	19.83		ug/L	99	68 - 130	
Methylene chloride	20.0	20.32		ug/L	102	50 - 150	
Naphthalene	20.0	20.22		ug/L	101	50 - 150	
n-Butylbenzene	20.0	18.91		ug/L	95	67 - 131	
n-Propylbenzene	20.0	21.30		ug/L	107	72 - 126	
p-Isopropyltoluene	20.0	20.92		ug/L	105	70 - 127	
sec-Butylbenzene	20.0	21.49		ug/L	107	70 - 127	
Styrene	20.0	20.79		ug/L	104	74 - 121	
tert-Butylbenzene	20.0	21.58		ug/L	108	72 - 124	
Tetrachloroethene	20.0	20.61		ug/L	103	71 - 130	
Toluene	20.0	20.61		ug/L	103	74 - 123	
trans-1,2-Dichloroethene	20.0	22.01		ug/L	110	70 - 126	
trans-1,3-Dichloropropene	20.0	18.13		ug/L	91	69 - 123	
Trichloroethene	20.0	21.38		ug/L	107	72 - 126	
Xylenes, Total	40.0	41.89		ug/L	105	73 - 123	

Surrogate	LCS	LCS	<b>Qualifer</b>	<b>Limits</b>
	%Recovery			
Dibromofluoromethane (Surr)	100			73 - 130
Toluene-d8 (Surr)	100			80 - 120
4-Bromofluorobenzene (Surr)	99			80 - 120

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

**Lab Sample ID:** MB 310-428138/1-A

**Matrix:** Water

**Analysis Batch:** 428188

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 428138

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		07/23/24 12:44	07/24/24 13:07	1
Surrogate	MB %Recovery	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	101		45 - 129				07/23/24 12:44	07/24/24 13:07	1
2-Fluorobiphenyl (Surr)	85		39 - 118				07/23/24 12:44	07/24/24 13:07	1
Terphenyl-d14 (Surr)	93		12 - 144				07/23/24 12:44	07/24/24 13:07	1

**Lab Sample ID:** LCS 310-428138/2-A

**Matrix:** Water

**Analysis Batch:** 428188

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 428138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2,4-Trichlorobenzene	100	51.34		ug/L	51	33 - 110	
1,2-Dichlorobenzene	100	59.19		ug/L	59	33 - 110	
1,3-Dichlorobenzene	100	54.73		ug/L	55	31 - 110	
1,4-Dichlorobenzene	100	58.25		ug/L	58	32 - 110	
2,4-Dinitrotoluene	100	96.42		ug/L	96	47 - 137	

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428138/2-A**

**Matrix: Water**

**Analysis Batch: 428188**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 428138**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	100	90.40		ug/L	90	51 - 130	
2-Chloronaphthalene	100	67.45		ug/L	67	37 - 110	
2-Methylnaphthalene	100	61.72		ug/L	62	33 - 110	
2-Nitroaniline	100	93.89		ug/L	94	50 - 135	
3-Nitroaniline	100	106.9		ug/L	107	42 - 139	
4-Bromophenyl phenyl ether	100	78.28		ug/L	78	45 - 119	
4-Chloroaniline	100	91.83		ug/L	92	21 - 139	
4-Chlorophenyl phenyl ether	100	66.60		ug/L	67	44 - 116	
4-Nitroaniline	100	113.7		ug/L	114	31 - 145	
Acenaphthene	100	68.11		ug/L	68	43 - 110	
Acenaphthylene	100	73.95		ug/L	74	40 - 110	
Anthracene	100	97.17		ug/L	97	51 - 120	
Benzo(a)anthracene	100	82.42		ug/L	82	51 - 123	
Benzo(a)pyrene	100	79.74		ug/L	80	48 - 125	
Benzo(b)fluoranthene	100	79.83		ug/L	80	49 - 129	
Benzo(g,h,i)perylene	100	78.18		ug/L	78	43 - 139	
Benzo(k)fluoranthene	100	96.20		ug/L	96	47 - 130	
Benzyl alcohol	100	84.85		ug/L	85	39 - 128	
Bis(2-chloroethoxy)methane	100	90.78		ug/L	91	48 - 121	
Bis(2-chloroethyl)ether	100	78.09		ug/L	78	43 - 123	
bis(2-chloroisopropyl) ether	100	69.80		ug/L	70	34 - 123	
Bis(2-ethylhexyl) phthalate	100	84.63		ug/L	85	43 - 143	
Butyl benzyl phthalate	100	93.61		ug/L	94	46 - 135	
Carbazole	100	101.6		ug/L	102	51 - 126	
Chrysene	100	90.02		ug/L	90	51 - 125	
Dibenz(a,h)anthracene	100	86.70		ug/L	87	38 - 149	
Dibenzofuran	100	76.92		ug/L	77	45 - 112	
Diethyl phthalate	100	95.05		ug/L	95	43 - 135	
Dimethyl phthalate	100	94.94		ug/L	95	43 - 129	
Di-n-butyl phthalate	100	95.28		ug/L	95	50 - 133	
Di-n-octyl phthalate	100	80.06		ug/L	80	34 - 150	
Fluoranthene	100	102.7		ug/L	103	47 - 128	
Fluorene	100	78.09		ug/L	78	45 - 119	
Hexachlorobenzene	100	75.85		ug/L	76	48 - 119	
Hexachlorobutadiene	100	46.47		ug/L	46	32 - 110	
Hexachlorocyclopentadiene	100	21.43		ug/L	21	10 - 110	
Hexachloroethane	100	47.55		ug/L	48	31 - 110	
Indeno(1,2,3-cd)pyrene	100	88.63		ug/L	89	37 - 150	
Isophorone	100	94.94		ug/L	95	50 - 125	
Naphthalene	100	63.30		ug/L	63	38 - 110	
Nitrobenzene	100	90.32		ug/L	90	47 - 116	
N-Nitrosodimethylamine	100	74.51		ug/L	75	37 - 110	
N-Nitrosodi-n-propylamine	100	104.2		ug/L	104	45 - 130	
N-Nitrosodiphenylamine	100	90.27		ug/L	90	49 - 121	
Phenanthrene	100	92.23		ug/L	92	51 - 117	
Pyrene	100	94.35		ug/L	94	48 - 127	
Pyridine	200	101.8		ug/L	51	10 - 110	

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428138/2-A**

**Matrix: Water**

**Analysis Batch: 428188**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 428138**

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
Nitrobenzene-d5 (Surr)	94				45 - 129
2-Fluorobiphenyl (Surr)	77				39 - 118
Terphenyl-d14 (Surr)	90				12 - 144

**Lab Sample ID: LCSD 310-428138/3-A**

**Matrix: Water**

**Analysis Batch: 428188**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 428138**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	100	51.28		ug/L		51	33 - 110	0	35
1,2-Dichlorobenzene	100	55.40		ug/L		55	33 - 110	7	35
1,3-Dichlorobenzene	100	52.98		ug/L		53	31 - 110	3	35
1,4-Dichlorobenzene	100	55.43		ug/L		55	32 - 110	5	35
2,4-Dinitrotoluene	100	91.14		ug/L		91	47 - 137	6	35
2,6-Dinitrotoluene	100	83.93		ug/L		84	51 - 130	7	35
2-Chloronaphthalene	100	65.52		ug/L		66	37 - 110	3	35
2-Methylnaphthalene	100	58.62		ug/L		59	33 - 110	5	35
2-Nitroaniline	100	89.67		ug/L		90	50 - 135	5	35
3-Nitroaniline	100	99.03		ug/L		99	42 - 139	8	35
4-Bromophenyl phenyl ether	100	73.54		ug/L		74	45 - 119	6	35
4-Chloroaniline	100	78.10		ug/L		78	21 - 139	16	35
4-Chlorophenyl phenyl ether	100	65.49		ug/L		65	44 - 116	2	35
4-Nitroaniline	100	106.5		ug/L		107	31 - 145	7	35
Acenaphthene	100	65.55		ug/L		66	43 - 110	4	35
Acenaphthylene	100	68.13		ug/L		68	40 - 110	8	35
Anthracene	100	90.07		ug/L		90	51 - 120	8	35
Benzo(a)anthracene	100	75.40		ug/L		75	51 - 123	9	35
Benzo(a)pyrene	100	75.20		ug/L		75	48 - 125	6	35
Benzo(b)fluoranthene	100	73.01		ug/L		73	49 - 129	9	35
Benzo(g,h,i)perylene	100	72.12		ug/L		72	43 - 139	8	35
Benzo(k)fluoranthene	100	81.61		ug/L		82	47 - 130	16	35
Benzyl alcohol	100	75.53		ug/L		76	39 - 128	12	35
Bis(2-chloroethoxy)methane	100	82.47		ug/L		82	48 - 121	10	35
Bis(2-chloroethyl)ether	100	67.44		ug/L		67	43 - 123	15	35
bis(2-chloroisopropyl) ether	100	58.64		ug/L		59	34 - 123	17	35
Bis(2-ethylhexyl) phthalate	100	81.03		ug/L		81	43 - 143	4	35
Butyl benzyl phthalate	100	86.65		ug/L		87	46 - 135	8	35
Carbazole	100	95.77		ug/L		96	51 - 126	6	35
Chrysene	100	83.38		ug/L		83	51 - 125	8	35
Dibenz(a,h)anthracene	100	77.58		ug/L		78	38 - 149	11	35
Dibenzofuran	100	74.38		ug/L		74	45 - 112	3	35
Diethyl phthalate	100	88.74		ug/L		89	43 - 135	7	35
Dimethyl phthalate	100	89.13		ug/L		89	43 - 129	6	35
Di-n-butyl phthalate	100	88.96		ug/L		89	50 - 133	7	35
Di-n-octyl phthalate	100	74.72		ug/L		75	34 - 150	7	35
Fluoranthene	100	94.34		ug/L		94	47 - 128	9	35
Fluorene	100	73.01		ug/L		73	45 - 119	7	35
Hexachlorobenzene	100	69.12		ug/L		69	48 - 119	9	35

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID:** LCSD 310-428138/3-A

**Matrix:** Water

**Analysis Batch:** 428188

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 428138

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD RPD	RPD Limit
Hexachlorobutadiene	100	53.12		ug/L	53	32 - 110	13	35	
Hexachlorocyclopentadiene	100	24.16		ug/L	24	10 - 110	12	35	
Hexachloroethane	100	50.39		ug/L	50	31 - 110	6	35	
Indeno(1,2,3-cd)pyrene	100	76.75		ug/L	77	37 - 150	14	35	
Isophorone	100	86.73		ug/L	87	50 - 125	9	35	
Naphthalene	100	56.21		ug/L	56	38 - 110	12	35	
Nitrobenzene	100	75.35		ug/L	75	47 - 116	18	35	
N-Nitrosodimethylamine	100	65.52		ug/L	66	37 - 110	13	35	
N-Nitrosodi-n-propylamine	100	91.91		ug/L	92	45 - 130	12	35	
N-Nitrosodiphenylamine	100	82.89		ug/L	83	49 - 121	9	35	
Phenanthrene	100	85.31		ug/L	85	51 - 117	8	35	
Pyrene	100	85.30		ug/L	85	48 - 127	10	35	
Pyridine	200	79.30		ug/L	40	10 - 110	25	35	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	92		45 - 129
2-Fluorobiphenyl (Surr)	74		39 - 118
Terphenyl-d14 (Surr)	87		12 - 144

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

**Lab Sample ID:** MB 310-428315/1-A

**Matrix:** Water

**Analysis Batch:** 428411

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 428315

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.200		0.200	0.0490	ug/L		07/24/24 16:06	07/26/24 03:39	1
Acenaphthylene	<0.200		0.200	0.0630	ug/L		07/24/24 16:06	07/26/24 03:39	1
Anthracene	<0.200		0.200	0.0610	ug/L		07/24/24 16:06	07/26/24 03:39	1
Benzo[a]anthracene	<0.200		0.200	0.0860	ug/L		07/24/24 16:06	07/26/24 03:39	1
Benzo[a]pyrene	<0.200		0.200	0.120	ug/L		07/24/24 16:06	07/26/24 03:39	1
Benzo[b]fluoranthene	<0.200		0.200	0.100	ug/L		07/24/24 16:06	07/26/24 03:39	1
Benzo[g,h,i]perylene	<0.200		0.200	0.120	ug/L		07/24/24 16:06	07/26/24 03:39	1
Benzo[k]fluoranthene	<0.200		0.200	0.110	ug/L		07/24/24 16:06	07/26/24 03:39	1
Chrysene	<0.200		0.200	0.0730	ug/L		07/24/24 16:06	07/26/24 03:39	1
Dibenz(a,h)anthracene	<0.200		0.200	0.130	ug/L		07/24/24 16:06	07/26/24 03:39	1
Fluoranthene	<0.200		0.200	0.120	ug/L		07/24/24 16:06	07/26/24 03:39	1
Fluorene	<0.200		0.200	0.0430	ug/L		07/24/24 16:06	07/26/24 03:39	1
Indeno[1,2,3-cd]pyrene	<0.200		0.200	0.110	ug/L		07/24/24 16:06	07/26/24 03:39	1
Naphthalene	<0.500		0.500	0.260	ug/L		07/24/24 16:06	07/26/24 03:39	1
Phenanthrene	<0.200		0.200	0.100	ug/L		07/24/24 16:06	07/26/24 03:39	1
Pyrene	<0.200		0.200	0.0940	ug/L		07/24/24 16:06	07/26/24 03:39	1

**Lab Sample ID:** LCS 310-428315/2-A

**Matrix:** Water

**Analysis Batch:** 428411

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 428315

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	2.00	1.184		ug/L	59	43 - 116	

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# QC Sample Results

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428315/2-A**

**Matrix: Water**

**Analysis Batch: 428411**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 428315**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	2.00	1.200		ug/L		60	50 - 110
Anthracene	2.00	1.352		ug/L		68	27 - 126
Benzo[a]anthracene	2.00	1.454		ug/L		73	46 - 133
Benzo[a]pyrene	2.00	1.466		ug/L		73	35 - 115
Benzo[b]fluoranthene	2.00	1.337		ug/L		67	46 - 131
Benzo[g,h,i]perylene	2.00	1.788		ug/L		89	21 - 150
Benzo[k]fluoranthene	2.00	1.436		ug/L		72	42 - 135
Chrysene	2.00	1.485		ug/L		74	45 - 129
Dibenz(a,h)anthracene	2.00	1.677		ug/L		84	30 - 147
Fluoranthene	2.00	1.377		ug/L		69	33 - 132
Fluorene	2.00	1.223		ug/L		61	48 - 120
Indeno[1,2,3-cd]pyrene	2.00	1.802		ug/L		90	30 - 150
Naphthalene	2.00	1.067		ug/L		53	44 - 110
Phenanthrene	2.00	1.351		ug/L		68	36 - 132
Pyrene	2.00	1.358		ug/L		68	35 - 129

**Lab Sample ID: LCSD 310-428315/3-A**

**Matrix: Water**

**Analysis Batch: 428411**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 428315**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acenaphthene	2.00	1.254		ug/L		63	43 - 116	6	35
Acenaphthylene	2.00	1.262		ug/L		63	50 - 110	5	35
Anthracene	2.00	1.352		ug/L		68	27 - 126	0	35
Benzo[a]anthracene	2.00	1.540		ug/L		77	46 - 133	6	35
Benzo[a]pyrene	2.00	1.477		ug/L		74	35 - 115	1	35
Benzo[b]fluoranthene	2.00	1.417		ug/L		71	46 - 131	6	35
Benzo[g,h,i]perylene	2.00	1.734		ug/L		87	21 - 150	3	35
Benzo[k]fluoranthene	2.00	1.562		ug/L		78	42 - 135	8	35
Chrysene	2.00	1.578		ug/L		79	45 - 129	6	35
Dibenz(a,h)anthracene	2.00	1.698		ug/L		85	30 - 147	1	35
Fluoranthene	2.00	1.605		ug/L		80	33 - 132	15	35
Fluorene	2.00	1.328		ug/L		66	48 - 120	8	35
Indeno[1,2,3-cd]pyrene	2.00	1.759		ug/L		88	30 - 150	2	35
Naphthalene	2.00	1.126		ug/L		56	44 - 110	5	35
Phenanthrene	2.00	1.370		ug/L		68	36 - 132	1	35
Pyrene	2.00	1.596		ug/L		80	35 - 129	16	35

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID: MB 310-429371/3**

**Matrix: Water**

**Analysis Batch: 429371**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00	0.450	mg/L			08/01/24 17:59	1
Sulfate	<1.00		1.00	0.420	mg/L			08/01/24 17:59	1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Method: 9056A - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 310-429371/4**

**Matrix: Water**

**Analysis Batch: 429371**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.476		mg/L		95	90 - 110
Sulfate	10.0	9.830		mg/L		98	90 - 110

**Lab Sample ID: 310-286332-1 MS**

**Matrix: Water**

**Analysis Batch: 429371**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	183		50.0	231.2		mg/L		96	80 - 120
Sulfate	33.0		50.0	81.00		mg/L		96	80 - 120

**Lab Sample ID: 310-286332-1 MSD**

**Matrix: Water**

**Analysis Batch: 429371**

**Client Sample ID: MW-1**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	183		50.0	230.8		mg/L		95	80 - 120	0	15
Sulfate	33.0		50.0	79.97		mg/L		94	80 - 120	1	15

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

**Lab Sample ID: MB 310-428195/1-A**

**Matrix: Water**

**Analysis Batch: 428438**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 428195**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/24/24 09:30	07/25/24 12:52	1
Boron	<0.100		0.100	0.0760	mg/L		07/24/24 09:30	07/25/24 12:52	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/24/24 09:30	07/25/24 12:52	1
Iron	<0.100		0.100	0.0360	mg/L		07/24/24 09:30	07/25/24 12:52	1
Magnesium	0.2361	J	0.500	0.150	mg/L		07/24/24 09:30	07/25/24 12:52	1
Manganese	<0.0100		0.0100	0.00360	mg/L		07/24/24 09:30	07/25/24 12:52	1

**Lab Sample ID: LCS 310-428195/2-A**

**Matrix: Water**

**Analysis Batch: 428438**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 428195**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.200	0.2061		mg/L		103	80 - 120
Boron	0.200	0.1758		mg/L		88	80 - 120
Cobalt	0.100	0.1047		mg/L		105	80 - 120
Iron	0.200	0.1890		mg/L		94	80 - 120
Magnesium	2.00	2.115		mg/L		106	80 - 120
Manganese	0.100	0.09622		mg/L		96	80 - 120

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# QC Sample Results

Client: SCS Engineers

Job ID: 310-286332-1

Project/Site: Archer Daniels Midland Landfill

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

**Lab Sample ID: 310-286332-1 MS**

**Matrix: Water**

**Analysis Batch: 428438**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Arsenic	<0.00200		0.200	0.2148		mg/L		107	75 - 125		
Boron	0.0859	J	0.200	0.3095		mg/L		112	75 - 125		
Cobalt	<0.000500		0.100	0.1040		mg/L		104	75 - 125		
Iron	<0.100		0.200	0.2099		mg/L		105	75 - 125		
Magnesium	50.1	B	2.00	51.01	4	mg/L		47	75 - 125		
Manganese	<0.0100		0.100	0.09620		mg/L		96	75 - 125		

**Lab Sample ID: 310-286332-1 MS**

**Matrix: Water**

**Analysis Batch: 428656**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits		
Nickel	<0.00500		0.200	0.2005		mg/L		100	75 - 125		

**Lab Sample ID: 310-286332-1 MSD**

**Matrix: Water**

**Analysis Batch: 428438**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00200		0.200	0.2192		mg/L		110	75 - 125	2	20
Boron	0.0859	J	0.200	0.3226		mg/L		118	75 - 125	4	20
Cobalt	<0.000500		0.100	0.1043		mg/L		104	75 - 125	0	20
Iron	<0.100		0.200	0.2171		mg/L		109	75 - 125	3	20
Magnesium	50.1	B	2.00	51.47	4	mg/L		70	75 - 125	1	20
Manganese	<0.0100		0.100	0.09670		mg/L		97	75 - 125	1	20

**Lab Sample ID: 310-286332-1 MSD**

**Matrix: Water**

**Analysis Batch: 428656**

**Client Sample ID: MW-1**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Nickel	<0.00500		0.200	0.1996		mg/L		100	75 - 125	0	20

**Lab Sample ID: 310-286332-11 DU**

**Matrix: Water**

**Analysis Batch: 428438**

**Client Sample ID: MW-12**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	Limit
Arsenic	0.0704			0.06861		mg/L				3	20
Cobalt	0.00175			0.001690		mg/L				4	20
Iron	25.0			24.21		mg/L				3	20
Magnesium	77.8	B		74.27		mg/L				5	20
Manganese	0.930			0.7931		mg/L				16	20

**Lab Sample ID: 310-286332-11 DU**

**Matrix: Water**

**Analysis Batch: 428656**

**Client Sample ID: MW-12**

**Prep Type: Total/NA**

**Prep Batch: 428195**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	Limit
Boron	2.41			2.383		mg/L				1	20

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

Lab Sample ID: 310-286332-11 DU

Matrix: Water

Analysis Batch: 428656

Client Sample ID: MW-12

Prep Type: Total/NA

Prep Batch: 428195

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Nickel	0.00638		0.006181		mg/L		3	20

## Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 310-429045/17

Matrix: Water

Analysis Batch: 429045

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia	<0.200		0.200	0.100	mg/L			07/31/24 17:00	1

Lab Sample ID: LCS 310-429045/18

Matrix: Water

Analysis Batch: 429045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Ammonia	8.55	8.114		mg/L		95	90 - 110

Lab Sample ID: 310-286332-1 MS

Matrix: Water

Analysis Batch: 429045

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Ammonia	<0.200	F1	1.00	0.9049		mg/L	90	90	90 - 110

Lab Sample ID: 310-286332-1 MSD

Matrix: Water

Analysis Batch: 429045

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Ammonia	<0.200	F1	1.00	0.8097	F1	mg/L	81	81	90 - 110

## Method: 5220D LL - COD

Lab Sample ID: MB 310-428377/32

Matrix: Water

Analysis Batch: 428377

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chemical Oxygen Demand	<5.00		5.00	4.80	mg/L			07/25/24 09:46	1

Lab Sample ID: MB 310-428377/60

Matrix: Water

Analysis Batch: 428377

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chemical Oxygen Demand	<5.00		5.00	4.80	mg/L			07/25/24 09:46	1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Method: 5220D LL - COD (Continued)

**Lab Sample ID: LCS 310-428377/33**

**Matrix: Water**

**Analysis Batch: 428377**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	127.2		mg/L	101		85 - 110

**Lab Sample ID: LCS 310-428377/63**

**Matrix: Water**

**Analysis Batch: 428377**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	125	128.2		mg/L	102		85 - 110

**Lab Sample ID: 310-286332-6 MS**

**Matrix: Water**

**Analysis Batch: 428377**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chemical Oxygen Demand	217		500	823.2		mg/L	121		83 - 146

**Lab Sample ID: 310-286332-6 MSD**

**Matrix: Water**

**Analysis Batch: 428377**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Chemical Oxygen Demand	217		500	805.7		mg/L	118		83 - 146	2 18

## Method: 9066 - Phenolics, Total Recoverable

**Lab Sample ID: MB 310-428198/1-A**

**Matrix: Water**

**Analysis Batch: 428322**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 428198**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenols, Total	<0.0200		0.0200	0.0100	mg/L		07/24/24 08:44	07/24/24 17:30	1

**Lab Sample ID: LCS 310-428198/2-A**

**Matrix: Water**

**Analysis Batch: 428322**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 428198**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenols, Total	0.100	0.09615		mg/L	96		90 - 110

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

**Lab Sample ID: MB 310-428035/1**

**Matrix: Water**

**Analysis Batch: 428035**

**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		07/22/24 16:45		1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Lab Sample ID: LCS 310-428035/2**

**Matrix: Water**

**Analysis Batch: 428035**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Total Suspended Solids	100	97.00		mg/L	97	81 - 116			

**Lab Sample ID: 310-286332-5 DU**

**Matrix: Water**

**Analysis Batch: 428035**

**Client Sample ID: MW-3**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	87.3		91.33		mg/L		4	35

**Lab Sample ID: MB 310-428076/1**

**Matrix: Water**

**Analysis Batch: 428076**

**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			07/23/24 08:42	1

**Lab Sample ID: LCS 310-428076/2**

**Matrix: Water**

**Analysis Batch: 428076**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Total Suspended Solids	100	95.00		mg/L	95	81 - 116			

**Lab Sample ID: MB 310-428124/1**

**Matrix: Water**

**Analysis Batch: 428124**

**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			07/23/24 11:38	1

**Lab Sample ID: LCS 310-428124/2**

**Matrix: Water**

**Analysis Batch: 428124**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Total Suspended Solids	100	89.00		mg/L	89	81 - 116			

**Lab Sample ID: 310-286332-12 DU**

**Matrix: Water**

**Analysis Batch: 428124**

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	79.3		79.67		mg/L		0.4	35

**Lab Sample ID: MB 310-428161/1**

**Matrix: Water**

**Analysis Batch: 428161**

**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			07/23/24 16:15	1

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# QC Sample Results

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

Lab Sample ID: LCS 310-428161/2

Matrix: Water

Analysis Batch: 428161

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	97.00		mg/L	97	81 - 116	

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## GC/MS VOA

### Analysis Batch: 428134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-10	MW-11	Total/NA	Water	8260D	
310-286332-11	MW-12	Total/NA	Water	8260D	
310-286332-26	Trip Blank 1	Total/NA	Water	8260D	
310-286332-28	Trip Blank 3	Total/NA	Water	8260D	
MB 310-428134/5	Method Blank	Total/NA	Water	8260D	
LCS 310-428134/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-428134/7	Lab Control Sample	Total/NA	Water	8260D	

### Analysis Batch: 428392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-8	MW-9	Total/NA	Water	8260D	
MB 310-428392/7	Method Blank	Total/NA	Water	8260D	
LCS 310-428392/10	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-428392/8	Lab Control Sample	Total/NA	Water	8260D	

## GC/MS Semi VOA

### Prep Batch: 428138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-7	MW-7	Total/NA	Water	3510C	
310-286332-8	MW-9	Total/NA	Water	3510C	
MB 310-428138/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-428138/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-428138/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 428188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-7	MW-7	Total/NA	Water	8270E	
310-286332-8	MW-9	Total/NA	Water	8270E	
MB 310-428138/1-A	Method Blank	Total/NA	Water	8270E	
LCS 310-428138/2-A	Lab Control Sample	Total/NA	Water	8270E	
LCSD 310-428138/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	

### Prep Batch: 428315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-8	MW-9	Total/NA	Water	3510C	
310-286332-10	MW-11	Total/NA	Water	3510C	
MB 310-428315/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-428315/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-428315/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 428411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-8	MW-9	Total/NA	Water	8270E SIM	
310-286332-10	MW-11	Total/NA	Water	8270E SIM	
MB 310-428315/1-A	Method Blank	Total/NA	Water	8270E SIM	
LCS 310-428315/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	
LCSD 310-428315/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## HPLC/IC

### Analysis Batch: 429371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	9056A	1
310-286332-2	MW-6	Total/NA	Water	9056A	2
310-286332-3	MW-17	Total/NA	Water	9056A	3
310-286332-4	MW-2	Total/NA	Water	9056A	4
310-286332-5	MW-3	Total/NA	Water	9056A	5
310-286332-6	MW-5	Total/NA	Water	9056A	6
310-286332-7	MW-7	Total/NA	Water	9056A	7
310-286332-8	MW-9	Total/NA	Water	9056A	8
310-286332-9	MW-10	Total/NA	Water	9056A	9
310-286332-10	MW-11	Total/NA	Water	9056A	10
310-286332-11	MW-12	Total/NA	Water	9056A	11
310-286332-12	MW-13	Total/NA	Water	9056A	12
310-286332-13	MW-14	Total/NA	Water	9056A	13
310-286332-14	MW-18	Total/NA	Water	9056A	14
310-286332-15	MW-4	Total/NA	Water	9056A	15
310-286332-16	MW-8	Total/NA	Water	9056A	
310-286332-17	MW-16	Total/NA	Water	9056A	
310-286332-18	MW-D	Total/NA	Water	9056A	
310-286332-19	MW-15	Total/NA	Water	9056A	
MB 310-429371/3	Method Blank	Total/NA	Water	9056A	
LCS 310-429371/4	Lab Control Sample	Total/NA	Water	9056A	
310-286332-1 MS	MW-1	Total/NA	Water	9056A	
310-286332-1 MSD	MW-1	Total/NA	Water	9056A	

## Metals

### Prep Batch: 428195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	3005A	1
310-286332-2	MW-6	Total/NA	Water	3005A	2
310-286332-3	MW-17	Total/NA	Water	3005A	3
310-286332-4	MW-2	Total/NA	Water	3005A	4
310-286332-5	MW-3	Total/NA	Water	3005A	5
310-286332-6	MW-5	Total/NA	Water	3005A	6
310-286332-7	MW-7	Total/NA	Water	3005A	7
310-286332-8	MW-9	Total/NA	Water	3005A	8
310-286332-9	MW-10	Total/NA	Water	3005A	9
310-286332-10	MW-11	Total/NA	Water	3005A	10
310-286332-11	MW-12	Total/NA	Water	3005A	11
310-286332-12	MW-13	Total/NA	Water	3005A	12
310-286332-13	MW-14	Total/NA	Water	3005A	13
310-286332-14	MW-18	Total/NA	Water	3005A	14
310-286332-15	MW-4	Total/NA	Water	3005A	15
310-286332-16	MW-8	Total/NA	Water	3005A	
310-286332-17	MW-16	Total/NA	Water	3005A	
310-286332-18	MW-D	Total/NA	Water	3005A	
310-286332-19	MW-15	Total/NA	Water	3005A	
MB 310-428195/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-428195/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-286332-1 MS	MW-1	Total/NA	Water	3005A	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Metals (Continued)

### Prep Batch: 428195 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1 MSD	MW-1	Total/NA	Water	3005A	
310-286332-11 DU	MW-12	Total/NA	Water	3005A	

### Analysis Batch: 428438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	6020B	428195
310-286332-2	MW-6	Total/NA	Water	6020B	428195
310-286332-3	MW-17	Total/NA	Water	6020B	428195
310-286332-4	MW-2	Total/NA	Water	6020B	428195
310-286332-5	MW-3	Total/NA	Water	6020B	428195
310-286332-6	MW-5	Total/NA	Water	6020B	428195
310-286332-7	MW-7	Total/NA	Water	6020B	428195
310-286332-8	MW-9	Total/NA	Water	6020B	428195
310-286332-9	MW-10	Total/NA	Water	6020B	428195
310-286332-10	MW-11	Total/NA	Water	6020B	428195
310-286332-11	MW-12	Total/NA	Water	6020B	428195
310-286332-12	MW-13	Total/NA	Water	6020B	428195
310-286332-13	MW-14	Total/NA	Water	6020B	428195
310-286332-14	MW-18	Total/NA	Water	6020B	428195
310-286332-15	MW-4	Total/NA	Water	6020B	428195
310-286332-16	MW-8	Total/NA	Water	6020B	428195
310-286332-17	MW-16	Total/NA	Water	6020B	428195
310-286332-18	MW-D	Total/NA	Water	6020B	428195
310-286332-19	MW-15	Total/NA	Water	6020B	428195
MB 310-428195/1-A	Method Blank	Total/NA	Water	6020B	428195
LCS 310-428195/2-A	Lab Control Sample	Total/NA	Water	6020B	428195
310-286332-1 MS	MW-1	Total/NA	Water	6020B	428195
310-286332-1 MSD	MW-1	Total/NA	Water	6020B	428195
310-286332-11 DU	MW-12	Total/NA	Water	6020B	428195

### Analysis Batch: 428656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	6020B	428195
310-286332-2	MW-6	Total/NA	Water	6020B	428195
310-286332-3	MW-17	Total/NA	Water	6020B	428195
310-286332-4	MW-2	Total/NA	Water	6020B	428195
310-286332-5	MW-3	Total/NA	Water	6020B	428195
310-286332-6	MW-5	Total/NA	Water	6020B	428195
310-286332-7	MW-7	Total/NA	Water	6020B	428195
310-286332-8	MW-9	Total/NA	Water	6020B	428195
310-286332-9	MW-10	Total/NA	Water	6020B	428195
310-286332-10	MW-11	Total/NA	Water	6020B	428195
310-286332-11	MW-12	Total/NA	Water	6020B	428195
310-286332-12	MW-13	Total/NA	Water	6020B	428195
310-286332-13	MW-14	Total/NA	Water	6020B	428195
310-286332-14	MW-18	Total/NA	Water	6020B	428195
310-286332-15	MW-4	Total/NA	Water	6020B	428195
310-286332-16	MW-8	Total/NA	Water	6020B	428195
310-286332-17	MW-16	Total/NA	Water	6020B	428195
310-286332-18	MW-D	Total/NA	Water	6020B	428195
310-286332-19	MW-15	Total/NA	Water	6020B	428195

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## Metals (Continued)

### Analysis Batch: 428656 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1 MS	MW-1	Total/NA	Water	6020B	428195
310-286332-1 MSD	MW-1	Total/NA	Water	6020B	428195
310-286332-11 DU	MW-12	Total/NA	Water	6020B	428195

### Analysis Batch: 428734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-8	MW-9	Total/NA	Water	6020B	428195

### Analysis Batch: 429027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-8	MW-9	Total/NA	Water	6020B	428195

## General Chemistry

### Analysis Batch: 428035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-5	MW-3	Total/NA	Water	I-3765-85	
310-286332-6	MW-5	Total/NA	Water	I-3765-85	
310-286332-7	MW-7	Total/NA	Water	I-3765-85	
310-286332-15	MW-4	Total/NA	Water	I-3765-85	
310-286332-16	MW-8	Total/NA	Water	I-3765-85	
310-286332-18	MW-D	Total/NA	Water	I-3765-85	
MB 310-428035/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-428035/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-286332-5 DU	MW-3	Total/NA	Water	I-3765-85	

### Analysis Batch: 428076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	I-3765-85	
310-286332-10	MW-11	Total/NA	Water	I-3765-85	
310-286332-11	MW-12	Total/NA	Water	I-3765-85	
310-286332-14	MW-18	Total/NA	Water	I-3765-85	
310-286332-19	MW-15	Total/NA	Water	I-3765-85	
MB 310-428076/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-428076/2	Lab Control Sample	Total/NA	Water	I-3765-85	

### Analysis Batch: 428124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-3	MW-17	Total/NA	Water	I-3765-85	
310-286332-4	MW-2	Total/NA	Water	I-3765-85	
310-286332-8	MW-9	Total/NA	Water	I-3765-85	
310-286332-9	MW-10	Total/NA	Water	I-3765-85	
310-286332-12	MW-13	Total/NA	Water	I-3765-85	
310-286332-13	MW-14	Total/NA	Water	I-3765-85	
310-286332-17	MW-16	Total/NA	Water	I-3765-85	
MB 310-428124/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-428124/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-286332-12 DU	MW-13	Total/NA	Water	I-3765-85	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## General Chemistry

### Analysis Batch: 428161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-2	MW-6	Total/NA	Water	I-3765-85	
MB 310-428161/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-428161/2	Lab Control Sample	Total/NA	Water	I-3765-85	

### Prep Batch: 428198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-4	MW-2	Total/NA	Water	Distill/Phenol	
310-286332-7	MW-7	Total/NA	Water	Distill/Phenol	
310-286332-8	MW-9	Total/NA	Water	Distill/Phenol	
310-286332-14	MW-18	Total/NA	Water	Distill/Phenol	
MB 310-428198/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 310-428198/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

### Analysis Batch: 428322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-4	MW-2	Total/NA	Water	9066	428198
310-286332-7	MW-7	Total/NA	Water	9066	428198
310-286332-8	MW-9	Total/NA	Water	9066	428198
310-286332-14	MW-18	Total/NA	Water	9066	428198
MB 310-428198/1-A	Method Blank	Total/NA	Water	9066	428198
LCS 310-428198/2-A	Lab Control Sample	Total/NA	Water	9066	428198

### Analysis Batch: 428377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	5220D LL	
310-286332-2	MW-6	Total/NA	Water	5220D LL	
310-286332-3	MW-17	Total/NA	Water	5220D LL	
310-286332-4	MW-2	Total/NA	Water	5220D LL	
310-286332-5	MW-3	Total/NA	Water	5220D LL	
310-286332-6	MW-5	Total/NA	Water	5220D LL	
310-286332-7	MW-7	Total/NA	Water	5220D LL	
310-286332-8	MW-9	Total/NA	Water	5220D LL	
310-286332-9	MW-10	Total/NA	Water	5220D LL	
310-286332-10	MW-11	Total/NA	Water	5220D LL	
310-286332-11	MW-12	Total/NA	Water	5220D LL	
310-286332-12	MW-13	Total/NA	Water	5220D LL	
310-286332-13	MW-14	Total/NA	Water	5220D LL	
310-286332-14	MW-18	Total/NA	Water	5220D LL	
310-286332-15	MW-4	Total/NA	Water	5220D LL	
310-286332-16	MW-8	Total/NA	Water	5220D LL	
310-286332-17	MW-16	Total/NA	Water	5220D LL	
310-286332-18	MW-D	Total/NA	Water	5220D LL	
310-286332-19	MW-15	Total/NA	Water	5220D LL	
MB 310-428377/32	Method Blank	Total/NA	Water	5220D LL	
MB 310-428377/60	Method Blank	Total/NA	Water	5220D LL	
LCS 310-428377/33	Lab Control Sample	Total/NA	Water	5220D LL	
LCS 310-428377/63	Lab Control Sample	Total/NA	Water	5220D LL	
310-286332-6 MS	MW-5	Total/NA	Water	5220D LL	
310-286332-6 MSD	MW-5	Total/NA	Water	5220D LL	

Eurofins Cedar Falls

# QC Association Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## General Chemistry

### Analysis Batch: 429045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-286332-1	MW-1	Total/NA	Water	350.1	1
310-286332-2	MW-6	Total/NA	Water	350.1	2
310-286332-3	MW-17	Total/NA	Water	350.1	3
310-286332-4	MW-2	Total/NA	Water	350.1	4
310-286332-5	MW-3	Total/NA	Water	350.1	5
310-286332-6	MW-5	Total/NA	Water	350.1	6
310-286332-7	MW-7	Total/NA	Water	350.1	7
310-286332-8	MW-9	Total/NA	Water	350.1	8
310-286332-9	MW-10	Total/NA	Water	350.1	9
310-286332-10	MW-11	Total/NA	Water	350.1	10
310-286332-11	MW-12	Total/NA	Water	350.1	11
310-286332-12	MW-13	Total/NA	Water	350.1	12
310-286332-13	MW-14	Total/NA	Water	350.1	13
310-286332-14	MW-18	Total/NA	Water	350.1	14
310-286332-15	MW-4	Total/NA	Water	350.1	15
310-286332-16	MW-8	Total/NA	Water	350.1	
310-286332-17	MW-16	Total/NA	Water	350.1	
310-286332-18	MW-D	Total/NA	Water	350.1	
310-286332-19	MW-15	Total/NA	Water	350.1	
MB 310-429045/17	Method Blank	Total/NA	Water	350.1	
LCS 310-429045/18	Lab Control Sample	Total/NA	Water	350.1	
310-286332-1 MS	MW-1	Total/NA	Water	350.1	
310-286332-1 MSD	MW-1	Total/NA	Water	350.1	

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## **Client Sample ID: MW-1**

Date Collected: 07/17/24 15:02

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 18:55
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 20:13
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 12:57
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:02
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428076	WZC8	EET CF	07/23/24 08:42

## **Client Sample ID: MW-6**

Date Collected: 07/18/24 09:14

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		20	429371	QTZ5	EET CF	08/01/24 19:38
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		4	428656	ZRI4	EET CF	07/26/24 20:24
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:08
Total/NA	Analysis	350.1		37.5	429045	ZJX4	EET CF	07/31/24 18:02
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428161	WZC8	EET CF	07/23/24 16:15

## **Client Sample ID: MW-17**

Date Collected: 07/17/24 13:16

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 19:52
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 20:27
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:10
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:04
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

## **Client Sample ID: MW-2**

Date Collected: 07/17/24 15:54

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 20:06

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## **Client Sample ID: MW-2**

Date Collected: 07/17/24 15:54

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 20:31
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:21
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:05
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Prep	Distill/Phenol			428198	A3GU	EET CF	07/24/24 08:44
Total/NA	Analysis	9066		1	428322	ZJX4	EET CF	07/24/24 17:33
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

## **Client Sample ID: MW-3**

Date Collected: 07/16/24 14:25

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/01/24 20:20
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 20:35
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:24
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:06
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

## **Client Sample ID: MW-5**

Date Collected: 07/16/24 16:17

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 20:34
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		7	428656	ZRI4	EET CF	07/26/24 20:38
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:26
Total/NA	Analysis	350.1		37.5	429045	ZJX4	EET CF	07/31/24 18:02
Total/NA	Analysis	5220D LL		10	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-7**

Date Collected: 07/16/24 17:23

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			428138	L5FG	EET CF	07/23/24 12:44
Total/NA	Analysis	8270E		1	428188	L0FS	EET CF	07/24/24 18:46
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/01/24 20:48
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		10	428656	ZRI4	EET CF	07/26/24 20:42
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:28
Total/NA	Analysis	350.1		100	429045	ZJX4	EET CF	07/31/24 18:50
Total/NA	Analysis	5220D LL		10	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Prep	Distill/Phenol			428198	A3GU	EET CF	07/24/24 08:44
Total/NA	Analysis	9066		1	428322	ZJX4	EET CF	07/24/24 17:33
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

**Client Sample ID: MW-9**

Date Collected: 07/17/24 19:01

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428392	WSE8	EET CF	07/25/24 13:36
Total/NA	Prep	3510C			428138	L5FG	EET CF	07/23/24 12:44
Total/NA	Analysis	8270E		1	428188	L0FS	EET CF	07/24/24 19:12
Total/NA	Prep	3510C			428315	L5FG	EET CF	07/24/24 16:06
Total/NA	Analysis	8270E SIM		1	428411	V7YZ	EET CF	07/26/24 05:55
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 21:02
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		4	428656	ZRI4	EET CF	07/26/24 20:46
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:30
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		7	428734	NFT2	EET CF	07/29/24 11:41
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		7	429027	NFT2	EET CF	07/31/24 14:01
Total/NA	Analysis	350.1		100	429045	ZJX4	EET CF	07/31/24 18:51
Total/NA	Analysis	5220D LL		10	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Prep	Distill/Phenol			428198	A3GU	EET CF	07/24/24 08:44
Total/NA	Analysis	9066		1	428322	ZJX4	EET CF	07/24/24 17:34
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

**Client Sample ID: MW-10**

Date Collected: 07/17/24 18:03

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 21:44

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# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

**Client Sample ID: MW-10**

Date Collected: 07/17/24 18:03

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:04
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:33
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:11
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

**Client Sample ID: MW-11**

Date Collected: 07/17/24 11:52

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428134	WSE8	EET CF	07/24/24 12:32
Total/NA	Prep	3510C			428315	L5FG	EET CF	07/24/24 16:06
Total/NA	Analysis	8270E SIM		1	428411	V7YZ	EET CF	07/26/24 06:14
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/01/24 21:58
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		4	428656	ZRI4	EET CF	07/26/24 21:08
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:35
Total/NA	Analysis	350.1		9.38	429045	ZJX4	EET CF	07/31/24 17:41
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428076	WZC8	EET CF	07/23/24 08:42

**Client Sample ID: MW-12**

Date Collected: 07/17/24 10:51

Date Received: 07/19/24 17:30

**Lab Sample ID: 310-286332-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428134	WSE8	EET CF	07/24/24 12:10
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/01/24 22:12
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:11
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:37
Total/NA	Analysis	350.1		9.38	429045	ZJX4	EET CF	07/31/24 17:42
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428076	WZC8	EET CF	07/23/24 08:42

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# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

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

**Date Collected: 07/17/24 16:58**

**Date Received: 07/19/24 17:30**

## **Lab Sample ID: 310-286332-12**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 22:27
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/02/24 13:07
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		4	428656	ZRI4	EET CF	07/26/24 21:18
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:41
Total/NA	Analysis	350.1		9.38	429045	ZJX4	EET CF	07/31/24 17:43
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

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

**Date Collected: 07/17/24 09:51**

**Date Received: 07/19/24 17:30**

## **Lab Sample ID: 310-286332-13**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 22:41
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		4	428656	ZRI4	EET CF	07/26/24 21:22
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:53
Total/NA	Analysis	350.1		9.38	429045	ZJX4	EET CF	07/31/24 17:43
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

## **Client Sample ID: MW-18**

**Date Collected: 07/17/24 14:11**

**Date Received: 07/19/24 17:30**

## **Lab Sample ID: 310-286332-14**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 22:55
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:26
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:55
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:14
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Prep	Distill/Phenol			428198	A3GU	EET CF	07/24/24 08:44
Total/NA	Analysis	9066		1	428322	ZJX4	EET CF	07/24/24 17:35
Total/NA	Analysis	I-3765-85		1	428076	WZC8	EET CF	07/23/24 08:42

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## **Client Sample ID: MW-4**

Date Collected: 07/16/24 15:26

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-15**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 23:09
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:29
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:57
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:16
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

## **Client Sample ID: MW-8**

Date Collected: 07/16/24 18:24

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-16**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 23:23
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:33
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 13:59
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:16
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

## **Client Sample ID: MW-16**

Date Collected: 07/17/24 12:33

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-17**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 23:37
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:37
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 14:02
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:19
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428124	WZC8	EET CF	07/23/24 11:38

## **Client Sample ID: MW-D**

Date Collected: 07/16/24 15:26

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-18**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		10	429371	QTZ5	EET CF	08/01/24 23:51

Eurofins Cedar Falls

# Lab Chronicle

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## **Client Sample ID: MW-D**

Date Collected: 07/16/24 15:26

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-18**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:55
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 14:04
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:19
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428035	ENB7	EET CF	07/22/24 16:45

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

Date Collected: 07/17/24 09:13

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-19**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	429371	QTZ5	EET CF	08/02/24 00:05
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428656	ZRI4	EET CF	07/26/24 21:59
Total/NA	Prep	3005A			428195	QTZ5	EET CF	07/24/24 09:30
Total/NA	Analysis	6020B		1	428438	NFT2	EET CF	07/25/24 14:06
Total/NA	Analysis	350.1		1	429045	ZJX4	EET CF	07/31/24 17:21
Total/NA	Analysis	5220D LL		1	428377	ENB7	EET CF	07/25/24 09:46
Total/NA	Analysis	I-3765-85		1	428076	WZC8	EET CF	07/23/24 08:42

## **Client Sample ID: Trip Blank 1**

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-26**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428134	WSE8	EET CF	07/24/24 06:32

## **Client Sample ID: Trip Blank 3**

Date Collected: 07/17/24 00:00

Date Received: 07/19/24 17:30

## **Lab Sample ID: 310-286332-28**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	428134	WSE8	EET CF	07/24/24 06:54

### Laboratory References:

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

Eurofins Cedar Falls

# Accreditation/Certification Summary

Client: SCS Engineers

Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

## 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		Water	1,2,3-Trichlorobenzene
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Bromobenzene
8260D		Water	Hexane
8260D		Water	p-Isopropyltoluene
8260D		Water	sec-Butylbenzene
8260D		Water	tert-Butylbenzene

# Method Summary

Client: SCS Engineers  
Project/Site: Archer Daniels Midland Landfill

Job ID: 310-286332-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET CF
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
350.1	Nitrogen, Ammonia	EPA	EET CF
5220D LL	COD	SM	EET CF
9066	Phenolics, Total Recoverable	SW846	EET CF
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
Distill/Phenol	Distillation, Phenolics	None	EET CF

## Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

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



310-286332 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

Client Information				
Client: SCS				
City/State:	CITY W Des Moines	STATE IA	Project: ADM Landfill	
Receipt Information				
Date/Time Received:	DATE 7-19-24	TIME 1730	Received By: HED	
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other:				
Condition of Cooler/Containers				
Sample(s) received in Cooler? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    If yes: Cooler ID:				
Multiple Coolers? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    If yes: Cooler # 1 of 4				
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? ↓  TB-1                          MW-9, MW-11				
Temperature Record				
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE				
Thermometer ID: 4		Correction Factor (°C): ±0		
Temp Blank Temperature – if no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C): 1.4		Corrected Temp (°C): 1.4		
Sample Container Temperature				
Container(s) used:		CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):				
Corrected Temp (°C):				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE: If yes, contact PM before proceeding. If no, proceed with login				
Additional Comments				



Environment Testing  
America

Place COC scanning label  
here

### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 7-19-24	TIME 1730	Received By: HED
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
	<input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>4</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ <u>TB-2</u> <u>none</u>
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE		
Thermometer ID:	<u>4</u>	Correction Factor (°C): <u>±0</u>	
Temp Blank Temperature - If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>3.8</u>	Corrected Temp (°C): <u>3.8</u>	
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<p>Document CED-P-SAM-FRM45521          Revision 26          Date 27 Jan 2022</p>			
<p>Eurofins Page 75 of 81</p>			
<p>General temperature criteria is 0 to 6°C          Bacteria temperature criteria is 0 to 10°C          27/2024 (Rev. 1)</p>			



Environment Testing  
America

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### Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE 7-19-24	TIME 1730	Received By: HED
Delivery Type.	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
	<input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>3</u> of <u>4</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Which VOA samples are in cooler? <u>TB-3</u> <u>MW-1Z</u>
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE		
Thermometer ID:	<u>4</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>5.0</u>	Corrected Temp (°C): <u>5.0</u>	
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<p>Document CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022</p>			
<p>Eurofins Page 16 of 81</p>			
<p>General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10°C 27/2024 (Rev. 1)</p>			



Environment Testing  
America

Place COC scanning label  
here

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>7-19-24</u>	TIME <u>1730</u>	Received By: <u>HED</u>
Delivery Type:	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> Lab Field Services	<input type="checkbox"/> Client Drop-off
	<input type="checkbox"/> Other: _____		
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler # <u>4</u> of <u>4</u>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓ <u>TB-4</u> <u>none</u>
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
<input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE		
Thermometer ID:	<u>4</u>	Correction Factor (°C): <u>±0</u>	
Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>1.4</u>	Corrected Temp (°C): <u>1.4</u>		
Sample Container Temperature			
Container(s) used:	<u>CARRIER 1</u>	<u>CARRIER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<p>Document CED-P-SAM-FRM45521 Revision 26 Date 27 Jan 2022</p> <p>Eurofins Page 77 of 81</p>			
<p>General temperature criteria is 0 to 6°C Bacteria temperature criteria is 0 to 10/27/2024 (Rev. 1)</p>			





**Eurofins Cedar Falls**  
3019 Venture Way  
Cedar Falls, IA 50613  
Phone: 319-277-2401 Fax: 319-277-2425

**Chain of Custody Record**

TestAmerica Des Moines eurofins  
214

<b>Client Information</b>		Sampler Name: <u>M. A. MURKAN</u>	Lab PW: Yang, Mary E	Carrier Tracking No(s): COC No: 310-94408-25914-3	
Client Contact: Kevin Jensen	Phone: 515-631-6154 (Tel)	E-Mail: Mary Yang@ET EurofinsUS.com	State of Origin:	Page: 3 of 3	
Company: SCS Engineers	PWSID: ADM Landfill 2024				
Address: 1690 All State Court, Suite 100	City: West Des Moines	Due Date Requested: TAT Requested (days):			
State, Zip: IA, 50265	Phone: 515-631-6154 (Tel)	Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Project Name: ADM Landfill 2024	Email: kjensen@scsengineers.com	PO#:			
Site: <u>ADM Landfill - C1N1N</u>	Project #: SSOW#:	WO#:			
Performed Sample (Yes or No) Field Filtered Sample (Yes or No)					
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (water, soil, oil, tissue, AAF, air)	Preservation Code:
MW-9	7/7/24	9:00	Water	S N D N D D	X S N D N A N N
MW-11	7/7/24	11:52	Water	S N D N D D	X S N D N A N N
MW-12	7/7/24	10:30	Water	S N D N D D	X S N D N A N N
TRIPBLANK			Water	S N D N D D	X S N D N A N N
Special Instructions/Note: Total Number of containers: 8270E, 8270E SIM - PAHs 8270E, 8270E SIM 8270D - Volume Standard Sublute 8270E - Bis(2-ethylhexyl) Phenoates, Total Recoverable 8020B - 6 Metals 8020B - 4 Metals 8020B - 7 Metals 300_ORGFM_28D - Chloride and Sulfate 1_3766_BB - Residue, Non-fliterable (TSS) 9068A_ORGFM_28D - Chloride and Sulfate 360.1_6220D_LL					
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					
Deliverable Requested I, II, III, IV, Other (specify)					
Empty Kit Relinquished by Relinquished by <u>M. A. MURKAN</u>		Date/Time: <u>7/7/24 09:00 AM</u>	Company: <u>SCS</u>	Received by <u>Quinn</u>	Method of Shipment: <u>7/19/24 11:15 AM</u>
Relinquished by		Date/Time:	Company:	Received by:	Date/Time:
Custody Seals Intact: △ Yes <input checked="" type="checkbox"/> No		Date:	Date:	Date:	Date/Time: <u>7/19/24 11:15 AM</u>
Colder Temperature(s) °C and Other Remarks: <u>7/19/24 11:15 AM</u>					

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

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-286332-1

**Login Number:** 286332

**List Source:** Eurofins Cedar Falls

**List Number:** 1

**Creator:** Miller, Samuel

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.	False	Some samples are listed on COC twice, samples weren't marked for analysis
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

Completed by: Semir Omerovic  
 Lab Report Date: 5/17/2024  
 Site Name: ADM-Clinton Landfill  
 Lab Report Number: 310-278908-1

**OK NO N/A NOTES**

**Sample Collection and Sample Handling**

Chain of Custody  
Temperature

Preservation

Condition

Reporting Limits

Case Narrative

Holding Times

	X		
	X		
		X	The following samples were received with insufficient preservation: MW-7 and Wet Well Leachate. The maximum amount of preservation was added by the laboratory, but the sample remained strongly basic. No further attempt was made to acidify the sample, as it would have diluted the sample. This does not meet regulatory requirements.
	X		
		X	Method 9056A: The following sample was diluted due to the nature of the sample matrix: MW-7 and MW-11. Elevated reporting limits are provided.
	X		
	X		

**Analytical Sensitivity and Blanks**

Method Blank Detections  
Trip Blank Detections

	X		Bis(2-ethylhexyl)phthalate was detected in the method blank for analytical batch 419071.
		X	

**Accuracy**

ICV/CCV  
LCS/LCSD

MS/MSD

Surrogates (organics only)

	X		
	X		
		X	MS & MSD results were below recovery limit for ammonia associated with analysis batch 418900.
	X		

**Precision**

QA/QC Sample RPDs

Field Duplicates

	X		Method 300: The following sample was analyzed outside of analytical holding time due to QC failure: Wet Well Leachate.
		X	The duplicate was collected from MW-16 during the spring 2024 event. All parameters had <50% relative difference, with the exception of chloride and sulfate. Constituents with J flag concentrations were not considered for the duplicate sample comparisons.

Completed by: Semir Omerovic  
 Lab Report Date: 8/27/2024  
 Site Name: ADM-Clinton Landfill  
 Lab Report Number: 310-286332-1

**OK NO N/A NOTES**

**Sample Collection and Sample Handling**

Chain of Custody  
Temperature

Preservation

Condition

Reporting Limits

Case Narrative  
Holding Times

	OK	NO	N/A	NOTES
Chain of Custody	X			
Temperature	X			
Preservation		X		Method 8260D: The following sample was collected in 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 the unpreserved samples but within the 14-day holding time specified for preserved samples: MW-9.
Condition	X			
Reporting Limits		X		Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-3, MW-7, MW-11 and MW-13. Elevated reporting limits are provided.  Method 8270E_SIM: Internal standard (ISTD) response for the following samples were outside of acceptance limits: MW-9 and MW-11. The ISTD failed low causing the data to be biased high. The affected analytes were non-detects therefore the data has been reported.
Case Narrative	X			
Holding Times	X			

**Analytical Sensitivity and Blanks**

Method Blank Detections

Trip Blank Detections

	X		Hexane was detected in the method blank for analytical batch 428392.
		X	Magnesium was detected in the method blank for analytical batch 428438.

Completed by: Semir Omerovic  
 Lab Report Date: 8/27/2024  
 Site Name: ADM-Clinton Landfill  
 Lab Report Number: 310-286332-1

**OK NO N/A NOTES**

**Accuracy**

ICV/CCV  
LCS/LCSD

	X		
	X		
MS/MSD		X	In analytical batch 428438 the MS & MSD results were outside recovery limit for magnesium.
Surrogates (organics only)	X		In analytical batch 429045 the MS & MSD results were outside recovery limits for ammonia.

**Precision**

QA/QC Sample RPDs

	X		
	X		
Field Duplicates		X	The duplicate sample was collected from MW-4 during the fall 2024 event. All parameters had <50% relative difference. Constituents with J flag were not considered for the duplicate sample comparisons.

## Appendix C

### Summary of Groundwater Chemistry

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Total Metals Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.2
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.925
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.139
	10/1/2014	< 0.002	< 0.002	< 0.002	< 0.00288	<b>0.0249</b>	N/A	<b>0.0328</b>	<b>0.0387</b>	<b>0.098</b>	N/A	<b>0.106</b>	N/A	<b>0.0723</b>	<b>0.108</b>	<b>0.122</b>	N/A	N/A	N/A	N/A
	10/1/2015	< 0.002	< 0.002	< 0.002	<b>0.00243</b>	<b>0.0212</b>	N/A	<b>0.0339</b>	<b>0.041</b>	<b>0.064</b>	N/A	<b>0.0742</b>	N/A	<b>0.0759</b>	<b>0.117</b>	<b>0.123</b>	N/A	N/A	N/A	N/A
	10/12/2016	0.000889*	< 0.002	< 0.002	<b>0.00989</b>	<b>0.0161</b>	N/A	<b>0.00674</b>	<b>0.00513</b>	<b>0.0237</b>	N/A	<b>0.0662</b>	N/A	<b>0.07</b>	<b>0.155</b>	<b>0.0988</b>	N/A	N/A	N/A	<b>0.109</b>
	10/5/2017	0.000605*	< 0.002	< 0.002	<b>0.0113</b>	<b>0.0106</b>	0.000541*	<b>0.0411</b>	<b>0.0499</b>	<b>0.0185</b>	< 0.002	<b>0.0467</b>	< 0.002	<b>0.0629</b>	<b>0.103</b>	<b>0.129</b>	0.00146*	< 0.002	0.000698*	N/A
	5/9/2018	<b>0.000934</b>	0.000934*	< 0.002	0.00177*	<b>0.0263</b>	< 0.002	<b>0.0484</b>	<b>0.0244</b>	<b>0.0824</b>	< 0.002	<b>0.0564</b>	< 0.002	<b>0.0524</b>	<b>0.122</b>	<b>0.116</b>	0.00135*	< 0.002	0.000744*	N/A
	9/10/2018	<b>0.000574*</b>	< 0.002	< 0.002	<b>0.0115</b>	<b>0.017</b>	< 0.002	<b>0.0423</b>	<b>0.0135</b>	<b>0.0352</b>	< 0.002	<b>0.0736</b>	< 0.002	<b>0.0626</b>	<b>0.098</b>	<b>0.117</b>	0.00103*	< 0.002	0.000716*	<b>0.0792</b>
	3/27/2019	< 0.002	< 0.002	< 0.002	<b>0.00273</b>	<b>0.0233</b>	< 0.002	<b>0.0364</b>	<b>0.0267</b>	<b>0.0223</b>	< 0.002	<b>0.0715</b>	< 0.002	<b>0.064</b>	<b>0.124</b>	<b>0.09</b>	< 0.002	< 0.002	< 0.002	N/A
	9/10/2019	< 0.002	< 0.002	< 0.002	<b>0.0432</b>	<b>0.00883</b>	0.000767*	<b>0.0355</b>	<b>0.0386</b>	<b>0.0312</b>	< 0.002	<b>0.0361</b>	< 0.002	<b>0.068</b>	<b>0.113</b>	<b>0.115</b>	0.00167*	< 0.002	0.00128*	N/A
	3/2/2020	< 0.002	< 0.002	< 0.002	<b>0.0206</b>	<b>0.00602</b>	< 0.002	<b>0.043</b>	<b>0.0174</b>	<b>0.0293</b>	< 0.002	<b>0.0275</b>	< 0.002	<b>0.0606</b>	<b>0.127</b>	<b>0.146</b>	<b>0.0398</b>	< 0.002	< 0.002	N/A
	8/26/2020	< 0.002	< 0.002	< 0.002	<b>0.0416</b>	<b>0.00386</b>	< 0.002	<b>0.0485</b>	<b>0.0303</b>	<b>0.0444</b>	< 0.002	<b>0.0259</b>	< 0.002	<b>0.0575</b>	<b>0.102</b>	<b>0.133</b>	0.00187*	< 0.002	< 0.002	<b>0.0679</b>
	5/4/2021	< 0.002	< 0.002	< 0.002	<b>0.0389</b>	<b>0.00786</b>	< 0.002	<b>0.08856</b>	<b>0.0184</b>	<b>0.0873</b>	< 0.002	<b>0.0716</b>	< 0.002	<b>0.0499</b>	<b>0.0999</b>	<b>0.0484</b>	< 0.002	< 0.002	< 0.002	N/A
	5/4/2021	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/9/2022	< 0.002	< 0.002	<b>0.00319</b>	<b>0.0146</b>	< 0.002	<b>0.0132</b>	<b>0.0424</b>	<b>0.0903</b>	< 0.002	<b>0.086</b>	< 0.002	<b>0.0564</b>	<b>0.0876</b>	<b>0.0245</b>	0.00081*	< 0.002	0.000865*	N/A	
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A	N/A
	2/14/2023	< 0.002	< 0.002	<b>0.0257</b>	<b>0.0108</b>	< 0.002	<b>0.0473</b>	<b>0.00957</b>	<b>0.0914</b>	< 0.002	<b>0.0816</b>	< 0.002	<b>0.0512</b>	<b>0.0651</b>	<b>0.13</b>	< 0.002	< 0.002	0.000918*	N/A	
	2/14/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	< 0.002	< 0.002	<b>0.00523</b>	N/A	< 0.002	<b>0.0272</b>	N/A	N/A	N/A	< 0.002	<b>0.0849</b>	<b>0.0895</b>	<b>0.113</b>	< 0.008	< 0.002	0.000714*	N/A		
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	<b>0.000785*</b>	0.000605*	<b>0.00232</b>	<b>0.0164</b>	< 0.002	<b>0.0509</b>	<b>0.0295</b>	<b>0.0446</b>	< 0.002	<b>0.0907</b>	< 0.002	<b>0.0762</b>	<b>0.0895</b>	< 0.002	0.000738*	<b>0.102</b>	0.000893*	<b>0.0927</b>	
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/16/2024	< 0.002	< 0.002	<b>0.00503</b>	<b>0.0272</b>	< 0.002	<b>0.051</b>	<b>0.0238</b>	<b>0.0297</b>	< 0.002	<b>0.0485</b>	0.000736*	<b>0.0575</b>	<b>0.0704</b>	<b>0.0952</b>	0.000948*	< 0.002	0.00067*	N/A	
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium, mg/L (CAS NO - 7440-41-7)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001
Cadmium, mg/L (CAS NO - 7440-43-9)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0175
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 0.025
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	<b>0.0069</b>
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 0.0004
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 0.0007
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>0.000884</b>
Cobalt, mg/L (CAS NO - 7440-48-4)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.021
	10/1/2014	< 0.005	< 0.000533	<b>0.000751</b>	<b>0.00179</b>	< 0.0005	<b>0.0114</b>	<b>0.0144</b>	<b>0.00975</b>	< 0.0005	<b>0.00349</b>	< 0.0005	<b>0.0262</b>	<b>0.0265</b>	<b>0.00307</b>	<b>0.000767</b>	< 0.0005	< 0.0005	N/A	
	10/1/2015	< 0.005	< 0.0005	<b>0.000808</b>	<b>0.00113</b>	< 0.0005	< 0.0005	<b>0.0106</b>	<b>0.0118</b>	<b>0.00534</b>	< 0.0005	<b>0.00304</b>	< 0.0005	<b>0.0204</b>	<b>0.0299</b>	<b>0.00228</b>	<b>0.00328</b>	< 0.0005	< 0.0005	N/A
	10/12/2016	< 0.005	< 0.000529*	<b>0.00033*</b>	<b>0.00348</b>	<b>0.00064</b>	0.000077*	<b>0.00491</b>	<b>0.00561</b>	0.000052*	<b>0.00229</b>	<b>0.00102</b>	<b>0.0256</b>	<b>0.0781</b>	<b>0.00185</b>	<b>0.00189</b>	0.000075*	0.00017*	<b>0.00773</b>	
	10/5/2017	< 0.005	< 0.000529*	<b>0.00041*</b>	<b>0.00418</b>	0.000436*	< 0.0005	<b>0.00457*</b>	0.000089*	<b>0.00494*</b>	< 0.0005	<b>0.00252*</b>	0.000097*	<b>0.0248</b>	0.00228*	<b>0.00216*</b>	<b>0.00154</b>	< 0.0005	0.000316*	N/A
	5/9/2018	0.000243*	<b>0.000243</b>	0.000263*	<b>0.0013</b>	0.000376*	0.0000604*	<b>0.00874</b>	<b>0.00818</b>	<b>0.00131</b>	< 0.0005	<b>0.00366</b>	0.000215*	<b>0.0172</b>	<b>0.0258</b>	<b>0.00291</b>	<b>0.00461</b>	< 0.0005	0.00013*	N/A
	9/10/2018	< 0.0005	0.000196*	0.000306*	<b>0.00417</b>	<b>0.00516</b>	< 0.0005	<b>0.00762</b>	<b>0.00797</b>	<b>0.00658</b>	< 0.0005	<b>0.00307</b>	0.000475*	<b>0.00828</b>	<b>0.00209</b>	<b>0.00239</b>	<b>0.00108</b>	< 0.0005	0.000201*	<b>0.00511</b>
	3/27/2019	< 0.0005	0.000223*	0.00017*	<b>0.00177</b>	0.000489*	< 0.0005	<b>0.0101</b>	<b>0.0118</b>	<b>0.00595</b>	< 0.0005	<b>0.00305</b>	0.000256*	<b>0.0107</b>	<b>0.0245</b>	0.00229*	<b>0.00654</b>	< 0.0005	0.000136*	N/A
	9/10/2019	< 0.0005	0.000381*	0.000128*	<b>0.00391</b>	<b>0.0104</b>	< 0.0005	<b>0.0058</b>	<b>0.00322</b>	<b>0.0059</b>	0.000109*	<b>0.00202</b>	<b>0.00733</b>	<b>0.0272</b>	<b>0.0263</b>	<b>0.00205</b>	<b>0.0115</b>	< 0.0005	0.000162*	N/A
	3/2/2020	< 0.0005	0.000266*	0.000143*	<b>0.00283</b>	<b>0.00643</b>	< 0.0005	<b>0.00523</b>	<b>0.00435</b>	<b>0.0044</b>	< 0.0005	<b>0.00194</b>	0.000275*	<b>0.035</b>	<b>0.0295</b>	<b>0.00235</b>	<b>0.0128</b>	< 0.0005	0.000168*	N/A
	8/26/2020	< 0.0005	0.000413*	0.000139*	<b>0.00349</b>	<b>0.0191</b>	< 0.0005	<b>0.00543</b>	<b>0.00753</b>	<b>0.0061</b>	< 0.0005	<b>0.00234</b>	0.000228*	<b>0.028</b>	<b>0.0234</b>	<b>0.00256</b>	<b>0.00864</b>	< 0.0005	< 0.0005	<b>0.00453</b>
	5/4/2021	< 0.0005	0.0004*	0.000173*	<b>0.00485</b>	<b>0.0026</b>	< 0.0005	<b>0.00494</b>	<b>0.00487</b>	<b>0.00539</b>	0.000013*	<b>0.00256</b>	<b>0.00576</b>	<b>0.0296</b>	<b>0.00227</b>	<b>0.00248</b>	<b>0.000819</b>	< 0.0005	0.000117*	N/A
	5/4/2021	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	< 0.0005	0.000345*	0.000218*	<b>0.0025</b>	<														

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Total Metals Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Lead, mg/L (CAS NO - 7439-92-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.0185
	10/32/2016	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	N/A	N/A	N/A	N/A	N/A	<0.005
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	0.00646
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	0.00058*
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<0.0035
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.002*
Mercury, mg/L (CAS NO - 7439-97-6)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.0002
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.00025
Nickel, mg/L (CAS NO - 7440-02-0)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.06
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.01
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.459
	10/1/2014	< 0.005	N/A	< 0.01	N/A	N/A	N/A	N/A	0.172	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/1/2015	< 0.005	N/A	< 0.005	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	N/A	N/A	N/A
	10/12/2016	< 0.005	N/A	0.00219*	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	N/A	N/A	0.0492
	10/5/2017	N/A	0.00479*	0.00467*	N/A	N/A	N/A	N/A	0.0033*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	0.00493*	0.00303*	N/A	N/A	N/A	N/A	0.077	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	< 0.002	N/A	0.00248	N/A	N/A	N/A	N/A	0.065	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0373
	3/27/2019	< 0.005	N/A	0.00183*	N/A	N/A	N/A	N/A	0.143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2019	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.0405	N/A	N/A	N/A	N/A	0.0148	0.00874	N/A	0.0272	< 0.005	N/A	N/A
	3/2/2020	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.0572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.105	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0294
	5/4/2021	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.065	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	< 0.005	N/A	0.00432*	N/A	N/A	N/A	N/A	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	< 0.005	N/A	0.00494*	N/A	N/A	N/A	N/A	0.0623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.037*
	8/9/2022	< 0.005	N/A	0.00308*	N/A	N/A	N/A	N/A	0.0633	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/14/2023	< 0.005	N/A	0.00489*	N/A	N/A	N/A	N/A	0.0453	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.0346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	< 0.005	N/A	0.006	N/A	N/A	N/A	N/A	0.0458	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0559
	7/16/2024	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	0.018*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, mg/L (CAS NO - 7782-49-2)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.05
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.0366
Zinc, mg/L (CAS NO - 7440-66-6)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.633
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.604
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.29
	10/1/2014	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0134	< 0.01	< 0.02	< 0.01	< 0.01	0.0534	< 0.01	0.0534	< 0.01	< 0.01	< 0.01	N/A
	10/1/2015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0124	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0236	< 0.01	0.0192	< 0.01	< 0.01	< 0.01	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<0.05
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	0.0212
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	<0.08
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<0.14
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0706
Total Suspended Solids, mg/L (CAS NO - TSS)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4130
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	168
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2530
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	35
	10/5/2017	0.75*	2.13	0.75*	37.5	76.5	< 1.88	98.9	< 1.88	1.38*	< 1.88	3.5	26	132	102	108	3	< 1.88	144	N/A
	5/9/2018	1*	1.5*	4.62	84	188	96	11.5	1.75*	< 1.88	3*	45.5	154	31	70	< 1.88	< 1.88	3.38	N/A	
	9/10/2018	< 1.88	1.5*	15.2	68	< 1.88	60.7	7.17	1.5*	< 1.88	4.33*	55.7	45.7	59.5	< 1.88	< 1.88	< 1.88	35		
	3/27/2019	0.75*	< 1.88	9.87	81	0.875*	93	473	14	< 1.88	7.2	27.4	167	101	91.8	< 1.88	1.38*	1.5*	N/A	
	9/10/2019	< 1.88	3.38	1.88	19.1	52.8	< 1.88	87.9	146	0.75*	< 1.88	1.63*	19	122	94	103	3.25	< 1.88	1.88	N/A
	3/2/2020	< 1.88	1.25*	< 1.88	16.5	31	0.75*	112	1290	< 3	0.75*	2.67*	27.5	97	73.7	96	20.1	1*	22.5	N/A
	8/26/2020	< 1.88	1*	< 1.88	4.88	33.1	< 1.88	108	549	1*	1.75*	103	52.5	132	91.5	90.5	6.75	6.87	2.63	29.3
	5/4/2021	< 1.88	1*	4.62	25.7	50.8	0.75*	94	185	< 1.88	0.875*	4.8	92.1	136	85.2	88.3	< 1.88	< 1.88	2	N/A
	5/4/2021	< 1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	< 1.88	< 1.88	5.67	52	< 1.88	108	110	< 1.88	< 1.88	3	96.7	124	68	96	< 1.88	< 1.88	27.3	N/A	
	8/17/2021	N/A	N/A	N/A	N/A	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
	3/15/2022	< 1.88	< 1.88	2.88	74	< 1.88	106	314	1.13*	< 1.88	5.5*	496	137	73	96.7	11.13*	< 1.88	4.5	21	
	8/9/2022	< 1.88	1.38*	< 1.88	13	74	3.75	104	1160	5.67	< 1.88	3*	88	140	76	99	< 1.88	< 1.88	3.5	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	0.75*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	2/14/2023	< 1.88	< 1.88	3	45	3.13	131	2240	6.87	3.5	280	606	44	42	109	< 1.88	6.25	8.63	N/A	
	2/14/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	7/19/2023	< 1.88	1.13*	< 1.88	7.38	N/A	< 1.88	N/A	314	N/A	3.5	N/A	107	140	64	97	< 1.88	< 1.88	10.9	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	< 1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	4/9/2024	1.5*	5.37	32.5	21.1	122	1.75*	108	1850	< 1.88	< 1.88	4.33*	31	138	67.3	10.9	5.5	73.3	21.1	574
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24.8
	7/16/2024	< 1.88	< 1.88	1.88	10.3	87.3	<													

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Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

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Summary of Groundwater Chemistry

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<18
	10/2/2013	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<1.8
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.672*	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.87
	10/2/2013	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<0.87	<8.7
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1.53
	10/2/2013	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<15
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<10
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<9.26
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
2-Butanone, ug/L (CAS NO - 78-93-3)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2300
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	764
	10/2/2013	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	1.06*	8.76*	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	369
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	20.7*
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.18*	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	2.34*	<10	N/A	N/A	N/A	N/A	<100
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<100	N/A	<10	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100	N/A	<100	N/A	N/A	N/A	N/A	N/A	<100
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100	N/A	<100	N/A	<100	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<100
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.14*	N/A	2.51*	<10	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<100	N/A	<10	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
2-Hexanone, ug/L (CAS NO - 591-78-6)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1000
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.53*
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.42*
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2.2

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Acetone, ug/L (CAS NO - 67-64-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1640
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	329
	10/2/2013	<1.79	<1.79	<1.79	<1.79	<1.79	<1.79	<1.79	9.29*	<1.79	3.52*	<1.79	6.08*	2.5*	<1.79	<1.79	<1.79	<1.79	<1.79	284
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<100
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.27*	N/A	13	4.82*	N/A	N/A	N/A	N/A	N/A	<100
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.03*	N/A	< 100	N/A	< 100	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 100	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	41.3*
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 100	N/A	< 100	N/A	< 100	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	5.31*	N/A	N/A	N/A	N/A	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.15*	N/A	17.6	5.31*	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 100	N/A	< 10	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.1*
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	4.5*	< 10	N/A	N/A	N/A	N/A	N/A	N/A
Acrylonitrile, ug/L (CAS NO - 107-13-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1000
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.53
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5.3
Benzene, ug/L (CAS NO - 71-43-2)	6/7/1993	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	9/14/1993	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5	< 1	6	< 1	< 5	< 2	< 5	< 2	< 1	< 1	< 1	N/A
	12/8/1993	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 2	< 5	< 2	< 1	< 1	N/A
	3/22/1994	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2.5	< 2.5	< 1	< 2.5	< 1	< 5	< 5	< 1	< 1	< 1	< 1	N/A
	9/30/1994	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/16/1995	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/26/1995	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	14.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/13/1996	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	11.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/10/1996	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	12.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/1997	N/A	N/A	< 1	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	N/A	N/A
	10/10/1997	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	14.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/19/1998	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	16.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/1998	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	14.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/18/1999	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/27/2000	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	19	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	10/10/2000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/17/2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/1/2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/5/2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/17/2006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/17/2006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/23/2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/9/2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/14/2008	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/23/2008	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/14/2009	N/A	N/A	N/A	N/A	N/A	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	N/A
	10/9/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/7/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/26/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/27/2011	N/A	N/A	N/A	N/A	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	N/A	N/A
	4/24/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.11
	10/2/2013	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	7.66	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<1.1
	10/1/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/1/2015	N/A	N/A	N/A	N/A	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	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	< 5
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	N/A	< 5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.3	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.6	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 5
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.8	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.8	N/A	< 5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.95	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	10/2/2013	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<50
	10/5/2017	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	N/A	N/A	N/A	N/A	N/A
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A
	9/10/2019	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	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	<50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<50
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5
	7/16/2024	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	N/A	N/A	N/A	N/A	N/A
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<200
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<12
	10/2/2013	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<1.2
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
Bromoform, ug/L (CAS NO - 75-25-2)	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.14
	10/2/2013	<0.14	<0.14	<0.14	0.196*	<0.14	<0.14	0.165*	0.278*	<0.14	0.177*	0.219*	<0.14	<0.14	<0.14	<0.14	0.15*	<0.14	<0.14	<0.14
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<50
	10/5/2017	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	N/A	N/A	N/A	N/A	N/A
	9/10/2018	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	N/A	N/A	N/A	N/A	<50
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	<50	N/A	<5	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	<50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<50
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	<50	N/A	<5	N/A	N/A	N/A	N/A
	4/9/2024	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	N/A	N/A	N/A	N/A	N/A
	7/16/2024	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	N/A	N/A	N/A	N/A	N/A
Bromomethane, ug/L (CAS NO - 74-83-9)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<500
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<22
	10/2/2013	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	4.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<2.2
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<40
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.391*	N/A	0.327*	<4	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A	N/A	<40
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<40	N/A	<4	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<40	N/A	N/A	N/A	N/A	N/A	<40
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<40	N/A	<40	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<40
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	10/2/2013	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.244*	0.45*	<0.15	0.592*	0.581*	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	6.25*
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.5	N/A	1.03	0.568*	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.549*	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.97	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.5	N/A	5.71*	N/A	N/A	N/A	N/A	N/A	5.21*
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.457*	N/A	0.489*	<1	N/A	N/A	N/A	N/A	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.457*	N/A	0.489*	<1	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.56*
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.1	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A

SCS ENGINEERS

#### **Summary of Groundwater Chemistry**

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

SCS ENGINEERS

Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
<b>Methylene Chloride, ug/L (CAS NO - 75-09-2)</b>	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 500
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.17
	10/2/2013	<0.17	<0.17	<0.17	<0.17	0.27*	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.549*	0.558*	<0.17	<0.17	<0.17	<0.17	<1.7	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	3.1*
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 50
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 50	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	< 50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 50	N/A						
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 50
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A						
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 5	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A						
<b>Styrene, ug/L (CAS NO - 100-42-5)</b>	10/2/2013	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A						
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 1	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
<b>Tetrachloroethene, ug/L (CAS NO - 127-18-4)</b>	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.182*
	10/2/2013	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	< 1.8
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A						
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 1	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
<b>Toluene, ug/L (CAS NO - 108-88-3)</b>	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.408*
	10/2/2013	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	7.98*	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	< 1.5
	10/1/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.37	N/A	< 1	N/A						
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	< 2	N/A						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.49	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.22	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.45*	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.8	N/A	< 1	N/A						
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.8	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.36	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A
<b>trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)</b>	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.21
	10/2/2013	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	< 2.1
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	10/2/2013	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	N/A	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<50
	10/5/2017	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	N/A	N/A	N/A	N/A	N/A
	9/10/2018	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	N/A	N/A	N/A	N/A	<50
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5	N/A	<50	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	<50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<50	N/A	<50	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<50
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A
	7/19/2023	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	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<5
	7/16/2024	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	N/A	N/A	N/A	N/A	N/A
Trichloroethene, ug/L (CAS NO - 79-01-6)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.19
	10/2/2013	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<1.9
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<400
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.17
	10/2/2013	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.374*	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<1.7
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<40
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A	N/A	<40
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<40	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<40	N/A	N/A	N/A	N/A	N/A	<40
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<40	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<40
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<40	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4	N/A	<4	N/A	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<100
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.1
	10/2/2013	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	<10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	<10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A	N/A	<10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<10	N/A	<10	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<10	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	<1	N/A	N/A	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I VOC Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<300
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.13
	10/2/2013	<0.13	<0.13	<0.13	<0.13	0.15*	<0.13	<0.13	0.227*	0.398*	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<1.3
	10/1/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<13	N/A							
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.26*	N/A	<30						
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.311*	N/A	<3	<3	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<6	<6	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	<3	N/A	N/A	N/A	N/A	N/A	<30
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	<30	N/A	<3	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<30	N/A	<30	N/A	N/A	N/A	N/A	N/A	<30
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<30	N/A	<30	N/A	<30	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<30
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3	N/A	<3	N/A	<3	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<30	N/A	<3	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<3
	7/16/2024	N/A	N/A	N/A	N/A	N/A	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

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

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Chemical Oxygen Demand, mg/L (CAS NO - COD)	6/7/1993	<5	<b>24</b>	<5	<b>32</b>	<b>24</b>	<5	<b>59</b>	<b>100</b>	<b>460</b>	<b>13</b>	<b>1400</b>	<b>5.3</b>	<b>130</b>	<b>59</b>	<b>150</b>	<b>33</b>	<b>16</b>	<b>23</b>	N/A	
	9/14/1993	<5	<b>18</b>	<5	<b>23</b>	<b>45</b>	<5	<b>40</b>	<b>93</b>	<b>550</b>	<5	<b>450</b>	<5	<b>320</b>	<b>36</b>	<b>250</b>	<b>140</b>	<b>17</b>	<b>5.5</b>	N/A	
	12/8/1993	<b>23</b>	<b>21</b>	<b>21</b>	<b>54</b>	<b>54</b>	<b>7.8</b>	<b>65</b>	<b>110</b>	<b>1000</b>	<b>7.8</b>	<b>1000</b>	<b>13</b>	<b>190</b>	<b>62</b>	<b>250</b>	<b>47</b>	<b>54</b>	<b>31</b>	N/A	
	3/22/1994	<5	<b>17</b>	<b>14</b>	<b>21</b>	<b>37</b>	<5	<b>48</b>	<b>91</b>	<b>370</b>	<5	<b>690</b>	<5	<b>110</b>	<b>34</b>	<b>240</b>	<b>28</b>	<b>59</b>	<b>14</b>	N/A	
	9/30/1994	<5	<b>22</b>	<b>8.3</b>	<b>31</b>	<b>39</b>	<5	<b>48</b>	<b>59</b>	<b>450</b>	<5	<b>680</b>	<5	<b>120</b>	<b>31</b>	<b>160</b>	<b>23</b>	<b>28</b>	<b>14</b>	N/A	
	3/16/1995	<5	<b>15</b>	<b>11</b>	<b>26</b>	<b>35</b>	<5	<b>55</b>	<b>82</b>	<b>470</b>	<5	<b>990</b>	<5	<b>200</b>	<b>39</b>	<b>290</b>	<b>23</b>	<b>130</b>	<b>11</b>	N/A	
	9/26/1995	<5	<b>18</b>	<b>7</b>	<b>47</b>	<b>33</b>	<5	<b>54</b>	<b>100</b>	<b>420</b>	<5	<b>420</b>	<5	<b>230</b>	<b>44</b>	<b>270</b>	<b>19</b>	<b>98</b>	<b>13</b>	N/A	
	5/13/1996	<5	<b>14</b>	<5	<b>26</b>	<b>23</b>	<5	<b>39</b>	<b>45</b>	<b>240</b>	<5	<b>260</b>	<5	<b>73</b>	<b>23</b>	<b>210</b>	<b>20</b>	<b>82</b>	<b>12</b>	N/A	
	10/10/1996	<5	<b>16.8</b>	<b>8.5</b>	<b>44</b>	<b>38</b>	<5	<b>44</b>	<b>120</b>	<b>430</b>	<b>23</b>	<b>520</b>	<5	<b>270</b>	<b>110</b>	<b>270</b>	<b>23</b>	<b>140</b>	<5	N/A	
	6/19/1997	<5	<b>5.2</b>	<5	<b>41</b>	<b>20</b>	<5	<b>43</b>	<b>110</b>	<b>360</b>	<5	<b>280</b>	<5	<b>240</b>	<b>67</b>	<b>220</b>	<b>12</b>	<b>58</b>	<5	N/A	
	10/10/1997	<5	<b>8</b>	<5	<b>46</b>	<b>26</b>	<b>14</b>	<b>49</b>	<b>130</b>	<b>540</b>	<5	<b>46</b>	<5	<b>240</b>	<b>91</b>	<b>330</b>	<b>15</b>	<b>58</b>	<b>6.3</b>	N/A	
	5/19/1998	<b>7.3</b>	<b>23</b>	<b>12</b>	<b>39</b>	<b>32</b>	<5	<b>51</b>	<b>120</b>	<b>460</b>	<5	<b>590</b>	<5	<b>340</b>	<b>160</b>	<b>370</b>	<b>20</b>	<b>60</b>	<b>24</b>	N/A	
	10/19/1998	<5	<b>11</b>	<b>7.6</b>	<b>23</b>	<b>27</b>	<5	<b>50</b>	<b>110</b>	<b>340</b>	<5	<b>400</b>	<5	<b>240</b>	<b>140</b>	<b>260</b>	<b>18</b>	<b>140</b>	<b>12</b>	N/A	
	4/20/1999	<5	<b>6.4</b>	<5	<b>14</b>	<b>22</b>	<5	<b>40</b>	<b>120</b>	<b>290</b>	<5	<b>220</b>	<5	<b>150</b>	<b>78</b>	<b>120</b>	<b>11</b>	<b>41</b>	<5	N/A	
	10/18/1999	<5	<b>8.3</b>	<5	<b>27</b>	<b>11</b>	<5	<b>37</b>	<b>140</b>	<b>290</b>	<5	<b>310</b>	<5	<b>150</b>	<b>140</b>	<b>180</b>	<b>12</b>	<b>49</b>	<5	N/A	
	4/18/2000	N/A	<b>14</b>	N/A	<b>36</b>	<b>29</b>	N/A	<b>44</b>	N/A	<b>450</b>	N/A	<b>570</b>	N/A	<b>230</b>	N/A	<b>250</b>	<b>14</b>	N/A	<b>6.9</b>	N/A	
	10/10/2000	N/A	<b>117</b>	N/A	<b>62.9</b>	<b>186</b>	N/A	<b>380</b>	N/A	<b>546</b>	N/A	<b>363</b>	N/A	<b>234</b>	N/A	<b>429</b>	<b>103</b>	N/A	<b>74.3</b>	N/A	
	4/25/2001	N/A	<20	N/A	<20	<b>48</b>	N/A	<b>54.2</b>	N/A	<b>228</b>	N/A	<b>258</b>	N/A	<b>125</b>	N/A	<b>204</b>	<b>28</b>	N/A	<b>28</b>	N/A	
	10/17/2001	<20	<20	N/A	<20	<20	<20	<20	<20	<b>3.23</b>	<20	<b>1.24</b>	<20	<20	<20	<20	<20	<20	<20	N/A	
	4/1/2002	N/A	<b>11</b>	N/A	<b>20</b>	<b>29</b>	N/A	<b>93</b>	N/A	<b>430</b>	N/A	<b>270</b>	N/A	<b>260</b>	N/A	<b>250</b>	<b>13</b>	N/A	<b>11</b>	N/A	
	10/1/2002	<20	<20	N/A	<b>30</b>	<b>30</b>	<20	<b>72</b>	<b>200</b>	<b>510</b>	<20	<b>500</b>	<20	<b>280</b>	<b>100</b>	<b>200</b>	<20	<20	<20	N/A	
	4/21/2003	N/A	<b>11</b>	N/A	<b>23</b>	<b>39</b>	N/A	<b>72</b>	N/A	<b>520</b>	N/A	<b>440</b>	N/A	<b>165</b>	N/A	<b>162</b>	<b>22.7</b>	N/A	<b>13.9</b>	N/A	
	9/24/2003	<5	<b>12</b>	<b>16</b>	<b>24</b>	<b>28</b>	<b>6.3</b>	<b>75</b>	<b>140</b>	<b>470</b>	<b>14</b>	<b>430</b>	<b>7</b>	<b>250</b>	<b>139</b>	<b>240</b>	<b>17</b>	<b>91</b>	<b>9.4</b>	N/A	
	4/9/2004	N/A	<b>12</b>	N/A	<b>25</b>	<b>36</b>	N/A	<b>230</b>	N/A	<b>380</b>	N/A	<b>1160</b>	N/A	<b>210</b>	N/A	<b>200</b>	<b>23</b>	N/A	<b>14</b>	N/A	
	10/19/2004	<5	<b>8.7</b>	<b>8.1</b>	<b>23</b>	<b>26</b>	<5	<b>66</b>	<b>170</b>	<b>400</b>	<5	<b>310</b>	<5	<b>180</b>	<b>95</b>	<b>210</b>	<b>18</b>	<b>60</b>	<b>11</b>	N/A	
	4/5/2005	N/A	<b>8.5</b>	N/A	<5	<b>28</b>	N/A	<b>100</b>	N/A	<b>280</b>	N/A	<b>460</b>	N/A	<b>260</b>	N/A	<b>180</b>	<b>19</b>	N/A	<b>8.7</b>	N/A	
	10/20/2005	<5	<b>12</b>	<b>25</b>	<b>10</b>	<b>28</b>	<5	<b>149</b>	<b>105</b>	<b>385</b>	<b>5.9</b>	<b>367</b>	<b>5.6</b>	<b>210</b>	<b>78</b>	<b>180</b>	<b>17</b>	<b>12</b>	<b>10</b>	N/A	
	4/17/2006	N/A	<b>13.4</b>	N/A	<b>19.2</b>	<b>27.3</b>	N/A	<b>165</b>	N/A	<b>216</b>	N/A	<b>440</b>	N/A	<b>165</b>	N/A	<b>162</b>	<b>22.7</b>	N/A	<b>13.9</b>	N/A	
	10/17/2006	<5	<b>12.7</b>	<b>10.3</b>	<b>16</b>	<b>29.4</b>	<5	<b>102</b>	<b>160</b>	<b>434</b>	<5	<b>388</b>	<5	<b>174</b>	<b>93</b>	<b>192</b>	<b>25.2</b>	<b>42.6</b>	N/A		
	4/23/2007	N/A	<b>16.1</b>	N/A	<b>29.1</b>	<b>36.5</b>	N/A	<b>122</b>	N/A	<b>260</b>	N/A	<b>1140</b>	N/A	<b>184</b>	N/A	<b>214</b>	<b>25.5</b>	N/A	<b>22.5</b>	N/A	
	10/9/2007	<b>9.1</b>	<b>15.9</b>	<b>9.5</b>	<b>26.1</b>	<b>32.7</b>	<5	<b>133</b>	<b>108</b>	<b>349</b>	<b>6.5</b>	<b>445</b>	<b>6.7</b>	<b>218</b>	<b>76.2</b>	<b>200</b>	<b>24.1</b>	<b>10</b>	<b>13.2</b>	N/A	
	4/14/2008	N/A	<b>22</b>	N/A	<b>8.3</b>	<b>41.2</b>	N/A	<b>266</b>	N/A	<b>39.5</b>	N/A	<b>601</b>	N/A	<b>184</b>	N/A	<b>271</b>	<5	N/A	<5	N/A	
	10/23/2008	<b>9.2</b>	<b>19.8</b>	<b>13.3</b>	<b>30</b>	<b>12.3</b>	<5	<b>81</b>	<b>179</b>	<b>470</b>	<b>5.8</b>	<b>374</b>	<b>8.1</b>	<b>148</b>	<b>80</b>	<b>221</b>	<b>29.2</b>	<b>24.1</b>	<b>22.9</b>	N/A	
	4/14/2009	N/A	<b>15.7</b>	N/A	<b>26.6</b>	<b>32.2</b>	N/A	<b>94.8</b>	N/A	<b>416</b>	N/A	<b>694</b>	N/A	<b>100</b>	N/A	<b>144</b>	<b>30.9</b>	N/A	<b>19.1</b>	N/A	
	10/9/2009	<5	<b>16.3</b>	<b>6.4</b>	<b>24.9</b>	<b>25.7</b>	<5	<b>49</b>	<b>140</b>	<b>356</b>	<5	<b>322</b>	<5	<b>142</b>	<b>67.7</b>	<b>108</b>	<b>19.7</b>	<b>32.9</b>	<b>12</b>	N/A	
	4/7/2010	N/A	<b>13.3</b>	N/A	<b>12.2</b>	<b>27.6</b>	N/A	<b>88.8</b>	N/A	<b>201</b>	N/A	<b>904</b>	N/A	<b>64.4</b>	N/A	<b>167</b>	<5	N/A	<b>10.5</b>	N/A	
	10/26/2010	<5	<25	<5	<b>38.1</b>	<b>7.5</b>	<5	<b>38.9</b>	<5	<b>314</b>	<5	<b>480</b>	<5	<b>270</b>	<b>60.4</b>	<b>138</b>	<b>22</b>	<b>9.6</b>	<b>12.3</b>	N/A	
	4/13/2011	N/A	<b>9.5</b>	N/A	<b>38.2</b>	<b>33.6</b>	N/A	<b>53.3</b>	N/A	<b>250</b>	N/A	<b>504</b>	N/A	<b>150</b>	N/A	<b>175</b>	<b>12.5</b>	N/A	<b>6.9</b>	N/A	
	10/27/2011	<b>9.7</b>	<b>13.6</b>	<b>6.8</b>	<b>46.9</b>	<b>7.8</b>		<b>64.8</b>	<b>32.2</b>	<b>384</b>	<5	<b>394</b>	<b>17.9</b>	<b>279</b>	<b>55.4</b>	<b>171</b>	<b>20.2</b>	<b>7.8</b>	<b>11.7</b>	N/A	
	4/24/2012	N/A	<5	N/A	<b>15.2</b>	<b>21.5</b>	N/A	<b>44.7</b>	N/A	<b>362</b>	N/A	<b>614</b>	N/A	<b>264</b>	N/A	<b>68.8</b>	<5	N/A	<5	N/A	
	10/23/2012	<b>11.6</b>	<b>9.3</b>	<b>10.9</b>	<5	<b>15.8</b>	<b>26.4</b>	<b>50.5</b>	<5	<b>506</b>	<b>5.1</b>	<b>415</b>	<5	<b>248</b>	<b>39.6</b>	<b>91.7</b>	<b>14.8</b>	<5	<b>6.1</b>	N/A	
	4/2/2013	<5	<b>5.1</b>	<b>8.8</b>	<b>17.8</b>	<b>29.9</b>	<5	<b>43.2</b>	<5	<b>1330</b>	<5	<b>511</b>	<5	<b>178</b>	<b>79</b>	<b>181</b>	<b>7.8</b>	<5	<b>15.1</b>	N/A	
	10/2/2013	<5	<5	<5	<b>33.1</b>	<b>30.1</b>	<5	<b>82.1</b>	<b>102</b>	<b>416</b>	<b>13.9</b>	<b>546</b>	<5	<b>190</b>	<b>75</b>	<b>147</b>	<5	<5	<b>6.4</b>	N/A	
	4/1/2014	<5	<6.7	<5	<b>6.1</b>	<b>14.8</b>	<b>31</b>	<5	<b>95.5</b>	<b>145</b>	<b>492</b>	<5	<b>501</b>	<b>7.8</b>	<b>144</b>	<b>76</b>	<b>164</b>	<b>27.2</b>	<b>12.5</b>	<b>8.8</b>	N/A
	10/1/2014	<b>5.3</b>	<b>14.4</b>	<5	<b>27.7</b>	<b>29.6</b>	<b>6.6</b>	<b>76.6</b>	<b>184</b>	<b>441</b>	<5	<b>460</b>	<b>6.3</b>	<b>288</b>	<b>78.8</b>	<b>190</b>	<b>14.7</b>	<b>9.9</b>	<b>11.1</b>	N/A	
	4/29/2015	<5	<b>13.1</b>	<b>11.4</b>	<b>30.4</b>	<0.5	<b>99.6</b>	<b>79.3</b>	<b>459</b>	<b>7.75</b>	<b>470</b>	<5	<b>262</b>	<b>90.3</b>	<b>150</b>	<5	<b>16.9</b>	<b>7.99</b>	N/A		
	10/1/2015	<b>5.05</b>	<b>9.18</b>	<b>10.2</b>	<b>22.3</b>	<b>30.9</b>	<5	<b>83.1</b>	<b>161</b>	<b>355</b>	<b>5.4</b>	<b>493</b>	<5	<b>186</b>	<b>28.7</b>	<b>142</b>	<b>7.12</b>	<b>16.8</b>	<b>12.3</b>	N/A	
	4/25/2016	<5	<b>13</b>	<b>6.13</b>	<b>21.8</b>	<b>29.1</b>	<b>4.98*</b>	<b>78.5</b>	<b>7.27</b>	<b>534</b>	<b>4.6*</b>	<b>524</b>	<5	<b>262</b>	<b>103</b>	<b>153</b>	<b>26.8</b>	<b>13</b>	<b>6.13</b>	N/A	
	10/12/2016	<5	<b>4.65*</b>	<5	<b>31.1</b>	<b>23.9</b>	<5	<b>60.5</b>	<5	<b>268</b>	<5	<b>496</b>	<5	<b>240</b>	<b>80</b>	<b>108</b>	<b>18.4</b>	<5	<b>8.24</b>	N/A	
	4/12/2017	<b>7.77</b>	<b>20.5</b>	<b>13.8</b>	<b>35.9</b>	<b>74.1</b>	<b>11.8</b>	<b>113</b>	N/A	<b>506</b>	<b>13.5</b>	<b>481</b>	<b>9.45</b>	<b>292</b>	<b>116</b>	<b>126</b>	<b>24.2</b>	<b>5.06</b>	<b>18.2</b>	N/A	
	10/5/2017	<b>28.6</b>	<b>30.3</b>	<b>9.79</b>	<b>31.6</b>	<b>12.2</b>	<b>6.39</b>	<b>63.6</b>	<5	<b>452</b>	<5	<b>408</b>	<b>6.18</b>	<b>251</b>	<b>76.2</b>	<b>145</b>	<b>4.68*</b>	<b>10.1</b>	N/A		
	5/9/2018	<b>9.99</b>	<b>11.6</b>	<5	<b>15.6</b>	<b>35.9</b>	<5	<b>85.8</b>	<b>74.7</b>	<b>284</b>	<5	<b>333</b>	<5	<b>192</b>	<b>50.4</b>	<b>123</b>	<b>9.33</b>	<5	<5	N/A	
	9/10/2018	<5	<b>7.42</b>	<5	<b>27.1</b>	<b>25.5</b>	<5	<b>67.1</b>	<b>52.1</b>	<b>387</b>	<5	<b>382</b>	<5	<b>119</b>	<b>57.1</b>	<b>125</b>	<b>14.1</b>	<5	<b>8.42</b>	N/A	
	3/27/2019	<b>8.88</b>	<b>15.9</b>	<b>5.36</b>	<b>21.2</b>	<b>38.2</b>	<5	<b>81.9</b>	<b>85</b>	<b>323</b>	<5	<b>65</b>									

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Iron, Dissolved, mg/L (CAS NO - D7439-89-6)	6/7/1993	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	0.1	<0.1	3.4	<0.1	0.26	<0.1	0.25	2.8	1.4	3	<0.1	<0.1	N/A	
	9/14/1993	<0.1	<0.1	<0.1	<0.1	11	2.6	<0.1	0.59	0.2	0.2	<0.1	40	5	4.4	8.8	<0.1	<0.1	<0.1	N/A	
	12/8/1993	<0.1	<0.1	<0.1	<0.1	15	<0.1	7.3	<0.1	4.5	0.11	0.19	<0.1	61	7.9	30	6.9	<0.1	<0.1	N/A	
	3/22/1994	<0.1	<0.1	<0.1	<0.1	0.16	<0.1	0.64	<0.1	2.6	<0.1	2.3	0.14	36	<0.1	<0.1	<0.1	<0.1	<0.1	N/A	
	9/30/1994	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.12	<0.1	2.1	<0.1	0.11	<0.1	3.4	<0.1	<0.1	1.6	<0.1	<0.1	N/A	
	3/16/1995	<0.1	<0.1	<0.1	<0.1	0.85	<0.1	0.39	<0.1	1.1	<0.1	0.12	<0.1	3.4	12	0.35	5.4	7.7	<0.1	N/A	
	9/26/1995	<0.1	<0.1	<0.1	<0.1	1.3	<0.1	0.11	0.1	1.3	<0.1	0.23	<0.1	58	11	0.22	1.3	<0.1	<0.1	N/A	
	5/13/1996	<0.1	<0.1	N/A	<0.1	20	<0.1	20	<0.1	26	<0.1	0.13	<0.1	51	5.8	5.6	<0.1	0.29	<0.1	N/A	
	10/10/1996	0.13	0.1	<0.1	0.1	26	<0.1	35	0.38	0.71	<0.1	0.49	<0.1	57	14	36	2.2	1.5	<0.1	N/A	
	6/19/1997	<0.1	<0.1	<0.1	<0.1	14	<0.1	16	0.1	2.6	<0.1	<0.1	<0.1	56	12	34	<0.1	<0.1	<0.1	N/A	
	10/10/1997	<0.1	<0.1	<0.1	0.26	23	<0.1	17	0.65	1.2	<0.1	0.19	<0.1	0.92	16	35	1	0.22	<0.1	N/A	
	5/19/1998	0.32	<0.1	<0.1	0.2	21	<0.1	19	0.23	2	<0.1	0.15	<0.1	58	19	42	0.13	0.1	0.28	N/A	
	10/19/1998	<0.1	<0.1	<0.1	<0.1	23	<0.1	19	0.57	1.6	<0.1	0.26	<0.1	58	21	41	3.1	0.82	<0.1	N/A	
	4/20/1999	<0.1	<0.1	<0.1	<0.1	34	<0.1	22	0.33	4.8	<0.1	0.23	<0.1	58	18	28	2.2	0.44	<0.1	N/A	
	10/18/1999	0.58	0.13	<0.1	0.27	21	<0.1	19	1.3	1.8	<0.1	0.18	<0.1	70	23	40	0.39	0.15	<0.1	N/A	
	4/18/2000	N/A	N/A	<0.1	25	N/A	30	N/A	3	N/A	0.14	N/A	55	N/A	41	<0.1	N/A	<0.1	N/A		
	10/10/2000	N/A	0.329	N/A	0.222	26.4	0.245	18.5	1.52	2.18	0.247	1.18	0.294	62.8	22.7	10.7	0.596	0.703	0.285	N/A	
	4/25/2001	N/A	0.198	N/A	0.208	24.2	N/A	14.8	N/A	1.87	N/A	0.988	N/A	74.1	N/A	26.5	0.287	N/A	0.17	N/A	
	10/17/2001	0.098	0.157	N/A	0.105	19.7	0.089	0.529	0.405	3.68	0.132	0.537	0.15	37.4	0.535	2.16	0.264	0.152	0.12	N/A	
	4/1/2002	N/A	<0.1	N/A	<0.1	28	N/A	14	N/A	2.3	N/A	0.19	N/A	62	N/A	34	0.12	N/A	<0.1	N/A	
	10/1/2002	0.035	0.032	N/A	0.22	22	0.032	20	1.9	2.3	0.022	0.2	0.027	54	28	42	0.83	0.073	0.066	N/A	
	4/21/2003	N/A	<0.1	N/A	<0.1	21	N/A	20	N/A	0.89	N/A	0.3	N/A	75	N/A	33	0.29	N/A	<0.1	N/A	
	9/24/2003	<0.1	<0.1	<0.1	<0.1	25	<0.1	19	2.1	1.9	<0.1	0.17	<0.1	65	28	43	<0.1	0.22	<0.1	N/A	
	4/9/2004	N/A	<0.1	N/A	<0.1	26	N/A	21	N/A	4.7	N/A	0.15	N/A	87	N/A	48	<0.1	N/A	<0.1	N/A	
	10/19/2004	<0.1	<0.1	<0.1	<0.1	26.3	<0.1	20	2.2	2.6	<0.1	0.3	<0.1	79	32	48	0.15	0.37	<0.1	N/A	
	4/5/2005	N/A	<0.1	N/A	<0.1	26	N/A	20	N/A	2.9	N/A	0.19	N/A	63	N/A	28	0.54	N/A	<0.1	N/A	
	10/20/2005	<0.1	<0.1	<0.1	<0.1	27	<0.1	19.6	1.88	2.37	<0.1	0.101	<0.1	56	32	31	0.2	<0.1	<0.1	N/A	
	4/17/2006	N/A	<0.1	N/A	<0.1	28.1	N/A	20.7	N/A	3.13	N/A	<0.1	N/A	73.3	N/A	22.2	0.14	N/A	<0.1	N/A	
	10/17/2006	<0.1	<0.1	<0.1	<0.1	27.9	<0.1	19.6	2.45	1.55	<0.1	0.34	<0.1	70.8	31.5	38.3	<0.1	0.291	<0.1	N/A	
	4/23/2007	N/A	<0.1	N/A	<0.1	25	N/A	25.4	N/A	2.1	N/A	0.217	N/A	74.5	N/A	30.3	<0.1	N/A	<0.1	N/A	
	10/9/2007	<0.1	<0.1	<0.1	0.181	25.3	<0.1	17.3	1.85	1.2	<0.1	0.436	<0.1	48.1	32.7	36.1	<0.1	<0.1	<0.1	N/A	
	4/14/2008	N/A	<0.1	N/A	<0.1	28	N/A	22.9	N/A	3.96	N/A	0.127	N/A	74.5	N/A	1.78	<0.1	N/A	<0.1	N/A	
	10/23/2008	<0.1	<0.1	<0.1	0.117	25.8	<0.1	15.5	2.65	1.59	<0.1	0.38	<0.1	76.8	32.4	41.2	0.178	<0.1	<0.1	N/A	
	4/14/2009	N/A	<0.1	N/A	<0.1	23.5	N/A	23.5	N/A	1.06	N/A	0.248	N/A	69.5	N/A	43.8	<0.1	N/A	<0.1	N/A	
	10/9/2009	<0.1	<0.1	<0.1	0.806	23.7	<0.1	21.1	3.09	2.11	<0.1	0.311	<0.1	63.7	39.2	35.2	<0.1	0.131	<0.1	N/A	
	4/7/2010	N/A	<0.1	N/A	<0.1	24	N/A	25	N/A	2.35	N/A	0.144	N/A	63.3	N/A	32.1	<0.1	N/A	<0.1	N/A	
	10/26/2010	<0.1	<0.1	<0.1	0.952	20.7	<0.1	25.6	<0.1	2.41	<0.1	<0.1	<0.1	41	33.8	28	0.337	<0.1	0.35	N/A	
	4/13/2011	N/A	<0.1	N/A	7.19	30.2	N/A	22.7	N/A	2.96	N/A	<0.1	N/A	85.1	N/A	34.6	1.66	N/A	0.96	N/A	
	10/27/2011	<0.1	<0.1	<0.1	1.18	22.4	<0.1	19.6	3.52	1.53	<0.1	<0.1	<0.1	5.29	31.9	24.2	0.764	<0.1	<0.1	N/A	
	4/24/2012	N/A	<0.1	N/A	<0.1	19.2	N/A	19.1	N/A	1.18	N/A	<0.1	N/A	49.5	N/A	14.1	0.363	N/A	<0.1	N/A	
	10/23/2012	<0.1	<0.1	<0.1	0.334	22.3	0.028	20.5	<0.1	0.78	<0.1	<0.1	<0.1	58.3	0.384	24.1	0.557	0.763	<0.1	N/A	
	4/2/2013	<0.1	<0.1	<0.1	<0.1	34.1	<0.1	23	<0.1	1.58	<0.1	0.429	<0.1	79.7	31.4	23.3	<0.1	<0.1	<0.1	N/A	
	10/2/2013	<0.1	<0.1	<0.1	0.309	27	<0.1	25.3	4.11	1.74	0.101	<0.1	0.121	62.7	33.5	39.5	0.394	<0.1	<0.1	N/A	
	4/1/2014	<0.301	<0.301	<0.301	<0.301	28.8	<0.301	27	3.81	0.439	<0.301	<0.301	<0.301	79.8	37.5	39.2	<0.602	0.301	<0.301	N/A	
	10/1/2014	<0.1	<0.1	<0.1	0.756	34.6	<0.1	29.5	3.82	1.9	<0.1	<0.1	<0.1	45.8	34.9	37.4	2.23	<0.1	<0.1	N/A	
	4/29/2015	<0.1	<0.1	<0.1	<0.1	35	<0.1	27.5	4.79	10.7	<0.1	<0.1	<0.1	71.4	38.9	40.9	0.72	<0.1	<0.1	N/A	
	10/1/2015	<0.1	<0.1	<0.1	0.349	38.4	<0.1	26.7	5.35	2.05	<0.1	<0.1	<0.1	69.8	45.3	18.3	1.68	0.536	<0.1	N/A	
	4/25/2016	<0.1	<0.1	0.068*	<0.1	15.4	<0.1	12.3	0.1	1.5	<0.1	<0.1	<0.1	53.9	39.8	30.2	<0.1	<0.1	<0.1	N/A	
	10/12/2016	<0.1	<0.1	<0.1	3.96	27.7	<0.1	36.6	<0.1	1.91	<0.1	<0.1	<0.1	0.0697*	47.6	42.3	29.9	0.729	<0.1	<0.1	N/A
	4/12/2017	<0.1	<0.1	<0.1	0.0951*	19.2	<0.1	1.71	N/A	0.857	<0.1	<0.1	<0.1	0.136	52.8	37	28.7	<0.1	<0.1	<0.1	N/A
	10/5/2017	<0.1	<0.1	<0.1	5.36	26.5	0.05*	28.2	<0.1	0.688	<0.1	0.0772*	0.0822*	50.5	31	39.1	0.938	0.0978*	<0.1	N/A	
	5/9/2018	<0.1	<0.1	<0.1	<0.1	36.2	1.94	35.2	4.41	1.57	<0.1	<0.5	0.0699*	76.9	38.1	32.4	0.938	0.11	<0.1	N/A	
	9/10/2018	<0.5	<0.5	N/A	3.57	32.6	<0.5	32.8	4.32	0.883	<0.5	<0.5	1.82	85.8	46.9	29.4	<0.5	<0.5	3.22	N/A	
	3/27/2019	<0.1	0.134	<0.1	0.222	32.8	<0.1	30.4	1.46	2.01	<0.1	<0.1	0.228	85.9	49.4	30.6	<0.1	<0.1	<0.1	N/A	
	9/10/2019	<0.1	0.299	<0.1	9.03	22.2	<0.1	25	1.32	0.513	<0.1	<0.1	<0.1	53.6	43.1	31.9	1.49	<0.1	<0.1	N/A	
	3/2/2020	<0.1	<0.1	<0.1	0.282	11.8	<0.1	31.8	10.2	0.419	<0.1	<0.1	<0.1	49.9	36.4	32.6	2.48	<0.1	<0.1	N/A	

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Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Total Phenols, mg/L (CAS NO - TP)	9/30/1994	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	9/26/1995	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	10/10/1996	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.031	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	10/10/1997	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.021	< 0.02	< 0.02	0.024	< 0.02	0.111	< 0.02	0.467	< 0.02	N/A
	10/19/1998	N/A	N/A	N/A	< 0.02	N/A	0.146	N/A	N/A	N/A	N/A	N/A	N/A							
	10/18/1999	N/A	N/A	N/A	< 0.02	N/A	0.0897	N/A	N/A	N/A	N/A	N/A	N/A							
	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.401
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3
	10/2/2013	< 0.02	< 0.0196	< 0.0204	< 0.0204	< 0.02	< 0.02	< 0.0196	< 0.0212	0.0744	< 0.0188	0.0929	< 0.018	< 0.0172	< 0.0188	< 0.0188	< 0.02	< 0.0188	< 0.0192	0.326*
	10/1/2014	< 0.0196	< 0.02	0.032	< 0.0184	N/A	N/A	N/A	N/A	< 0.0392	N/A	< 0.1	N/A							
	10/1/2015	< 0.018	< 0.02	< 0.0184	< 0.0184	N/A	N/A	N/A	N/A	< 0.018	N/A	0.0348	N/A							
	10/12/2016	< 0.0192	< 0.0184	< 0.018	< 0.0184	N/A	N/A	N/A	N/A	0.00718*	N/A	0.186	N/A	0.436						
	10/5/2017	< 0.0196	N/A	N/A	< 0.0192	N/A	N/A	N/A	N/A	0.0314	N/A	0.0554	N/A							
	9/10/2018	N/A	< 0.0204	N/A	< 0.0204	N/A	N/A	N/A	N/A	0.0158*	N/A	0.171	N/A	< 0.0384						
	9/10/2019	N/A	< 0.0204	N/A	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	0.0553	N/A							
	8/26/2020	N/A	< 0.192	N/A	< 0.188	N/A	N/A	N/A	N/A	< 0.184	N/A	0.0467	N/A	0.0153*						
	8/17/2021	N/A	< 0.0184	N/A	< 0.0188	N/A	N/A	N/A	N/A	< 0.0192	N/A	0.0283	N/A							
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	0.0787
	8/9/2022	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	0.0301	N/A							
	7/19/2023	N/A	< 0.0204	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0391
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	7/16/2024	N/A	< 0.02	N/A	< 0.0192	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.0208	N/A							
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	10/2/2013	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 122
	10/2/2013	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 12
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 50
	10/5/2017	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	N/A	N/A	N/A	N/A	N/A
	9/10/2018	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	N/A	N/A	N/A	N/A	< 101
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 50
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 50	N/A	< 5	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 50	N/A	< 50	N/A	N/A	N/A	< 123
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 50	N/A	< 50	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 50
	8/9/2022	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	< 5	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	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	< 5	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 143
	10/2/2013	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	< 14	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Acrolein, ug/L (CAS NO - 107-02-8)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1000							
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.5							
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 15							
Anthracene, ug/L (CAS NO - 120-12-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600							
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0102							
	10/2/2013	< 0.0101	< 0.0101	< 0.0101	< 0.0101	< 0.0102	< 0.0101	< 0.0101	< 0.0103	< 0.01	< 0.0102	< 0.0101	< 0.0101	< 0.0102	< 0.01	< 0.0101	< 0.0102	< 0.1	< 0.0102	< 0.1
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A							
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10							
	10/5/2017	N/A	N/A	N/A	N/A	< 1.03	N/A	< 1	N/A	N/A	N/A	N/A	N/A							
	9/10/2018	N/A	N/A	N/A	< 1.01	N/A	< 1.14	N/A	N/A	N/A	N/A	N/A	< 101							
	9/10/2019	N/A	N/A	N/A	< 0.323	N/A	< 0.323	N/A	N/A	N/A	N/A	N/A	N/A							
	8/26/2020	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123							
	8/17/2021	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A							
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10							
	8/9/2022	N/A	N/A	N/A	< 0.204	N/A	0.113*	N/A	N/A	N/A	N/A	N/A	N/A							
	7/19/2023	N/A	N/A	N/A	N/A	N/A	< 0.189	N/A	N/A	N/A	N/A	N/A	N/A							
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26							
	7/16/2024	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600							
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0204							
	10/2/2013	< 0.0202	< 0.0202	< 0.0202	< 0.0202	< 0.0204	< 0.0202	< 0.0202	< 0.0206	< 0.02	< 0.0204	< 0.0202	< 0.0202	< 0.0204	< 0.02	< 0.0202	< 0.0204	< 0.2	< 0.0202	< 0.2
	4/25/2016	N/A	N/A	N/A	< 0.196	N/A	< 0.196	N/A	N/A	N/A	N/A	N/A	N/A							
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10							
	10/5/2017	N/A	N/A	N/A	< 0.205	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							
	9/10/2018	N/A	N/A	N/A	< 0.203	N/A	< 0.227	N/A	N/A	N/A	N/A	N/A	< 101							
	9/10/2019	N/A	N/A	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	N/A							
	8/26/2020	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123							
	8/17/2021	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A							
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10							
	8/9/2022	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A							
	7/19/2023	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26							
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600							
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.00816							
	10/2/2013	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00825	< 0.008	< 0.00808	< 0.00808	< 0.00808	< 0.00815	< 0.008	< 0.00808	< 0.00815	< 0.08	< 0.00808	< 0.0808
	4/25/2016	N/A	N/A	N/A	< 0.098	N/A	< 0.098	N/A	N/A	N/A	N/A	N/A	N/A							
	10/12/2016	N/A	N/A	N/A	< 0.103	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A							
	10/5/2017	N/A	N/A	N/A	< 0.101	N/A	< 0.114	N/A	N/A	N/A	N/A	N/A	< 101							
	9/10/2018	N/A	N/A	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	N/A							
	9/10/2019	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A							
	8/26/2020	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123							
	8/17/2021	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A							
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10							
	8/9/2022	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A							
	7/19/2023	N/A	N/A	N/A	< 0.189	N/A	< 0.189	N/A	N/A	N/A	N/A	N/A	N/A							
	4/9/2024	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							
	7/16/2024	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600							
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0286							
	10/2/2013	< 0.0283	< 0.0283	< 0.0283	< 0.0283	< 0.0288	< 0.0283	< 0.0283	< 0.0289	< 0.028	< 0.0286	< 0.0283	< 0.0283	< 0.0286	< 0.028	< 0.0283	< 0.0286	< 0.28	< 0.0283	< 0.28
	4/25/2016	N/A	N/A	N/A	< 0.098	N/A	< 0.098	N/A	N/A	N/A	N/A	N/A	N/A							
	10/12/2016	N/A	N/A	N/A	< 0.103	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	< 10							
	10/5/2017	N/A	N/A	N/A	< 0.101	N/A	< 0.114	N/A	N/A	N/A	N/A	N/A	< 101							
	9/10/2018	N/A	N/A	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	< 101							
	9/10/2019	N/A	N/A	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	N/A							
	8/26/2020	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123							
	8/17/2021	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A							
	3/15/2022	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	< 10							
	8/9/2022	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A							
	7/19/2023	N/A	N/A	N/A	< 0.189	N/A	< 0.189	N/A	N/A	N/A	N/A	N/A	N/A							
	4/9/2024	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	< 9.26							
	7/16/2024	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A							

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## **Summary of Groundwater Chemistry**

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 3.47																		
	10/2/2013	< 0.343	< 0.343	< 0.347	< 0.37	< 0.343	< 0.37	< 0.347	< 0.343	< 0.343	< 0.34	< 0.343	< 0.366	< 0.34	< 0.351	< 0.358	< 0.343	< 0.347	< 34		
	10/12/2016	N/A	0.676*																		
	9/10/2018	N/A	< 101																		
	8/26/2020	N/A	< 123																		
	3/15/2022	N/A	< 10																		
	4/9/2024	N/A	< 9.26																		
Chrysene, ug/L (CAS NO - 218-01-9)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 0.00816																		
	10/2/2013	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.00808	< 0.08
	4/25/2016	N/A	< 0.098	N/A	< 0.098	N/A	< 0.098	N/A	N/A	N/A	N/A										
	10/12/2016	N/A	< 10																		
	10/5/2017	N/A	< 0.103	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A										
	9/10/2018	N/A	< 0.101	N/A	< 0.114	N/A	N/A	N/A	N/A	N/A	< 101										
	9/10/2019	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	N/A										
	8/26/2020	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123										
	8/17/2021	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A										
	3/15/2022	N/A	< 10																		
	8/9/2022	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A										
	7/19/2023	N/A	< 0.189	N/A	N/A	N/A	N/A	N/A	N/A												
	4/9/2024	N/A	< 9.26																		
Cyanide, mg/L (CAS NO - 57-12-5)	10/23/2012	N/A	0.0113																		
	4/2/2013	N/A	0.0117																		
	10/2/2013	N/A	0.0151																		
	10/12/2016	N/A	0.03																		
	9/10/2018	N/A	0.0211																		
	8/26/2020	N/A	0.0235																		
	3/15/2022	N/A	0.0122																		
	4/9/2024	N/A	0.033																		
Dibenz [a,h]anthracene, ug/L (CAS NO - 53-70-3)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 0.0102																		
	10/2/2013	< 0.0101	< 0.0101	< 0.0101	< 0.0101	< 0.0101	< 0.0102	< 0.0101	< 0.0101	< 0.0103	< 0.01	< 0.0102	< 0.0101	< 0.0101	< 0.0102	< 0.0102	< 0.01	< 0.0101	< 0.0102	< 0.1	
	4/25/2016	N/A	< 0.196	N/A	< 0.196	N/A	< 0.196	N/A	N/A	N/A	N/A	N/A									
	10/12/2016	N/A	< 10																		
	10/5/2017	N/A	< 0.205	N/A	< 0.2	N/A															
	9/10/2018	N/A	< 0.203	N/A	< 0.227	N/A	N/A	N/A	N/A	N/A	N/A	< 101									
	9/10/2019	N/A	< 0.323	N/A	< 0.323	N/A															
	8/26/2020	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A	< 123									
	8/17/2021	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A	< 10									
	3/15/2022	N/A	< 10																		
	8/9/2022	N/A	< 0.204	N/A	< 0.185	N/A															
	7/19/2023	N/A	< 0.189	N/A																	
	4/9/2024	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26									
Dibenzofuran, ug/L (CAS NO - 132-64-9)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 2.45																		
	10/2/2013	< 0.242	< 0.242	< 0.245	< 0.261	< 0.242	< 0.245	< 0.242	< 0.242	< 0.24	< 0.242	< 0.242	< 0.258	< 0.24	< 0.247	< 0.253	< 0.242	< 0.245	< 24		
	10/12/2016	N/A	< 10																		
	9/10/2018	N/A	< 102																		
	8/26/2020	N/A	< 123																		
	3/15/2022	N/A	< 10																		
	4/9/2024	N/A	< 9.26																		
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	10/2/2013	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	
	10/12/2016	N/A	< 30																		
	10/5/2017	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A										
	9/10/2018	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 30										
	9/10/2019	N/A	< 3	N/A	< 30	N/A	< 3	N/A	N/A	N/A	N/A										
	8/26/2020	N/A	< 30	N/A	< 30	N/A	N/A	N/A	N/A	N/A	< 30										
	8/17/2021	N/A	< 30	N/A	< 30	N/A	N/A	N/A	N/A	N/A	N/A										
	3/15/2022	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 30										
	8/9/2022	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A										
	7/19/2023	N/A	< 30	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A										
	4/9/2024	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A										
	7/16/2024	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A										
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 2.65																		
	10/2/2013	< 0.263	< 0.263	< 0.263	< 0.283	< 0.263	< 0.265	< 0.263	< 0.263	< 0.26	< 0.263	< 0.26	< 0.28	0.323*	< 0.268	< 0.274	< 0.263	< 0.265	< 26		
	10/12																				

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3.5
	10/2/2013	< 0.232	< 0.232	< 0.235	< 0.232	< 0.25	< 0.232	< 0.235	< 0.232	< 0.232	< 0.23	< 0.232	< 0.247	< 0.23	< 0.237	< 0.242	< 0.232	< 0.235	< 23	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5.2
	10/2/2013	< 0.515	< 0.515	< 0.52	< 0.515	< 0.554	< 0.515	< 0.52	< 0.515	< 0.515	< 0.51	< 0.515	< 0.515	< 0.548	< 0.55	< 0.526	< 0.537	< 0.515	< 0.52	< 51
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3190
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.35
	10/2/2013	< 0.232	< 0.235	< 0.232	< 0.25	< 0.232	0.497*	< 0.232	0.814*	< 0.23	< 0.232	< 0.232	< 0.247	0.423*	< 0.237	< 0.242	< 0.232	< 0.235	< 23	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	1.77*
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 202
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 247
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 20
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.3*
Fluoranthene, ug/L (CAS NO - 206-44-0)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0102
	10/2/2013	< 0.0101	< 0.0101	< 0.0101	< 0.0101	< 0.0102	< 0.0101	< 0.0101	< 0.0103	< 0.01	< 0.0102	< 0.0101	< 0.0101	< 0.0102	< 0.0102	< 0.01	< 0.0101	< 0.0102	< 0.1	
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.196	N/A	0.235	< 0.196	N/A	N/A	N/A	N/A	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.205	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.203	N/A	0.203*	N/A	N/A	N/A	N/A	N/A	N/A	< 101
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.431	N/A	< 0.431	N/A						
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A	< 123
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A						
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A						
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.189	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
Fluorene, ug/L (CAS NO - 86-73-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0163
	10/2/2013	< 0.0162	< 0.0162	< 0.0162	< 0.0162	< 0.0162	< 0.0163	< 0.0162	< 0.0165	< 0.016	< 0.0163	0.352	< 0.0162	< 0.0163	< 0.016	< 0.0162	< 0.0163	< 0.016	< 0.0162	< 0.16
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.376	N/A	0.318*	< 0.49	N/A	N/A	N/A	N/A	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.513	N/A	0.293*	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.507	N/A	0.0605*	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.323	N/A	0.435	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.108	N/A	0.221	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.204	N/A	0.386	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.168*	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.208	N/A	0.0781*	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.76
	10/2/2013	< 0.273	< 0.273	< 0.276	< 0.273	< 0.293	< 0.273	< 0.276	< 0.273	< 0.273	< 0.27	< 0.273	< 0.273	< 0.29	< 0.27	< 0.278	< 0.284	< 0.273	< 0.276	< 27
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	4/2/2013	N/A	<1.33																		
	10/2/2013	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 13	
	10/12/2016	N/A	< 50																		
	10/5/2017	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A										
	9/10/2018	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 50										
	9/10/2018	N/A	< 101																		
	9/10/2019	N/A	< 5	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A										
	8/26/2020	N/A	< 50	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A										
	8/26/2020	N/A	< 50																		
	8/17/2021	N/A	< 50	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	< 123									
	3/15/2022	N/A	< 10																		
	3/15/2022	N/A	< 50																		
	8/9/2022	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
	7/19/2023	N/A	< 50	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
	4/9/2024	N/A	< 9.26																		
	4/9/2024	N/A	< 5																		
	7/16/2024	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A									
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 19.3																		
	10/2/2013	< 1.91	< 1.91	< 1.91	< 2.05	< 1.91	< 1.93	< 1.91	< 1.89	< 1.91	< 1.91	< 2.03	< 1.89	< 1.95	< 1.99	< 1.91	< 1.93	< 1.89	< 1.91	< 1.93	
	10/12/2016	N/A	< 20																		
	9/10/2018	N/A	< 101																		
	8/26/2020	N/A	< 123																		
	3/15/2022	N/A	< 10																		
	4/9/2024	N/A	< 9.26																		
Hexachloroethane, ug/L (CAS NO - 67-72-1)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 1600																		
	10/2/2013	< 0.131	< 0.131	< 0.133	< 0.141	< 0.131	< 0.133	< 0.131	< 0.131	< 0.13	< 0.131	< 0.14	< 0.13	< 0.134	< 0.137	< 0.131	< 0.133	< 0.13	< 0.13	< 10	
	10/12/2016	N/A	< 101																		
	9/10/2018	N/A	< 103																		
	8/26/2020	N/A	< 123																		
	3/15/2022	N/A	< 10																		
	4/9/2024	N/A	< 9.26																		
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 0.00612																		
	10/2/2013	< 0.00606	< 0.00606	< 0.00606	< 0.00606	< 0.00606	< 0.00612	< 0.00606	< 0.00605	< 0.00612	< 0.00606	< 0.00606	< 0.00612	< 0.00606	< 0.00606	< 0.00612	< 0.00606	< 0.00606	< 0.00612	< 0.06	
	4/25/2016	N/A	< 0.196	N/A	< 0.196	N/A															
	10/12/2016	N/A	< 10																		
	10/5/2017	N/A	< 0.205	N/A	< 0.2	N/A															
	9/10/2018	N/A	< 0.203	N/A	< 0.227	N/A	N/A	N/A	N/A	N/A	N/A	< 102									
	9/10/2019	N/A	< 0.215	N/A	< 0.215	N/A															
	8/26/2020	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A	< 123									
	8/17/2021	N/A	< 0.105	N/A	< 0.106	N/A															
	3/15/2022	N/A	< 10																		
	8/9/2022	N/A	< 0.204	N/A	< 0.185	N/A															
	7/19/2023	N/A	< 0.189	N/A																	
	4/9/2024	N/A	< 9.26																		
	7/16/2024	N/A	< 0.208	N/A	< 0.2	N/A															
Isophorone, ug/L (CAS NO - 78-59-1)	10/23/2012	N/A	< 1600																		
	4/2/2013	N/A	< 2.24																		
	10/2/2013	< 0.222	< 0.222	< 0.224	< 0.222	< 0.239	< 0.224	< 0.222	< 0.222	< 0.22	< 0.222	< 0.222	< 0.237	< 0.22	< 0.227	< 0.232	< 0.222	< 0.224	< 22		
	10/12/2016	N/A	< 10																		
	9/10/2018	N/A	< 101																		
	8/26/2020	N/A	< 123																		
	3/15/2022	N/A	< 10																		
	4/9/2024	N/A	< 9.26																		

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Naphthalene, ug/L (CAS NO - 91-20-3)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0469
	10/2/2013	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	0.483*	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.46	
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.98	N/A	< 0.98	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 50
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	0.535*	N/A	N/A	N/A	N/A	N/A
	9/10/2018	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	< 5	N/A	N/A	N/A	< 101
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 50
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.349*	N/A	< 1.08	< 5	N/A	N/A	N/A	N/A	N/A
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.538	N/A	< 0.532	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 50	N/A	N/A	N/A	N/A	N/A	< 50
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.526	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	< 0.532	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 50
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.51	N/A	< 0.463	< 5	N/A	N/A	N/A	N/A	N/A
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5
	7/16/2024	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	N/A	N/A	N/A	N/A	N/A
	7/16/2024	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	N/A	N/A	N/A	N/A	N/A
Nitrobenzene, ug/L (CAS NO - 98-95-3)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.24
	10/2/2013	< 0.222	< 0.222	< 0.224	< 0.229	< 0.222	< 0.224	< 0.222	< 0.222	< 0.222	< 0.222	< 0.222	< 0.237	< 0.22	< 0.227	< 0.232	< 0.222	< 0.224	< 22	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.43
	10/2/2013	< 0.141	< 0.141	< 0.143	1.43*	< 0.152	< 0.141	< 0.143	< 0.141	< 0.141	< 0.14	< 0.141	< 0.141	< 0.151	< 0.14	< 0.144	< 0.147	< 0.141	< 0.143	< 14
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.65
	10/2/2013	< 0.263	< 0.263	< 0.263	< 0.283	< 0.263	< 0.265	< 0.263	< 0.263	< 0.263	< 0.26	< 0.263	< 0.28	< 0.26	< 0.268	< 0.274	< 0.263	< 0.265	< 26	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 6.73
	10/2/2013	< 0.667	< 0.667	< 0.673	< 0.667	< 0.717	< 0.667	< 0.673	< 0.667	< 0.667	< 0.66	< 0.667	< 0.667	< 0.71	< 0.66	< 0.68	< 0.695	< 0.667	< 0.673	< 66
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.45
	10/2/2013	< 0.242	< 0.242	< 0.245	< 0.242	< 0.242	< 0.245	< 0.242	< 0.242	< 0.242	< 0.24	< 0.242	< 0.242	< 0.258	< 0.24	< 0.247	< 0.253	< 0.242	< 0.245	< 24
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Other Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Phenanthrene, ug/L (CAS NO - 85-01-8)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0051
	10/2/2013	< 0.00505	< 0.00505	< 0.00505	< 0.00505	< 0.00505	0.0351*	0.0309*	0.0554*	0.0388*	< 0.005	0.0296*	0.309	< 0.00505	0.0155*	< 0.005	< 0.00505	< 0.0051	< 0.05	
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.49	N/A	2.7	< 0.49	N/A	N/A	N/A	N/A	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.513	N/A	0.842	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.507	N/A	< 0.569	N/A	N/A	N/A	N/A	N/A	< 101
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.323	N/A	< 0.323	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.108	N/A	0.224	N/A	N/A	N/A	N/A	N/A	< 123
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.204	N/A	0.496	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.175*	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene, ug/L (CAS NO - 129-00-0)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0173
	10/2/2013	< 0.0172	< 0.0172	< 0.0172	< 0.0172	< 0.0172	< 0.0173	< 0.0172	< 0.0172	< 0.0175	< 0.017	< 0.0173	< 0.0172	< 0.0172	< 0.0173	< 0.017	< 0.0172	< 0.0173	< 0.017	< 0.17
	4/25/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.196	N/A	0.174*	< 0.196	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.208	N/A	0.0897*	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.203	N/A	0.0523*	N/A	N/A	N/A	N/A	N/A	< 101
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.215	N/A	< 0.215	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.108	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	< 123
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.105	N/A	< 0.106	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.204	N/A	< 0.185	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.189	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.208	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A

Note: \* indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.

Denotes Confirmed Outlier, Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Total Natural Attenuations Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Ammonia as N, mg/L (CAS NO - 7664-41-7)	6/7/1993	<b>0.24</b>	<b>3.1</b>	<b>0.51</b>	<b>0.94</b>	<b>6.5</b>	<0.2	<b>69</b>	<b>4.2</b>	<b>560</b>	<b>0.24</b>	<b>870</b>	<b>4.3</b>	<b>24</b>	<b>0.74</b>	<b>160</b>	<b>0.83</b>	<b>11</b>	<0.2	N/A	
	9/14/1993	<0.2	<b>2.8</b>	<0.2	<b>2.2</b>	<b>7.5</b>	<0.2	<b>74</b>	<b>140</b>	<b>1000</b>	<0.2	<b>240</b>	<b>3</b>	<b>24</b>	<b>1.4</b>	<b>240</b>	<b>1.5</b>	<b>17</b>	<0.2	N/A	
	12/8/1993	<0.2	<b>3.6</b>	<b>0.45</b>	<b>5.9</b>	<b>8.2</b>	<0.2	<b>67</b>	<b>150</b>	<b>970</b>	<b>0.78</b>	<b>8.8</b>	<b>2.7</b>	<b>23</b>	<b>1.9</b>	<b>76</b>	<b>2.1</b>	<b>79</b>	<0.2	N/A	
	3/22/1994	<b>2.41</b>	<b>2.2</b>	<b>0.2</b>	<b>1.6</b>	<b>7.8</b>	<0.2	<b>61</b>	<b>120</b>	<b>700</b>	<0.2	<b>310</b>	<b>2.3</b>	<b>26</b>	<b>1.8</b>	<b>100</b>	<b>0.95</b>	<b>150</b>	<0.2	N/A	
	9/30/1994	<0.2	<b>3.3</b>	<b>1.5</b>	<b>3.1</b>	<b>5.8</b>	<0.2	<b>70</b>	<b>92</b>	<b>840</b>	<0.2	<b>670</b>	<b>2.1</b>	<b>18</b>	<b>1.1</b>	<b>19</b>	<b>0.75</b>	<b>65</b>	<0.2	N/A	
	3/16/1995	<2	<b>1.1</b>	<b>0.6</b>	<b>1.5</b>	<b>3.4</b>	<0.2	<b>97</b>	<b>160</b>	<b>1000</b>	<0.2	<b>850</b>	<b>1.3</b>	<b>30</b>	<b>3.5</b>	<b>40</b>	<b>0.6</b>	<b>240</b>	<0.2	N/A	
	9/26/1995	<b>1.8</b>	<0.2	<b>3</b>	<b>3.4</b>	<b>5.2</b>	<0.2	<b>84</b>	<b>150</b>	<b>940</b>	<0.2	<b>480</b>	<b>1.5</b>	<b>38</b>	<b>3.7</b>	<b>20</b>	<b>1</b>	<b>400</b>	<0.2	N/A	
	5/13/1996	<0.2	<b>1.1</b>	<b>2.4</b>	<b>1.7</b>	<b>3.3</b>	<0.2	<b>100</b>	<b>310</b>	<b>610</b>	<0.2	<b>540</b>	<b>6.6</b>	<b>11</b>	<b>2.4</b>	<b>190</b>	<0.2	<b>200</b>	<0.2	N/A	
	10/10/1996	<0.2	<b>4.3</b>	<b>1.5</b>	<b>4.5</b>	<b>4.4</b>	<0.2	<b>71</b>	<b>170</b>	<b>870</b>	<b>1.5</b>	<b>610</b>	<b>0.82</b>	<b>32</b>	<b>73</b>	<b>30</b>	<b>5</b>	<b>200</b>	<b>0.94</b>	N/A	
	6/19/1997	<0.2	<b>3.9</b>	<0.2	<b>3.9</b>	<b>2.7</b>	<0.2	<b>16</b>	<b>150</b>	<b>890</b>	<0.2	<b>520</b>	<b>3.8</b>	<b>19</b>	<b>18</b>	<b>20</b>	<b>0.86</b>	<b>120</b>	<0.2	N/A	
	10/10/1997	<b>1</b>	<b>5.3</b>	<0.2	<b>5.5</b>	<b>4.6</b>	<0.2	<b>61</b>	<b>190</b>	<b>890</b>	<0.2	<b>5.5</b>	<b>0.61</b>	<b>78</b>	<b>54</b>	<b>23</b>	<b>2.6</b>	<b>120</b>	<0.2	N/A	
	5/19/1998	<0.2	<b>3.1</b>	<0.2	<b>4.9</b>	<b>2.3</b>	<0.2	<b>49</b>	<b>150</b>	<b>750</b>	<0.2	<b>460</b>	<0.2	<b>26</b>	<b>87</b>	<b>28</b>	<0.2	<b>84</b>	<0.2	N/A	
	10/19/1998	<0.2	<b>0.23</b>	<0.2	<b>0.54</b>	<b>4.1</b>	<0.2	<b>31</b>	<b>220</b>	<b>1200</b>	<0.2	<b>520</b>	<0.2	<b>21</b>	<b>39</b>	<b>9</b>	<b>2.3</b>	<b>230</b>	<0.2	N/A	
	4/20/1999	<0.2	<b>1.9</b>	<0.2	<b>0.84</b>	<b>4.4</b>	<0.2	<b>77</b>	<b>120</b>	<b>560</b>	<0.2	<b>480</b>	<b>0.25</b>	<b>27</b>	<b>57</b>	<b>75</b>	<b>3.3</b>	<b>78</b>	<b>0.48</b>	N/A	
	10/18/1999	<0.2	<b>3.6</b>	<0.2	<b>4</b>	<b>3.9</b>	<0.2	<b>74</b>	<b>190</b>	<b>800</b>	<0.2	<b>430</b>	<0.2	<b>31</b>	<b>82</b>	<b>20</b>	<b>9.2</b>	<b>91</b>	<0.2	N/A	
	4/18/2000	N/A	<b>1.57</b>	N/A	<b>3.21</b>	<b>4.17</b>	N/A	<b>64.3</b>	N/A	<b>712</b>	N/A	<b>552</b>	N/A	<b>27.2</b>	N/A	<b>18.8</b>	<b>3.46</b>	N/A	<0.2	N/A	
	10/10/2000	N/A	<b>0.111</b>	N/A	<0.1	N/A	<b>12.2</b>	N/A	<b>443</b>	N/A	<b>213</b>	N/A	<b>16.9</b>	<b>1</b>	N/A	<b>0.432</b>	N/A				
	4/25/2001	N/A	<0.1	N/A	<0.1	<b>1.41</b>	N/A	<b>34.9</b>	N/A	<b>162</b>	N/A	<b>390</b>	N/A	<b>9.7</b>	N/A	<b>30.4</b>	<b>0.16</b>	N/A	<0.1	N/A	
	10/17/2001	<0.1	<b>1.29</b>	N/A	<b>3.17</b>	<b>6.21</b>	<0.1	<b>57.8</b>	<b>133</b>	<b>565</b>	<b>3.54</b>	<b>330</b>	<b>1.48</b>	<b>25.9</b>	<b>52.3</b>	<b>36.7</b>	<b>8.86</b>	<b>88.3</b>	<b>1.92</b>	N/A	
	4/1/2002	N/A	<b>0.23</b>	N/A	<b>0.49</b>	<b>4</b>	N/A	<b>100</b>	N/A	<b>770</b>	N/A	<b>480</b>	N/A	<b>34</b>	N/A	<b>3.1</b>	<b>2.8</b>	N/A	<0.2	N/A	
	10/1/2002	<0.1	<b>1.5</b>	N/A	<b>3.7</b>	<b>2.2</b>	<0.1	<b>71</b>	<b>220</b>	<b>930</b>	<0.1	<b>380</b>	<0.1	<b>20</b>	<b>59</b>	<b>35</b>	<b>8.7</b>	<b>1.4</b>	<0.1	N/A	
	4/21/2003	N/A	<0.2	N/A	<b>1.1</b>	<b>3.16</b>	N/A	<b>76.3</b>	N/A	<b>980</b>	N/A	<b>439</b>	N/A	<b>26.4</b>	N/A	<b>18.2</b>	<b>7.85</b>	N/A	<b>0.22</b>	N/A	
	9/24/2003	<0.2	<b>0.79</b>	<0.2	<0.2	<b>3.47</b>	<0.2	<b>74.8</b>	<b>242</b>	<b>875</b>	<b>1.22</b>	<b>486</b>	<0.2	<b>31.3</b>	<b>54.8</b>	<b>11.7</b>	<b>3.12</b>	<b>128</b>	<0.2	N/A	
	4/9/2004	N/A	<b>0.52</b>	N/A	<0.2	<b>2.82</b>	N/A	<b>133</b>	N/A	<b>598</b>	N/A	<b>651</b>	N/A	<b>26.3</b>	N/A	<b>31.1</b>	<0.2	N/A	<0.2	N/A	
	10/19/2004	<0.2	<b>1.12</b>	<0.2	<b>1.32</b>	<b>3.3</b>	<0.2	<b>67.5</b>	<b>261</b>	<b>751</b>	<b>1.04</b>	<b>438</b>	<0.2	<b>29.7</b>	<b>47.3</b>	<b>11.5</b>	<b>1.24</b>	<b>95.1</b>	<0.2	N/A	
	4/5/2005	N/A	<0.2	N/A	<0.2	<b>3.27</b>	N/A	<b>95.3</b>	N/A	<b>594</b>	N/A	<b>559</b>	N/A	<b>31.1</b>	N/A	<b>17.2</b>	<b>1.28</b>	N/A	<0.2	N/A	
	10/20/2005	<0.2	<b>0.28</b>	<b>1.05</b>	<0.2	<b>3.19</b>	<b>2.3</b>	<0.2	<b>91.6</b>	<b>199</b>	<b>549</b>	<b>1.76</b>	<b>535</b>	<0.2	<b>15.8</b>	<b>41.7</b>	<b>53</b>	<b>1.2</b>	<b>26.2</b>	<0.2	N/A
	4/17/2006	N/A	<0.2	N/A	<0.2	<b>2.53</b>	N/A	<b>143</b>	N/A	<b>468</b>	N/A	<b>476</b>	N/A	<b>16.4</b>	N/A	<b>41.1</b>	<b>0.95</b>	N/A	<0.2	N/A	
	10/17/2006	<0.2	<b>0.937</b>	<0.2	<b>0.593</b>	<b>3.34</b>	<0.2	<b>149</b>	<b>248</b>	<b>368</b>	<b>1.95</b>	<b>573</b>	<0.2	<b>15.4</b>	<b>44.8</b>	<b>9.94</b>	<b>0.967</b>	<b>74.2</b>	<0.2	N/A	
	4/23/2007	N/A	<b>0.387</b>	N/A	<b>0.397</b>	<b>2.78</b>	N/A	<b>124</b>	N/A	<b>433</b>	N/A	<b>481</b>	N/A	<b>27.5</b>	N/A	<b>16.8</b>	<0.2	N/A	<0.2	N/A	
	10/9/2007	<0.2	<b>0.627</b>	<0.2	<b>2.01</b>	<b>2.56</b>	<0.2	<b>125</b>	<b>209</b>	<b>595</b>	<b>1.72</b>	<b>477</b>	<b>0.761</b>	<b>29.6</b>	<b>30.1</b>	<b>17.8</b>	<b>0.752</b>	<b>12.2</b>	<0.2	N/A	
	4/14/2008	N/A	<0.2	N/A	<0.2	<b>3.14</b>	N/A	<b>186</b>	N/A	<b>460</b>	N/A	<b>500</b>	N/A	<b>24.9</b>	N/A	<b>36.6</b>	<0.2	N/A	<0.2	N/A	
	10/23/2008	<0.2	<b>0.366</b>	<0.2	<b>2.54</b>	<b>3.47</b>	<0.2	<b>90.2</b>	<b>273</b>	<b>722</b>	<0.2	<b>527</b>	<0.2	<b>28.1</b>	<b>36.8</b>	<b>16.4</b>	<b>7.26</b>	<b>34.4</b>	<0.2	N/A	
	4/14/2009	N/A	<0.2	N/A	<b>0.915</b>	<b>3.01</b>	N/A	<b>114</b>	N/A	<b>808</b>	N/A	<b>522</b>	N/A	<b>31.6</b>	N/A	<b>47</b>	<0.2	N/A	<0.2	N/A	
	10/9/2009	<0.2	<b>0.628</b>	<0.2	<b>2.97</b>	<b>3.37</b>	<0.2	<b>66.7</b>	<b>319</b>	<b>624</b>	<0.2	<b>479</b>	<0.2	<b>29.4</b>	<b>25.6</b>	<b>55.4</b>	<b>1.23</b>	<b>54.3</b>	<0.2	N/A	
	4/7/2010	N/A	<0.2	N/A	<b>0.948</b>	<b>3.26</b>	N/A	<b>113</b>	N/A	<b>615</b>	N/A	<b>479</b>	N/A	<b>26.3</b>	N/A	<b>51.8</b>	<b>0.423</b>	N/A	<0.2	N/A	
	10/26/2010	<0.2	<b>0.682</b>	<0.2	<b>4.68</b>	<b>2.13</b>	<0.2	<b>81</b>	<b>21</b>	<b>711</b>	<0.2	<b>434</b>	<0.2	<b>35.9</b>	<b>26.8</b>	<b>59</b>	<b>0.622</b>	<0.2	<0.2	N/A	
	4/13/2011	N/A	<b>1.03</b>	N/A	<b>3.49</b>	<b>3.56</b>	N/A	<b>78.9</b>	N/A	<b>527</b>	N/A	<b>435</b>	N/A	<b>23.2</b>	N/A	<b>66.6</b>	<b>0.71</b>	N/A	<0.2	N/A	
	10/27/2011	<0.2	<b>1.65</b>	<0.2	<b>5.34</b>	<b>2.6</b>	<0.2	<b>87.7</b>	<b>63.8</b>	<b>882</b>	<b>0.256</b>	<b>370</b>	<b>28.6</b>	<b>34.3</b>	<b>27.5</b>	<b>69.2</b>	<b>0.605</b>	<b>0.23</b>	<0.2	N/A	
	4/24/2012	N/A	<b>1.37</b>	N/A	<b>2.29</b>	<b>3.36</b>	N/A	<b>70.7</b>	N/A	<b>1020</b>	N/A	<b>435</b>	N/A	<b>33.8</b>	N/A	<b>74.2</b>	<b>0.219</b>	N/A	<0.2	N/A	
	10/23/2012	<0.2	<0.2	<0.2	<b>2.71</b>	<b>3.17</b>	<b>3.2</b>	<b>72.8</b>	<0.2	<b>1020</b>	<0.2	<b>426</b>	<b>5.77</b>	<b>37.7</b>	<b>14.8</b>	<b>91.6</b>	<b>0.541</b>	<b>0.489</b>	<0.2	<b>4190</b>	
	4/2/2013	<0.2	<b>0.46</b>	<0.2	<0.2	<b>3.35</b>	<0.2	<b>128</b>	<b>310</b>	<b>1090</b>	<0.2	<b>358</b>	<b>3.3</b>	<b>24.6</b>	<b>48.3</b>	<b>49.7</b>	<b>0.875</b>	<b>9.77</b>	<0.2	<b>4280</b>	
	10/1/2014	<0.2	<b>1.85</b>	<0.2	<b>2.86</b>	<b>3.43</b>	<0.2	<b>83.1</b>	<b>306</b>	<b>947</b>	<0.2	<b>408</b>	<b>10</b>	<b>35.7</b>	<b>48.3</b>	<b>56.7</b>	<b>5.35</b>	<b>17.4</b>	<0.2	N/A	
	4/29/2015	<0.2	<0.2	<0.2	<b>0.26</b>	<b>3.18</b>	<0.2	<b>105</b>	<b>300</b>	<b>942</b>	<0.2	<b>412</b>	<b>3.43</b>	<b>33.2</b>	<b>56</b>	<b>55.9</b>	<b>1.9</b>	<b>37.2</b>	<0.2	N/A	
	10/1/2015	<0.2	<b>1.59</b>	<0.2	<b>1.07</b>	<b>3.22</b>	<0.2	<b>82.1</b>	<b>304</b>	<b>756</b>	<0.2	<b>417</b>	<b>1.81</b>	<b>34.8</b>	<b>54.1</b>	<b>60.2</b>	<b>1.62</b>	<b>26.1</b>	<0.2	N/A	
	4/25/2016	<0.2	<b>1.91</b>	<0.2	<b>1.06</b>	<b>1.89</b>	<0.2	<b>72.2</b>	<0.2	<b>888</b>	<0.2	<b>388</b>	<b>2.61</b>	<b>32.1</b>	<b>54.8</b>	<b>69.7</b>	<0.2	<b>1.37</b>	<0.2	N/A	
	10/17/2016	<0.2	<b>1.89</b>	<0.2	<b>5.63</b>	<b>2.85</b>	<0.2	<0.2	<b>738</b>	<0.2	<0.2	<b>908</b>	<b>33.6</b>	<0.2	<b>0.853</b>	<b>0.159*</b>					

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Total Natural Attenuations Constituents																				
Iron, Total, mg/L (CAS NO - 7439-89-6)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20.5
	10/1/2014	<0.1	<0.1	<0.1	0.887	34.6	<0.1	29.1	4.16	3.26	<0.1	<0.2	<0.1	69.5	34.3	39.4	0.21	0.163	<0.1	N/A
	10/1/2015	<0.1	<0.1	<0.1	0.677	33.8	<0.1	33.3	5.18	3.01	0.123	<0.252	<0.1	75.2	49.2	41.7	2.08	<0.1	<0.1	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	1.53
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	0.392
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	0.35
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<0.7
	2/14/2023	<0.1	<0.1	<0.1	0.325	11.7	<0.1	41.3	2.44	0.499	<0.1	7.56	0.209	56.3	27.7	28.9	0.0385*	<0.1	0.0638*	N/A
	2/14/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0568*
	7/19/2023	<0.1	0.465	<0.1	1.98	N/A	<0.1	N/A	8.76	N/A	<0.1	N/A	0.462	27.4	28.4	27.3	<0.4	<0.1	<0.1	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	<0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	<0.1	<0.1	<0.1	0.313	31.2	0.0535*	38.9	14.3	0.583*	<0.1	<0.4	0.206	69.4	26.8	0.0563*	<0.1	19.6	0.0667*	4.38
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0582*
	7/16/2024	<0.1	0.0789*	<0.1	2.02	42.7	<0.1	39.9	11.3	11.1	<0.1	0.0497*	1.4	63.6	25	29.2	<0.1	<0.1	<0.1	N/A
	7/16/2024	N/A	N/A	N/A	N/A	N/A	<0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Manganese, mg/L (CAS NO - 7439-96-5)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.122
	10/1/2014	<0.01	0.286	1.73	0.482	6.35	N/A	2.76	0.331	0.665	N/A	1.43	0.0514	1.57	0.468	4.02	3.07	N/A	N/A	N/A
	10/1/2015	<0.01	0.0854	1.47	0.379	5.99	N/A	2.79	0.256	0.598	N/A	1.27	<0.01	1.34	0.861	2.98	2.95	N/A	N/A	N/A
	10/12/2016	<0.01	0.387	0.815	0.285	5.25	N/A	1.33	<0.01	0.619	N/A	1.19	0.561	0.859	3.46	1.39	2.08	N/A	N/A	0.226
	10/5/2017	<0.01	0.572	0.765	0.368	5.13	N/A	2.2	<0.01	0.368	N/A	1.1	0.0868	0.816	0.968	2.11	1.96	N/A	N/A	N/A
	5/9/2018	<0.01	0.672	0.545	0.402	6.69	N/A	2.81	0.233	0.106	N/A	1.19	0.106	1.66	0.903	2.17	2.74	N/A	N/A	N/A
	9/10/2018	0.00474*	0.406	0.695	0.276	7.53	N/A	2.61	0.337	0.529	N/A	1.32	0.306	2.13	0.723	2.18	0.696	N/A	N/A	0.0153
	3/27/2019	<0.01	0.929	0.344	0.375	6.74	N/A	2.19	0.449	0.523	N/A	1.3	0.173	2.09	1.46	2.11	0.418	N/A	N/A	N/A
	9/10/2019	<0.01	0.852	0.00696*	0.255	5.65	N/A	2.67	0.67	0.448	N/A	1.18	0.209	0.921	1.04	2.41	3.12	<0.01	N/A	N/A
	3/2/2020	<0.01	0.701	0.0314	0.207	3.81	N/A	2.49	0.389	0.375	N/A	1.18	0.159	0.622	1.18	2.09	3.01	N/A	N/A	N/A
	8/26/2020	<0.01	0.936	<0.01	0.166	3.8	N/A	2.98	0.349	0.571	N/A	1.38	0.136	0.772	1.12	2.41	2.86	N/A	N/A	0.376
	5/4/2021	<0.01	0.977	0.244	0.663	4.85	N/A	2.86	0.22	0.509	N/A	1.59	0.392	0.811	1.19	2.21	0.371	N/A	N/A	N/A
	8/17/2021	<0.01	0.765	0.214	0.275	5.79	N/A	2.31	0.188	0.598	N/A	1.54	1.74	0.728	0.876	1.8	1.19	N/A	N/A	N/A
	3/15/2022	<0.01	0.0175	0.181	0.0661	6.63	N/A	2.21	0.198	0.418	N/A	1.45	0.568	1.13	0.873	2.02	0.974	N/A	N/A	0.347
	8/9/2022	<0.01	0.875	0.179	0.613	6.42	N/A	2.7	0.25	0.554	N/A	1.57	0.574	0.893	0.815	2.17	1.4	N/A	N/A	N/A
	2/14/2023	<0.01	0.0204	0.281	0.109	2.58	N/A	2.64	0.145	0.595	N/A	1.85	0.258	0.584	0.763	2.14	0.476	N/A	N/A	N/A
	7/19/2023	<0.01	1.2	0.00942*	0.438	N/A	N/A	0.162	N/A	N/A	N/A	0.283	1.1	1.15	2.34	2.71	N/A	N/A	N/A	N/A
	4/9/2024	<0.01	0.0823	1.23	0.146	5.68	N/A	2.43	0.319	0.463	N/A	1.48	0.209	1.04	0.942	<0.01	0.0805	N/A	N/A	0.0959
	7/16/2024	<0.01	1.2	0.109	0.274	5.69	N/A	2.2	0.244	0.709	N/A	1.13	0.279	1.3	0.93	1.71	1.14	N/A	N/A	N/A
Nitrate (NO3), mg/L (CAS NO - 14797-55-8)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.2
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<2.5
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	0.974
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	<1
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	<0.1
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	0.47
Oxidation-Reduction Potential, mV (CAS NO - ORP)	4/25/2016	112.9	28.9	101.9	64.4	-145.5	14.8	-103.6	-17.1	-111.3	11.7	-380	-164.3	-123.8	-109.6	-149.6	-6.2	23.2	37.5	N/A
	10/17/2016	57.8	17.1	57.2	-111.2	-131.3	-27	23.6	27.7	-120.3	29.6	370.8	-221.4	126.8	-142	-148.1	-15.3	194.2	54.2	N/A
	4/12/2017	79.4	57.7	75	38	-144.5	18.9	-43.1	-13.1	N/A	-79.1	-380.9	-35.5	-109.6	-118.1	-142.6	116	121.9	122.5	N/A
	10/5/2017	156.2	-26.2	61.4	-120.9	-152.1	16.5	-124.6	N/A	148.5	63.1	-366.5	-82.1	-125.9	87	167.2	-8.8	128.3	84.2	N/A
	5/9/2018	65.7	88.4	57.2	70.9	-121	-92	-74.5	-41.7	-98.9	34.4	84.9	100.1	-77.8	-59.8	90.6	24.8	27.6	62.4	N/A
	9/10/2018	-94.2	30.5	-99.2	-117.6	-113.8	-59.9	-85.2	-39.6	-141	-86	101.2	90.9	131.4	-103	-168.4	27.8	-44.7	-81	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Total Natural Attenuations Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Sulfate, mg/L (CAS NO - 14808-79-8)	10/2/2013	44.9	34.7	69.1	55.5	<5	70.3	833	340	7.87	62.2	632	120	<5	10.6	<5	151	134	53.3	<100
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	147
	10/5/2017	35.8	19.8	54.4	30.5	6.07	53.1	605	10.6	151	55	411	126	<5	4*	<5	47.4	100	47.7	1330
	5/9/2018	29.8	19.2	61.8	39.3	<5	16.6	678	388	43.4	57.6	430	127	<5	13.7	<5	95.3	109	40.7	268
	9/10/2018	22.3	24.4	61.8	26.5	<5	68.3	752	304	37.5	50.8	507	122	<5	6.5	<5	40	88	41.4	532
	3/27/2019	32.3	46.4	59.8	31.5	<5	59.8	721	415	12.3	55.1	592	116	2.07	14.9	<5	71.7	107	47.2	N/A
	9/10/2019	N/A	23.2	<5	116	46.6	52.9	683	628	45.8	53.5	541	29.2	N/A	N/A	57	N/A	N/A	44	N/A
	3/2/2020	33.2	31.2	55.7	23.4	17.1	51.6	757	525	<5	52.1	528	117	4.98*	<5	<5	41	92.6	45	N/A
	8/26/2020	30.7	36.1	53	19.4	33.5	50.5	759	543	<5	52.5	467	111	<5	<5	<5	18.2	83.7	41	73
	8/17/2021	37	40.4	50.7	25	2.94*	55.8	891	555	4.21*	49	565	120	<5	6.14	3.29*	46.7	89.9	43.8	N/A
	8/17/2021	N/A	N/A	N/A	N/A	3.3*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
	3/15/2022	34.8	34.7	44.9	25.6	<5	58.7	885	624	3.18*	48.6	633	129	<5	7.5	<5	35	86.5	43.2	276
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	43.2
	8/9/2022	35.2	32.3	46.7	27.8	<5	56.1	967	581	<5	49.7	552	112	<5	9.91	<5	23.5	82.6	36.5	N/A
	8/9/2022	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	N/A	N/A	N/A	N/A	N/A	N/A
	2/14/2023	34.8	26.5	46.1	48.1	21	54.5	279	219	<5	49.6	710	134	<5	11.2	<5	35.9	91.4	40.8	N/A
	2/14/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	41.3
	7/19/2023	41.2	27.4	51.3	57.6	N/A	57.3	N/A	573	N/A	49.9	N/A	117	<5	10.7	<5	45.9	89.3	45.8	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	35.8	26.9	43.7	92.6	2.88*	50.6	965	412	<5	50.2	717	121	<5	6.43	82.8	185	17.2	39.5	655
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	436
	7/16/2024	33	22.9	51	60.7	<5	48	840	293	<5	47.5	354	94	<5	23.2	<5	206	86.1	49.5	N/A
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: \* indicates '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.

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Aluminum, mg/L (CAS NO - 7429-90-5)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.807
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	0.227*
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	0.117
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	0.0894*
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	<0.35
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.274*
Boron, mg/L (CAS NO - 7440-42-8)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.45
	10/1/2014	0.127	0.256	0.658	0.363	3.4	0.464	26	24.2	31.9	0.831	19	1.38	1.1	8.08	14.4	1.3	1.08	0.424	N/A
	10/1/2015	0.12	0.255	0.645	0.375	3.35	0.464	23.4	20.7	26.4	0.486	19.4	0.435	2.13	6.62	19	1.12	1.19	0.353	N/A
	10/13/2016	0.141*	0.289	0.65	0.394	3.48	0.443	16.4	0.4	24.8	0.639	16.6	0.517	0.38*	6.17	8.13	1.77*	0.284	0.467	24.6
	10/5/2017	0.131*	0.193	0.553	0.382	3.87	0.395	14.4	0.393	25.8	0.502	12.3	0.298	0.448	4.23	9.45	1.86	0.307	0.552	N/A
	5/9/2018	0.125	0.125*	0.586	0.339	3.1	0.447	19.4	13.5	6.81	0.623	15.3	0.713	1.93	4.24	13.8	1.19	0.383	0.304	N/A
	9/10/2018	0.102*	0.229	0.626	0.396	3.33	0.444	25	16.3	55	0.7	17.6	0.453	3.52	4.23	13.6	1.09	0.303	0.42	23.3
	3/27/2019	0.169*	0.331	1.04	0.371	3.83	0.431	20.6	16.8	32.5	0.575	12.4	0.44	2.13	2.76	12.4	0.709	0.356	0.405	N/A
	9/10/2019	<0.2	0.273	0.734	0.402	3.6	0.424	14.3	17.7	32	0.5	10.8	0.776	0.46	3.9	9.5	1.09	0.277	0.451	N/A
	3/2/2020	0.138*	0.261	0.818	0.411	4.81	0.423	14.6	17.1	30.4	0.546	11.3	0.686	<0.8	3.57	9.96	1.34	0.213	0.425	N/A
	8/26/2020	0.1	0.311	0.878	0.416	4.6	0.432	14.3	19.5	32.5	0.634	10.7	0.717	0.319	3.36	10.5	1.27	0.251	0.497	22.9
	5/4/2021	0.0884*	0.27	0.864	0.285*	4.1	0.395	14.1	18.6	35.2	0.566	11.2	0.344	0.263*	2.86	9.83	1.11	<0.4	0.375*	N/A
	5/4/2021	<0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2021	0.0895*	0.249	0.507	0.314	3.67	0.356	14.3	19.2	32	0.645	13.3	0.284	0.403	2.65	10.3	1.09	0.274	0.462	N/A
	8/17/2021	N/A	N/A	N/A	N/A	3.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						
	3/15/2022	0.167	0.219	0.49	0.238	4.19	0.368	15	16.6	35.8	0.333	10.1	0.241	0.876	2.41	8.53	0.815	0.21	0.392	21.8
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	0.359
	8/9/2022	0.153	0.274	0.593	0.258	4.18	0.444	14.5	18.5	37.7	0.49	11.1	0.285	<0.7	1.95	8.9	0.455	0.177	0.393	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	0.411	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/14/2023	0.125	0.219	0.508	0.204	2.29	0.441	16.8	6.95	51.2	0.448	11.6	0.328	0.359	2.15	8.39	0.513	0.275	0.44	N/A
	2/14/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.428
	7/19/2023	0.144	0.23	0.752	0.364	N/A	0.353	N/A	16.1	N/A	0.502	N/A	0.457	1.56	1.7	9.88	0.966	0.222	0.368	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	0.336	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	0.112	0.224	0.586	0.306	4.03	0.332	20.1	14.1	34.6	0.772	11.4	0.519	1.12	1.87	0.288	0.774	7.68	0.949	20.6
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.338
	7/16/2024	0.0859*	0.251	1.55	0.383	3.81	0.342	22.4	10	31.6	0.358	12.9	1.67	1.74	2.41	9.79	1.54	0.215	0.264	N/A
	7/16/2024	N/A	N/A	N/A	N/A	N/A	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Carbonaceous Biochemical Oxygen Demand, mg/L (CAS NO - CBOD)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15500
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11000
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11400
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	80.3
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	17
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	19.2
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	19.3
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	42.3
Dissolved Oxygen, mg/L (CAS NO - DO)	4/25/2016	4.71	0.4	0.68	0.54	0.56	0.74	0.86	9.63	0.32	0.79	0.46	0.3	0.38	0.59	0.43	0.76	1.04	3.4	N/A
	10/12/2016	4.7	0.57	0.61	0.66	0.77	0.62	1.14	0.41	0.53	1.44	0.49	0.16	0.23	0.72	1.21	0.72	1.5	0.72	N/A
	4/12/2017	4.54	0.73	0.67	0.85	0.9	0.99	1.17	9.01	N/A	2.68	0.45	0.71	0.75	0.71	1.34	1.17	4.64	6.82	N/A
	10/5/2017	0.36	1.01	1.1	1.15	1.32	1.07	0.75	2.64	1.32	1.95	0.38	1.59	0.46	1.67	1.55	1.77	0.97	0.85	N/A
	5/9/2018	0.84	0.78	0.79	0.26	0.39	0.89	0.64	0.61	0.78	0.82	0.72	0.62	0.49	0.47	0.89	0.56	2.05	0.81	N/A
	9/10/2018	0.39	0.51	0.78	0.48	0.64	0.37	0.47	0.77	0.58	0.52	0.73	0.72	0.82	0.47	0.54	0.32	0.64	0.43	N/A
Nitrogen, Total Kjeldahl, mg/L (CAS NO - TKN)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5980
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5060
	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8000
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	973
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	870
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	813
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	777
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	754
Oxidation-Reduction Potential, mV (CAS NO - ORP)	4/25/2016	112.9	28.9	101.9	64.4	-145.5	14.8	-103.6	-17.1	-111.3	11.7	-380	-164.3	-123.8	-109.6	-148.6	-6.2	23.2	37.5	N/A
	10/12/2016	57.8	17.1	57.2	-111.2	-131.3	-27	23.6	27.7	-120.3	-29.6	370.8	-221.4	-126.8	-142	-148.1	-15.3	194.2	54.2	N/A
	4/12/2017	79.4	57.7	75	38	-144.5	18.9	43.1	-13.1	N/A	-79.1	-380.9	35.5	-109.6	-118.1	-142.6	116	121.9	122.5	N/A
	10/3/2017	156.2	26.2	61.4	-120.9	-152.1	16.5	-124.6	N/A	148.5	63.1	-366.5	82.1	-125.9	87	167.2	-8.8	128.3	84.2	N/A
	5/9/2018	65.7	88.4	57.2	70.9	-121	92	74.5	-41.7	-88.9	34.4	84.9	100.1	-77.8	-59.8	90.6	24.8	27.6	62.4	N/A
	9/10/2018	-94.2	30.5	-99.2	-117.6	-113.8	-59.9	-85.2	-39.6	-141	-86	101.2	90.9	-131.4	-103	-168.4	27.8	-44.7	-81	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
pH, S.U. (CAS NO - PH)	6/7/1993	6.8	6.9	6.8	6.4	7.4	6.5	7.5	6.5	7.3	6.7	7.3	6.8	7.4	7.4	7.6	7.4	7.4	7.4	N/A
	9/14/1993	7.5	7.3	6.8	7.7	6.6	7.6	6.9	6.9	7.6	7.9	6.7	8.7	7.4	7.2	7.9	7.6	7.9	7.7	N/A
	12/8/1993	7.4	6.9	6.7	7	6.9	7.3	7.1	6.8	7.5	7.9	6.9	6.6	6.6	7.8	7.8	7.7	8.1	7.8	N/A
	3/22/1994	7.3	7	N/A	7.2	6.7	7.2	N/A	N/A	N/A	N/A	N/A	5.3	6.1	5.4	6.7	N/A	N/A	N/A	N/A
	9/30/1994	7.5	7.1	7.3	7.3	7.6	7.9	7.5	6.7	7.5	7.3	7.3	7	6.6	6.9	7	7.9	7.2	6.9	N/A
	3/16/1995	7.3	6.8	6.5	6.7	6.4	6.4	7.2	6.7	7.3	7.1	7.4	7.2	6.4	6.6	7.2	7.2	7	7.1	N/A
	9/26/1995	6.75	7	6.75	7.25	7.25	7.5	7	6.75	7.5	6.75	7.25	6.75	6.75	6.75	7	6.75	7.25	6.75	N/A
	5/13/1996	6.6	6.8	6.5	6.7	6.7	6.8	7	6.5	6.5	6.8	7.1	6.6	6.5	6.5	6.6	6.9	6.6	6.5	N/A
	10/10/1996	7.2	7	6	7	6.7	7.4	7.9	7.7	7.5	7.1	7.3	6.7	6.6	6.8	6.9	6.2	7.4	6.7	N/A
	6/19/1997	5.75	6.5	6.5	6.75	7	6.75	6.75	6.5	7	6.75	6.75	6.5	6.5	6.75	7	6.5	7	6.75	N/A
	10/10/1997	6.8	6.9	6.7	7	6.9	7	6.9	6.6	7.2	7.2	6.9	7.1	6.6	6.9	6.75	6.8	7.1	8	N/A
	5/19/1998	6.6	6.5	6.9	6.7	6.5	6.8	6.8	6.3	7.5	6.8	6.2	6.8	6.5	6.3	6.5	6.5	6.5	6.9	N/A
	10/19/1998	7	6.9	6.5	6.4	7.1	7.2	7	6.8	7.5	7.5	7.1	7.3	6.2	6.9	7	6.8	7	7.1	N/A
	4/20/1999	7.09	6.98	7.06	7.05	6.63	7.41	6.63	6.53	7.11	7.05	7.07	6.91	6.6	6.7	6.71	6.8	7.15	6.89	N/A
	10/18/1999	7.2	6.8	6.3	7.2	7	6.5	7	7	7	7	6.5	7	6.5	7	6.5	7	7	7	N/A
	4/18/2000	N/A	6.8	N/A	7.1	6.8	N/A	8.7	N/A	7.3	N/A	6.8	N/A	4.1	N/A	6.2	5.5	N/A	6.3	N/A
	6/27/2000	N/A	N/A	N/A	N/A	6.6	N/A	6.43	N/A	6.95	N/A	6.8	N/A	6.22	5.5	N/A	N/A	N/A	N/A	N/A
	10/10/2000	7	6.5	6.8	7	N/A	6.5	7	6.3	7.5	7	7	6.5	6.8	6.5	6.5	7	7	N/A	
	4/25/2001	N/A	6.7	N/A	6.8	7	N/A	4	N/A	3.9	N/A	7	N/A	3.7	N/A	7	6.3	N/A	6.8	N/A
	10/17/2001	6.4	7.3	N/A	6.6	7	6.4	6.5	7.1	7.4	6.9	7.1	7.5	6.4	6.5	6.6	6.5	6.9	6.8	N/A
	4/1/2002	N/A	6.8	N/A	6.84	6.41	N/A	6.2	N/A	6.8	N/A	6.52	N/A	5.45	N/A	6.35	5.9	N/A	6.41	N/A
	10/1/2002	6.75	6.5	N/A	6.5	6.5	6.5	6.25	7	7.5	7	6.5	7.5	6.25	6.5	6.25	6.5	6.5	6.5	N/A
	4/21/2003	N/A	7.5	N/A	7	6.5	N/A	7	N/A	7.5	N/A	8	N/A	7	N/A	7.5	6.5	N/A	6.5	N/A
	9/24/2003	7.06	6.67	6.95	6.44	6.61	6.85	7.76	7	6.96	7	7.5	6.5	6.5	7.5	7	6.5	7	7.5	N/A
	4/9/2004	N/A	6.59	N/A	7.59	6.59	N/A	6.52	N/A	7.09	N/A	6.73	N/A	6.37	N/A	6.6	6.53	N/A	6.82	N/A
	10/19/2004	7.04	6.62	6.74	7.02	6.63	6.72	6.5	6.46	6.98	6.69	6.8	6.68	6.29	6.43	6.48	6.49	6.86	6.73	N/A
	4/5/2005	N/A	7.01	N/A	7.22	6.99	N/A	6.69	N/A	7.11	N/A	6.91	N/A	6.34	N/A	6.78	6.69	N/A	7.12	N/A
	10/20/2005	6.46	6.3	6.29	6.15	6.34	6.37	6.56	6.47	7.11	6.7	6.71	6.49	6.18	6.54	6.73	6.42	6.79	6.43	N/A
	4/17/2006	N/A	6.5	N/A	6.72	6.6	N/A	6.57	N/A	7.11	N/A	6.92	N/A	6.25	N/A	6.7	6.44	N/A	6.48	N/A
	10/17/2006	6.7	6.46	6.71	6.64	6.78	6.92	6.84	6.75	6.96	6.61	6.61	6.65	6.58	6.75	6.61	6.86	7.09	6.73	N/A
	4/23/2007	N/A	6.42	N/A	6.64	6.85	N/A	6.69	N/A	7.07	N/A	6.79	N/A	6.54	N/A	6.65	6.81	N/A	6.86	N/A
	10/9/2007	6.04	6.73	6.65	6.92	6.92	7	6.94	6.89	6.97	6.79	6.84	6.9	6.39	6.95	6.89	6.81	6.91	6.73	N/A
	4/14/2008	N/A	7.03	N/A	8.03	6.88	N/A	6.88	N/A	7.2	N/A	6.64	N/A	7.23	N/A	6.87	7.65	N/A	7.86	N/A
	10/23/2008	7.46	7.18	7.49	7.68	7.22	7.42	7.18	7.08	7.61	7.52	7.24	7.3	6.99	7.08	7.22	7.12	7.39	7.39	N/A
	4/14/2009	N/A	6.88	N/A	7.05	6.97	N/A	6.81	N/A	7.29	N/A	6.23	N/A	6.76	N/A	6.78	6.99	N/A	6.96	N/A
	10/9/2009	7.15	6.94	7.03	7.25	6.88	7.04	6.81	6.94	7.37	7.17	6.99	6.85	6.56	6.83	6.87	6.92	7.01	6.96	N/A
	4/7/2010	N/A	6.98	N/A	6.67	6.7	N/A	6.54	N/A	7.01	N/A	7.1	N/A	6.53	N/A	6.91	6.67	N/A	6.6	N/A
	10/26/2010	7.09	7.01	7.11	7.2	6.79	7.05	6.92	7.03	7.25	7.11	7.01	6.81	6.61	6.82	6.83	6.97	6.98	7.01	N/A
	4/13/2011	N/A	7.66	N/A	7.51	7.36	N/A	7.31	N/A	7.41	N/A	7.24	N/A	7.81	N/A	7.34	6.86	N/A	7.88	N/A
	10/27/2011	7.57	8.64	8.44	8.38	8.08	7.48	7.28	7.45	7.76	6.91	7.31	6.9	7.73	7.61	8.18	7.34	7	7.3	N/A
	4/24/2012	N/A	7.43	N/A	7.42	7.29	N/A	7.34	N/A	7.48	N/A	7.16	N/A	7.71	N/A	7.42	7.01	N/A	7.63	N/A
	10/23/2012	7.63	8.41	7.43	8.36	6.17	7.36	7.29	7.39	7.22	7.49	7.01	7.24	7.13	7.46	7.59	7.52	8.09	7.71	8.5
	4/2/2013	6.71	6.56	7.03	7.27	6.85	7.24	7.05	7.84	7.04	7.27	6.19	6.67	6.37	6.54	6.68	6.1	7.22	7.41	8.63
	10/7/2013	7.06	6.96	7.08	7.37	7.02	7.1	6.85	6.91	7.34	7.16	7.03	7	6.67	6.84	6.96	6.86	7.03	6.91	8.57
	4/1/2014	5.86	6.93	6.83	7.25	6.86	6.84	6.62	6.68	7.26	6.97	6.83	6.91	6.53	6.6	6.71	6.71	6.76	6.93	N/A
	10/1/2014	7.97	7.43	7.86	7.81	7.26	7.69	7.53	9.52	10.97	10.49	8.74	9.2	7.13	7.27	7.53	6.75	8.01	8.14	N/A
	4/29/2015	6.89	7.33	6.94	7.35	6.79	6.82	6.75	6.83	7.38	6.91	6.98	6.76	6.78	6.61	6.85	6.87	6.81	7.22	N/A
	10/1/2015	6.98	7.3	7.08	7.7	7.31	7	6.73	7.14	7.98	7.02	7.28	6.87	6.84	6.73	7.1	6.98	6.93	7.26	N/A
	4/25/2016	7.26	7.09	7.62	7.41	7.07	7.25	6.78	8.34	7.08	8.11	7.02	7.78	6.84	6.58	6.78	7.29	7.15	7.45	N/A
	10/12/2016	6.98	6.86	7.16	7.02	6.83	7.16	6.69	7.51	7.16	7.13	6.77	7.01	6.6	6.69	6.52	6.72	7.01	6.94	N/A
	4/12/2017	7.14	7.08	7.32	7.27	7.13	7.25	6.9	6.75	7.29	6.93	7.04	6.61	6.72	6.97	7.17	7.17	7.29	N/A	
	10/5/2017	6.98	6.88	7.06	7.08	6.89	7.6	6.71	7.64	7.08	7.49	6.8	6.88	6.51	6.64	6.86	6.79	6.95	6.86	N/A
	5/9/2018	7.93	7.19	7.46	7.35	6.93	7.25	6.61	6.86	7.18	7.31	7.3	7.37	6.63	6.69	7.1	7.29	6.99	7.41	N/A
	9/10/2018	7.37	7.7	7.39	7.22	6.79	7.37	7.01	7.32	7.29	7.81	7.4	7.41	7.54	7.51	7.35	8.09	8.79	7.82	N/A
	3/27/2019	7	6.92	7.11	7.26	6.84	7	6.62	6.73	7.05	7.01	6.79	7.11	6.54	6.6	6.77	7.11	6.95	7.05	N/A
	9/10/2019	7.03	7.06	7.23	7.16	7.06	7.83	6.82	6.99	7.29	7.63	7.43	7.16	6.69	6.69	7	7.17	6.99	N/A	
	3/2/2020	6.84	6.88	7.08	7.24	6.85	7.1	6.63	6.71	7.08	7.27	6.67	6.97	6.39	6.48	6.75	6.81	7.27	6.97	N/A
	8/26/2020	6.71	6.76	6.79	6.92	6.94	7.56	6.68	6.75	7.22	7.74	6.81	6.7	6.48	6.57	6.79	6.76	6.99	N/A	
	5/4/2021	6.8	6.89	7.05	7.2	6.9	7.42	6.62	6.68	7.11	6.98	6.66	6.66	6.43	6.52	6.8	6.81	6.87	6.9	N/A
	8/17/2021	5.79	6.87	6.95	7.07	6.79	7.33	6.62	6.67	7.1	6.98	6.75	6.74	6.4	6.58	6.77	6.81	6.88	6.8	N/A
	3/15/2022	7.07	7.13	7.21	7.3	6.74</														

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG	
Specific Conductance, umhos/cm (CAS NO - SPECCON)	6/7/1993	2120	2750	1470	1320	4260	1980	5420	5870	6210	5400	6800	5600	4200	3950	5500	4550	3950	3690	N/A	
	9/14/1993	888	1222	1120	906	3910	946	4580	4890	11470	1000	4690	1370	840	880	2320	1080	630	730	N/A	
	12/8/1993	913	1243	1240	885	3590	1130	4900	5340	11190	1030	6930	1990	1660	1660	4630	2370	2490	1660	N/A	
	3/22/1994	1000	980	1030	670	2740	800	3710	3500	8160	910	6130	1180	1700	1460	4390	1870	2450	1300	N/A	
	9/30/1994	919	1079	931	862	3080	1020	4820	3180	7650	860	5980	1130	1930	1380	1280	1670	1490	1090	N/A	
	3/16/1995	1154	1200	1105	937	3650	1000	4640	4830	10460	1310	6660	2550	2090	1610	4560	4560	3300	1270	N/A	
	9/26/1995	940	1150	970	890	2720	960	4270	5220	10100	1000	6330	1190	1960	1360	4270	1480	2730	1190	N/A	
	5/13/1996	1160	1371	1291	1377	3420	1386	6430	5440	8430	1794	9480	1855	1703	1953	6160	1362	3410	1496	N/A	
	10/10/1996	995	1132	1060	896	2560	750	3760	4114	8600	755	5120	951	2111	430	3760	460	640	460	N/A	
	6/19/1997	990	1030	1000	890	2430	870	4600	5090	7150	980	5900	1280	2040	1710	4350	1630	2180	1060	N/A	
	10/10/1997	1045	1017	895	739	2020	893	4400	5250	9200	861	6200	785	1900	1900	380	1450	1800	990	N/A	
	5/19/1998	980	1000	960	810	2400	940	4600	5100	9260	980	5850	1120	2100	2950	4080	1330	2000	1260	N/A	
	10/19/1998	960	800	815	940	2130	950	4490	5040	9460	915	6490	1210	2010	2900	4550	1550	3140	1100	N/A	
	4/20/1999	927	962	997	844	2280	477	4380	4410	7760	934	7250	1225	2000	2044	4160	1583	1864	1030	N/A	
	10/18/1999	1061	1055	1197	906	2290	985	4280	5430	10050	998	6840	1434	2340	3150	4710	1512	1944	1731	N/A	
	4/18/2000	N/A	1109	N/A	823	2450	N/A	4200	N/A	11590	N/A	6810	N/A	1709	N/A	3780	1369	N/A	968	N/A	
	6/27/2000	N/A	N/A	N/A	N/A	2150	N/A	4460	N/A	7940	N/A	7200	N/A	1930	2360	N/A	N/A	N/A	N/A	N/A	
	10/10/2000	800	960	920	710	2350	950	4170	5270	9760	990	5000	1100	1900	2390	3900	1280	1620	1100	N/A	
	4/25/2001	N/A	N/A	808	N/A	798	2270	N/A	5070	N/A	599	N/A	6290	N/A	1882	N/A	3690	1292	N/A	952	N/A
	10/17/2001	1800	1990	N/A	1480	4020	1570	8000	9200	17200	1730	11320	2150	3790	4830	7740	2880	3750	1890	N/A	
	4/1/2002	N/A	659	N/A	698	1433	N/A	695	N/A	1425	N/A	1111	N/A	1861	N/A	695	963	N/A	826	N/A	
	10/1/2002	1100	1140	N/A	930	3270	1040	6950	8450	15500	1670	N/A	1750	N/A	6420	N/A	N/A	N/A	N/A	N/A	
	4/21/2003	N/A	894	N/A	785	2090	N/A	4890	N/A	9240	N/A	9130	N/A	3250	N/A	5450	2000	N/A	976	N/A	
	9/24/2003	1109	1030	1052	753	2050	1039	4780	5430	10190	1127	7470	1211	2300	2590	6400	1639	2400	1214	N/A	
	4/9/2004	N/A	459	N/A	541	1177	N/A	4410	N/A	6280	N/A	5710	N/A	1000	N/A	3620	810	N/A	594	N/A	
	10/19/2004	1097	1012	1022	869	2100	1046	4570	5230	8590	1185	6520	1109	2200	2690	4570	1489	1974	1088	N/A	
	4/5/2005	N/A	840	N/A	783	1817	N/A	4330	N/A	5980	N/A	6370	N/A	1873	N/A	3800	1369	N/A	976	N/A	
	10/20/2005	1159	981	1027	854	1990	1034	3880	4420	9310	1152	7080	1132	2010	2220	4030	1592	1170	1090	N/A	
	4/17/2006	N/A	985	N/A	900	1990	N/A	5460	N/A	6750	N/A	7390	N/A	2180	N/A	4100	1462	N/A	1032	N/A	
	10/17/2006	1169	1028	1002	647	2050	1022	5090	5590	970	1175	7160	1156	2330	2470	4660	1556	1657	1069	N/A	
	4/23/2007	N/A	982	N/A	800	2106	N/A	5710	N/A	5941	N/A	7983	N/A	2343	N/A	4958	1508	N/A	1105	N/A	
	10/9/2007	1303	1048	1033	1017	1985	1027	5070	4450	8310	1357	6590	1117	2010	2240	4740	1700	1179	1176	N/A	
	4/14/2008	N/A	880	N/A	940	2050	N/A	5920	N/A	6160	N/A	7950	N/A	2300	N/A	4880	1790	N/A	1084	N/A	
	10/23/2008	1292	909	955	851	1936	1012	4710	5100	8610	1228	6280	1036	2300	2280	4720	2080	1288	1079	N/A	
	4/14/2009	N/A	809	N/A	804	1922	N/A	4910	N/A	9080	N/A	7810	N/A	2100	N/A	4640	1900	N/A	1026	N/A	
	10/9/2009	1406	939	929	858	2070	1155	4580	5710	9410	1337	7760	1078	2300	2240	4370	1583	1737	1055	N/A	
	4/7/2010	N/A	939	N/A	838	2080	N/A	5100	N/A	7560	N/A	6990	N/A	2350	N/A	4300	1934	N/A	947	N/A	
	10/26/2010	1386	951	939	862	2100	1175	4486	5692	9372	1296	7785	1118	2185	2260	4415	1526	1752	1087	N/A	
	4/13/2011	N/A	888	N/A	815	5140	N/A	4630	N/A	6390	N/A	6890	N/A	2020	N/A	4130	1686	N/A	495	N/A	
	10/27/2011	1579	1018	1039	1153	2249	1248	591	3999	1304	3999	1390	2450	2170	1734	1210	1183	3779	1086	N/A	
	4/24/2012	N/A	915	N/A	837	3163	N/A	4217	N/A	6147	N/A	6799	N/A	1987	N/A	4207	1831	N/A	563	N/A	
	10/23/2012	1624	1132	1201	1136	2175	1322	4201	576	3879	1409	4101	1407	5823	1008	2004	2246	3827	1825	1038	865
	4/2/2013	1073	721	679	644	1024	208	3783	432	9135	890	5519	959	1784	1969	3703	1886	926	737	N/A	
	10/7/2013	904	864	762	818	1852	1117	4627	4768	8083	1027	5823	1008	2004	2246	3827	1825	1216	1248	N/A	
	4/1/2014	838.6	968.8	762.8	835.5	2171.8	1333.8	6054.4	5631.1	11519.6	1121.4	7432.8	1249.7	2389.3	2798.9	4712.6	2309.4	2000.5	991	N/A	
	10/1/2014	1348	931	875	833	2078	1286	5360	5669	9909	1133	6953	1277	2216	2725	4681	1761	1311	921	N/A	
	4/29/2015	1395	968	1025	848	1695	1146	5640	5650	10820	910	7690	1011	2110	3280	4260	2330	1924	919	N/A	
	10/1/2015	1395	960	833	869	2350	1350	6270	6270	8800	969	7010	1200	2170	4780	4440	1816	1470	936	N/A	
	4/25/2016	1505	957	873	460	2211	1362	5332	569	1182	1051	7605	1306	2075	3676	4208	1725	1457	1089	N/A	
	10/12/2016	1135	803	736	863	1805	1081	3945	416	8519	881	5556	1010	1980	3233	3630	1712	1042	826	N/A	
	4/12/2017	1160	737	755	823	1859	1094	4360	454	10556	1010	6424	1134	2030	3261	3998	1067	988	649	N/A	
	10/5/2017	1178	902	894	944	2082	1284	1553	544	10370	1039	5500	1278	2856	3299	4104	1390	1127	947	N/A	
	5/9/2018	1354	1008	921	935	2511	1553	4948	3201	9674	2647	11832	11201	2596	2780	10392	1534	1219	868	N/A	
	9/10/2018	1209	959	1026	1022	2390	1576	5389	4203	10991	2360	11822	11906	3337	3450	4850	1113	1573	1095	N/A	
	3/27/2019	1222	838	884	808	2243	1169	5432	3609	8274	1064	6247	1194	2982	3010	4066	997	1140	845	N/A	
	9/10/2019	1182.2	757.5	766.3	828.9	1812.7	1051.9	4168.6	4571.8	9439.6	1117.9	9859	1188.8	1971.3	2351.6	2800.4	1199.4	962.7	803.7	N/A	
	3/2/2020	1356	794	823	907	2137	1176	5659	4863	11603	1058	6014	1225	2272	3007	4124	1603	1106	883	N/A	
	8/26/2020	1385.5	804.8	826.5	899.8	2121.4	1182.9	5547.8	5047.2	10835.5	1069.8	5875.8	1207.5	2078.53	2771.22	3931	12				

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Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

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## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Benzidine, ug/L (CAS NO - 92-87-5)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1600
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<4.8
	10/2/2013	< 0.475	< 0.475	< 0.48	< 0.475	< 0.511	< 0.475	< 0.48	< 0.475	< 0.475	< 0.47	< 0.475	< 0.475	< 0.505	< 0.47	< 0.485	< 0.495	< 0.475	< 0.48	< 47
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 100
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 202
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 247
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 20
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 18.5
Benzoic acid, ug/L (CAS NO - 65-85-0)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 16000
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	344*
	10/2/2013	< 1.02	< 1.02	< 1.03	3.95*	< 1.1	< 1.02	4.01*	4.24*	4.65*	< 1.01	< 1.02	4.81*	4.21*	4.06*	4.1*	< 1.02	< 1.03	17100*	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 100
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 1010
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 1230
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 100
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 92.6
Bromobenzene, ug/L (CAS NO - 108-86-1)	10/2/2013	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A						
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
Carbazole, ug/L (CAS NO - 86-74-8)	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	< 101
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	< 123
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
Hexane, ug/L (CAS NO - 110-54-3)	10/7/2013	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
Isopropylbenzene, ug/L (CAS NO - 98-82-8)	10/2/2013	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
Methyl Tert-Butyl Ether, ug/L (CAS NO - 1634-04-4)	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.16
	10/2/2013	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 1.6
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
<b>Methylphenols, total, ug/L (CAS NO - 1319-77-3)</b>	6/7/1993	< 21	< 21	< 23	< 25	< 22	< 14	< 29	< 23	< 26	< 21	<b>1100</b>	< 21	< 24	< 25	< 21	< 23	< 26	< 22	N/A
	9/14/1993	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<b>542</b>	< 10	< 10	< 14	< 10	< 10	< 10	< 10	N/A
	12/8/1993	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<b>492</b>	< 10	< 14	< 10	< 10	< 15	< 10	< 10	N/A
	3/22/1994	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<b>87.2</b>	< 10	< 10	< 10	< 10	< 13	< 10	< 10	N/A
	9/30/1994	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	<b>40.6</b>	N/A	N/A						
	3/16/1995	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 14	N/A	<b>34.2</b>	N/A	N/A						
	5/13/1996	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 14	N/A	< 10	N/A	N/A						
	10/10/1996	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 5	N/A	N/A						
	6/19/1997	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	<b>65.4</b>	N/A	N/A						
	10/19/1997	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	<b>10.5</b>	N/A	N/A						
	5/19/1998	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	<b>153</b>	N/A	N/A						
	10/19/1998	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A						
	10/10/2000	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						
	10/1/2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 300	N/A	N/A						
	9/24/2003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 14	N/A	N/A						
	10/19/2004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A						
	4/5/2005	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						
	10/20/2005	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						
	4/17/2006	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						
	10/17/2006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>10.6</b>	N/A	N/A						
	4/23/2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>32.8</b>	N/A	N/A						
	10/9/2007	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A						
	4/14/2008	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						
	10/23/2008	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						
	4/14/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>27.6</b>	N/A	N/A						
	10/9/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 619	N/A	N/A						
	4/7/2010	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						
	10/26/2010	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						
	4/13/2011	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						
	10/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 29	N/A	N/A						
	4/24/2012	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						
	10/23/2012	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	N/A	N/A	N/A	N/A	<b>5080</b>	N/A
	4/2/2013	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	N/A	N/A	N/A	N/A	<b>650</b>	N/A
	10/7/2013	< 0.182	< 0.182	< 0.184	< 0.182	< 0.196	< 0.182	< 0.184	< 0.182	< 0.182	< 0.182	<b>10*</b>	< 0.182	< 0.194	< 0.182	< 0.186	< 0.189	< 0.182	< 0.184	<b>4920</b>
	10/1/2014	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						
	10/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.36*	N/A	N/A						
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 105	N/A	<b>103</b>						
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	24*						
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 123						
	3/19/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10						
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26
<b>N-Butylbenzene, ug/L (CAS NO - 104-51-8)</b>	10/2/2013	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	3/15/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
<b>N-Propylbenzene, ug/L (CAS NO - 103-65-1)</b>	10/2/2013	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	N/A
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	< 10
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	< 10
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	< 10
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A

# SCS ENGINEERS

## Summary of Groundwater Chemistry

Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Appendix I Supplemental Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
P-Isopropyltoluene, ug/L (CAS NO - 99-87-6)	10/2/2013	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	N/A	
	10/12/2016	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	N/A	N/A	N/A	N/A	< 10	
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	< 10	
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	3.58*	
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	
	3/15/2022	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	N/A	N/A	N/A	N/A	< 10	
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	7/19/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
Pyridine, ug/L (CAS NO - 110-86-1)	10/12/2016	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	N/A	N/A	N/A	N/A	< 10	
	9/10/2018	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	N/A	N/A	N/A	N/A	< 101	
	8/26/2020	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	N/A	N/A	N/A	N/A	< 123	
	3/15/2022	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	N/A	N/A	N/A	N/A	< 10	
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.26	
Sec-Butylbenzene, ug/L (CAS NO - 135-98-8)	10/2/2013	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A	
	10/12/2016	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	N/A	N/A	N/A	N/A	< 10	
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	< 10	
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	< 10	
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	
	3/15/2022	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	N/A	N/A	N/A	N/A	< 10	
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	7/19/2023	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	< 1	N/A	N/A	N/A	N/A	
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
Tert-Butylbenzene, ug/L (CAS NO - 98-06-06)	10/2/2013	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	
	10/12/2016	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	N/A	N/A	N/A	N/A	< 10	
	10/5/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	9/10/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	< 10	
	9/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 10	< 1	N/A	N/A	N/A	N/A	
	8/26/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	< 10	
	8/17/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	
	3/15/2022	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	N/A	N/A	N/A	N/A	< 10	
	8/9/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	
	7/19/2023	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	< 1	N/A	N/A	N/A	N/A	
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	
	7/16/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	

Note: \* indicates 'I flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.

Denotes Confirmed Outlier, Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

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Summary of Groundwater Chemistry  
Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Geochemistry Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Bicarbonate, mg/L (CAS NO - BICARB)	10/5/2017	361	412	361	412	850	350	2650	268	5480	355	3500	500	1150	1060	2890	716	386	438	2120
	5/9/2018	427	371	330	407	810	389	3010	1560	5320	410	3890	524	1050	968	2670	700	381	232	4510
Calcium, mg/L (CAS NO - 7440-70-2)	10/5/2017	91.8	99.8	93.9	103	86.6	102	486	66.6	165	87	497	132	201	207	372	107	115	131	49.1
	5/9/2018	112	105	100	100	116	108	510	123	166	107	650	153	260	196	391	135	134	68.5	131
Carbonate, mg/L (CAS NO - CARB)	10/5/2017	<5	<5	<5	<5	<5	<5	<20	<5	<20	<5	<20	<5	<5	<10	<10	<5	<5	<5	<20
	5/9/2018	<5	<5	<5	<5	<5	<5	<10	<5	<25	<5	<25	<5	<10	<25	<5	<5	<5	<5	<25
Chloride, mg/L (CAS NO - 16887-00-6)	6/7/1993	68	23	20	19	220	52	330	440	440	49	1100	24	47	82	120	57	140	18	N/A
	9/14/1993	77	24	22	20	<5	55	<5	360	40	210	48	21	10	<5	58	29	21	N/A	
	12/8/1993	68	200	23	23	<5	53	<5	12	340	34	810	47	41	<5	58	41	26	N/A	
	3/22/1994	76	24	23	26	260	62	<5	5.1	42	42	620	52	51	74	200	69	29	29	N/A
	9/30/1994	110	23	22	54	310	62	240	440	340	40	490	51	51	66	200	60	40	37	N/A
	3/16/1995	94	22	20	47	300	62	220	420	300	38	790	48	44	68	200	60	64	33	N/A
	9/26/1995	81	22	23	34	280	61	210	390	310	45	260	48	45	<5	210	30	60	32	N/A
	5/13/1996	71	23	32	27	260	63	250	400	300	59	110	55	37	59	200	19	65	25	N/A
	10/10/1996	94	26	25	34	260	57	230	370	55	48	340	49	53	84	280	30	77	36	N/A
	6/19/1997	93	180	28	33	25	57	190	390	280	46	300	52	48	59	220	32	52	37	N/A
	10/10/1997	120	27	26	34	200	57	190	380	280	43	220	52	51	70	220	40	50	46	N/A
	5/19/1998	96.4	22.4	27.7	30.2	175	71.9	167	340	243	59.6	210	50.4	47.3	99.1	199	31	55.8	50.7	N/A
	10/19/1998	100	16	25	11	180	58	150	380	260	53	180	47	50	110	200	34	75	52	N/A
	4/20/1999	74	24	30	12	200	59	150	370	260	49	310	47	54	93	180	38	50	35	N/A
	10/18/1999	97	22	29	24	150	61	120	370	280	47	260	47	55	120	210	30	51	37	N/A
	4/18/2000	N/A	18	N/A	22.8	163	N/A	118	N/A	231	N/A	671	N/A	44.6	N/A	187	36.8	N/A	34	N/A
	10/10/2000	N/A	15.9	N/A	21.7	136	70.1	78.7	366	300	55.8	173	51.9	28.8	96.6	175	23.6	44.8	34.5	N/A
	4/25/2001	N/A	52.5	N/A	14.8	275	N/A	315	N/A	304	N/A	123	N/A	63.2	N/A	188	40.8	N/A	30.8	N/A
	10/17/2001	N/A	13.5	N/A	14.5	195	N/A	146	N/A	355	N/A	98.8	N/A	47.9	N/A	187	63.4	N/A	34.5	N/A
	4/1/2002	N/A	14.2	N/A	10.9	183	N/A	208	N/A	268	N/A	366	N/A	54.6	N/A	185	57.5	N/A	38.2	N/A
	10/1/2002	110	20	N/A	16	150	77	<2	<4	<5	100	<1	44	52	110	<2	86	34	36	N/A
	4/21/2003	N/A	17.7	N/A	22.6	201	N/A	206	N/A	300	N/A	469	N/A	76.6	N/A	183	75	N/A	41.9	N/A
	9/24/2003	134	22.6	31.8	17.4	186	86.1	175	421	311	95.8	263	45.8	93.4	121	188	82.7	65.3	45.2	N/A
	4/9/2004	N/A	22.3	N/A	14.7	224	N/A	254	N/A	295	N/A	1000	N/A	129	N/A	194	85.5	N/A	55	N/A
	10/19/2004	132	20.6	34.1	15.4	189	98.5	172	400	270	153	364	49.4	92.4	126	187	57.5	62.2	63.1	N/A
	4/5/2005	N/A	12.4	N/A	11.5	210	N/A	181	N/A	263	N/A	272	N/A	63	N/A	154	56.2	N/A	63.1	N/A
	10/20/2005	159	16.7	14.9	38.1	205	96	233	381	263	126	213	47	59.6	103	150	52.3	48	59.3	N/A
	4/17/2006	N/A	16.2	N/A	9.8	221	N/A	647	N/A	295	N/A	499	N/A	101	N/A	144	61.9	N/A	43.9	N/A
	10/17/2006	143	27.3	34.3	9.4	197	95.1	191	236	247	137	265	47.2	82.3	106	149	61.3	57	58.5	N/A
	4/23/2007	N/A	19	N/A	11.7	206	N/A	242	N/A	214	N/A	1190	N/A	83.6	N/A	160	60.4	N/A	61.3	N/A
	10/9/2007	149	22.4	33.3	17.9	199	97.2	216	354	238	206	40.2	49.9	61.9	100	134	77.4	50.4	63.6	N/A
	4/14/2008	N/A	54.4	N/A	14.9	203	N/A	245	N/A	224	N/A	1020	N/A	94.8	N/A	121	118	N/A	42.9	N/A
	10/23/2008	185	18.9	32.4	17.6	140	95.5	146	330	228	181	171	49	99.8	107	117	124	57.9	75.6	N/A
	4/14/2009	N/A	13.8	N/A	13.7	201	N/A	180	N/A	242	N/A	430	N/A	79.6	N/A	105	85.1	N/A	71.2	N/A
	10/9/2009	208	24	35.8	19.2	156	97.9	136	325	321	255	28.8	49.4	90.9	108	126	90.1	62.2	66.2	N/A
	4/7/2010	N/A	24.5	N/A	11.2	201	N/A	190	N/A	223	N/A	548	N/A	105	N/A	88.9	184	N/A	18.5	N/A
	10/26/2010	193	23.6	45.2	21.9	163	94.8	152	<5	206	116	458	49.7	74.1	115	104	170	52	23.1	N/A
	4/13/2011	N/A	31	N/A	23.5	212	N/A	140	N/A	210	N/A	213	N/A	102	N/A	75.1	176	N/A	27	N/A
	10/27/2011	201	25.6	42.3	27	134	133	164	76.8	214	108	416	73.3	70.9	112	78.1	71.7	59.3	38.3	N/A
	4/24/2012	N/A	24.3	N/A	13.3	168	N/A	127	N/A	200	N/A	40.4	N/A	57.6	N/A	16.4	186	N/A	24.6	N/A
	10/23/2012	153	64.5	42.3	19.2	148	160	140	<5	220	62.2	46.5	48.8	61.1	90.3	38.5	154	171	36.7	N/A
	4/2/2013	190	27.1	30.4	11.9	188	3.64*	132	3.29*	221	53	49.2	46.8	91.1	141	52.3	371	46.9	29.9	N/A
	10/7/2013	105	47.2	40.7	18.2	167	142	171	126	159	136	50.3	47.2	78.6	206	54.9	233	52	43.9	690
	4/1/2014	92.7	38.6	31.1	15.6	200	139	189	229	203	76.3	52.8	45.4	101	218	59.1	296	44.1	39.2	N/A
	10/1/2014	178	39.4	42.5	17.3	180	151	173	230	202	100	64.5	52.1	71.2	194	63.8	146	53.9	50.2	N/A
	4/29/2015	124	33.7	35.3	14.9	196	157	179	225	213	72.7	57	48.9	66.2	343	58.7	361	52.2	45.6	N/A
	10/1/2015	206	41.4	35.5	13	176	158	162	235	166	83.2	83.4	54.4	103	557	51.9	193	49.4	45.1	N/A
	4/25/2016	203	25.8	37.3	13.4	175	164	167	5.55	226	79.3	654	48.3	75.4	581	46.9	30.9	57.2	30.7	N/A
	10/12/2016	171	24.2	39.1	25.6	206	153	162	4.27	228	78.2	720	47.5	75.3	508	51.1	47.4	66.4	21.1	312
	4/12/2017	183	22.3	46.9	12.8	169	152	169	N/A	228	85.9	738	49	91.7	529	43.5	34.2	71.5	20.1	N/A
	10/5/2017	131	23.2	33.7	19.2	160	124	151	2.25*	185	68.3	37	45.8	84.7	490	39.7	36.4	69.6	24.3	238
	5/9/2018	159	20.3	39.2	16.1	270	34.3	649	373	203	67.8	52.7	51.6	264	435	92	38	65	24.3	484
	9/10/2018	158	19.2	40	15.3	212	128	145	412	178	64.9	42.1	44.9	456	445	36.4	8.11	68.6	28.3	257
	3/27/2019	164	15.8	44.6	15.8	234	129	149	187	216	84.5	29.8	54.7	409	494	61.9	10	65	28.6	N/A
	9/10/2019	198	15.3	34.5	45.7	193	113	127	158	174	74.9	23.3	95.1	444	33	33.4	73.9	26.5	N/A	
	3/2/2020	202	16.7	30.5	18.3	186	137	136	139	170	77.2	21.6	45.3	70.8	460	29.7	20.4			

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Summary of Groundwater Chemistry  
Archer Daniels Midland Landfill (Closed) - 23-SDP-05-88C

Geochemistry Constituents	Sample Date	MW-1 UPG	MW-2 UPG	MW-17 UPG	MW-18 UPG	MW-3 DNG	MW-4 DNG	MW-5 DNG	MW-6 DNG	MW-7 DNG	MW-8 DNG	MW-9 DNG	MW-10 DNG	MW-11 DNG	MW-12 DNG	MW-13 DNG	MW-14 DNG	MW-15 DNG	MW-16 DNG	WET_WELL DNG
Chloride, mg/L (CAS NO - 16887-00-6)	7/19/2023	204	33	45.5	39.7	N/A	183	N/A	176	N/A	117	N/A	51.5	74.6	305	47.3	493	88.1	41.7	N/A
	7/19/2023	N/A	N/A	N/A	N/A	N/A	197	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/9/2024	179	31.8	36.4	41.3	420	186	166	317	168	176	27.3	49.3	129	302	97.1	195	78.7	28.2	239
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	360	N/A
	7/16/2024	183	30.1	71.6	39.2	298	180	192	385	195	146	38.9	76.3	293	298	64.6	357	90.1	68.3	N/A
	7/16/2024	N/A	N/A	N/A	N/A	N/A	177	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
Magnesium, mg/L (CAS NO - 7439-95-4)	10/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28.8
	10/1/2014	53.7	34.9	37.8	39.1	84.5	N/A	394	334	340	N/A	252	59.6	110	143	288	86.3	73.1	N/A	N/A
	10/1/2015	56.3	35.6	38.3	39.2	75.9	N/A	441	339	257	N/A	264	42.6	135	208	659	91.2	112	N/A	N/A
	10/13/2016	42.9	28.7	30.4	34.2	73.7	N/A	289	20.6	281	N/A	229	57.5	90.9	236	325	109	47.7	N/A	469
	10/5/2017	43.4	26.4	33.3	33.7	75.7	35.5	297	22.7	247	35.9	224	50.2	94.1	118	280	86.7	50	61.2	364
	5/9/2018	43.5	28.9	32.3	31.7	78.1	39.2	401	183	57.3	39.2	226	50.5	106	115	294	79.7	49.9	22.9	369
	9/10/2018	38.8	27.8	31.7	36.2	77.4	N/A	523	242	494	N/A	339	50.3	150	142	474	54.4	48.1	N/A	275
	3/27/2019	36.1	29.7	30.6	28.2	80.7	N/A	404	280	276	N/A	223	50.1	107	112	279	71.5	50.2	N/A	N/A
	9/10/2019	43	26.6	32.7	35.4	82.5	N/A	336	294	312	N/A	225	55.9	102	112	312	68.3	52.6	N/A	N/A
	3/2/2020	43.1	24.1	29.9	32.6	86	N/A	343	378	244	N/A	236	48.4	96.2	111	328	128	55.2	N/A	N/A
	8/26/2020	46.1	26.8	30.3	30.6	86.2	N/A	338	356	241	N/A	237	51.7	101	112	312	71	47.4	N/A	594
	5/4/2021	54.1	27	31.6	30.8	86.3	N/A	334	293	290	N/A	247	57.1	102	102	299	67.9	53.6	N/A	N/A
	8/17/2021	45.9	23.9	27.4	28.2	78.9	N/A	364	324	444	N/A	315	66.9	114	101	328	69.5	49.1	N/A	N/A
	3/15/2022	38.8	30.6	31.3	28.1	81.6	N/A	374	338	337	N/A	278	61.9	99.1	92.7	273	73.7	50.8	N/A	504
	8/9/2022	64	28.2	33.4	28.3	95.2	N/A	508	400	436	N/A	322	70.9	105	86.5	298	62.6	65.9	N/A	N/A
	2/14/2023	45.8	30.2	30.2	27.5	71	N/A	423	149	487	N/A	326	54.7	98.8	81.2	274	73.1	60.6	N/A	N/A
	7/19/2023	50.8	26.3	29.4	32	N/A	N/A	463	324	321	N/A	265	51.4	97.8	69.9	53.1	84	278	N/A	448
	4/9/2024	47.2	28.2	29.1	32.2	96.3	N/A	514	159	240	N/A	251	67.6	95.4	77.8	263	102	51.7	N/A	N/A
	7/16/2024	50.1	27.2	29	33.9	84.9	N/A	514	159	240	N/A	251	67.6	95.4	77.8	263	102	51.7	N/A	N/A
Potassium, mg/L (CAS NO - 7440-09-7)	10/23/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1510
	4/2/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1490
	10/12/2016	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	N/A	N/A	N/A	N/A	N/A	286
	10/5/2017	5.44	11.7	11.1	24.6	158	4.88	37.2	6.01	228	8.2	60.8	16.8	7.77	9.03	14.4	8.06	7.64	4.93	219
	5/9/2018	11.1	7.66	10.4	27.3	132	4.46	40.6	49.4	235	7.44	70.4	20.1	6.08	9.47	17.3	5.31	11.2	7.54	220
	9/10/2018	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	N/A	N/A	N/A	N/A	N/A	310
	8/26/2020	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	N/A	N/A	N/A	N/A	N/A	235
	3/15/2022	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	N/A	N/A	N/A	N/A	N/A	245
	4/9/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	263
Sodium, mg/L (CAS NO - 7440-23-5)	10/5/2017	56.4	20.9	23.8	18.1	107	60	210	4.76	445	41.2	63.5	27.4	46.1	214	95.5	37.4	30.1	30.6	271
	5/9/2018	21.8	70.7	30.6	18.4	166	67.7	224	303	392	41.9	86.4	36.4	102	190	142	69.1	37.1	16.8	596

Note: \* indicates 'I flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.

Denotes Confirmed Outlier, Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

## Appendix D

### Statistical Report

## Attachment A

Trend Test ( $\alpha=0.01$ )

# Trend Test

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR Printed 9/24/2024, 9:44 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Acenaphthene (ug/L)	MW-9	-0.1112	-14	-21	No	8	87.5	0.01	NP
Acenaphthene (ug/L)	MW-11	-0.05273	-18	-21	No	8	37.5	0.01	NP
Acenaphthylene (ug/L)	MW-9	-0.07793	-16	-21	No	8	50	0.01	NP
Acenaphthylene (ug/L)	MW-11	-0.1601	-9	-21	No	8	75	0.01	NP
Acetone (ug/L)	MW-11	0	2	21	No	8	62.5	0.01	NP
Arsenic (mg/L)	MW-3	0.005096	18	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-5	0.003343	16	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-6	0.002427	4	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-7	-0.01627	-4	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-9	0.005708	12	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-11	0.003834	14	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-12	0.0003342	1	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-13	-0.01267	-4	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-15	0	5	21	No	8	87.5	0.01	NP
Arsenic (mg/L)	MW-18 (bg)	-0.002603	-8	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-9	-0.3042	-8	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-1 (bg)	-0.0142	-12	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-2 (bg)	-0.007098	-3	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-3	-0.1599	-12	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-4	-0.01652	-12	-21	No	8	0	0.01	NP
<b>Boron (mg/L)</b>	<b>MW-5</b>	<b>1.813</b>	<b>23</b>	<b>21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	MW-6	-2.432	-18	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-7	0.6375	2	21	No	8	0	0.01	NP
Boron (mg/L)	MW-8	-0.04451	-2	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-9	0.2942	10	21	No	8	0	0.01	NP
Boron (mg/L)	MW-10	0.1019	18	21	No	8	0	0.01	NP
Boron (mg/L)	MW-11	0.4599	18	21	No	8	12.5	0.01	NP
Boron (mg/L)	MW-12	-0.2905	-15	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-13	-0.1968	-8	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-14	-0.04218	-2	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-15	0.009442	8	21	No	8	12.5	0.01	NP
Boron (mg/L)	MW-16	-0.03171	-14	-21	No	8	0	0.01	NP
Boron (mg/L)	MW-17 (bg)	0.05707	8	21	No	8	0	0.01	NP
Boron (mg/L)	MW-18 (bg)	0.0274	8	21	No	8	0	0.01	NP
Carbon Disulfide (ug/L)	MW-9	0.06864	2	21	No	8	25	0.01	NP
Carbon Disulfide (ug/L)	MW-11	0	-2	-21	No	8	62.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-1 (bg)	-0.01132	-10	-21	No	8	62.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-2 (bg)	1.659	13	21	No	8	37.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-3	1.417	2	21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-4	0	2	21	No	8	50	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-5	11.45	6	21	No	8	12.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-6	-23.24	-15	-21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-7	-147.3	-14	-21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-8	-0.2523	-1	-21	No	8	25	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-9	-47.93	-12	-21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-10	2.646	11	21	No	8	25	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-11	-60.72	-16	-21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-12	-3.709	-14	-21	No	8	0	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-13	-2.071	-9	-21	No	8	12.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-14	3.02	10	21	No	8	12.5	0.01	NP

# Trend Test

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Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO-AM 2024AWQR   Printed 9/24/2024, 9:44 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Chemical Oxygen Demand (mg/L)	MW-15	2.874	16	21	No	8	62.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-16	0.9349	4	21	No	8	12.5	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-17 (bg)	0	2	21	No	8	50	0.01	NP
Chemical Oxygen Demand (mg/L)	MW-18 (bg)	-1.575	-2	-21	No	8	12.5	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-15.9	-6	-21	No	8	0	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-3.242	-16	-21	No	8	0	0.01	NP
Chloride (mg/L)	MW-3	25.43	18	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-4	13.61	16	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-5	6.152	8	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-6	32.36	4	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-7	1.965	2	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-8	12.82	18	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-9	2.083	8	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-10	1.81	8	21	No	8	12.5	0.01	NP
Chloride (mg/L)	MW-11	20.71	12	21	No	8	0	0.01	NP
<b>Chloride (mg/L)</b>	<b>MW-12</b>	<b>-56.29</b>	<b>-26</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	MW-13	11.35	20	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-14	114.7	20	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-15	-0.9013	-4	-21	No	8	0	0.01	NP
Chloride (mg/L)	MW-16	13.26	20	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-17 (bg)	5.932	12	21	No	8	0	0.01	NP
Chloride (mg/L)	MW-18 (bg)	2.232	8	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-2 (bg)	0.000008688	3	21	No	8	25	0.01	NP
Cobalt (mg/L)	MW-3	-0.0004089	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-5	0.001057	18	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-6	-0.001017	-18	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-7	-0.000177	-6	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-9	0.000293	16	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-10	-0.0002414	-9	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-11	-0.004881	-16	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-12	-0.00018	-20	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-13	-0.00004208	-2	-21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-14	-0.0003723	-6	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-15	0	5	21	No	8	87.5	0.01	NP
Cobalt (mg/L)	MW-18 (bg)	-0.0003024	-4	-21	No	8	0	0.01	NP
Fluorene (ug/L)	MW-9	-0.05096	-18	-21	No	8	87.5	0.01	NP
Fluorene (ug/L)	MW-11	-0.01995	-6	-21	No	8	12.5	0.01	NP
Iron (mg/L)	MW-2 (bg)	0	5	14	No	6	66.67	0.01	NP
Iron (mg/L)	MW-3	0.261	0	12	No	5	0	0.01	NP
Iron (mg/L)	MW-5	1.056	6	12	No	5	0	0.01	NP
Iron (mg/L)	MW-6	1.02	9	14	No	6	0	0.01	NP
Iron (mg/L)	MW-7	-0.0885	0	12	No	5	0	0.01	NP
Iron (mg/L)	MW-8	0	-3	-14	No	6	83.33	0.01	NP
Iron (mg/L)	MW-9	0.001771	0	12	No	5	60	0.01	NP
Iron (mg/L)	MW-10	0.0468	10	14	No	6	33.33	0.01	NP
Iron (mg/L)	MW-11	-0.6801	-5	-14	No	6	0	0.01	NP
Iron (mg/L)	MW-12	-1.903	-11	-14	No	6	0	0.01	NP
Iron (mg/L)	MW-13	-1.421	-7	-14	No	6	0	0.01	NP
Iron (mg/L)	MW-14	-0.01679	-6	-14	No	6	50	0.01	NP
Iron (mg/L)	MW-15	0	-1	-14	No	6	66.67	0.01	NP

## Trend Test

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<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>
Iron (mg/L)	MW-18 (bg)	0.1128	1	14	No	6	0	0.01	NP
Magnesium (mg/L)	MW-1 (bg)	0.2122	0	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-2 (bg)	0.03122	1	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-3	0.4023	2	21	No	8	0	0.01	NP
<b>Magnesium (mg/L)</b>	<b>MW-5</b>	<b>44.6</b>	<b>22</b>	<b>21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Magnesium (mg/L)	MW-6	-5.462	-3	-21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-7	16.33	2	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-9	7.255	8	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-10	-1.525	-4	-21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-11	-3.838	-18	-21	No	8	0	0.01	NP
<b>Magnesium (mg/L)</b>	<b>MW-12</b>	<b>-10.97</b>	<b>-24</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Magnesium (mg/L)	MW-13	-16.04	-10	-21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-14	8.386	16	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-15	2.212	7	21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-17 (bg)	-0.8287	-12	-21	No	8	0	0.01	NP
Magnesium (mg/L)	MW-18 (bg)	1.24	12	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-2 (bg)	0.04254	5	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-3	0.2726	4	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-5	-0.1492	-16	-21	No	8	0	0.01	NP
Manganese (mg/L)	MW-6	0.0183	4	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-7	0.0247	4	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-9	-0.01924	-2	-21	No	8	0	0.01	NP
Manganese (mg/L)	MW-10	-0.1127	-14	-21	No	8	0	0.01	NP
Manganese (mg/L)	MW-11	0.1418	16	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-12	-0.0314	-4	-21	No	8	0	0.01	NP
Manganese (mg/L)	MW-13	-0.04859	-6	-21	No	8	12.5	0.01	NP
Manganese (mg/L)	MW-14	0.06491	2	21	No	8	0	0.01	NP
Manganese (mg/L)	MW-17 (bg)	-0.0359	-6	-21	No	8	0	0.01	NP
Manganese (mg/L)	MW-18 (bg)	-0.07532	-6	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-6	-0.01422	-20	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-17 (bg)	0	1	21	No	8	37.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-2 (bg)	-0.4063	-8	-21	No	8	12.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-3	0.1986	8	21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-4	0	-3	-21	No	8	75	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-5	0.4007	7	21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-6	-21	-10	-21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-7	-54.72	-6	-21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-8	0	-6	-21	No	8	62.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-9	8.708	4	21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-10	0.08769	6	21	No	8	12.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-11	-1.419	-6	-21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-12	-2.005	-17	-21	No	8	0	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-13	-2.903	-8	-21	No	8	12.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-14	-0.8355	-4	-21	No	8	12.5	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-15	0	7	21	No	8	75	0.01	NP
Nitrogen, Ammonia (mg/L)	MW-18 (bg)	-0.7886	-4	-21	No	8	12.5	0.01	NP
pH (S.U.)	MW-1 (bg)	0.02916	12	21	No	8	0	0.01	NP
pH (S.U.)	MW-2 (bg)	-0.003408	-2	-21	No	8	0	0.01	NP
pH (S.U.)	MW-3	-0.05293	-12	-21	No	8	0	0.01	NP
pH (S.U.)	MW-4	-0.1501	-15	-21	No	8	0	0.01	NP

# Trend Test

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Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO-AM 2024AWQR   Printed 9/24/2024, 9:44 AM

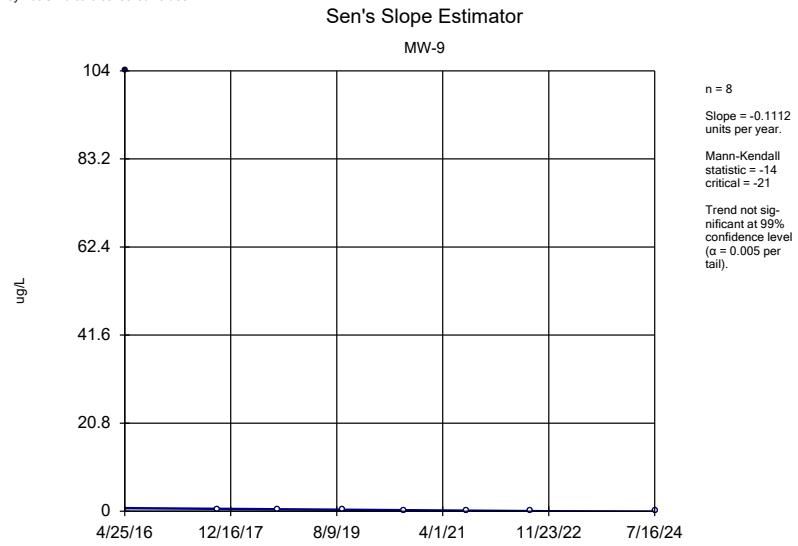
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
pH (S.U.)	MW-5	0	0	21	No	8	0	0.01	NP
pH (S.U.)	MW-6	0.01364	2	21	No	8	0	0.01	NP
pH (S.U.)	MW-7	-0.006632	-7	-21	No	8	0	0.01	NP
pH (S.U.)	MW-8	0.02876	9	21	No	8	0	0.01	NP
pH (S.U.)	MW-9	0.02573	7	21	No	8	0	0.01	NP
pH (S.U.)	MW-10	0.04239	10	21	No	8	0	0.01	NP
pH (S.U.)	MW-11	0.0237	6	21	No	8	0	0.01	NP
pH (S.U.)	MW-12	0.03715	13	21	No	8	0	0.01	NP
pH (S.U.)	MW-13	0.01327	4	21	No	8	0	0.01	NP
pH (S.U.)	MW-14	-0.03475	-9	-21	No	8	0	0.01	NP
pH (S.U.)	MW-15	0.008591	4	21	No	8	0	0.01	NP
pH (S.U.)	MW-16	0.04897	8	21	No	8	0	0.01	NP
pH (S.U.)	MW-17 (bg)	0.01625	6	21	No	8	0	0.01	NP
pH (S.U.)	MW-18 (bg)	-0.03151	-7	-21	No	8	0	0.01	NP
Phenanthrene (ug/L)	MW-11	-0.04394	-12	-21	No	8	50	0.01	NP
Specific Conductance (umhos/cm)	MW-1 (bg)	-6.161	-2	-21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-2 (bg)	0.1704	0	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-3	57.93	6	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-4	53.59	14	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-5	153.9	12	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-6	-201.8	-14	-21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-7	9.844	0	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-8	56.89	14	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-9	169.3	8	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-10	76.54	10	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-11	70.4	8	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-12	-229.2	-14	-21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-13	-105.8	-8	-21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-14	428.4	20	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-15	42.92	8	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-16	20.49	6	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-17 (bg)	31.38	8	21	No	8	0	0.01	NP
Specific Conductance (umhos/cm)	MW-18 (bg)	32.41	8	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	0.4212	3	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-4.435	-20	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-3	-1.246	-11	-21	No	8	37.5	0.01	NP
Sulfate (mg/L)	MW-4	-1.417	-6	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-5	24.39	6	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-6	-59.15	-8	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-8	-0.3316	-2	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-9	42.03	8	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-10	-0.5921	0	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-12	3.303	18	21	No	8	12.5	0.01	NP
Sulfate (mg/L)	MW-13	0	1	21	No	8	75	0.01	NP
Sulfate (mg/L)	MW-14	26.58	18	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-15	-0.4378	-4	-21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-16	2.439	14	21	No	8	0	0.01	NP
Sulfate (mg/L)	MW-17 (bg)	-0.5832	-6	-21	No	8	0	0.01	NP
<b>Sulfate (mg/L)</b>	<b>MW-18 (bg)</b>	<b>15.22</b>	<b>26</b>	<b>21</b>	<b>Yes</b>	<b>8</b>	<b>0</b>	<b>0.01</b>	<b>NP</b>
Toluene (ug/L)	MW-9	0.3952	4	21	No	8	12.5	0.01	NP

## Trend Test

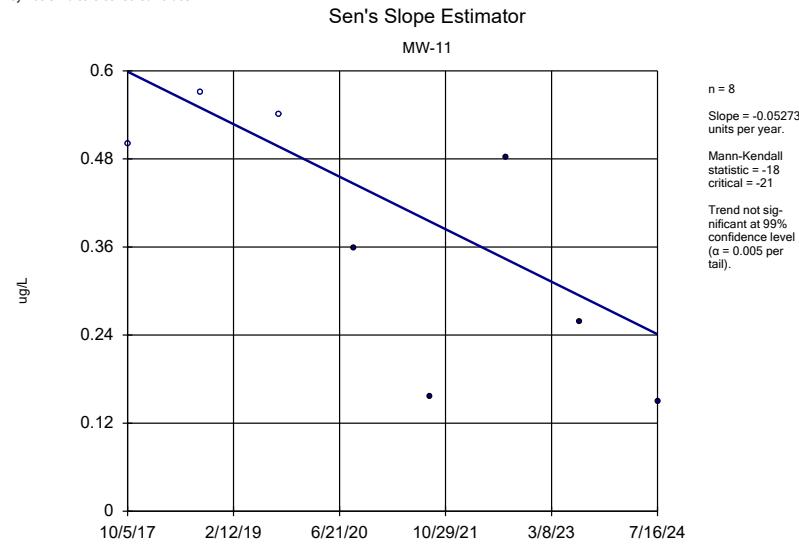
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR Printed 9/24/2024, 9:44 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Total Phenols (mg/L)	MW-7	0	-1	-21	No	8	62.5	0.01	NP
<b>Total Phenols (mg/L)</b>	<b>MW-9</b>	<b>-0.009751</b>	<b>-24</b>	<b>-21</b>	<b>Yes</b>	<b>8</b>	<b>12.5</b>	<b>0.01</b>	<b>NP</b>

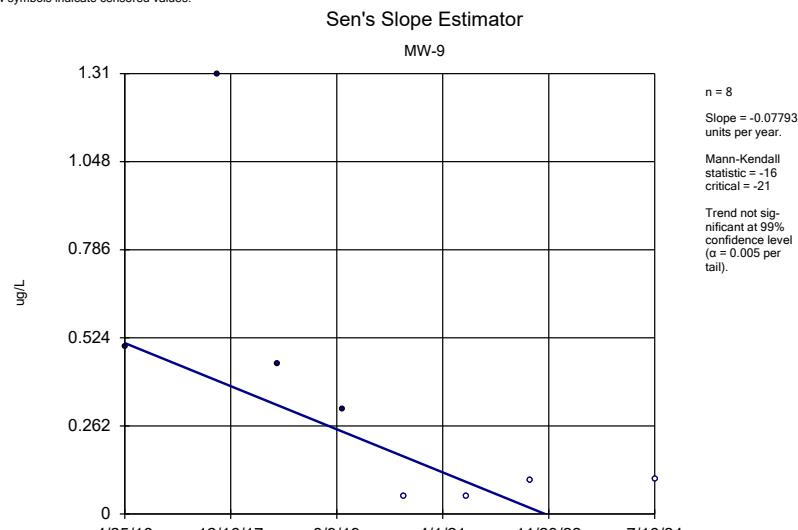
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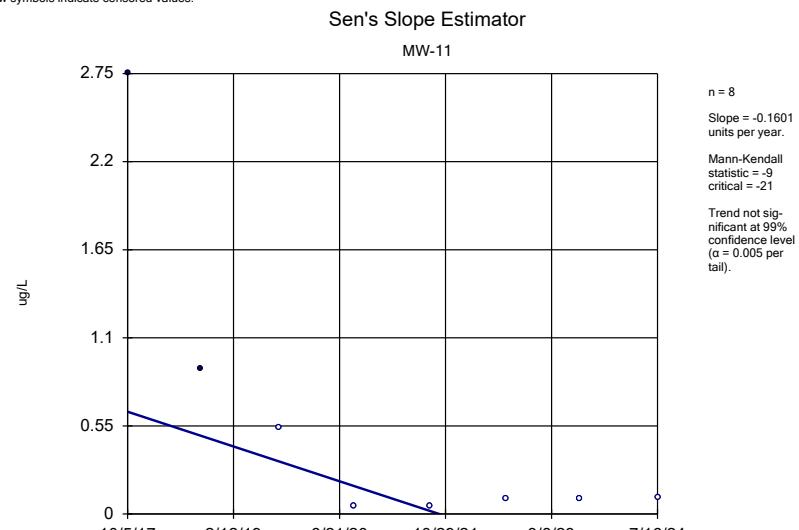
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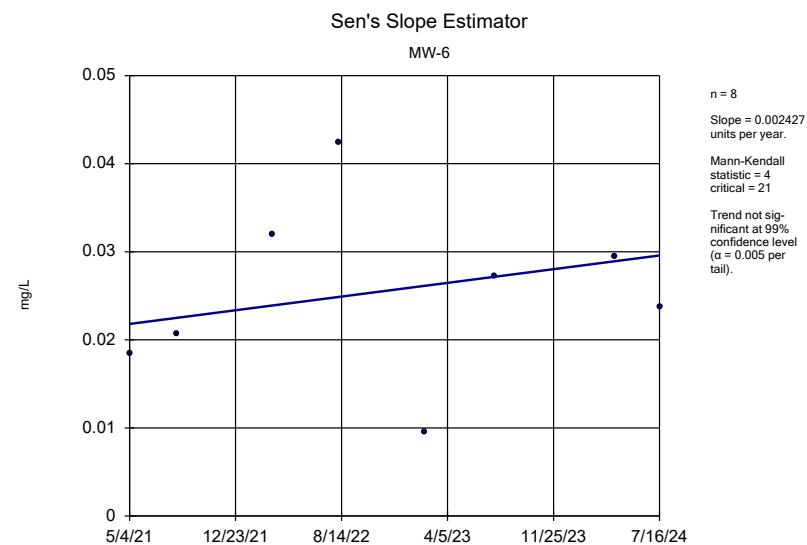
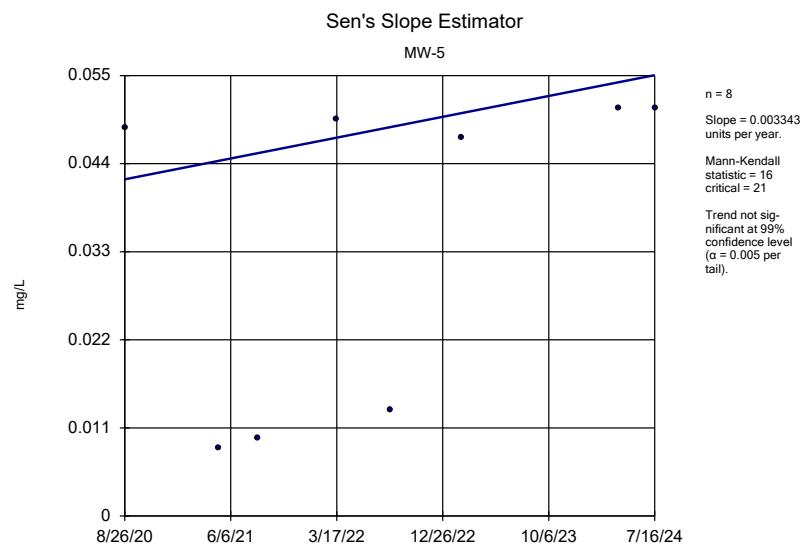
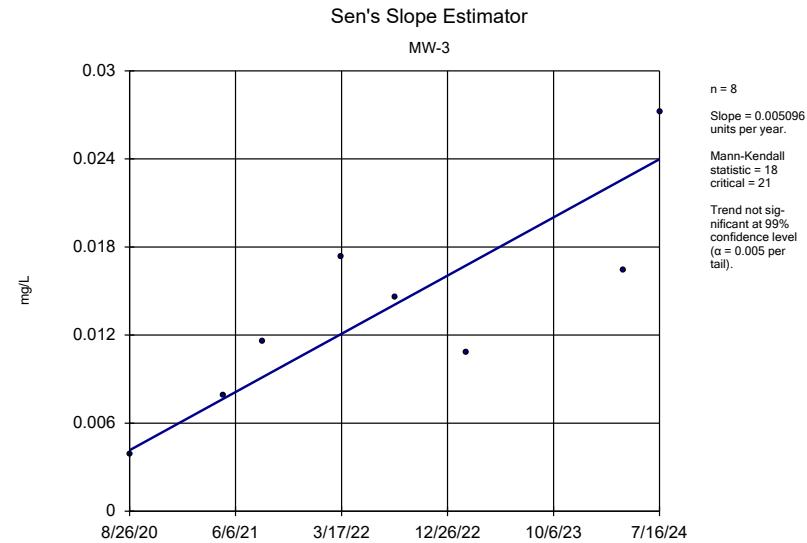
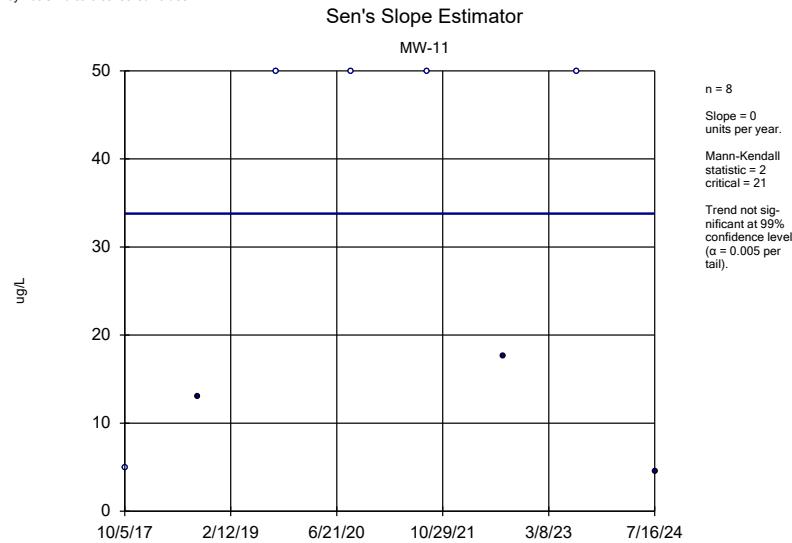


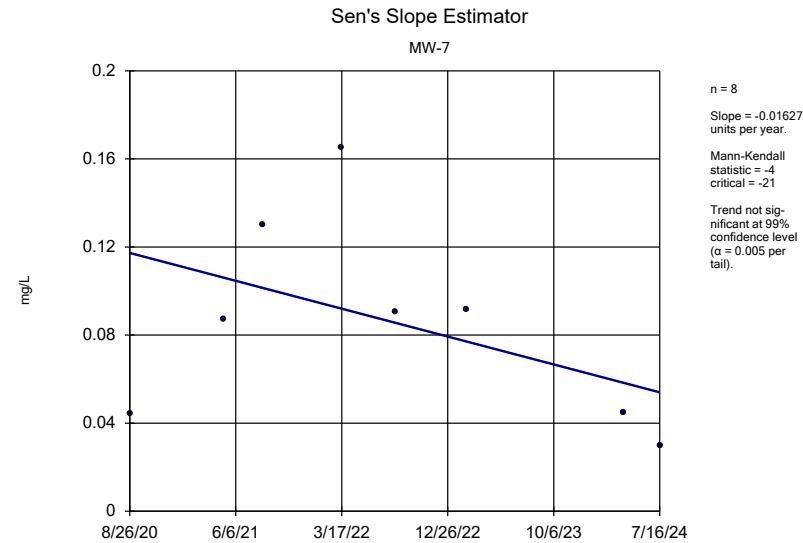
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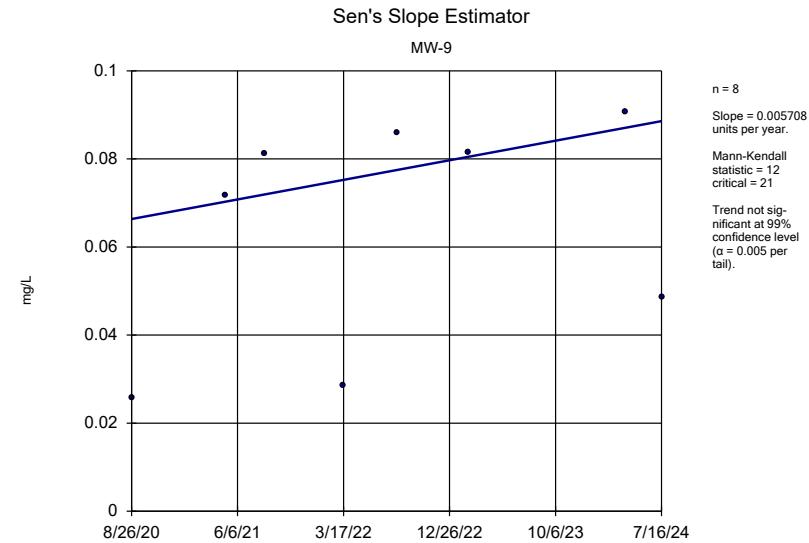
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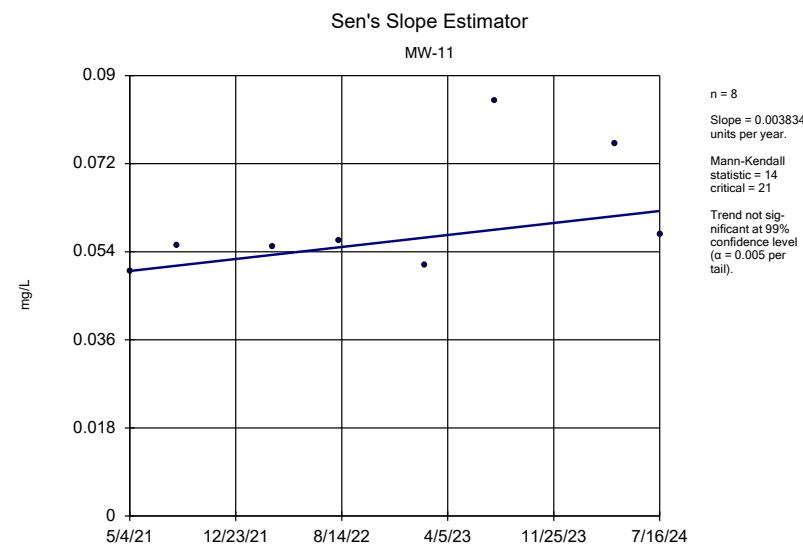




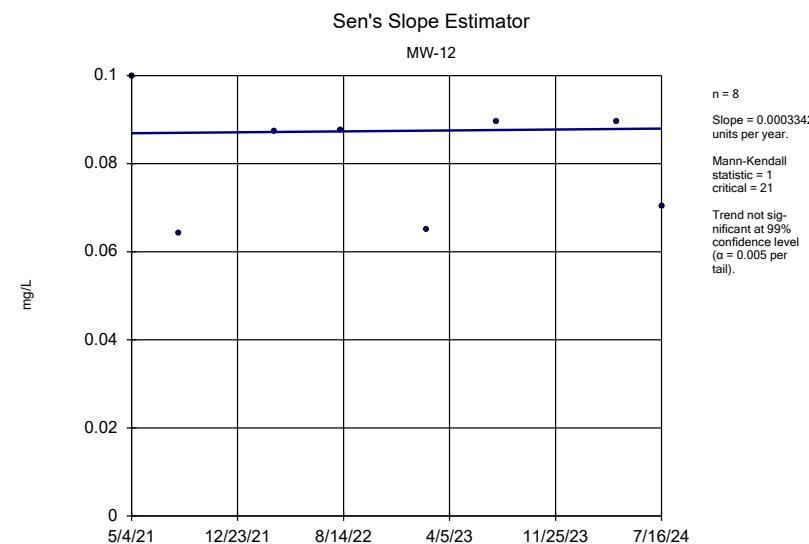
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR



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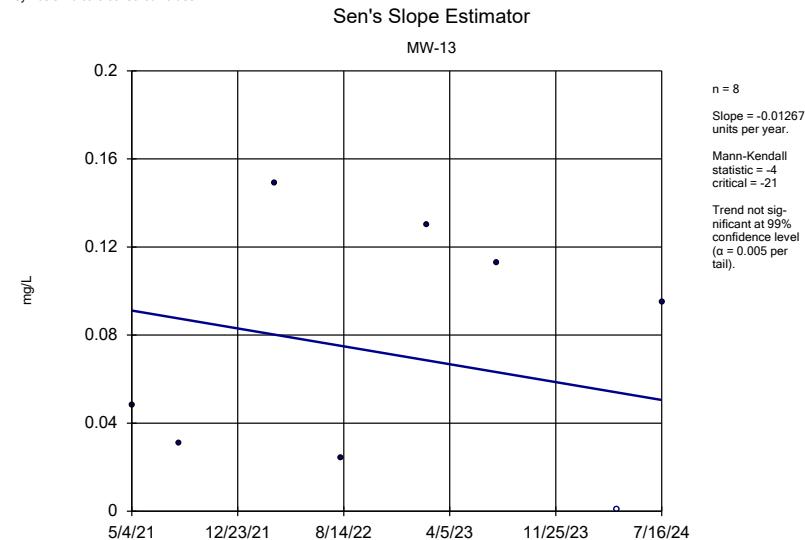


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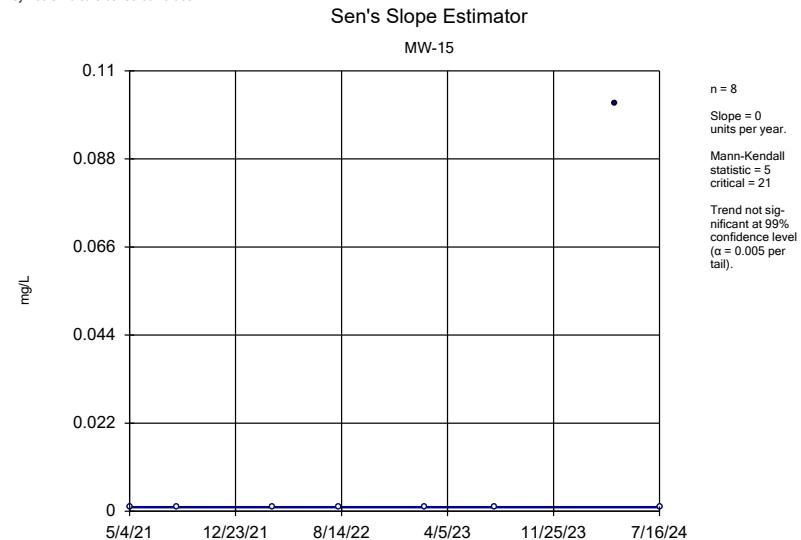


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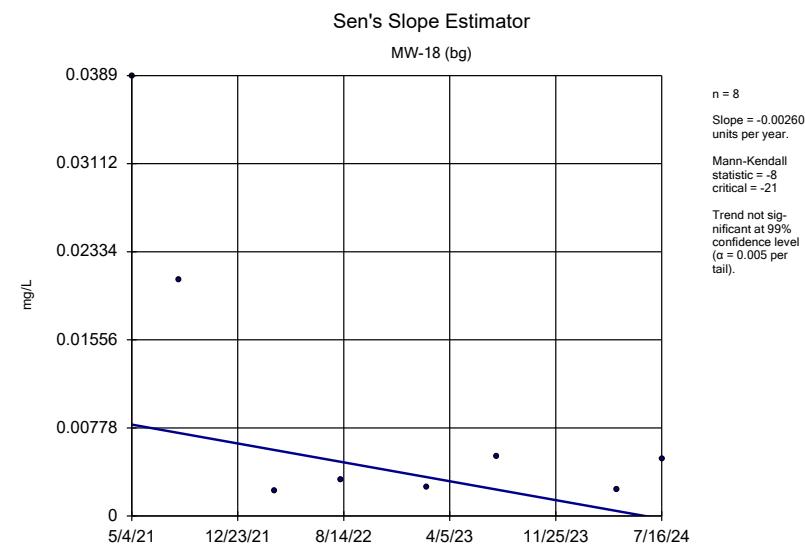
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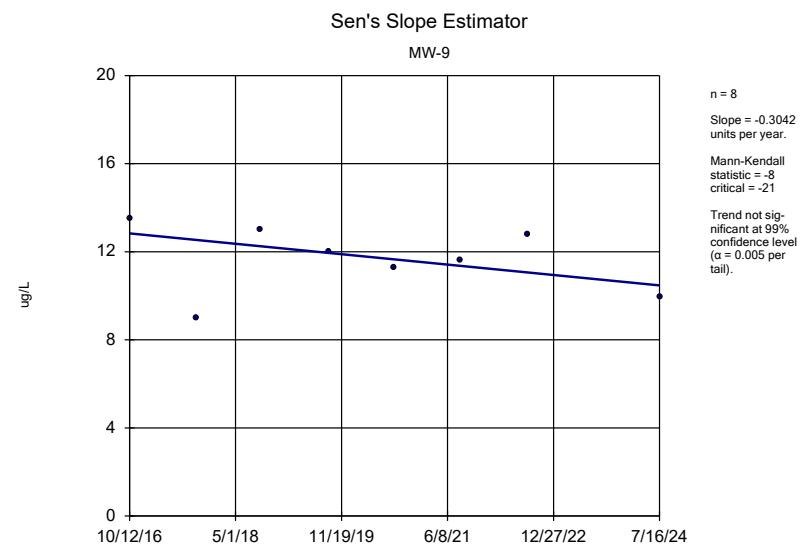
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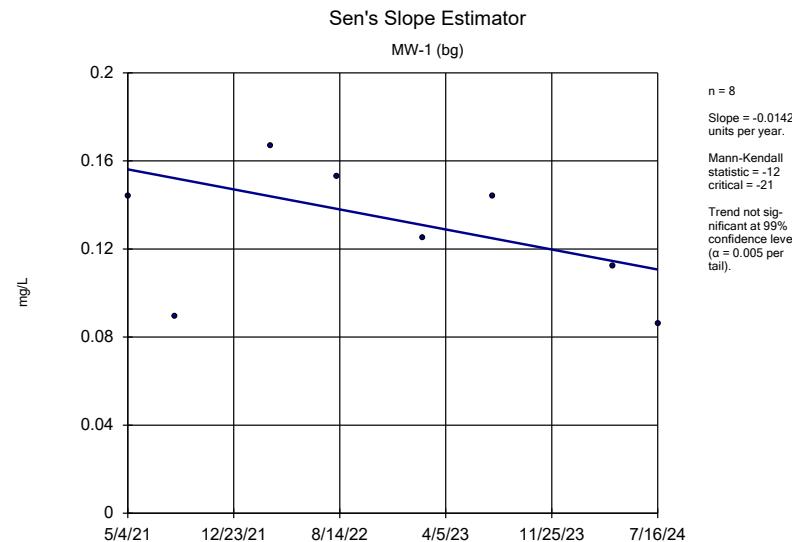


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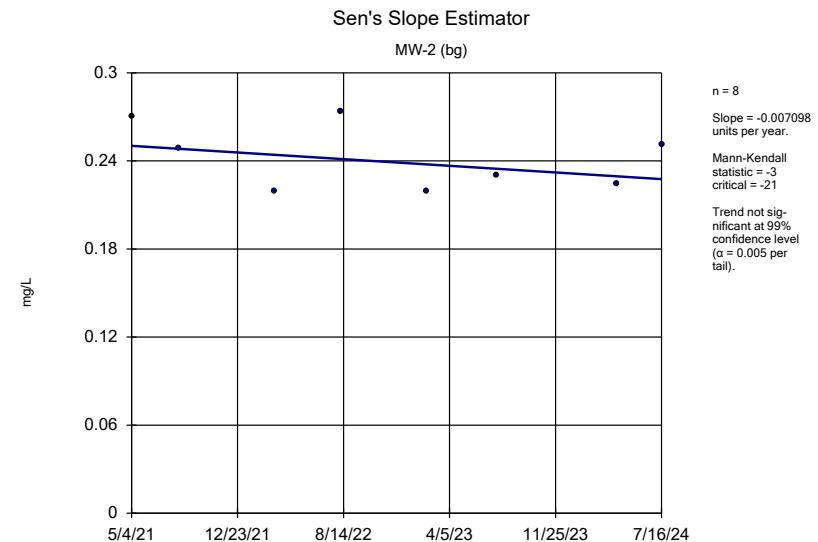


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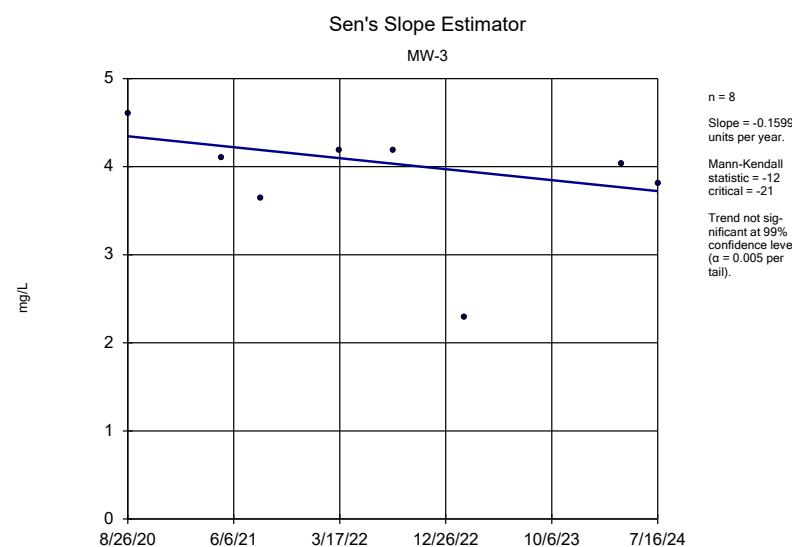




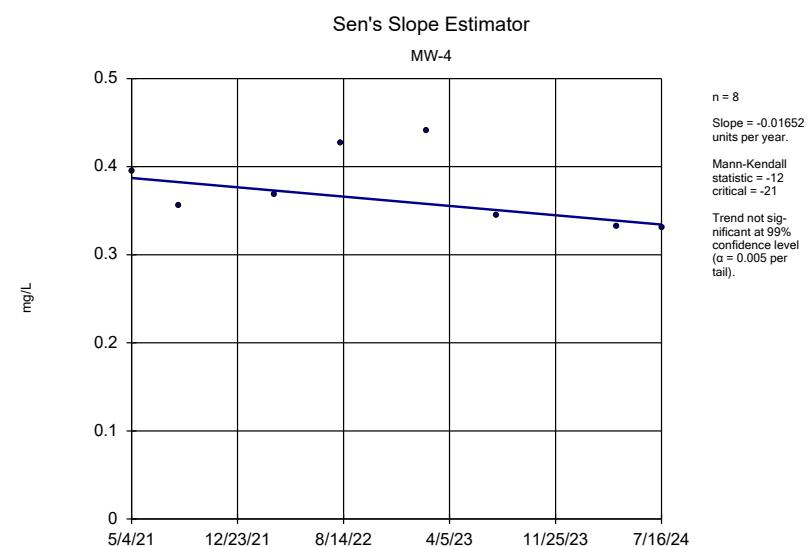
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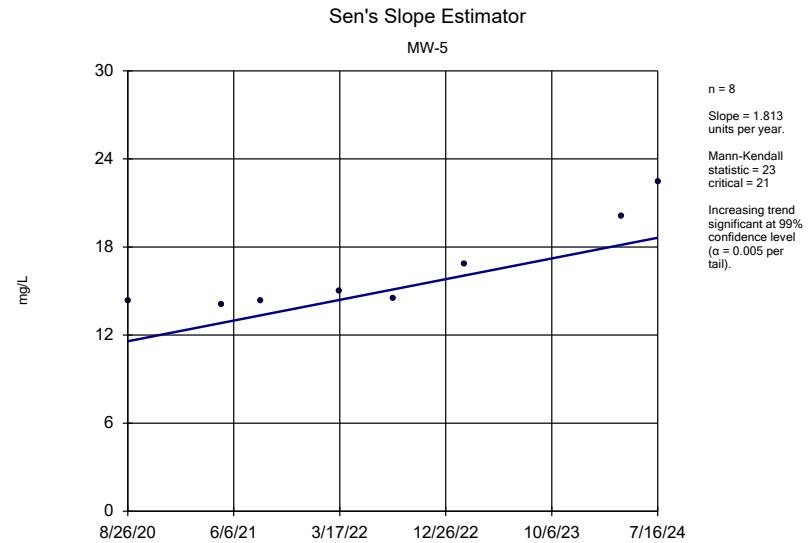
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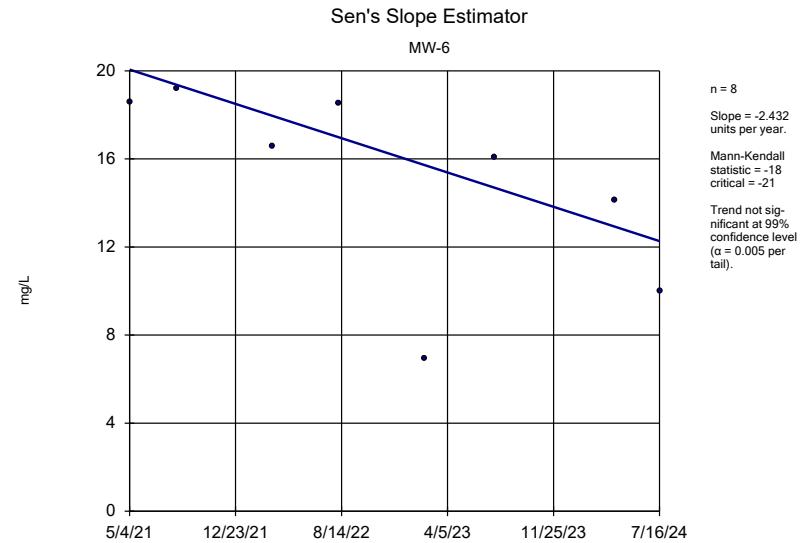
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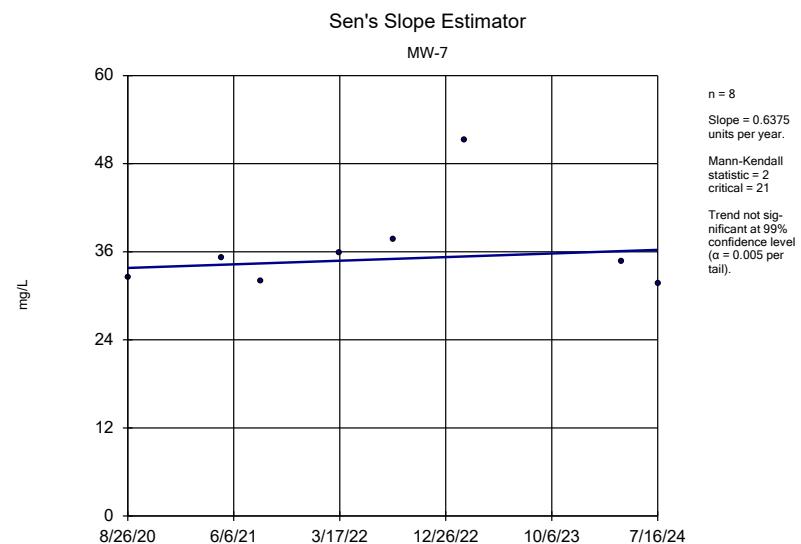
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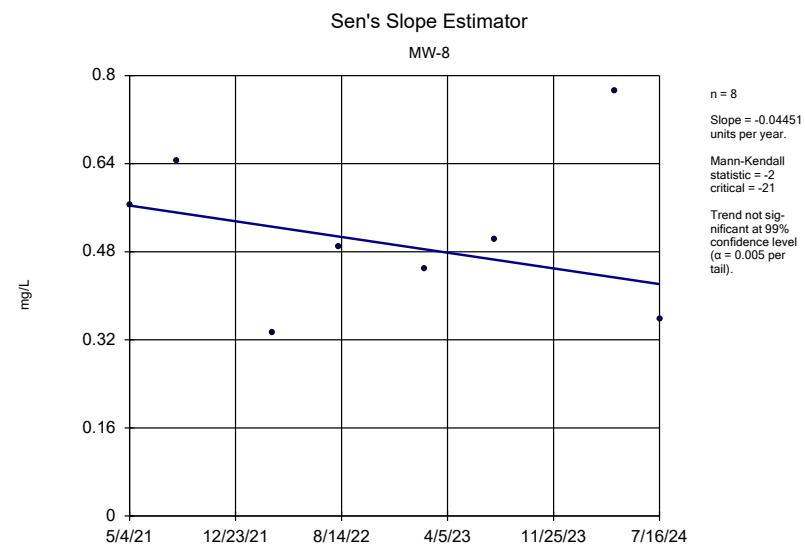
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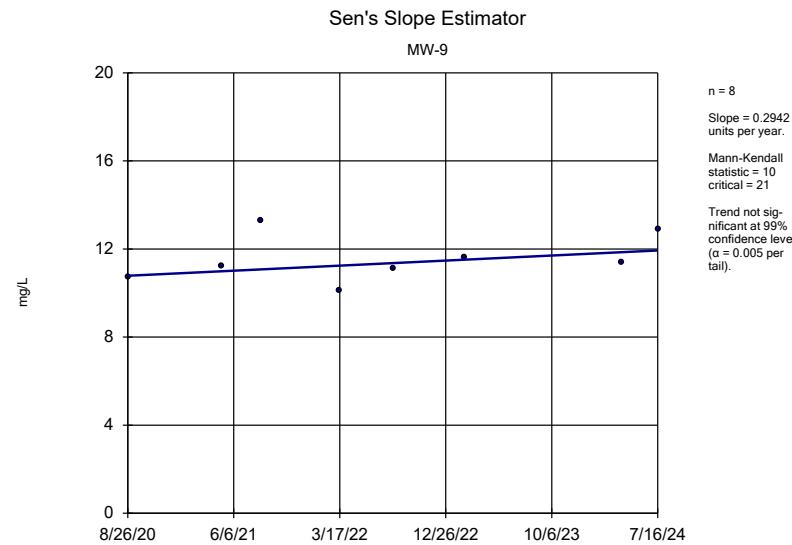
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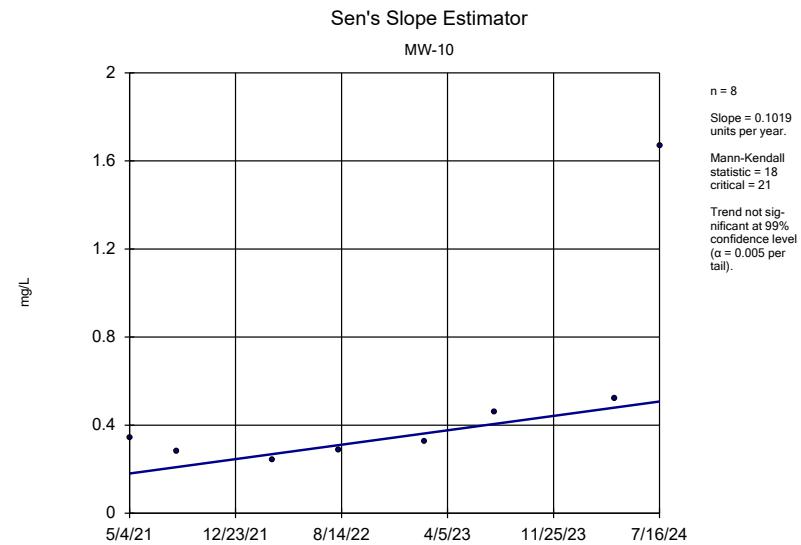
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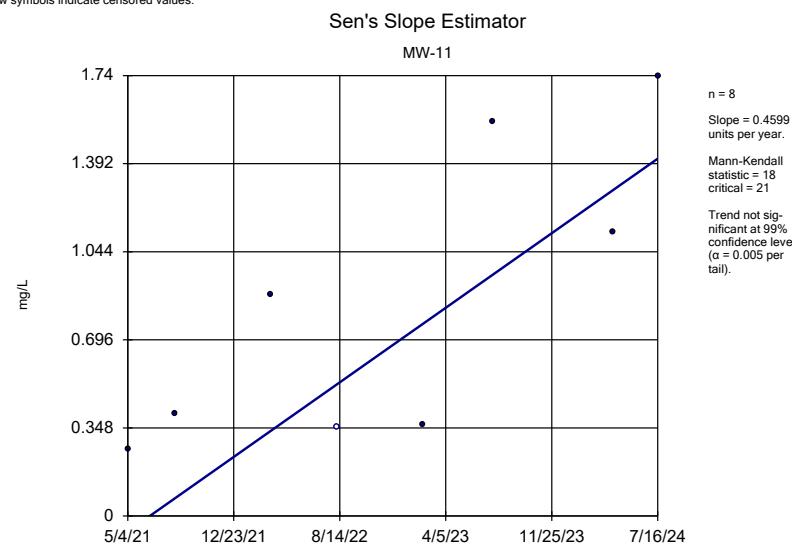
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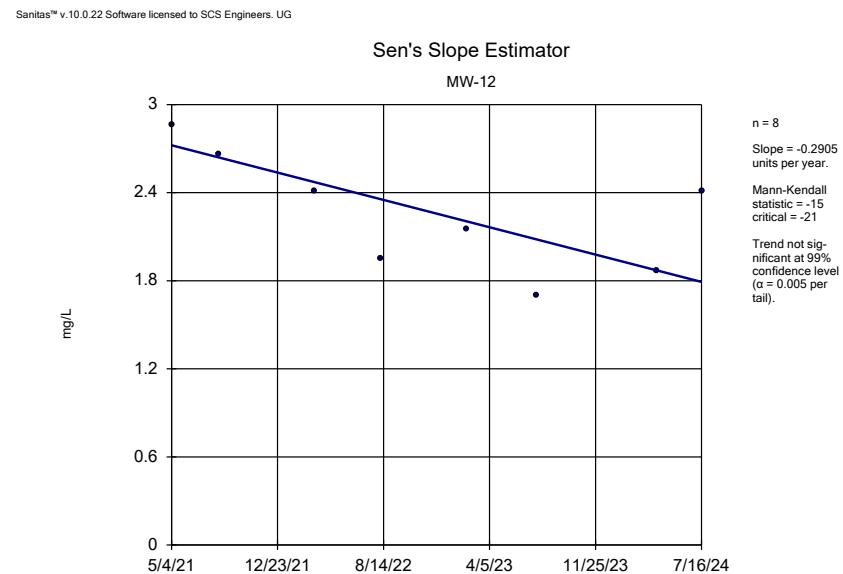
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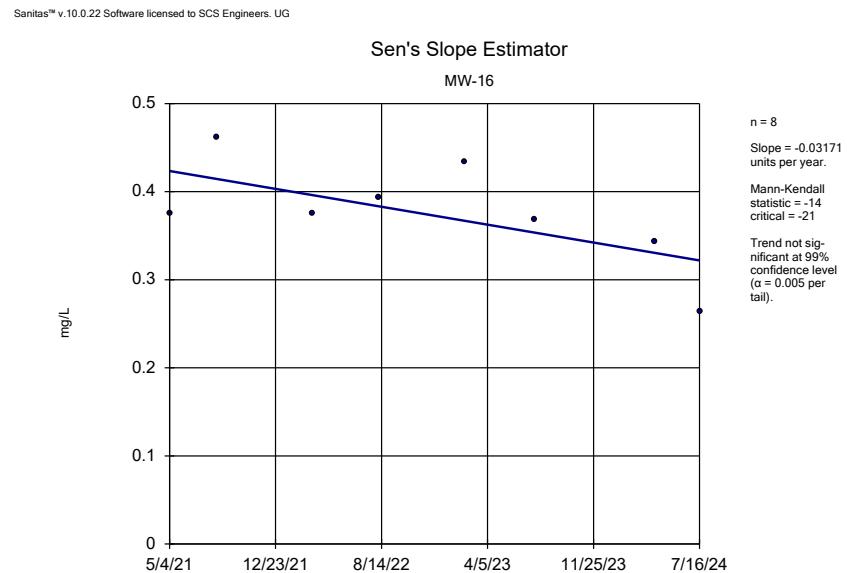
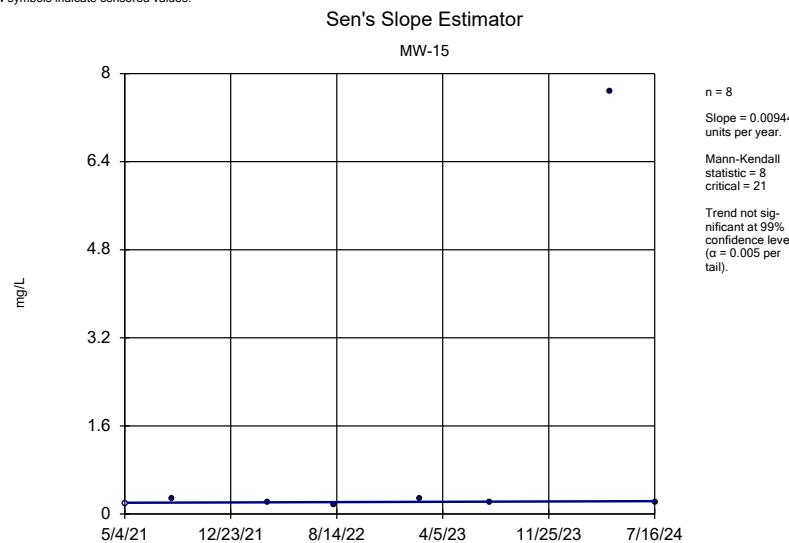
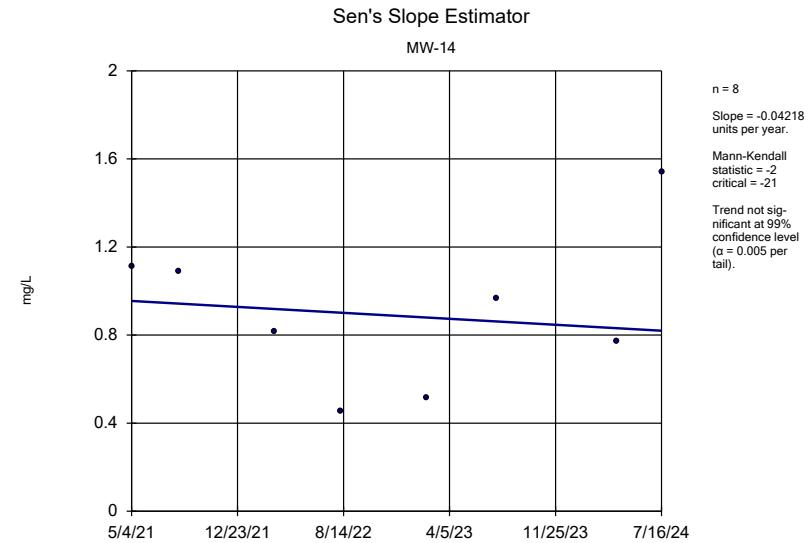
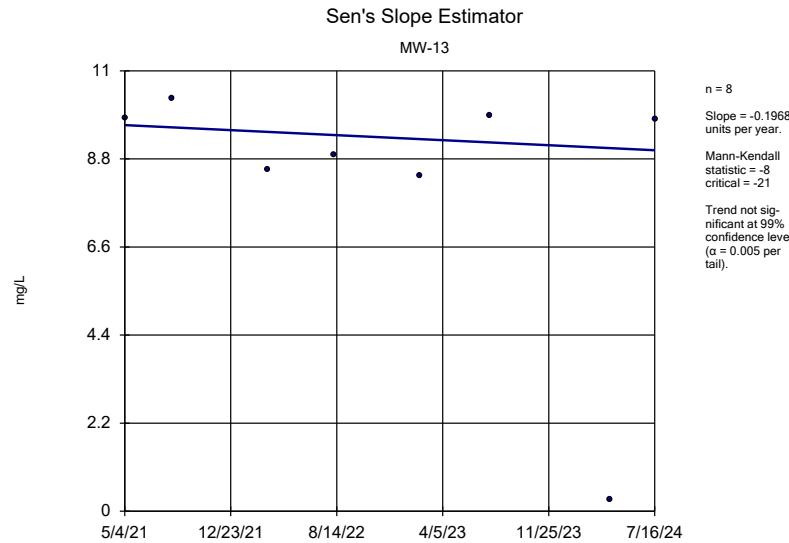
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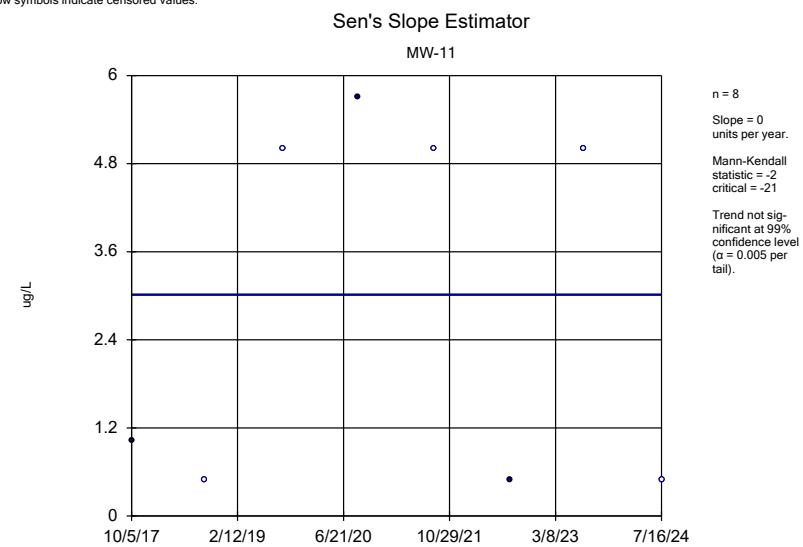
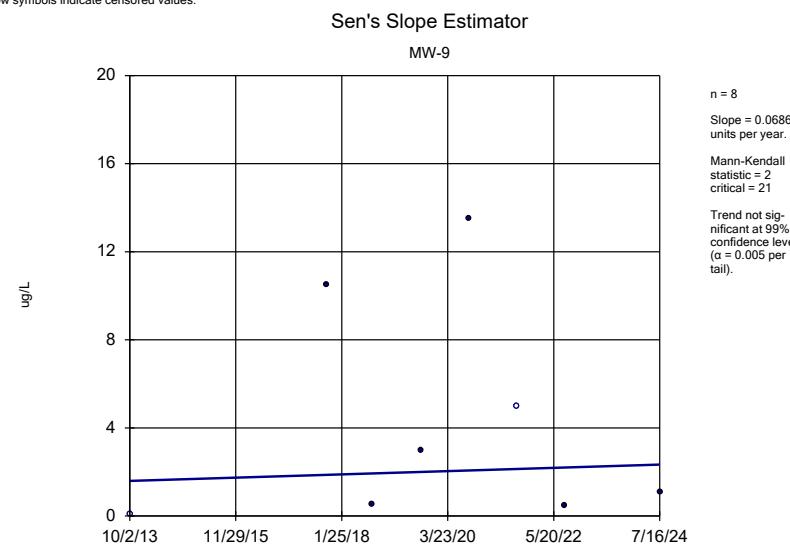
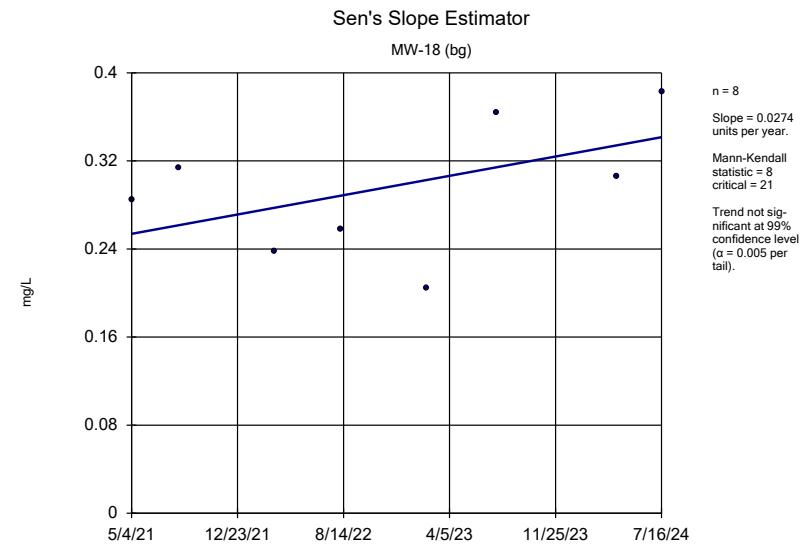
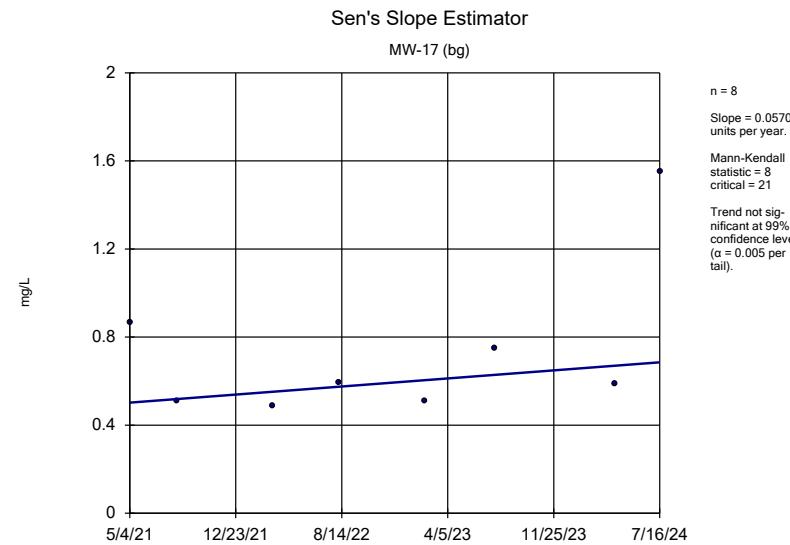


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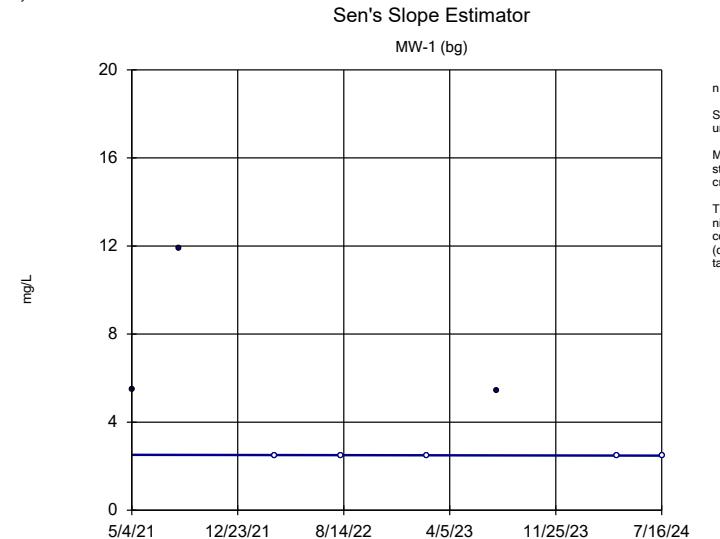


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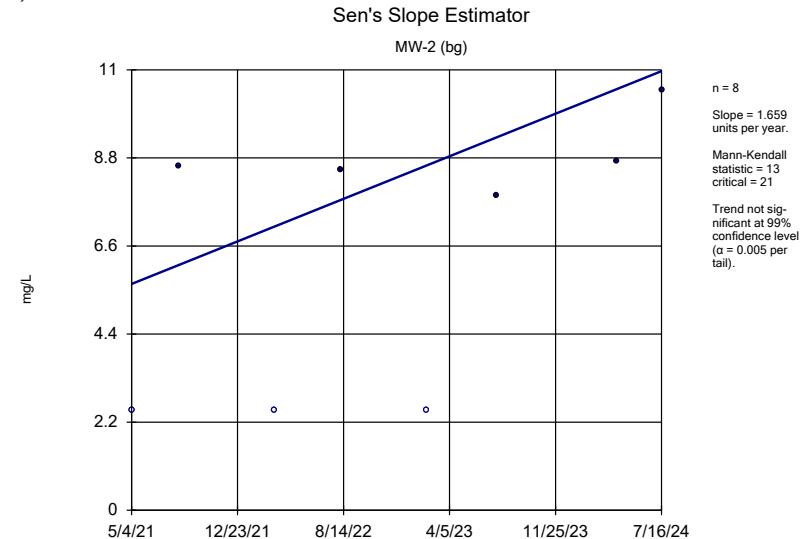




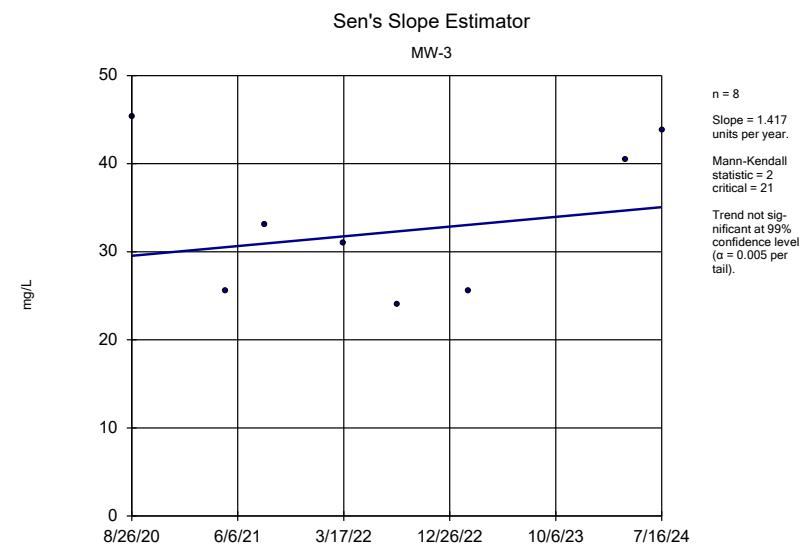
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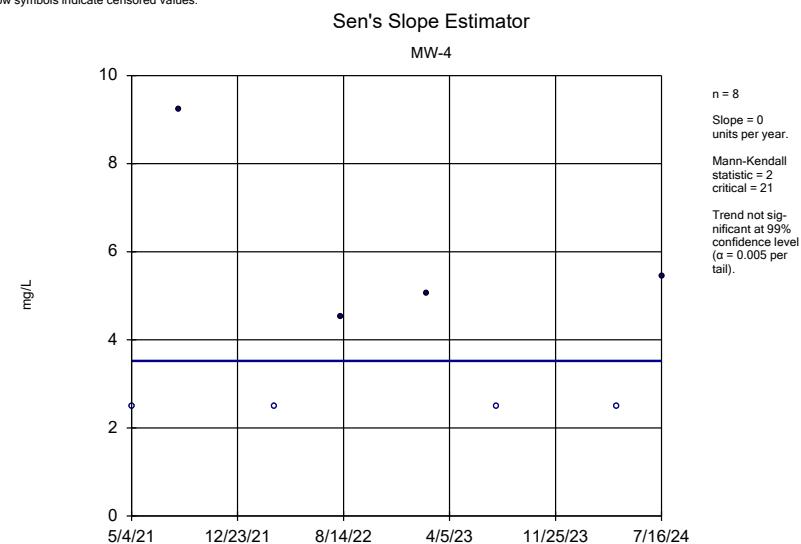
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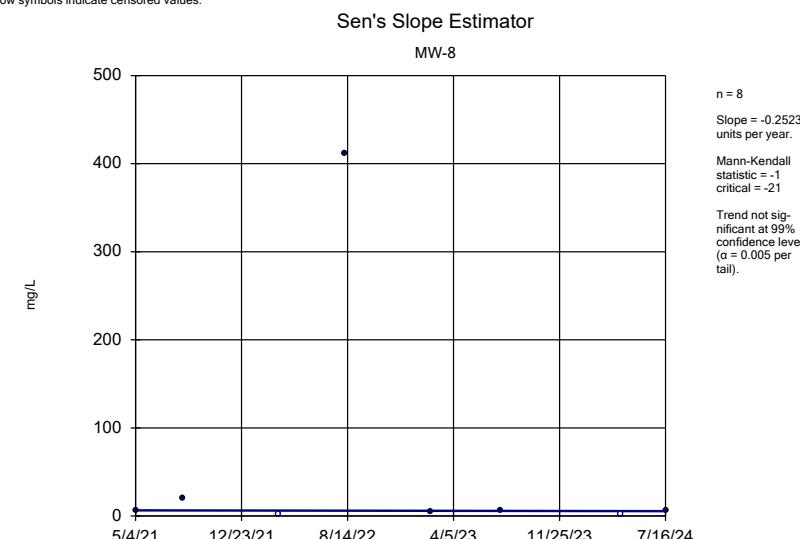
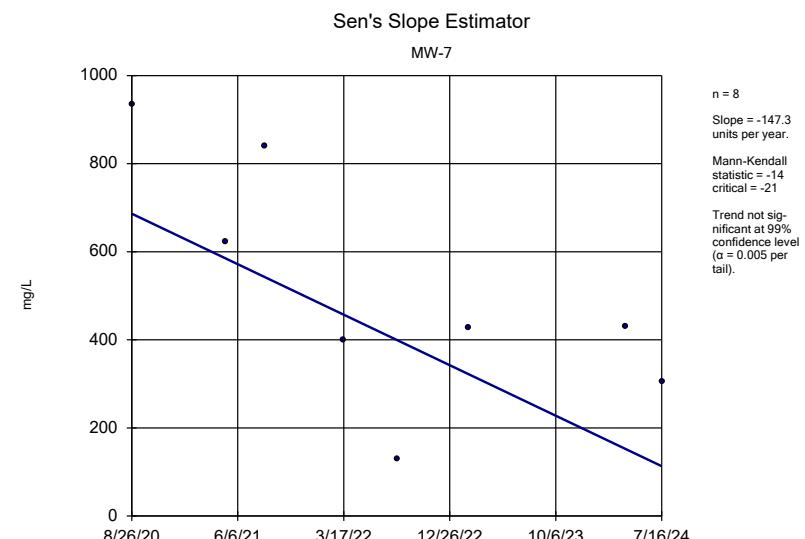
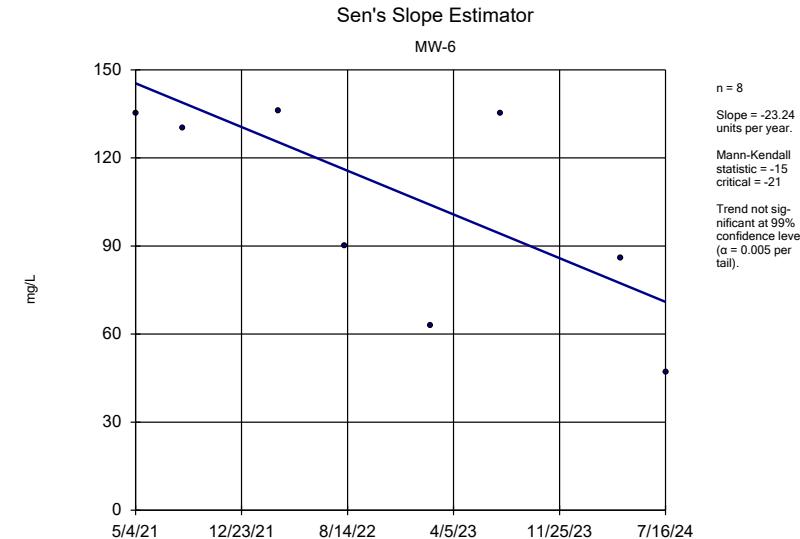
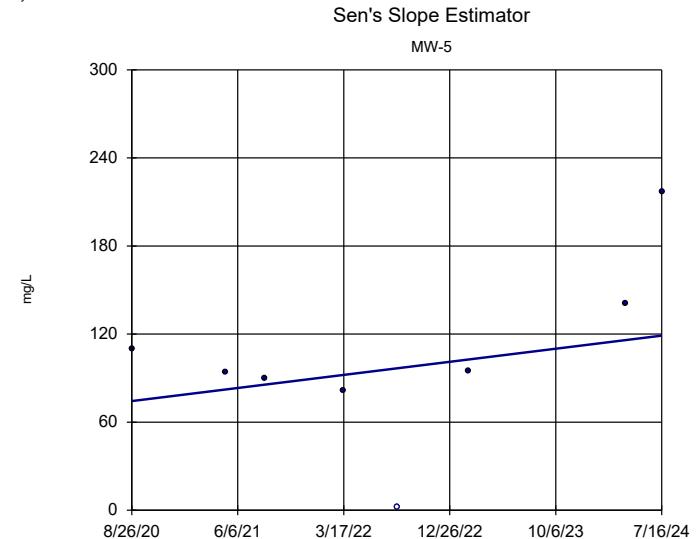


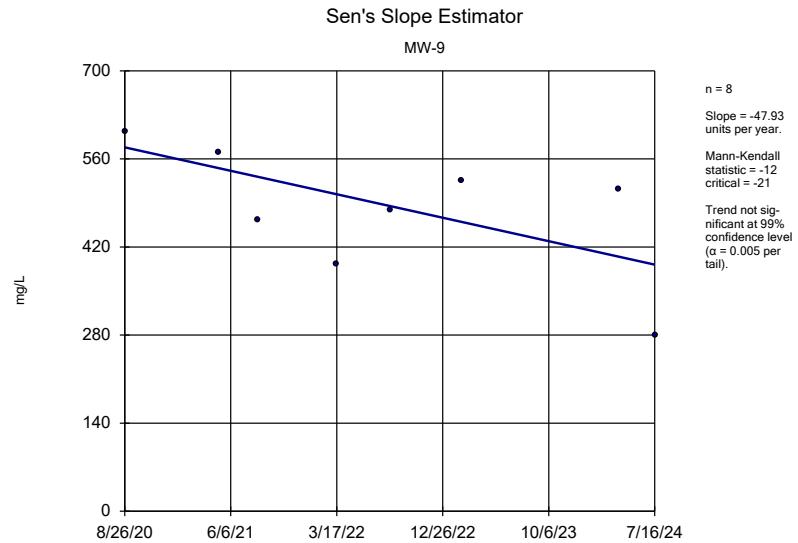
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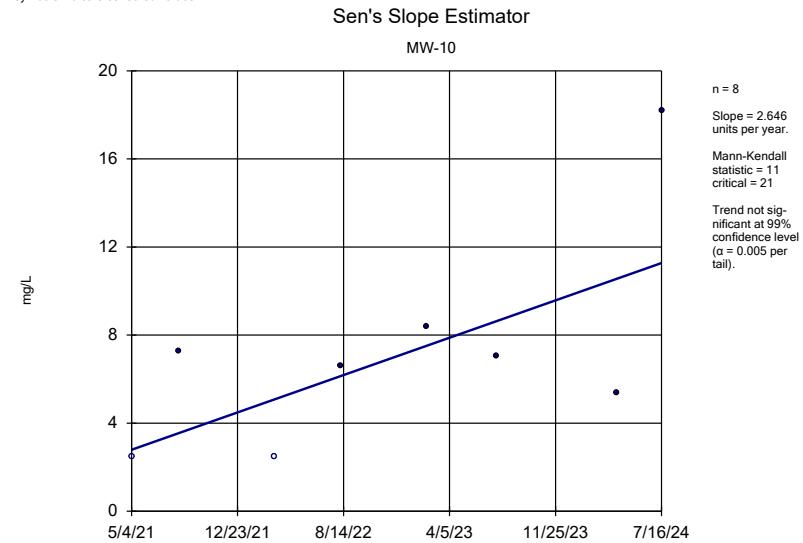
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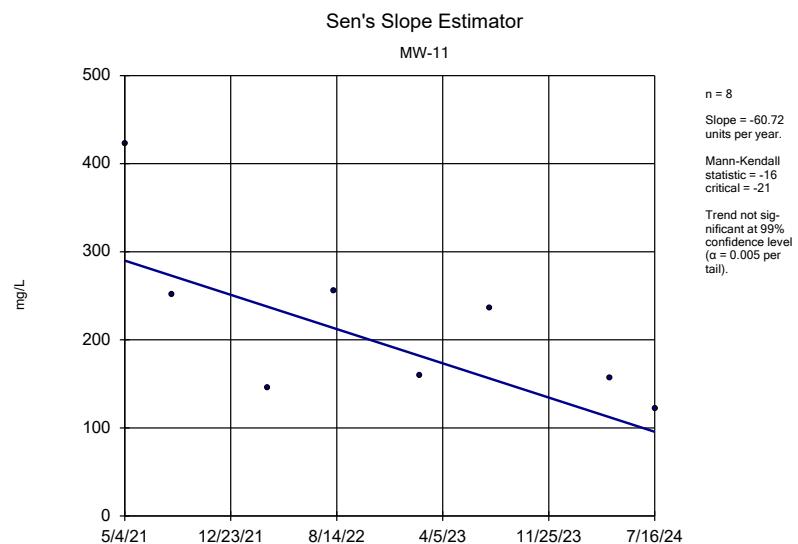




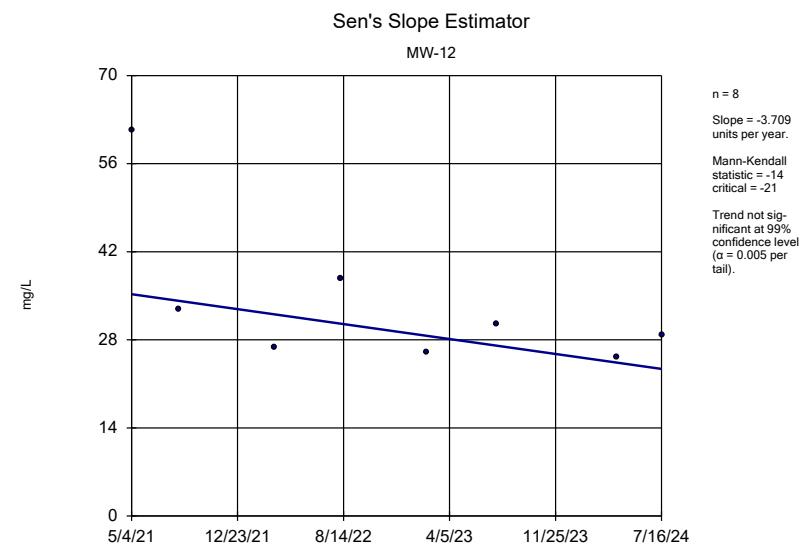
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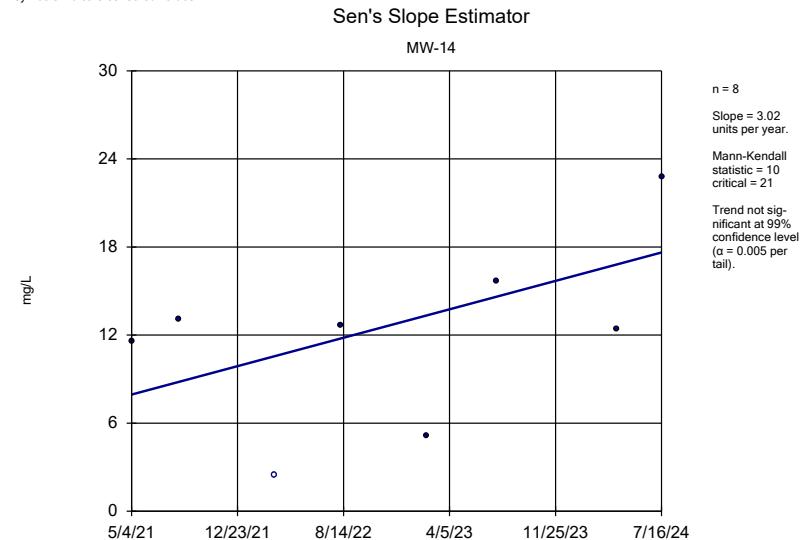


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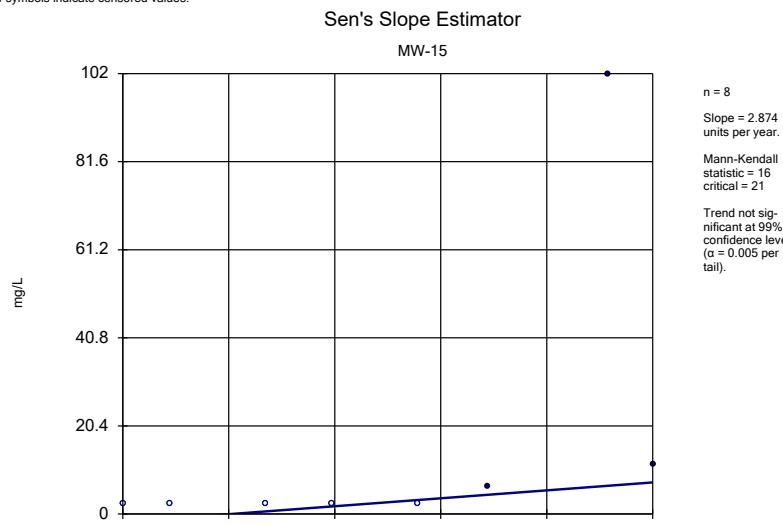
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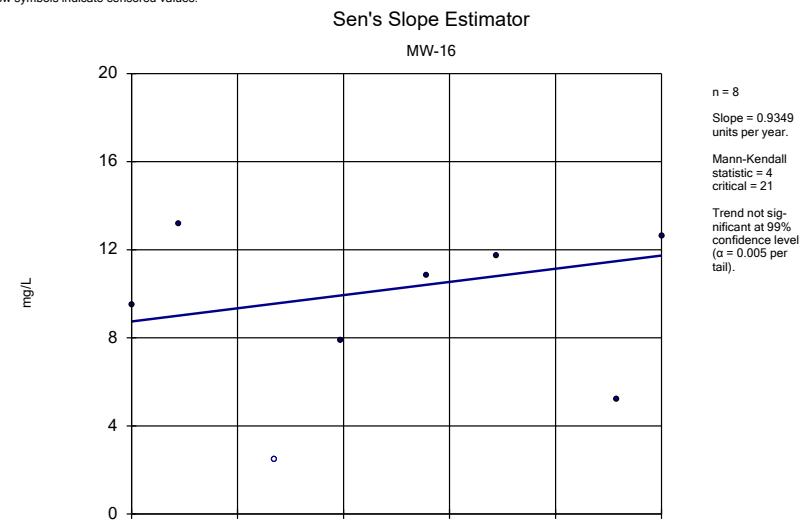
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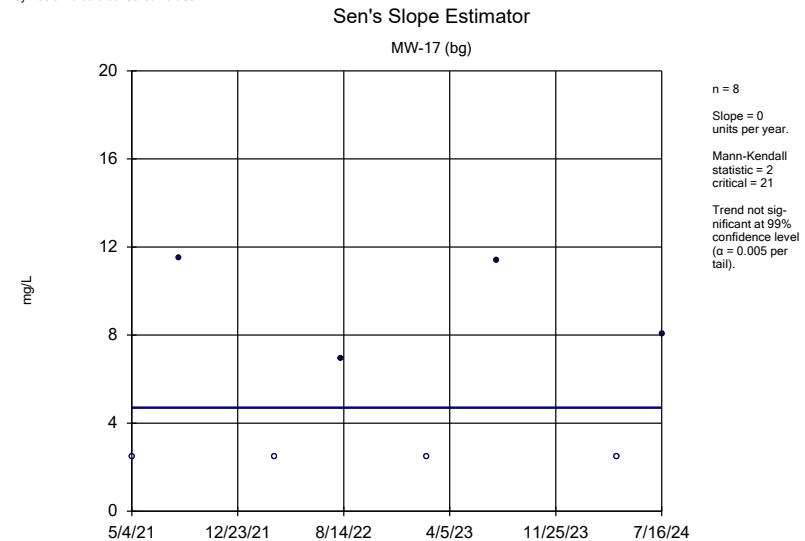
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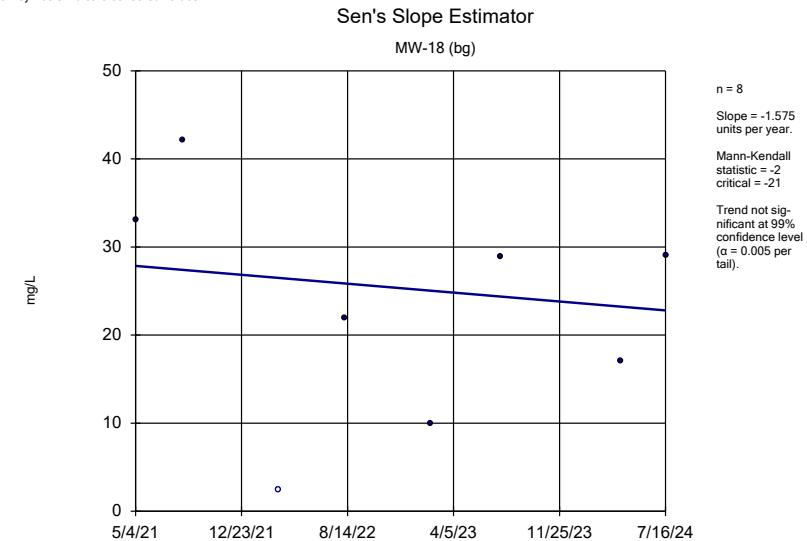


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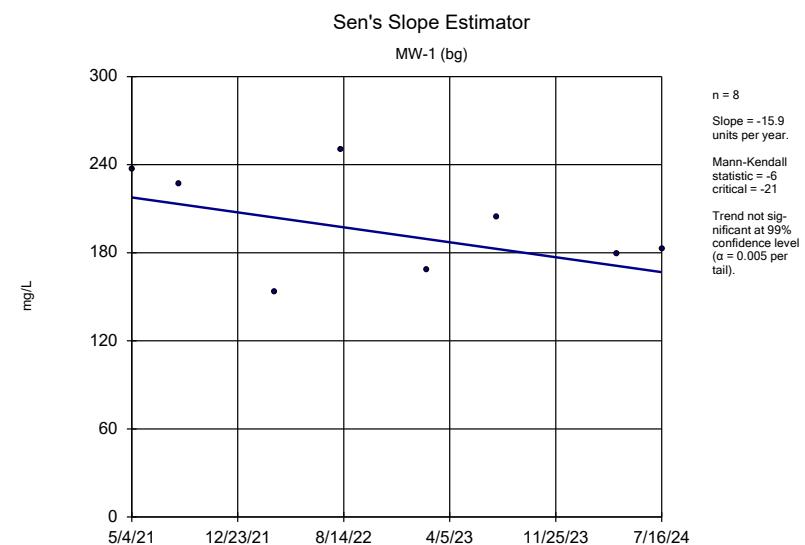
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR

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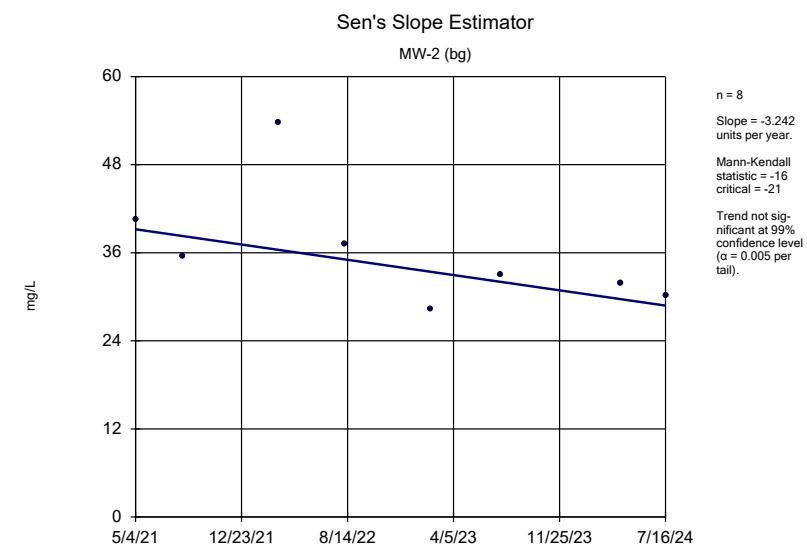
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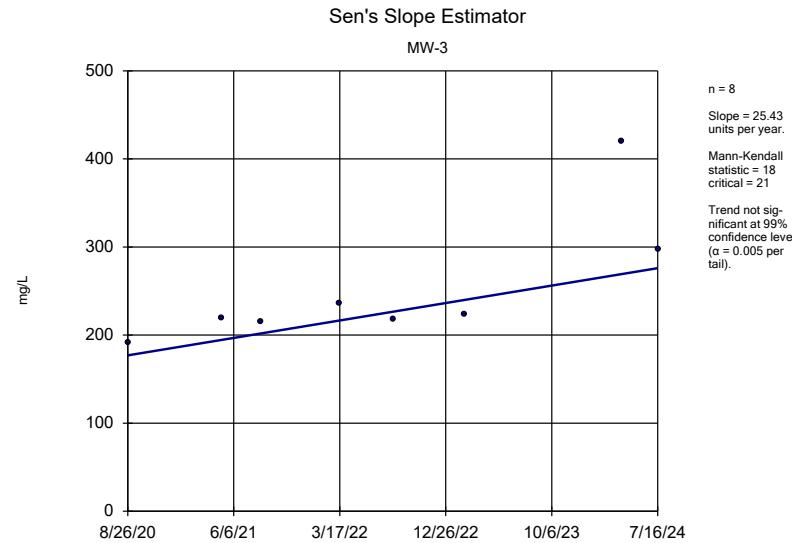


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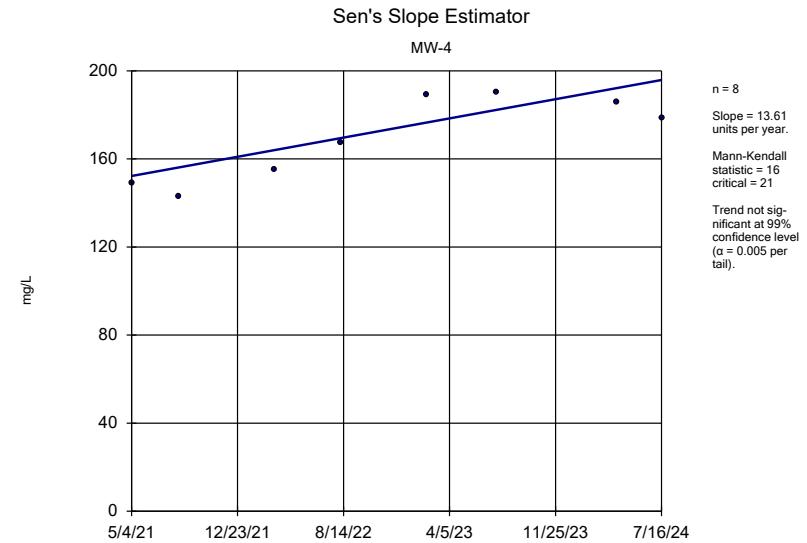
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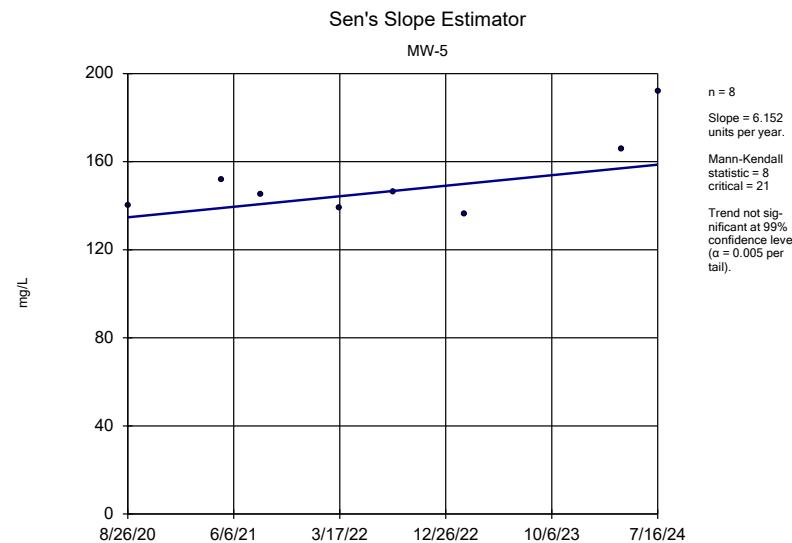
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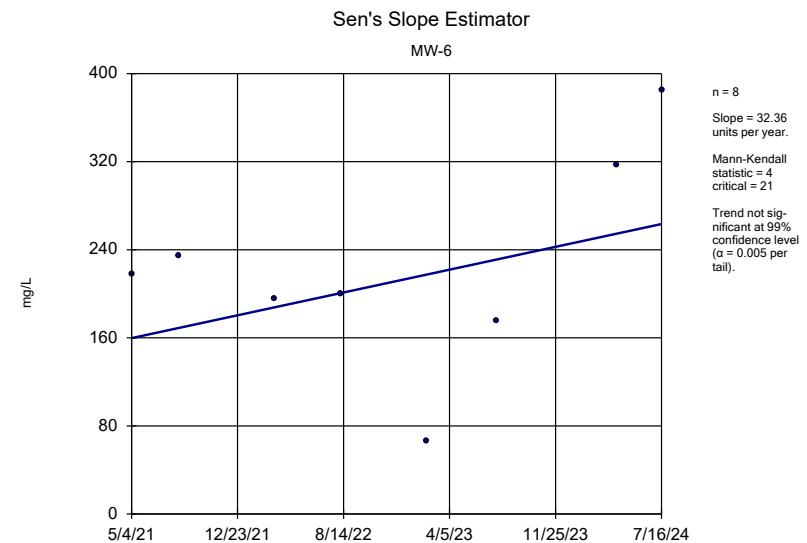
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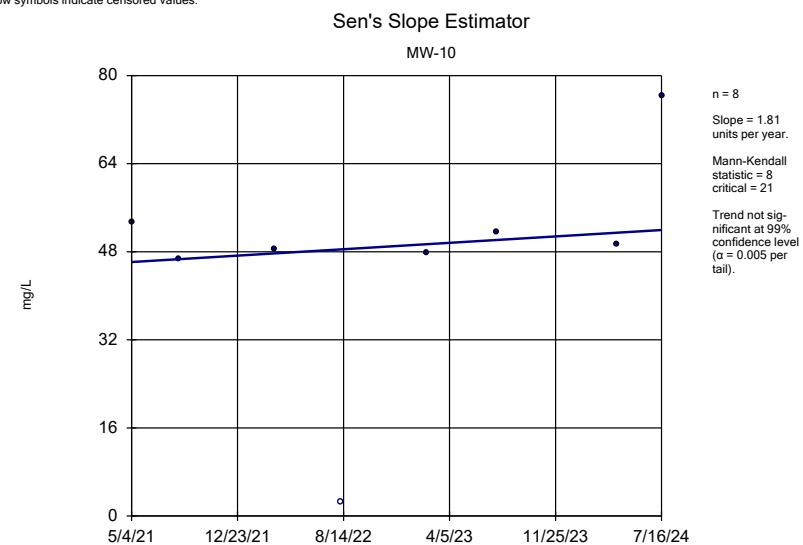
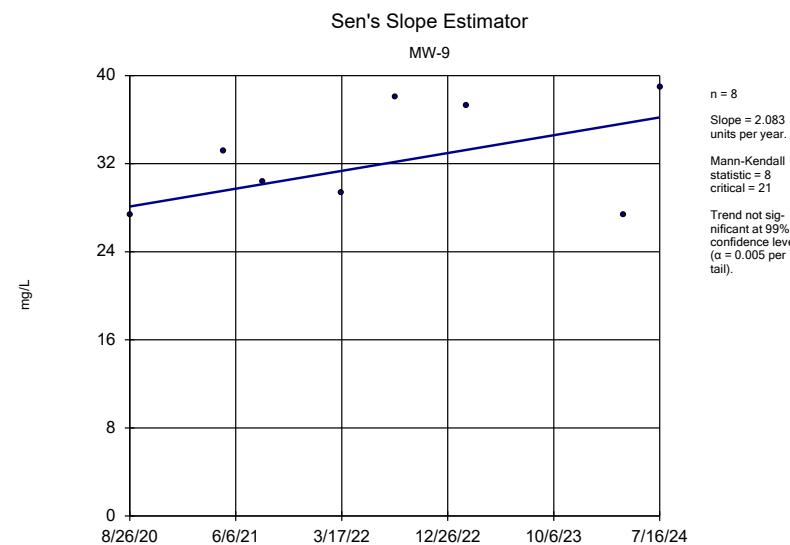
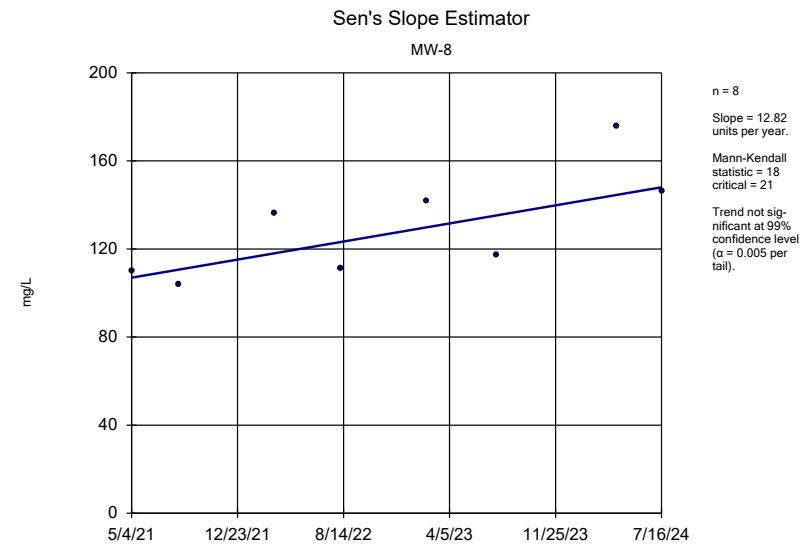
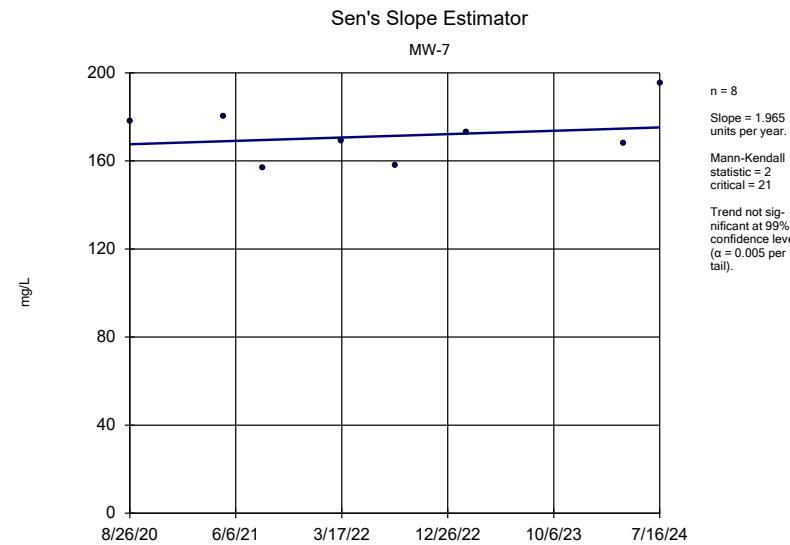
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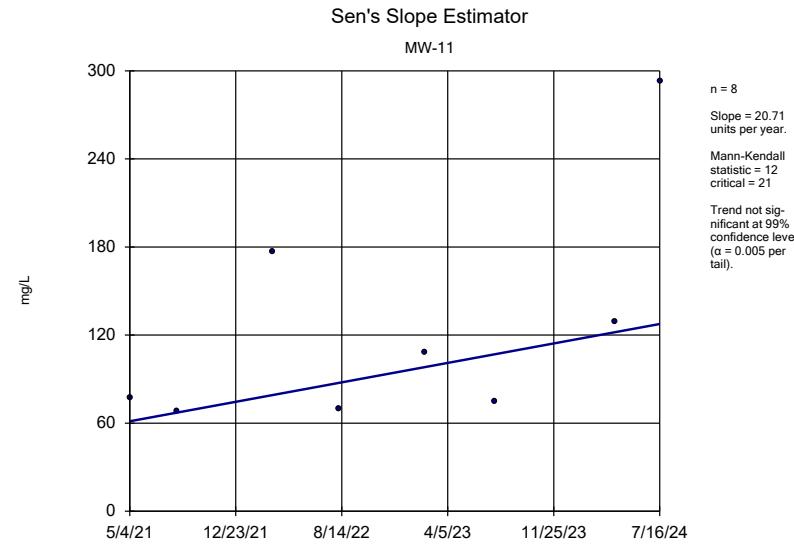


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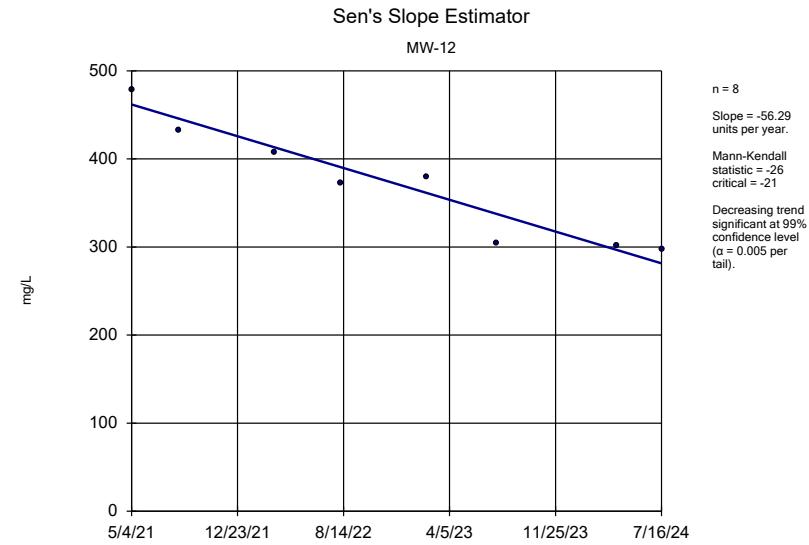


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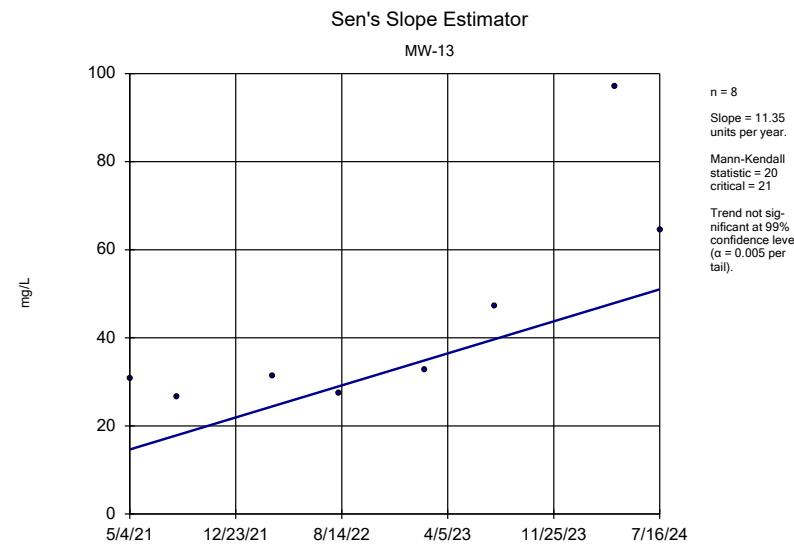




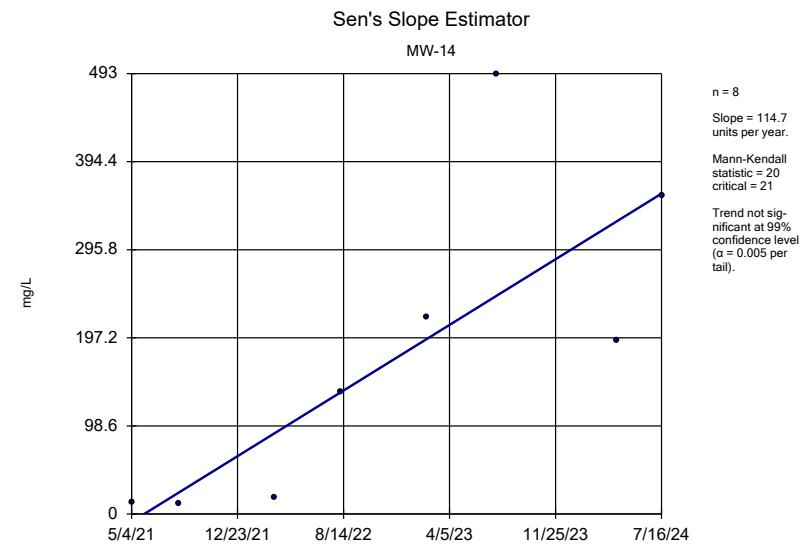
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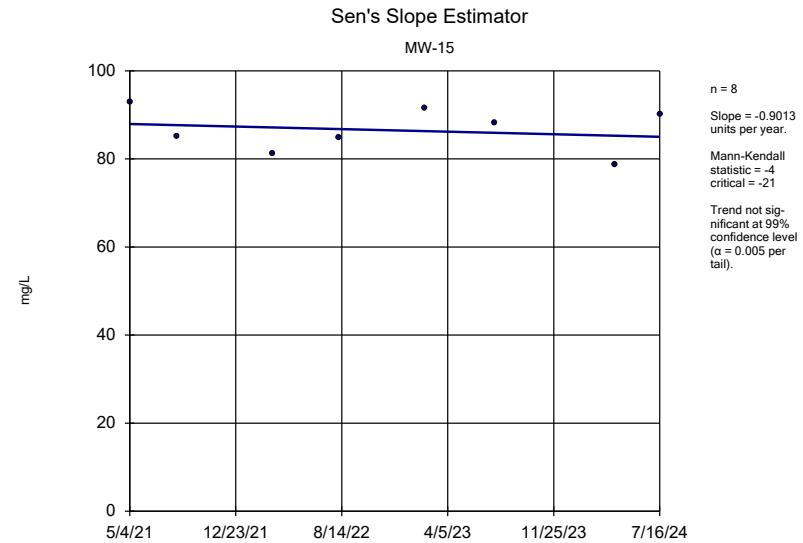
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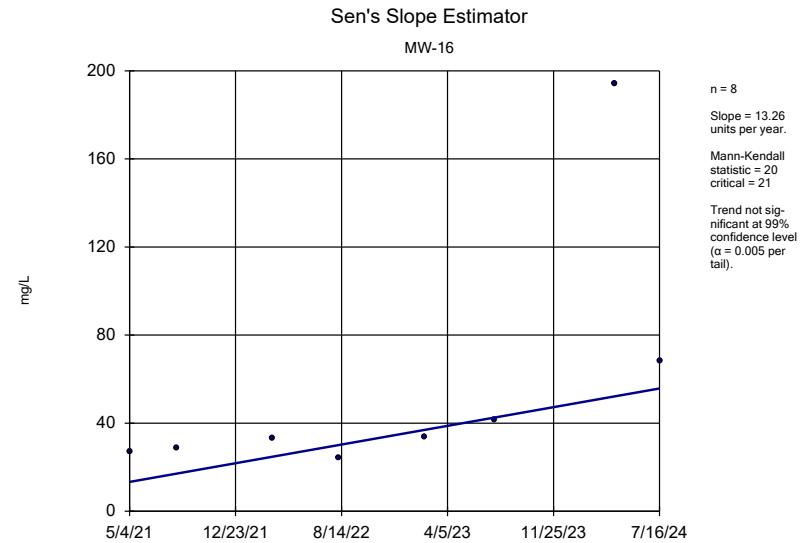
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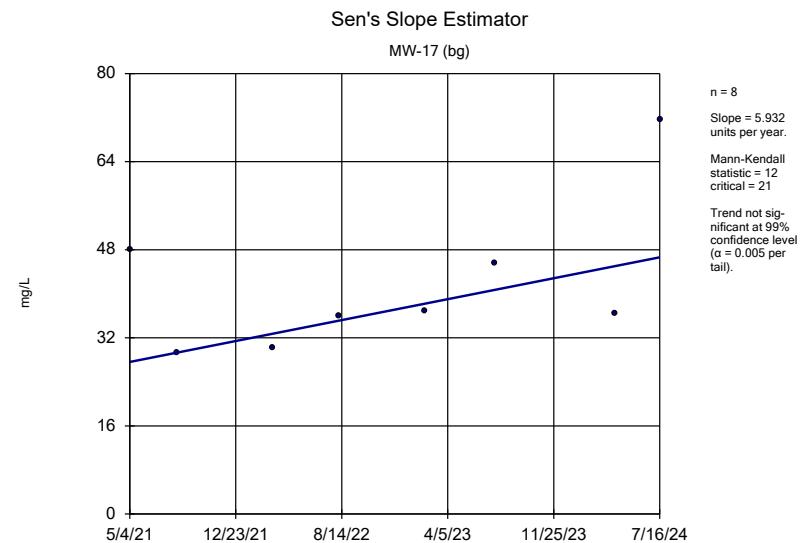
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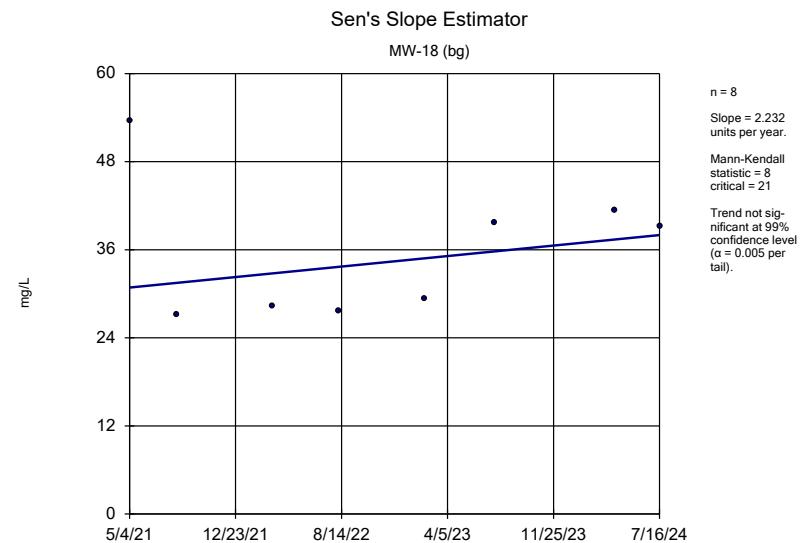
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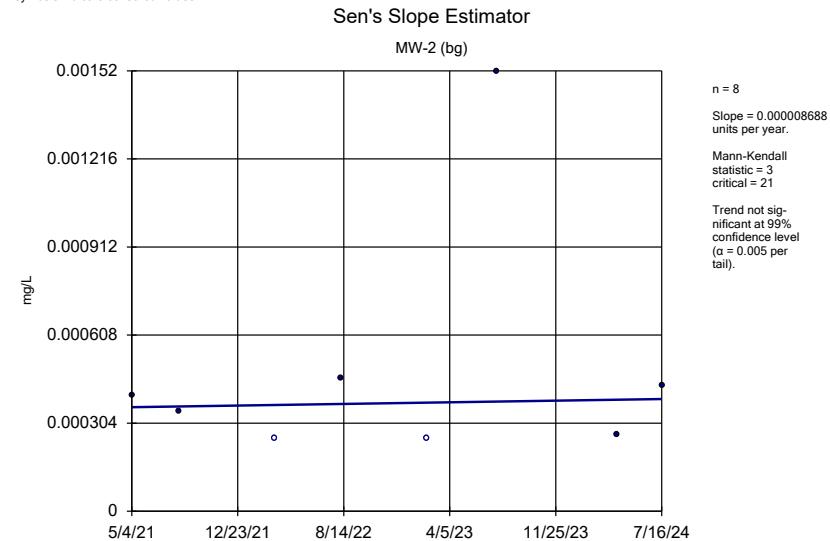


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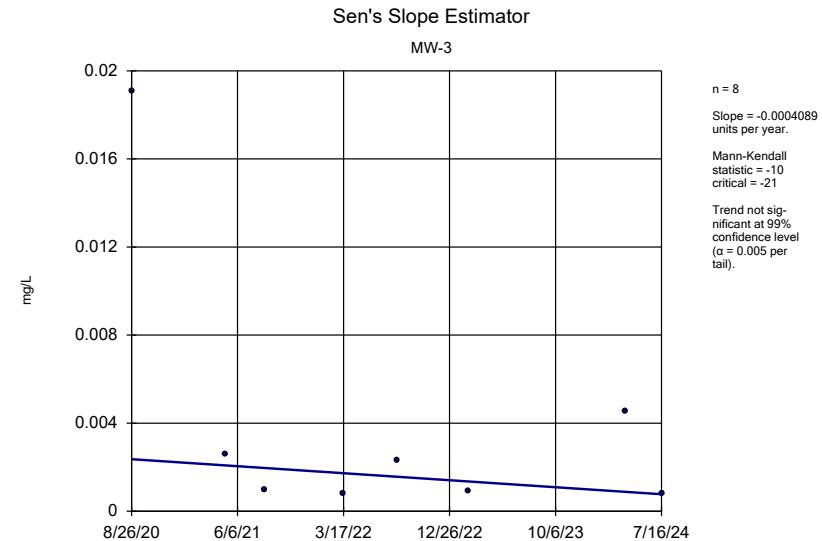


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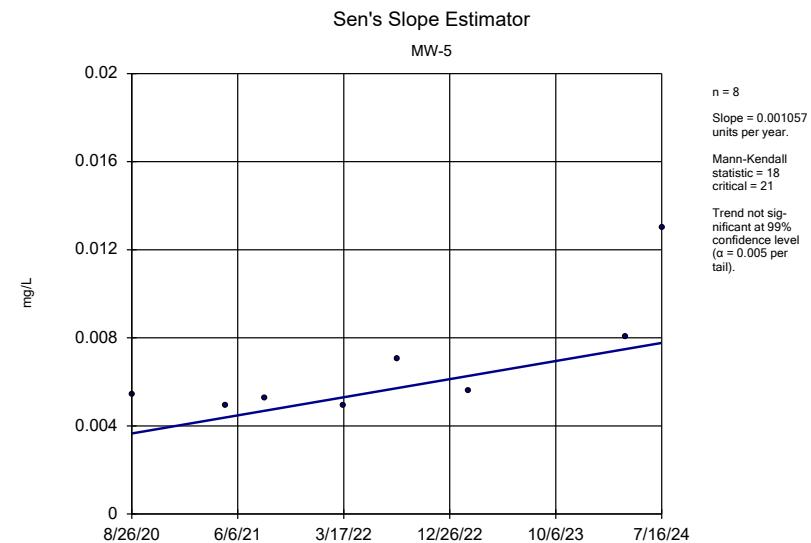
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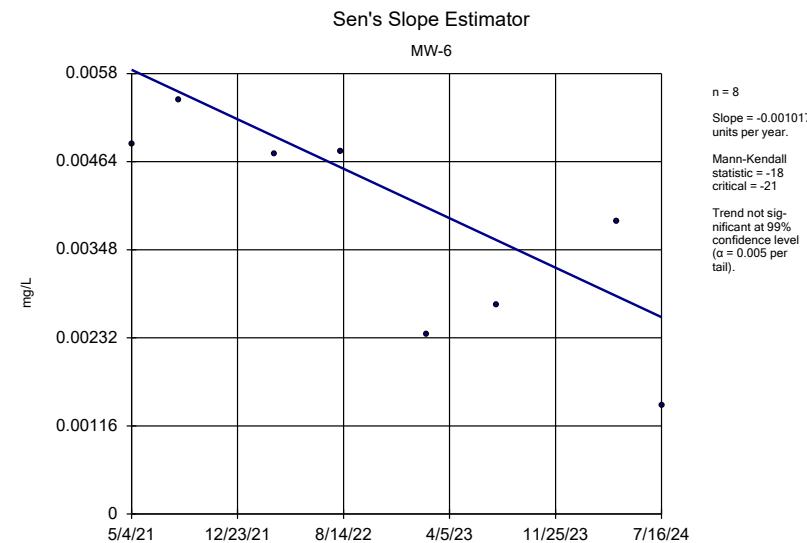
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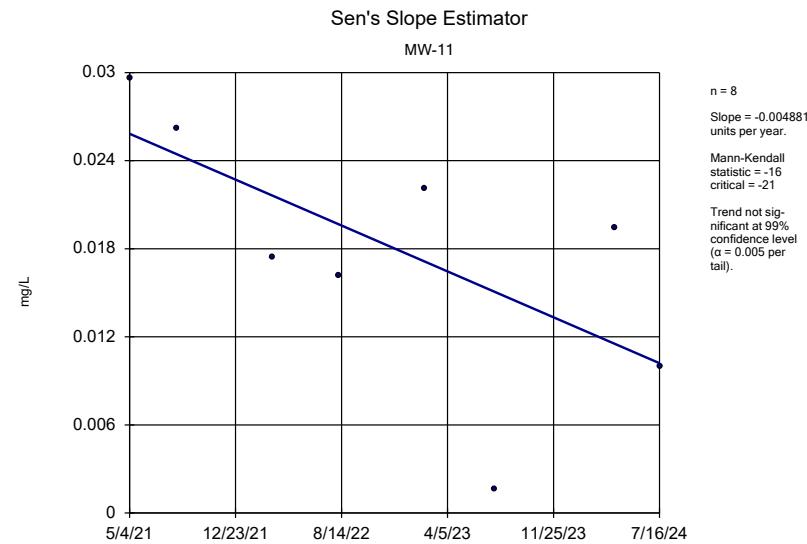
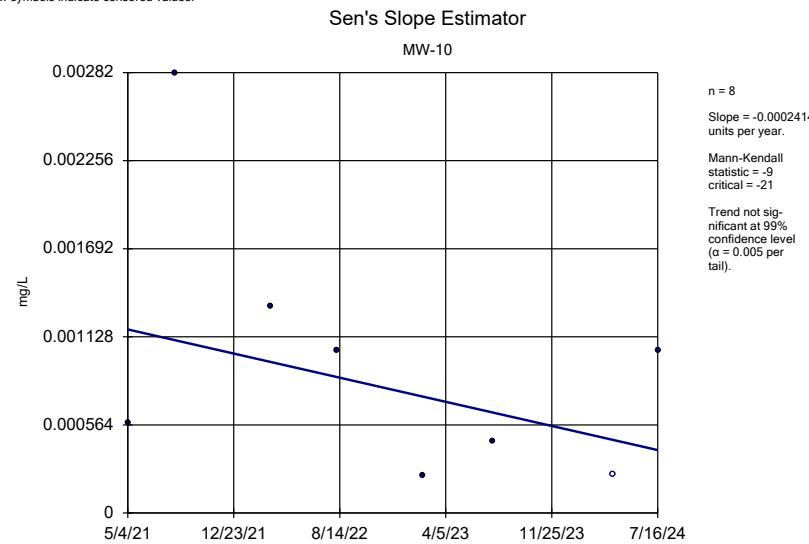
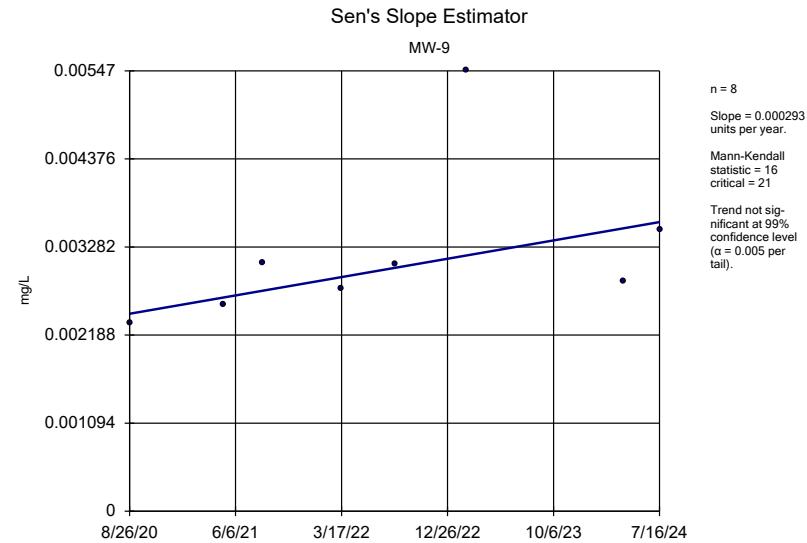
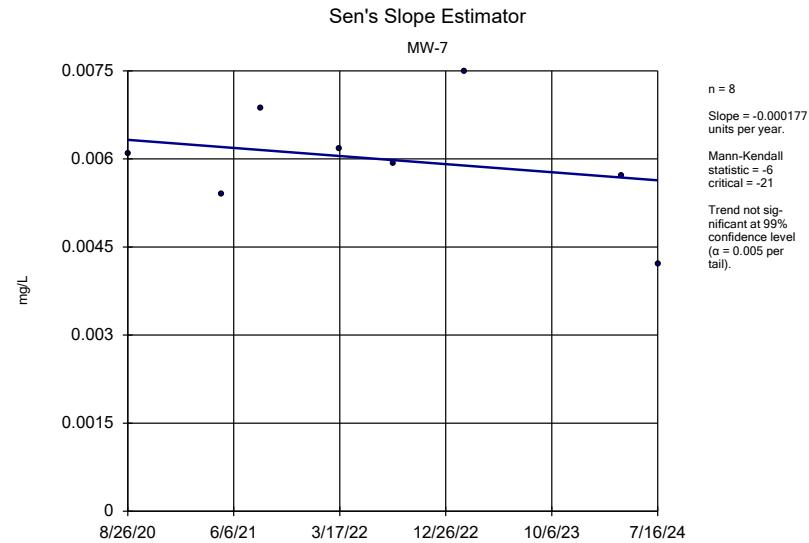


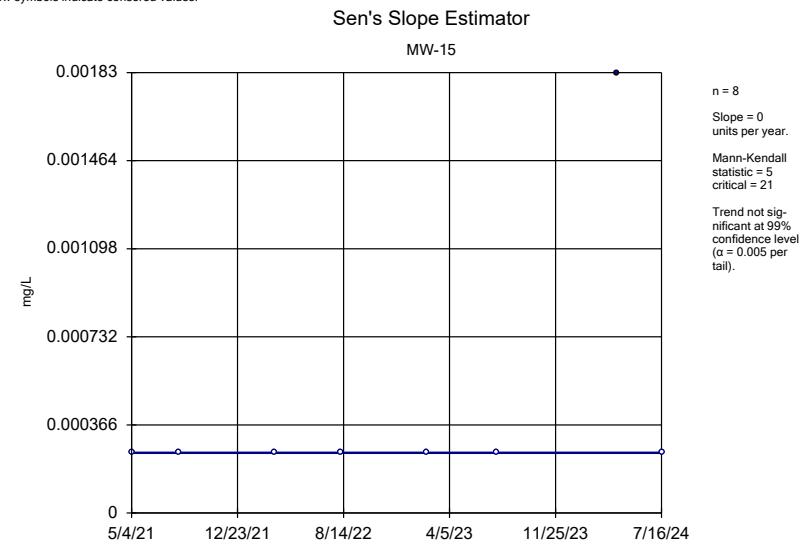
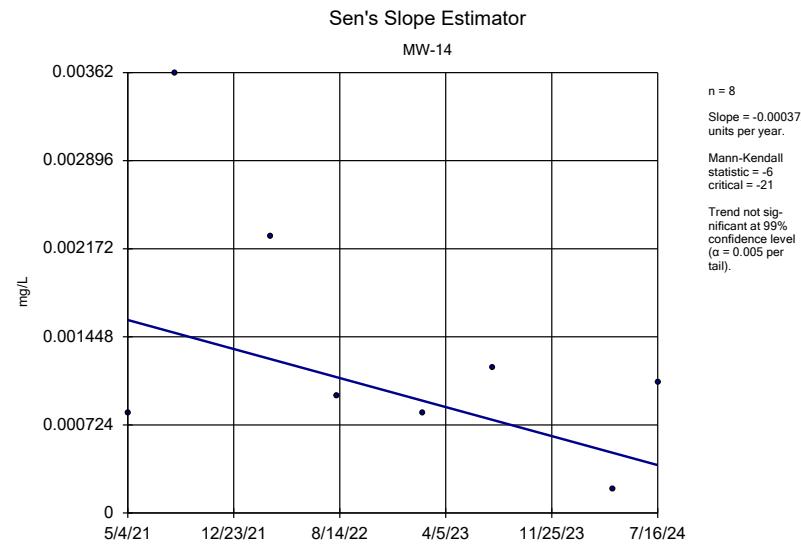
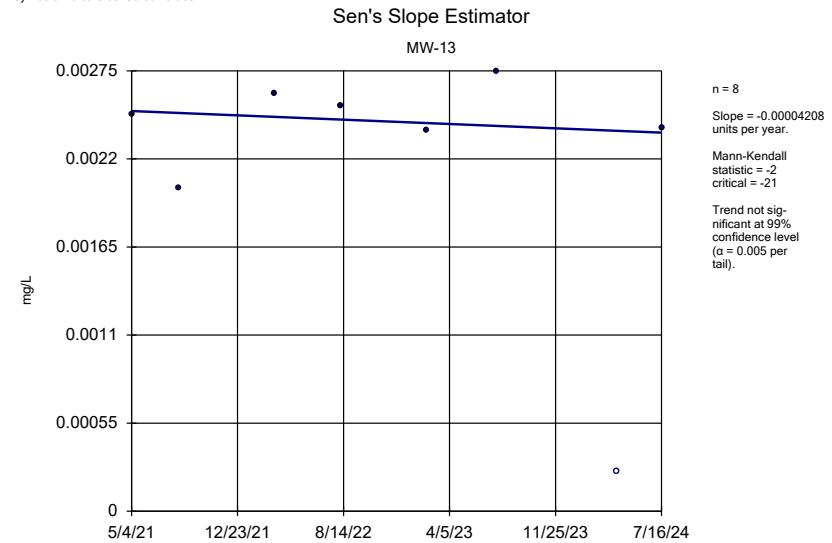
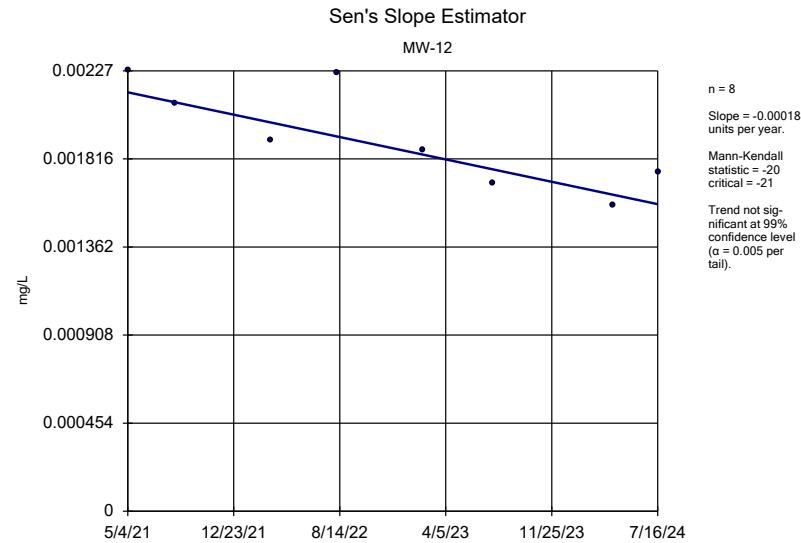
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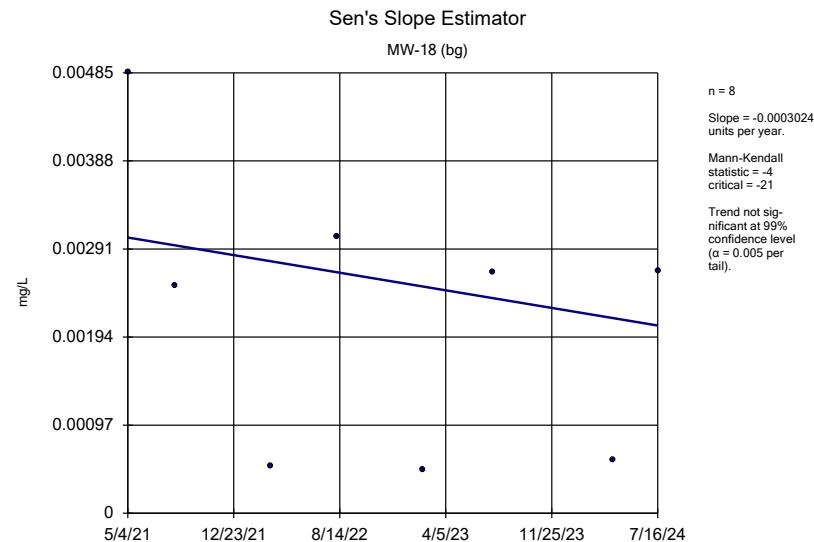


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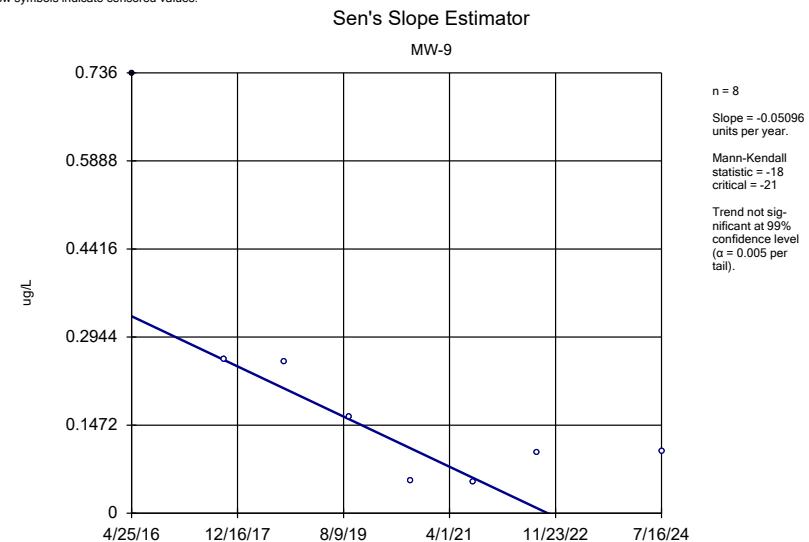




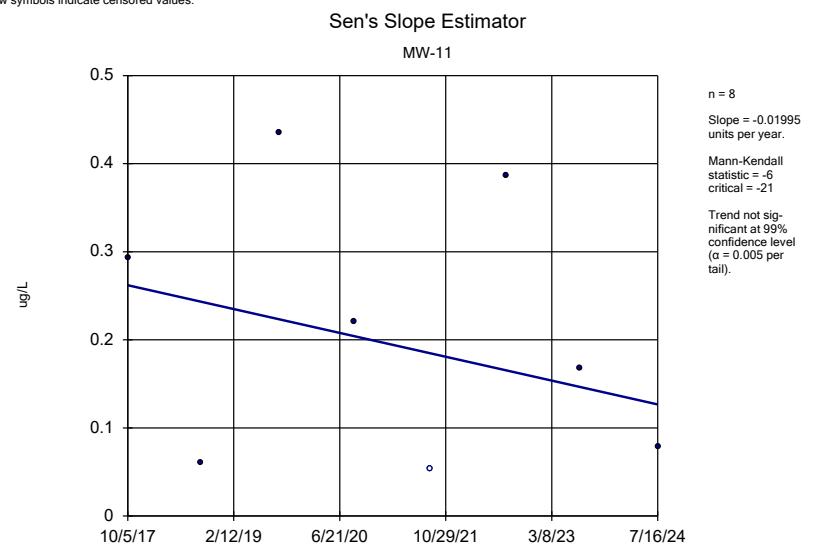




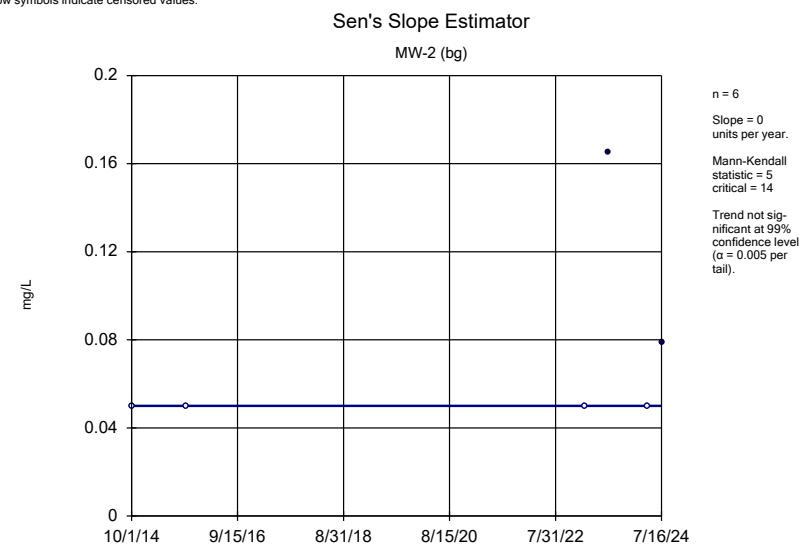
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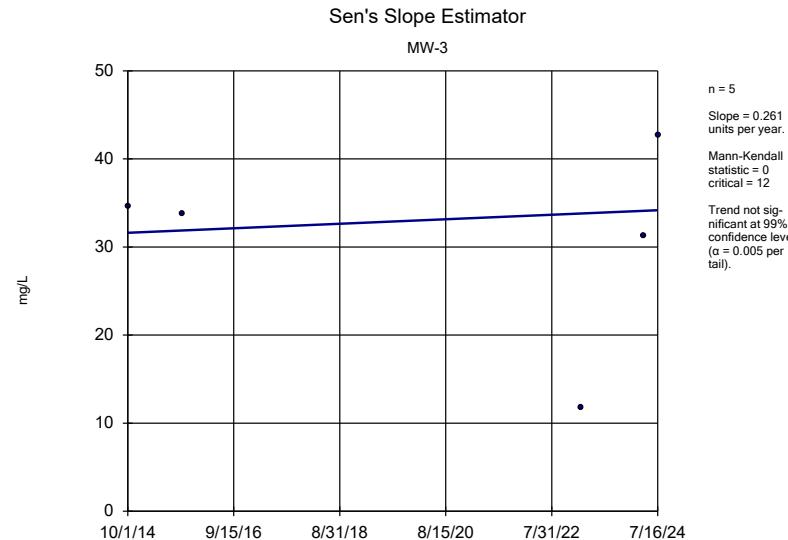
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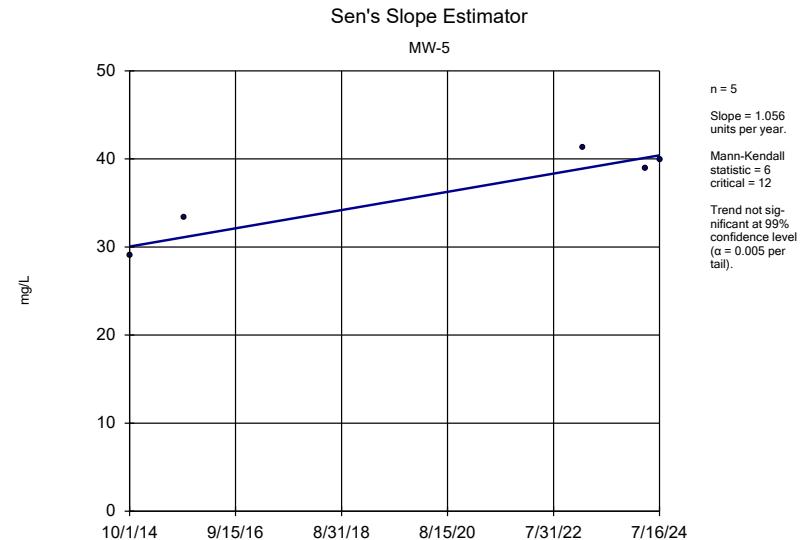
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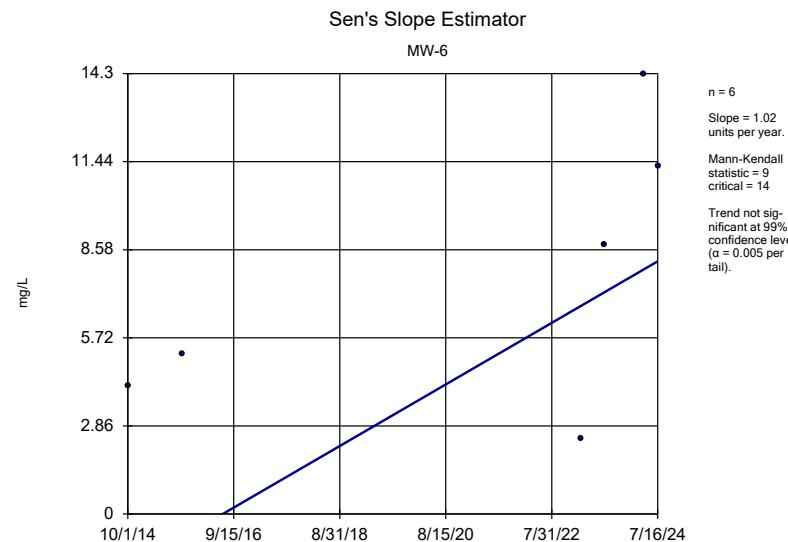
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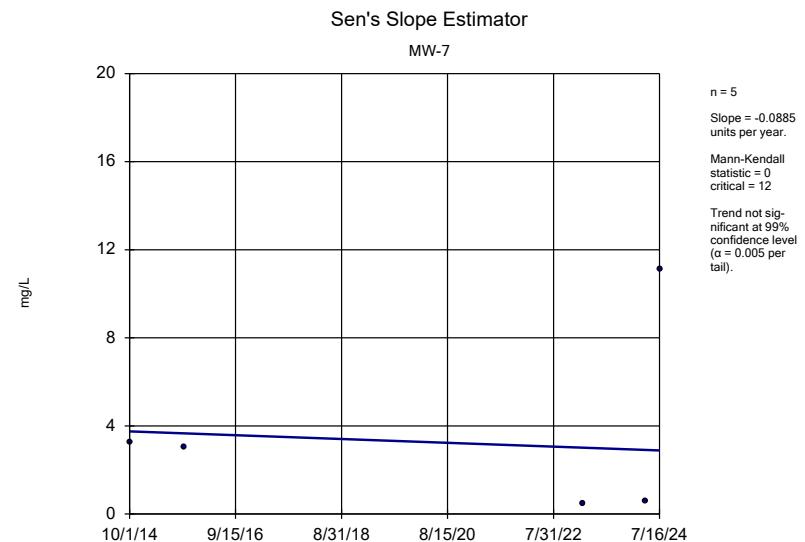
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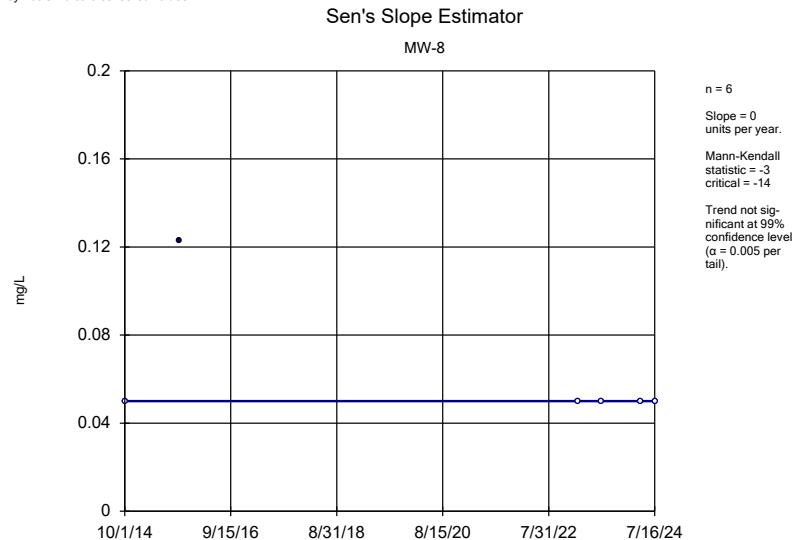


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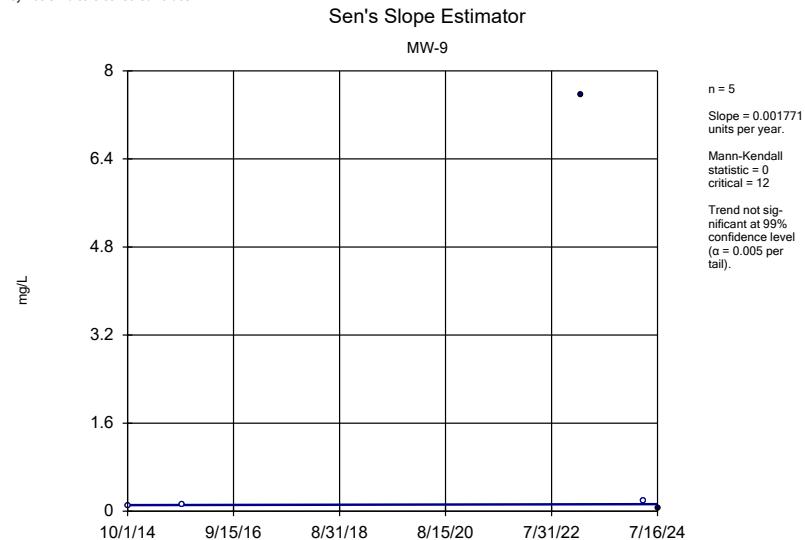


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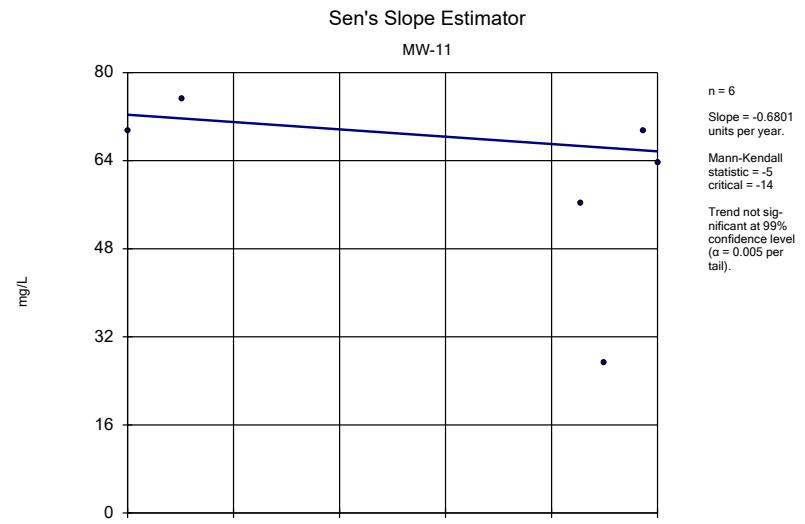
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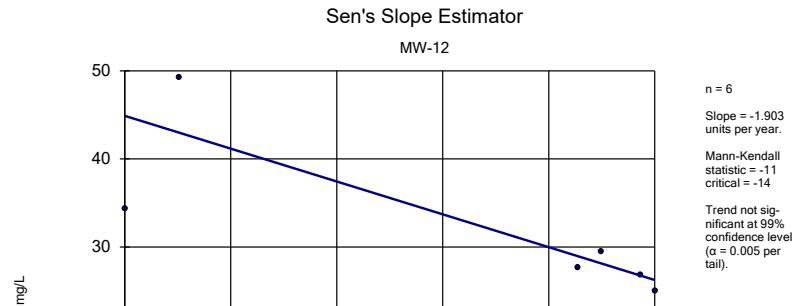


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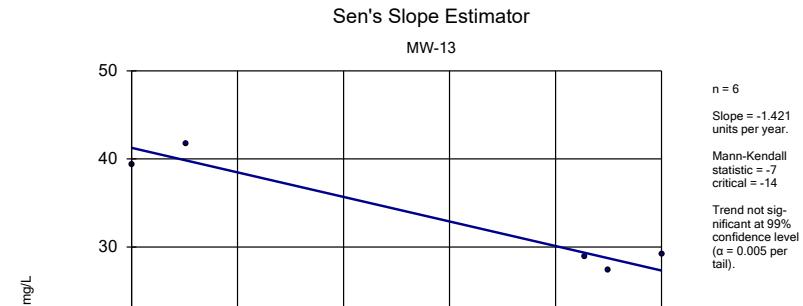


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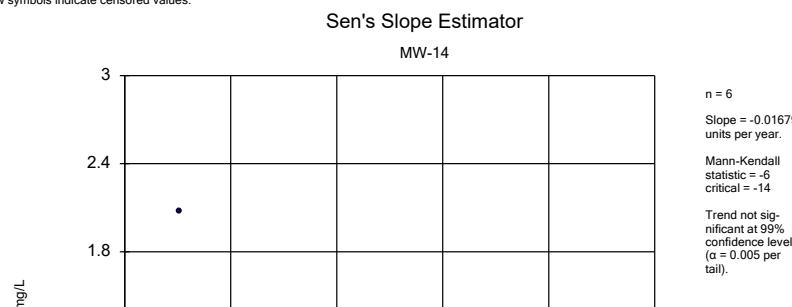




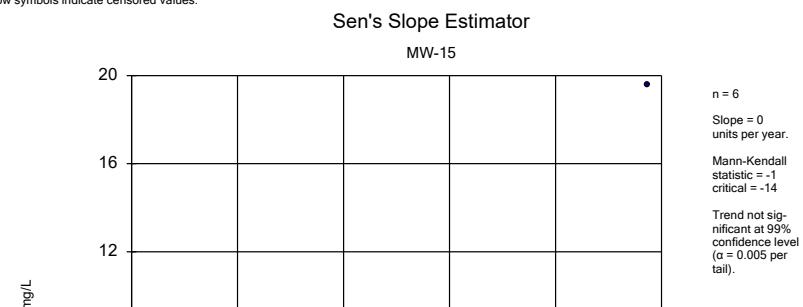
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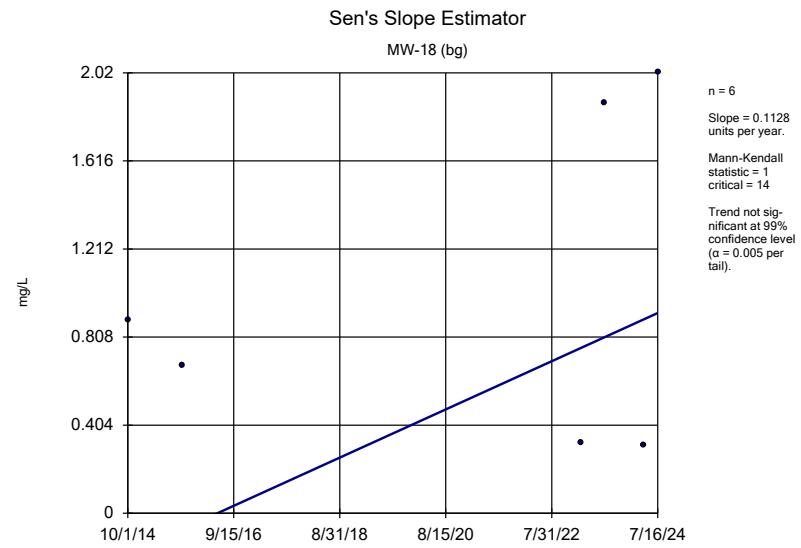
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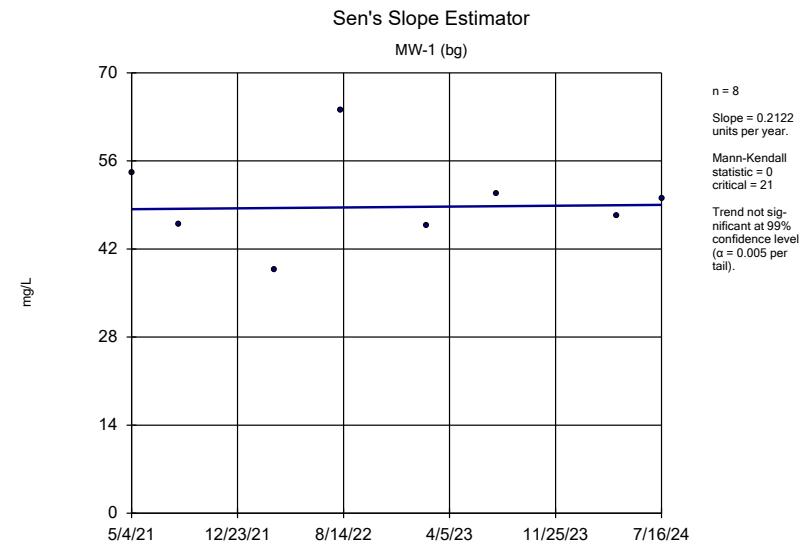
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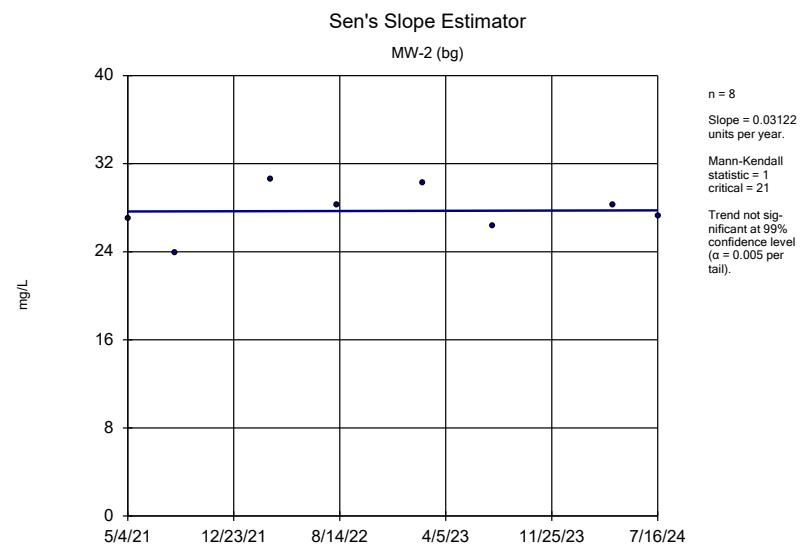
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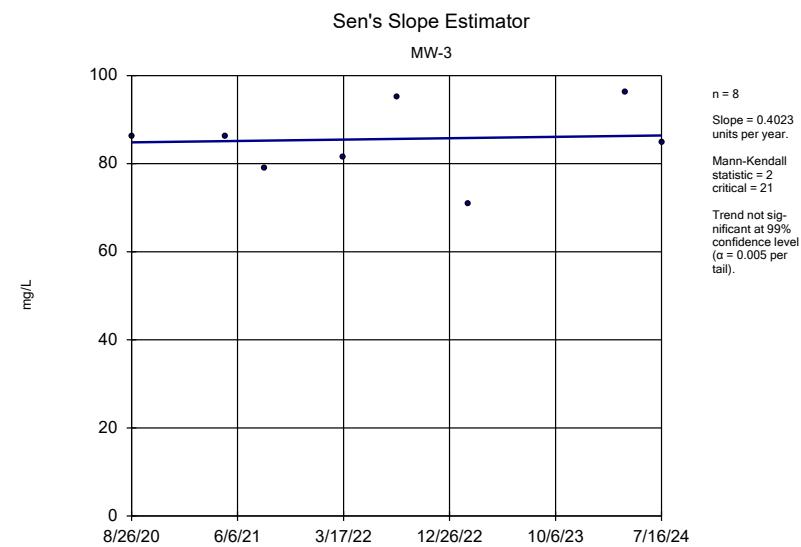
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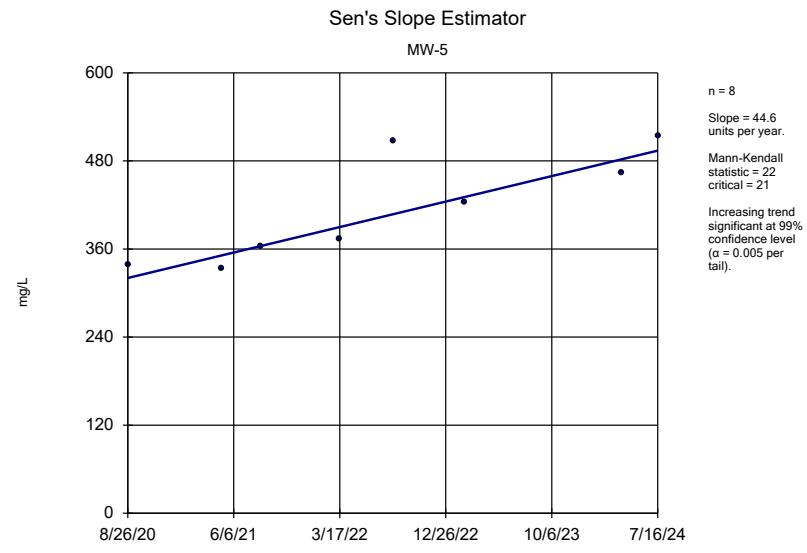
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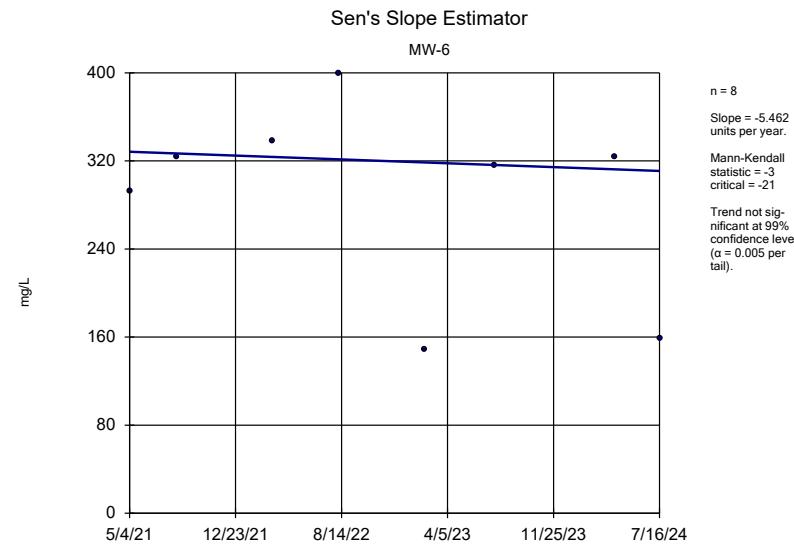
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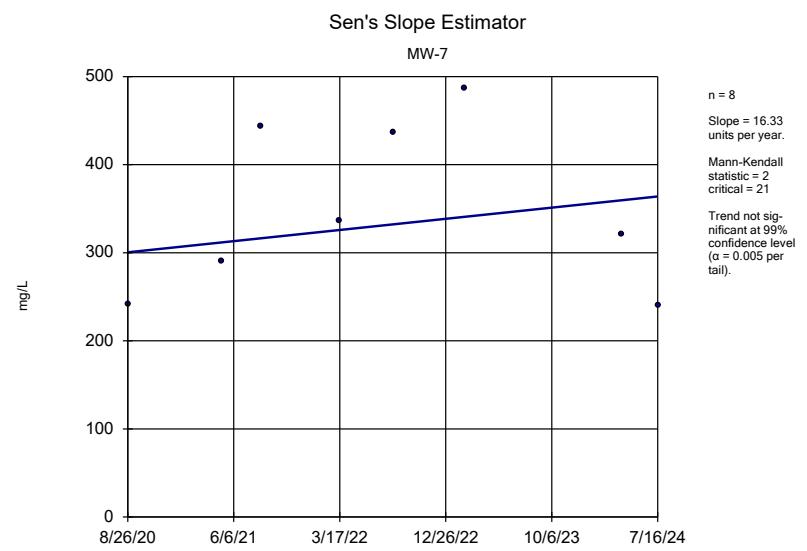
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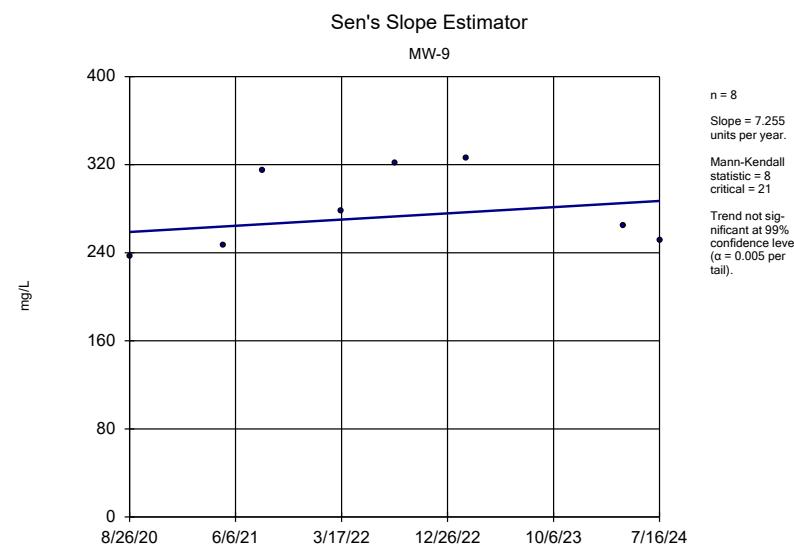
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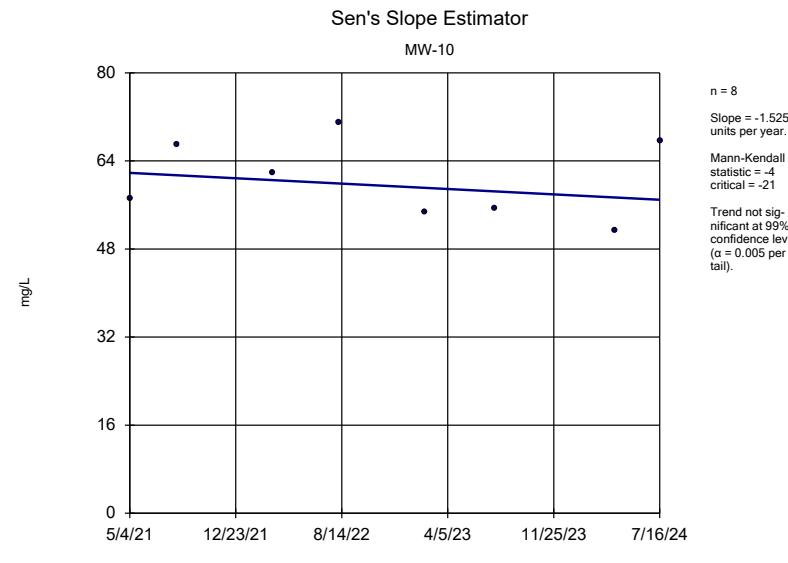
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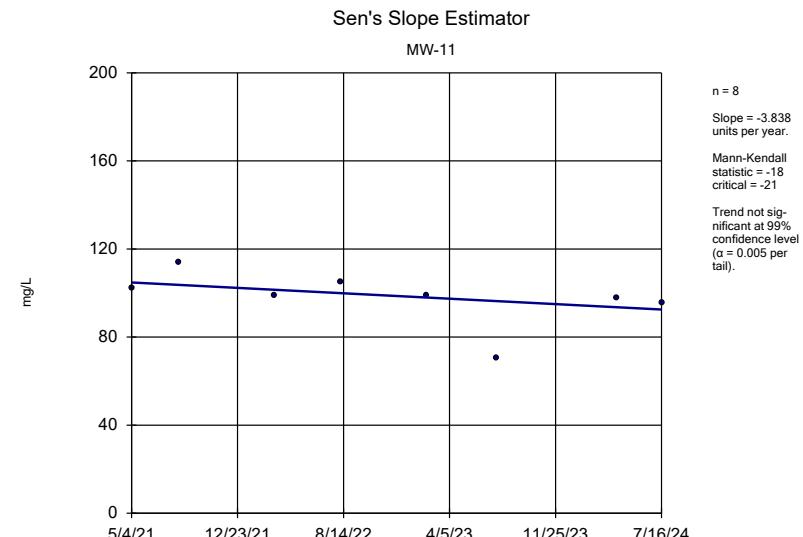
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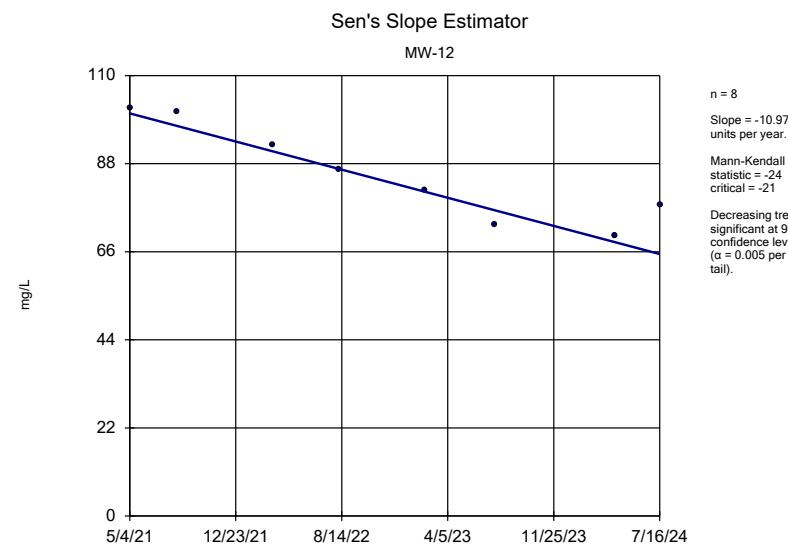
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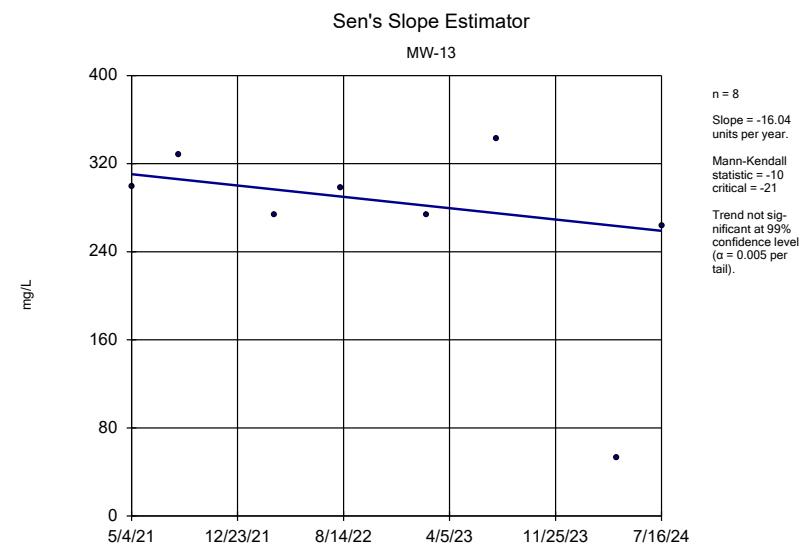
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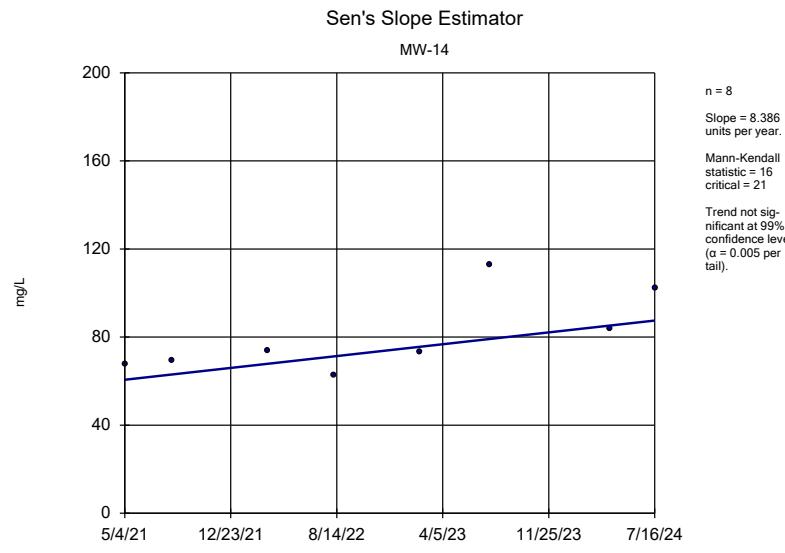
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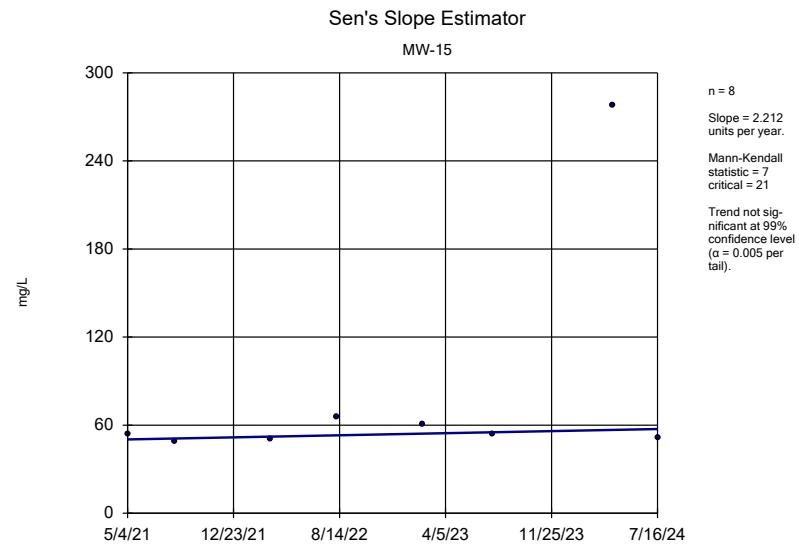
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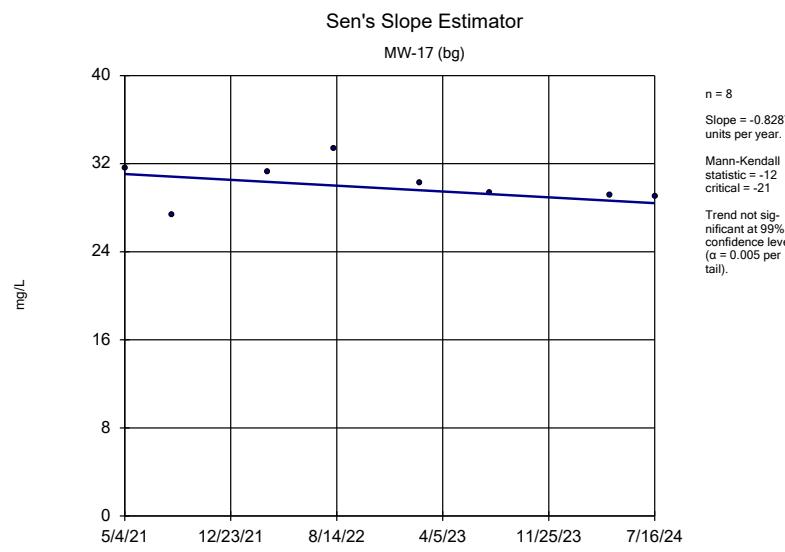
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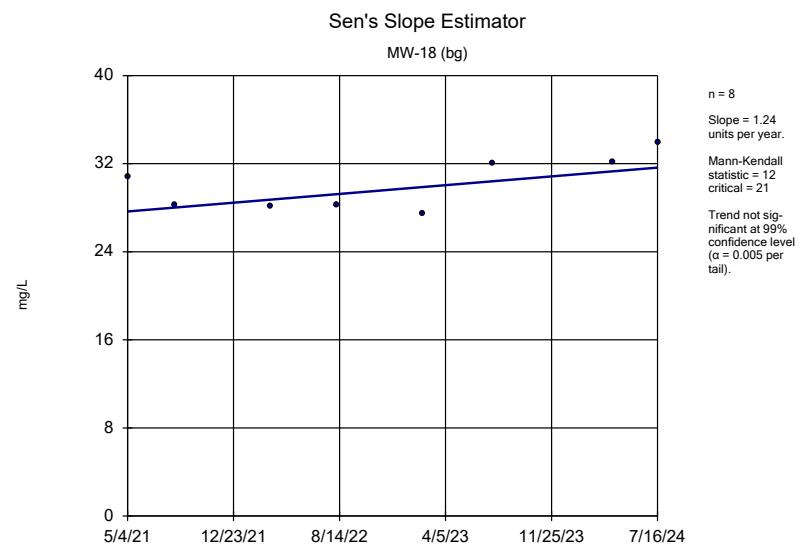
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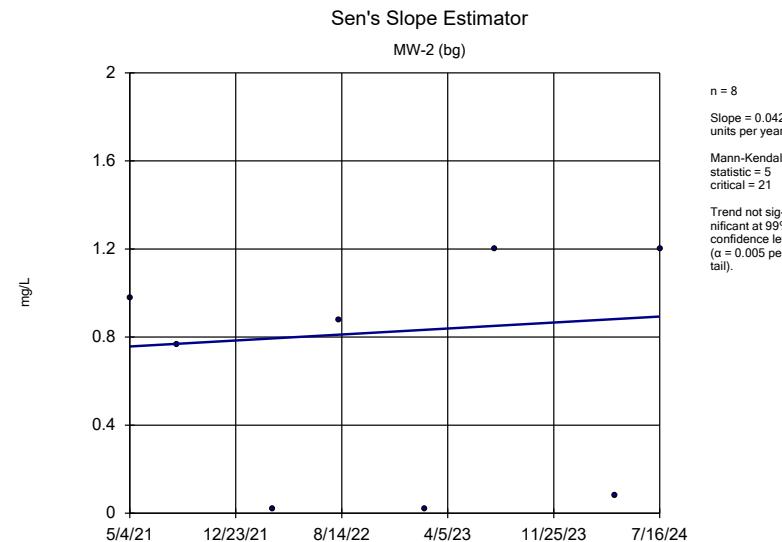
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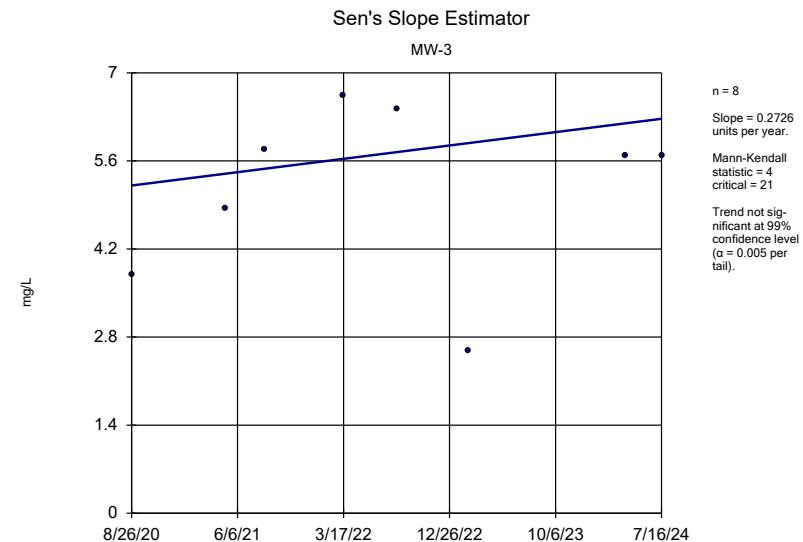
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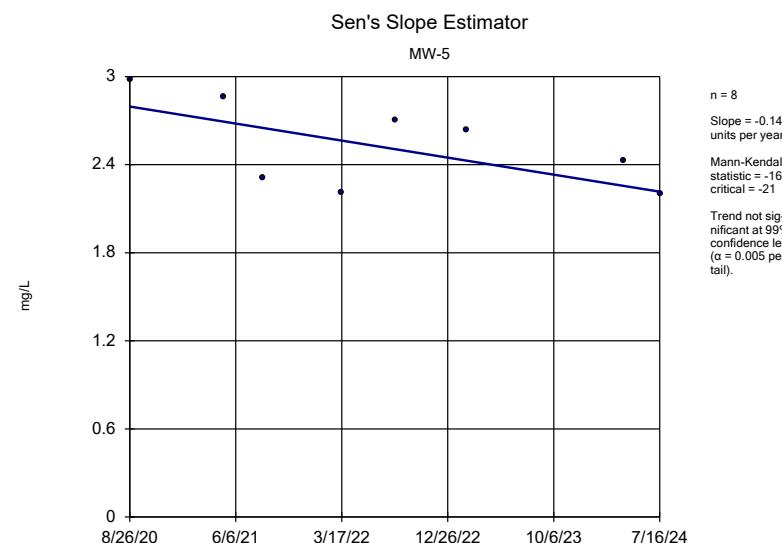
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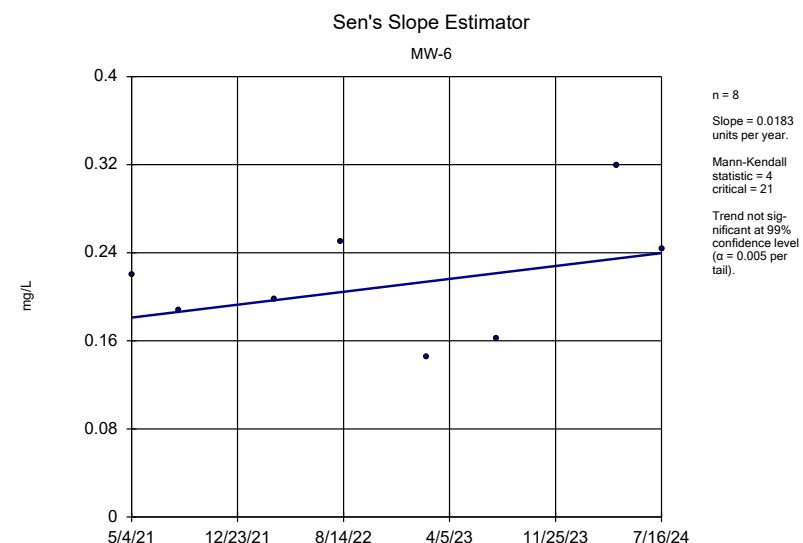
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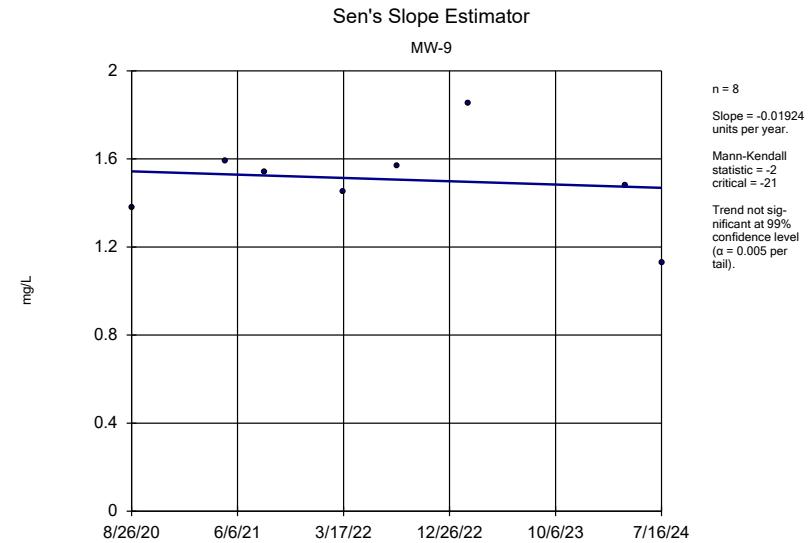
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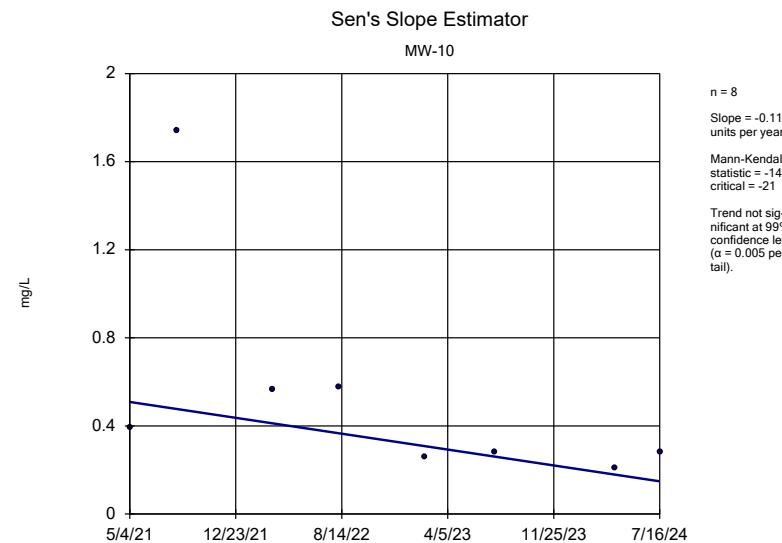
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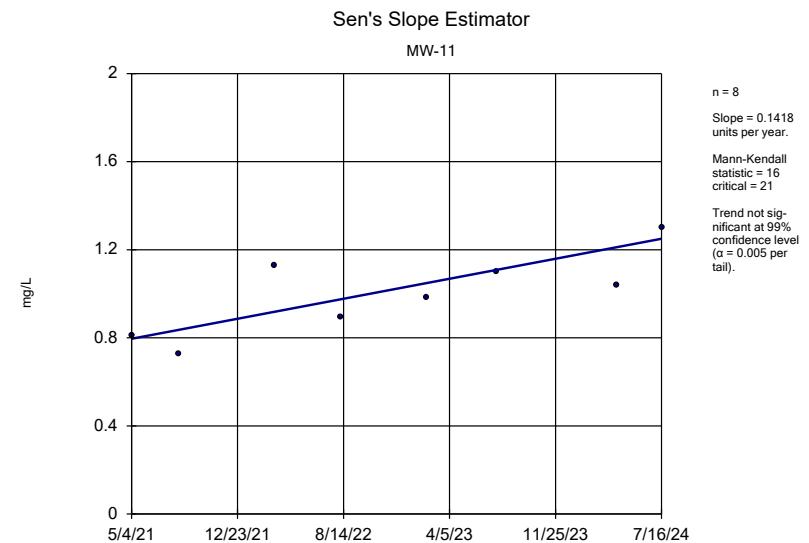
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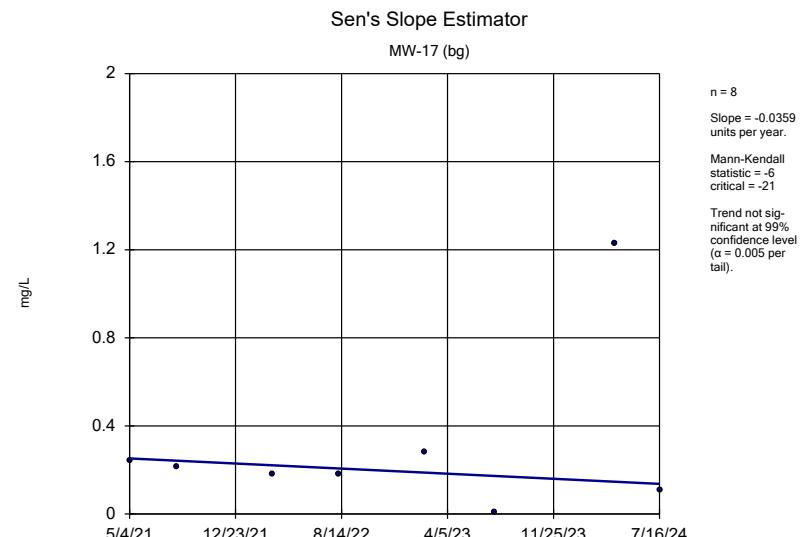
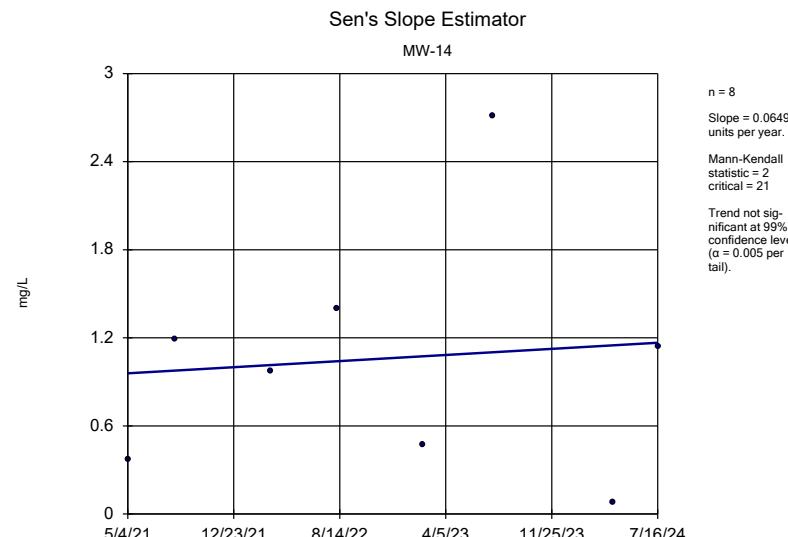
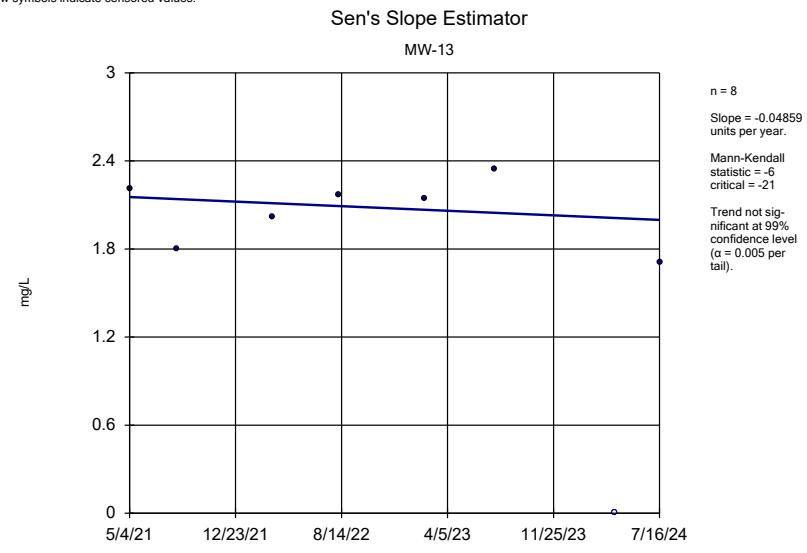
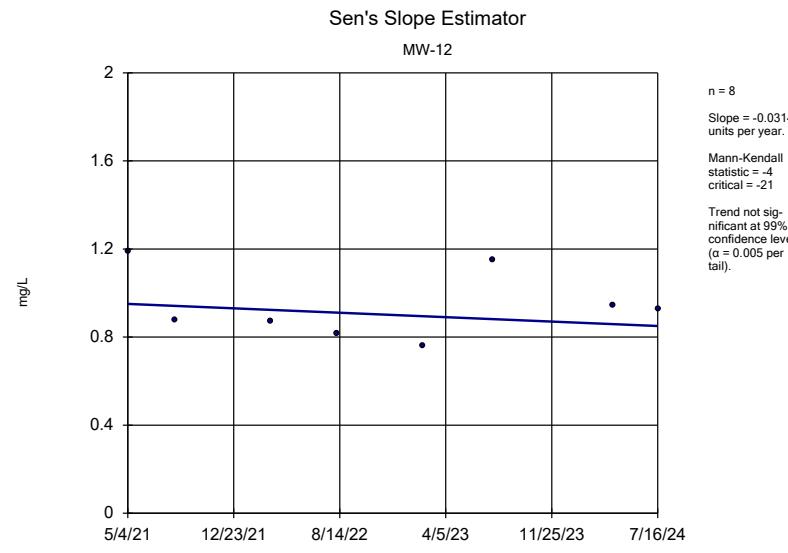
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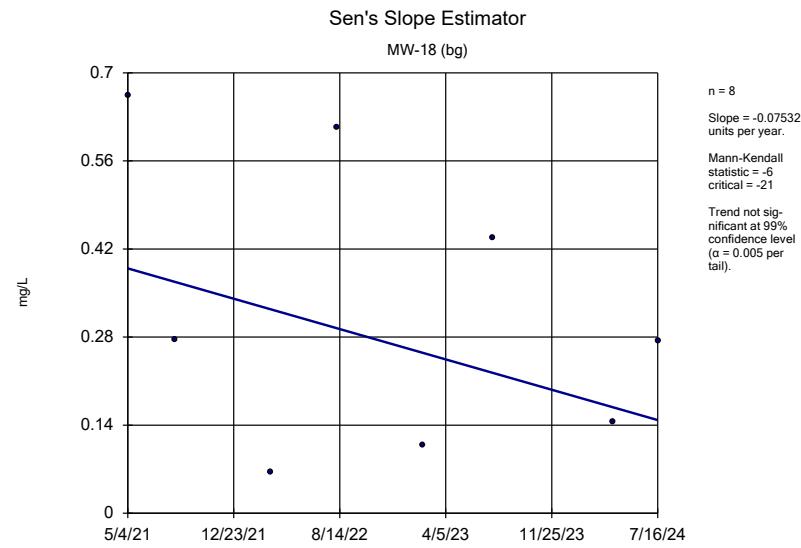


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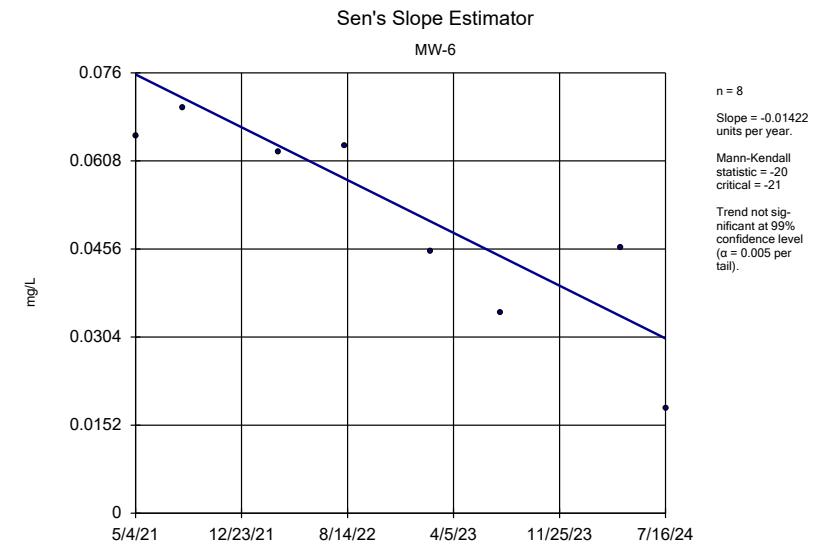


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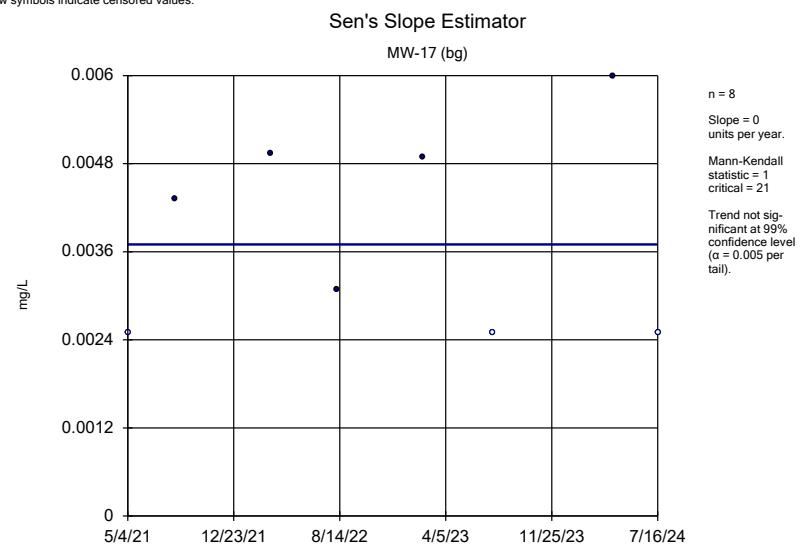




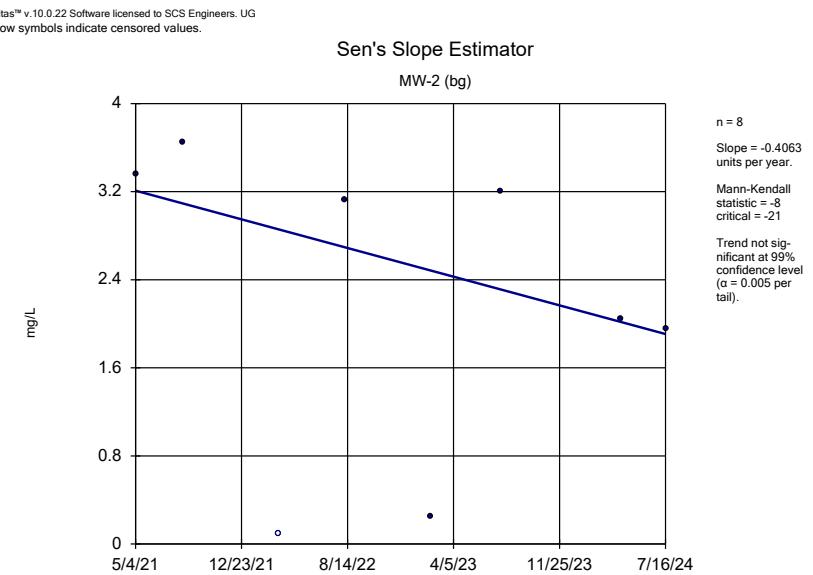
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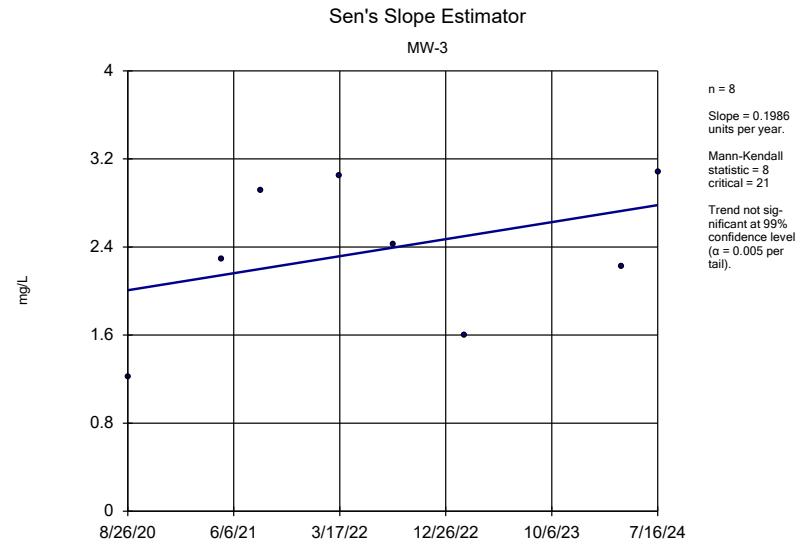
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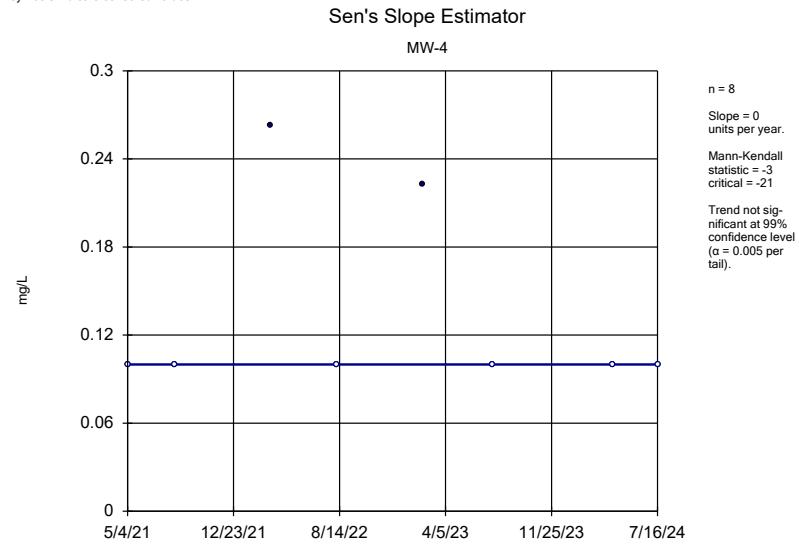
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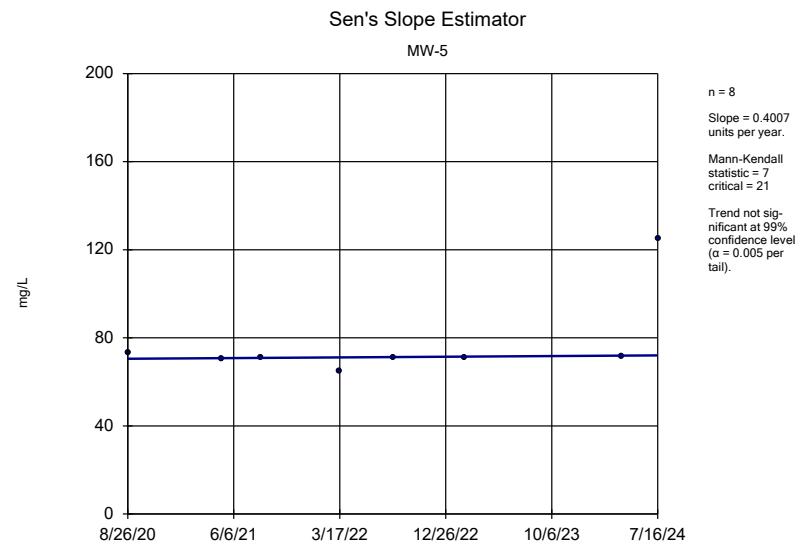
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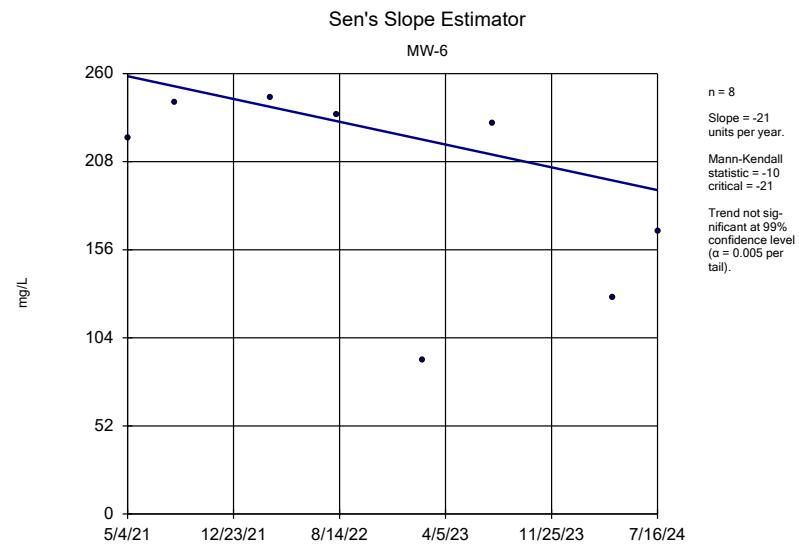
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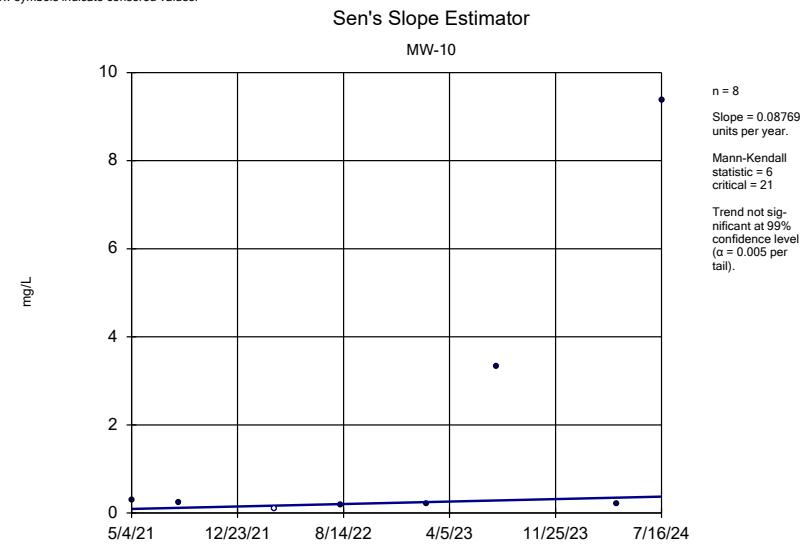
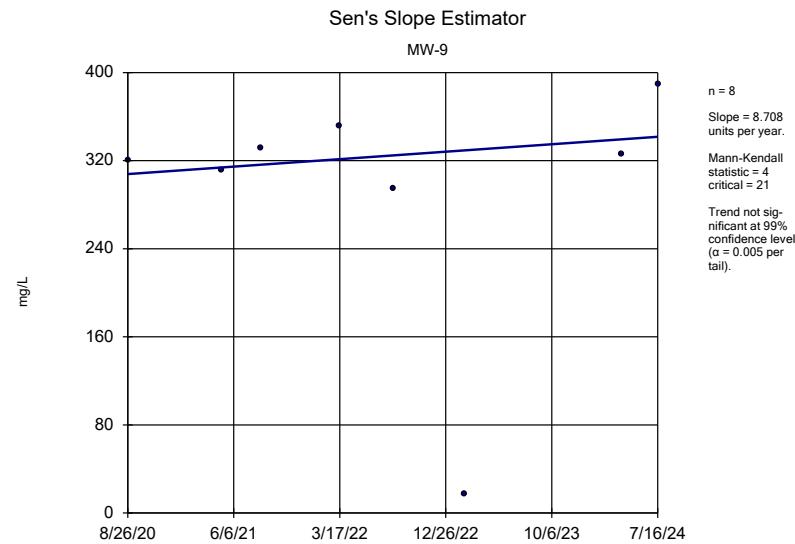
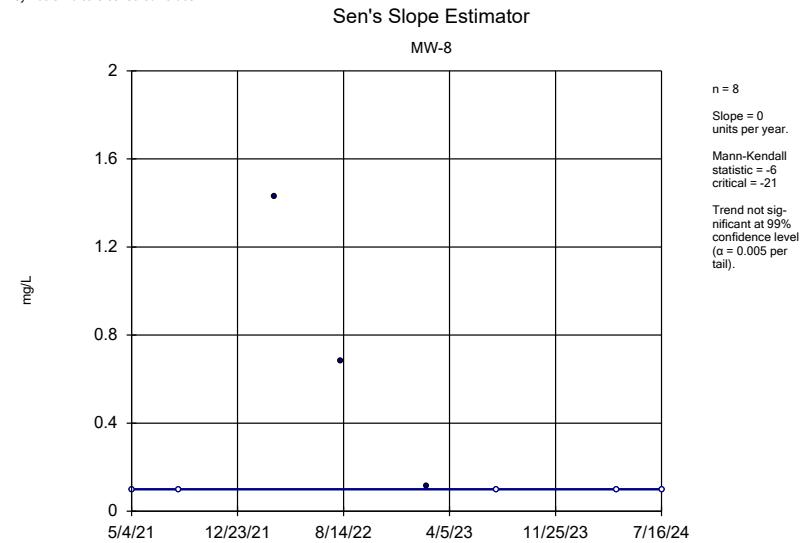
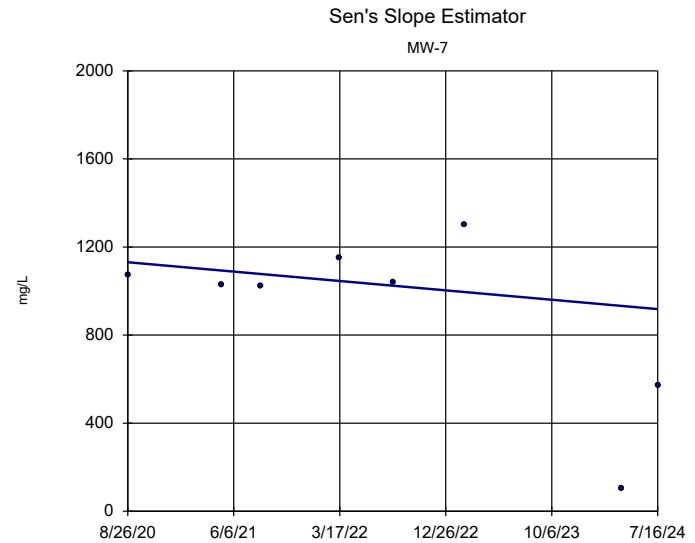
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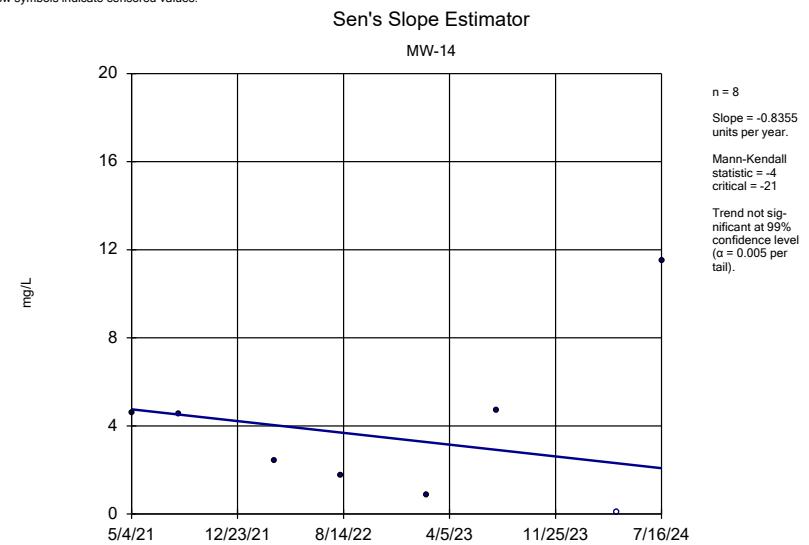
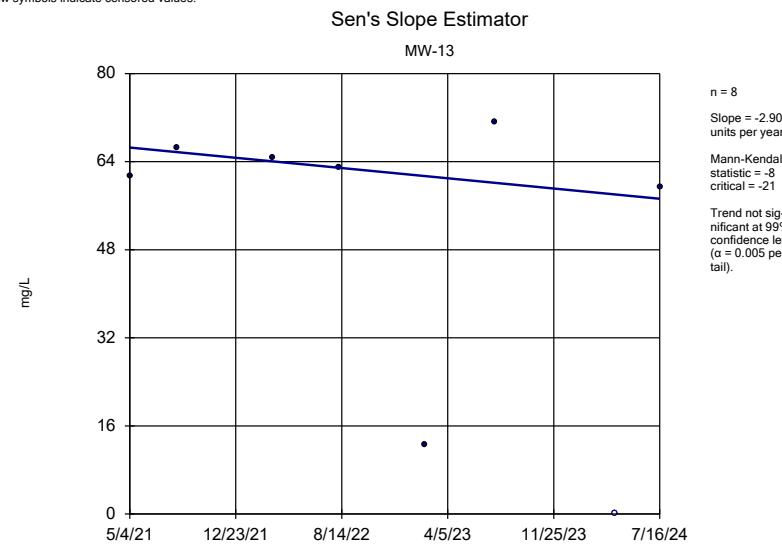
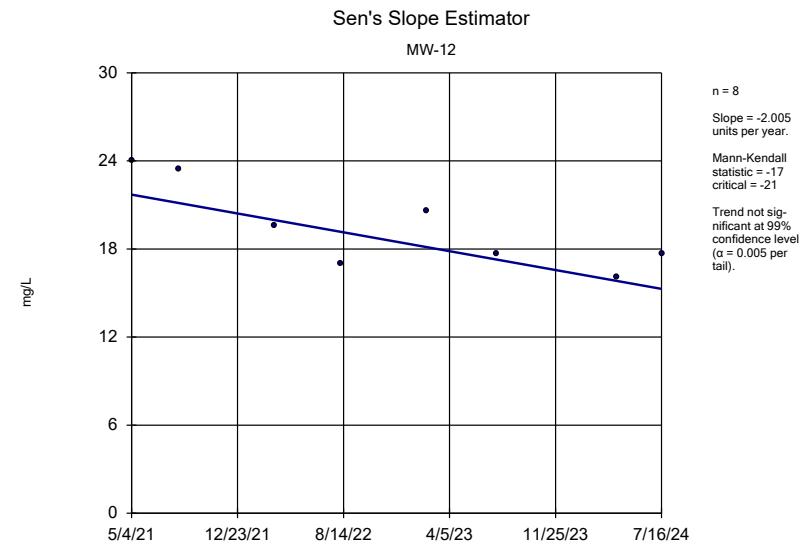
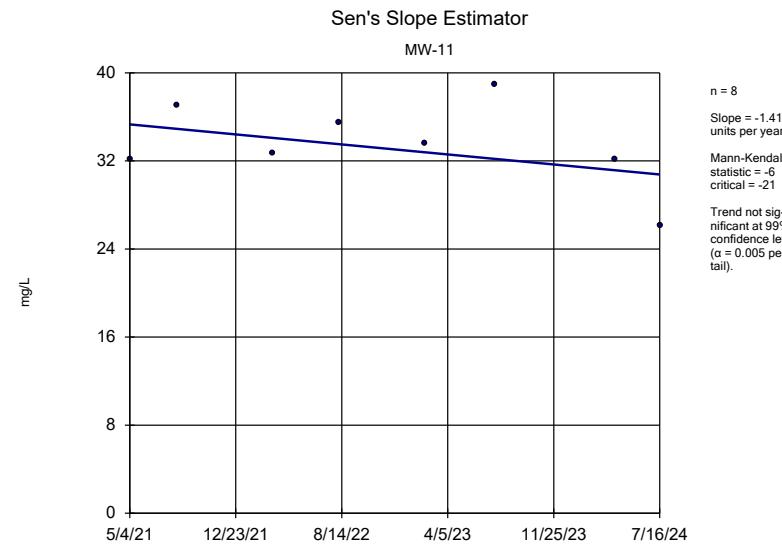


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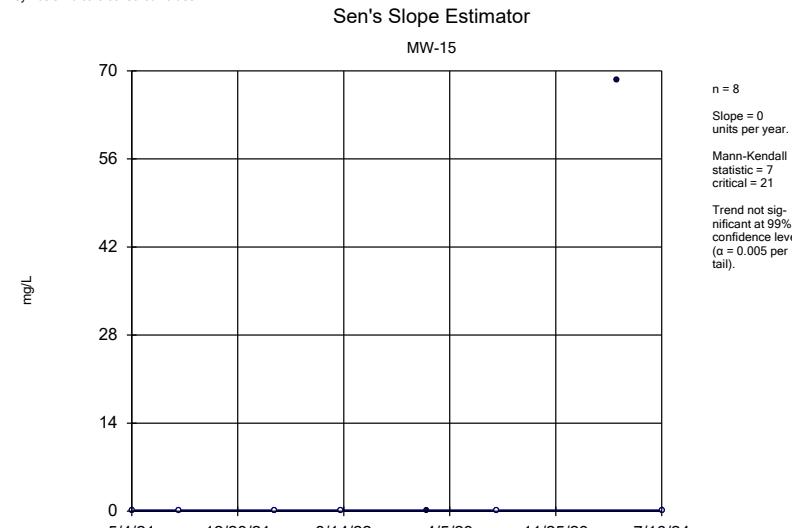


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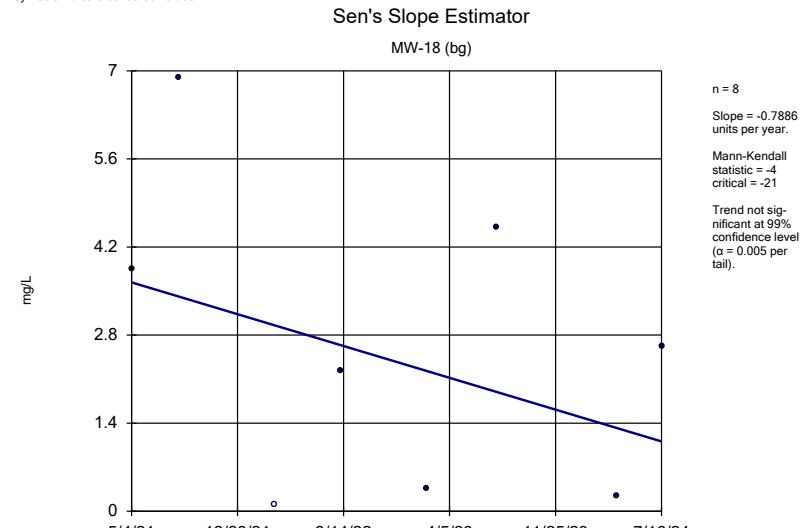




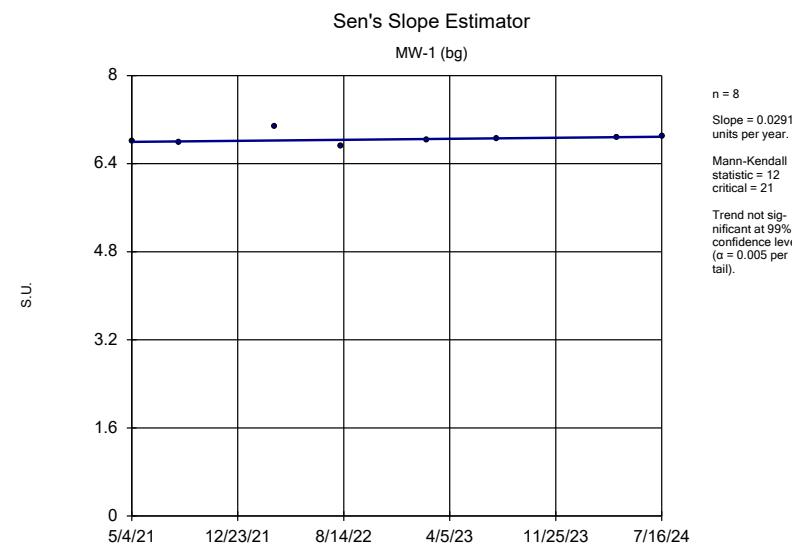
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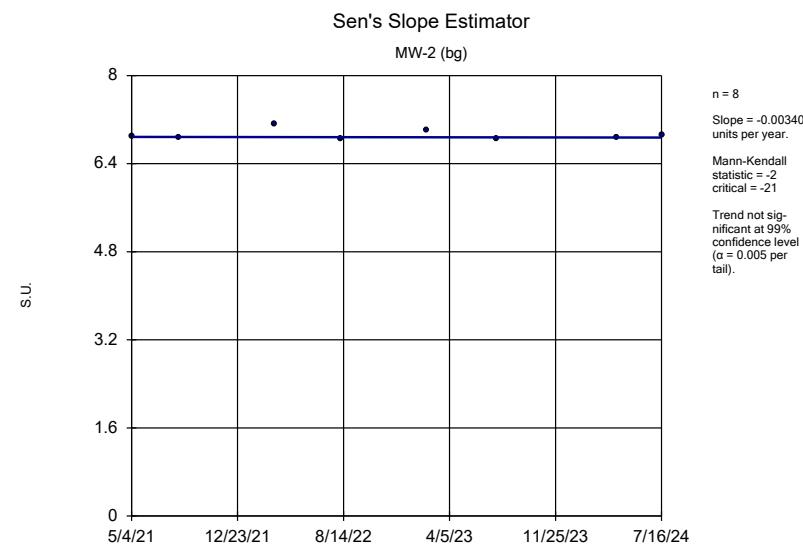
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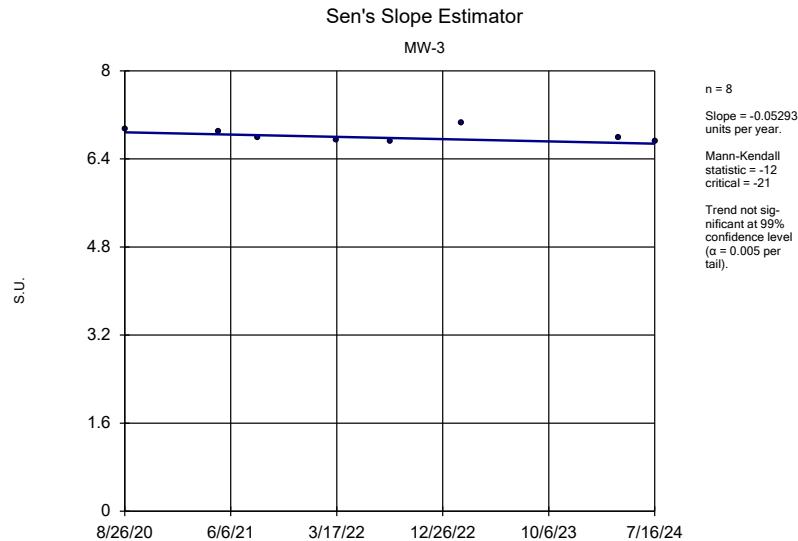


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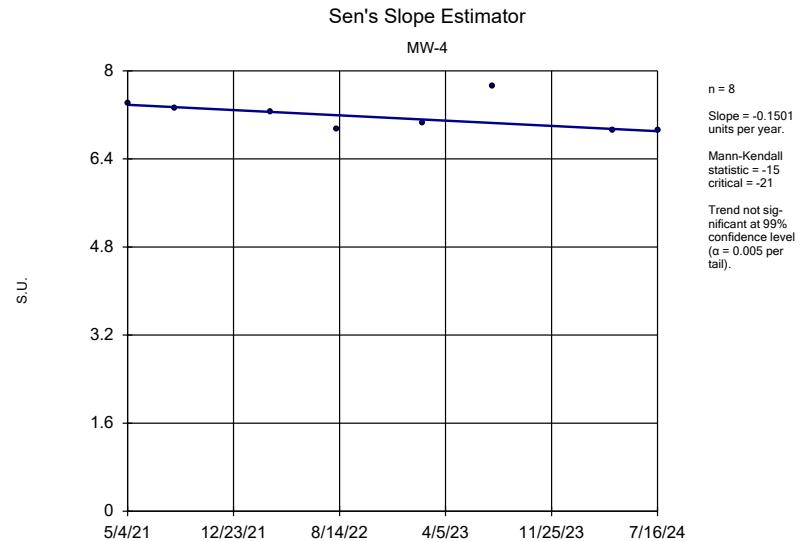


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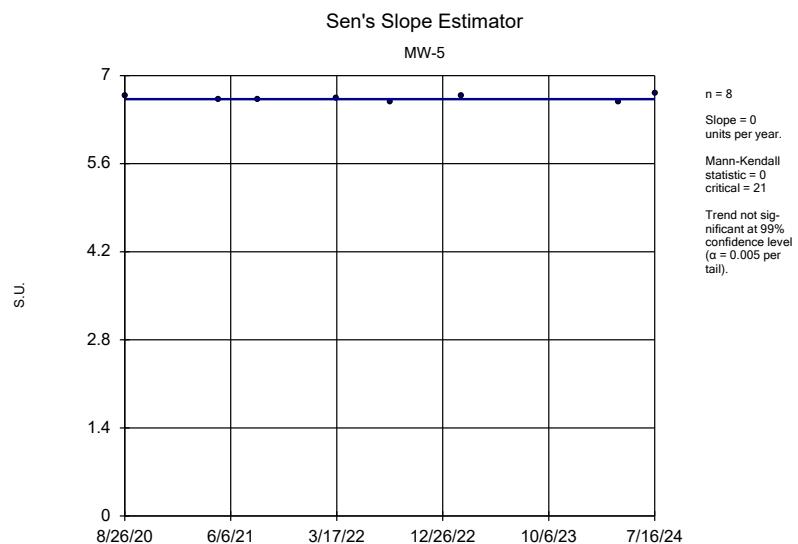




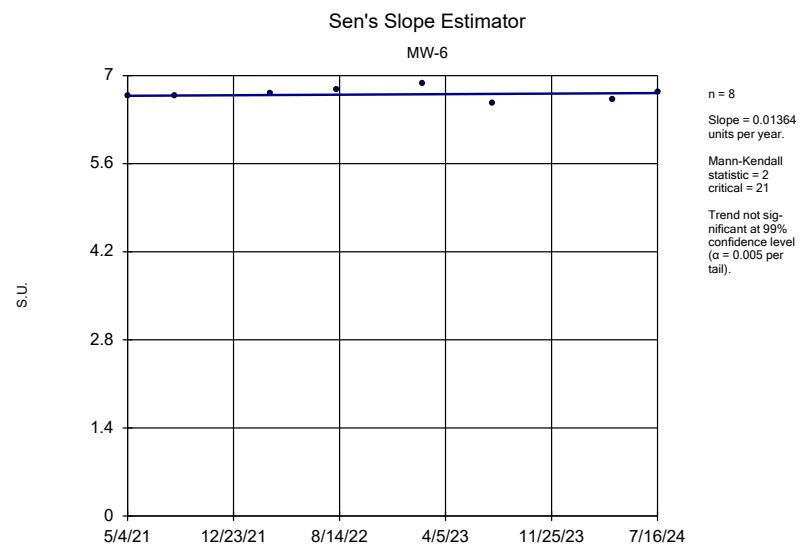
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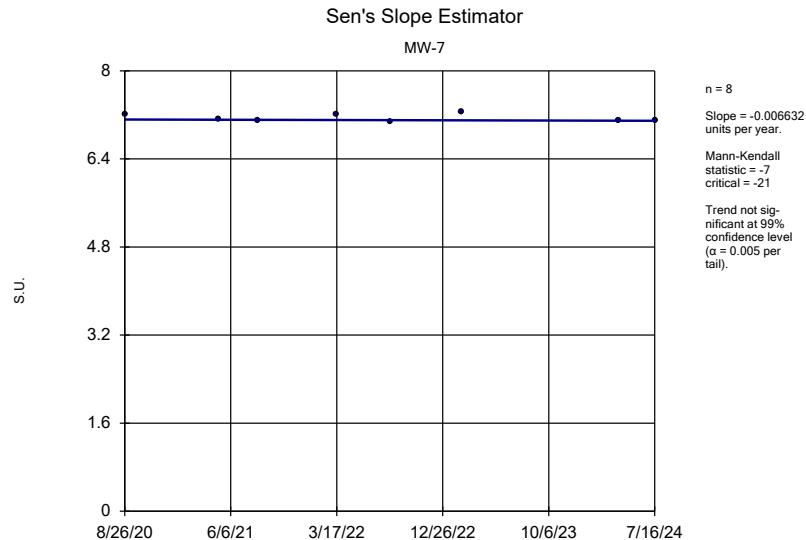
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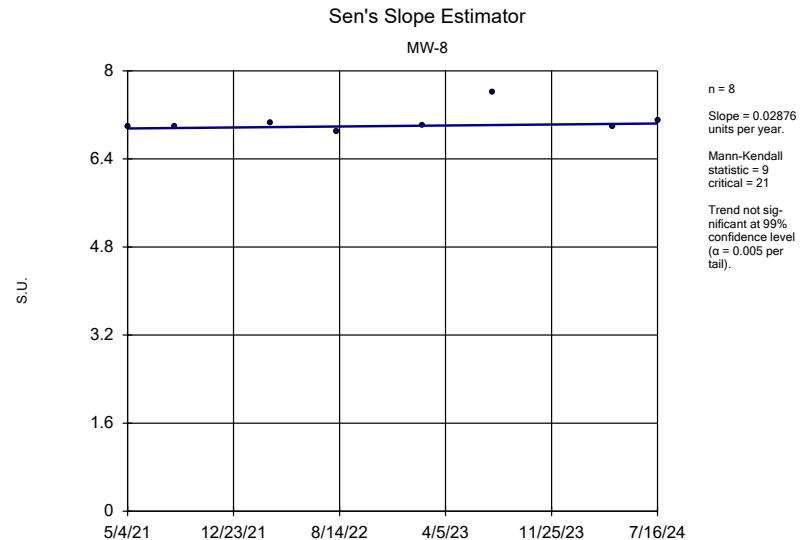
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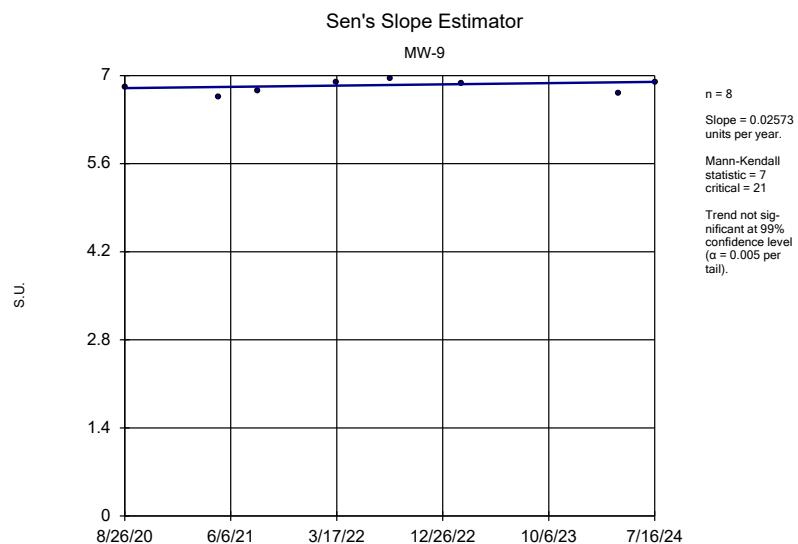
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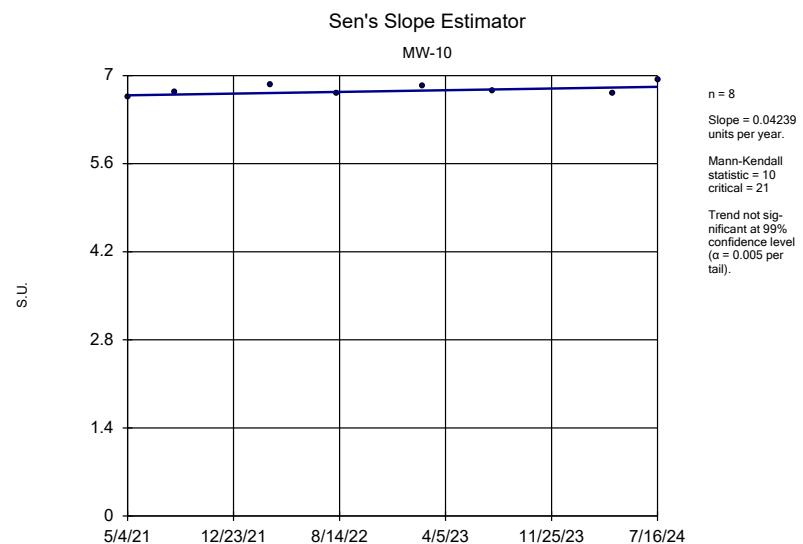
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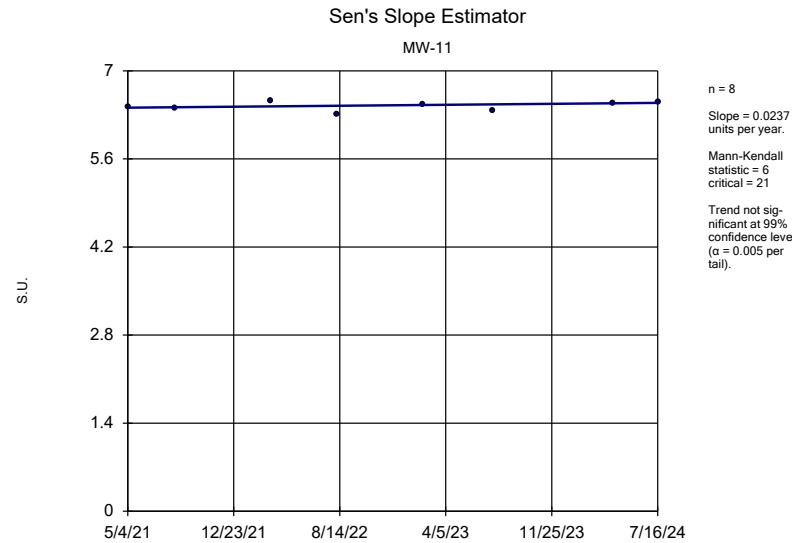
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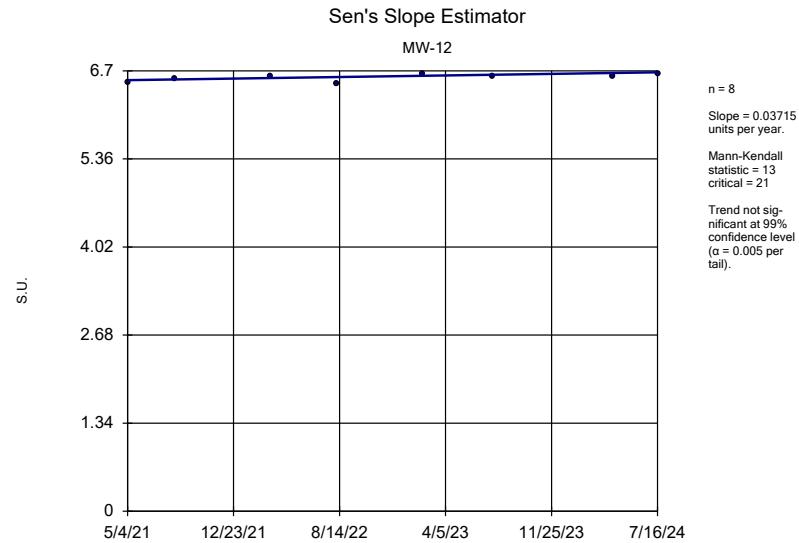
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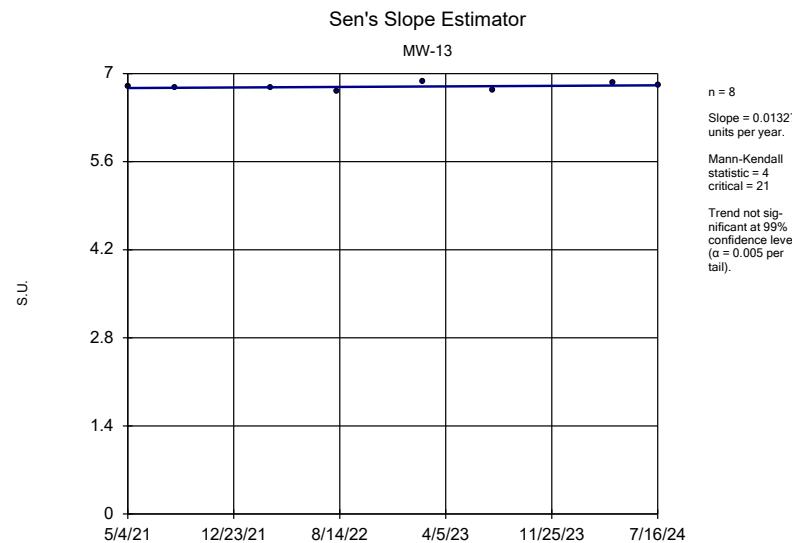
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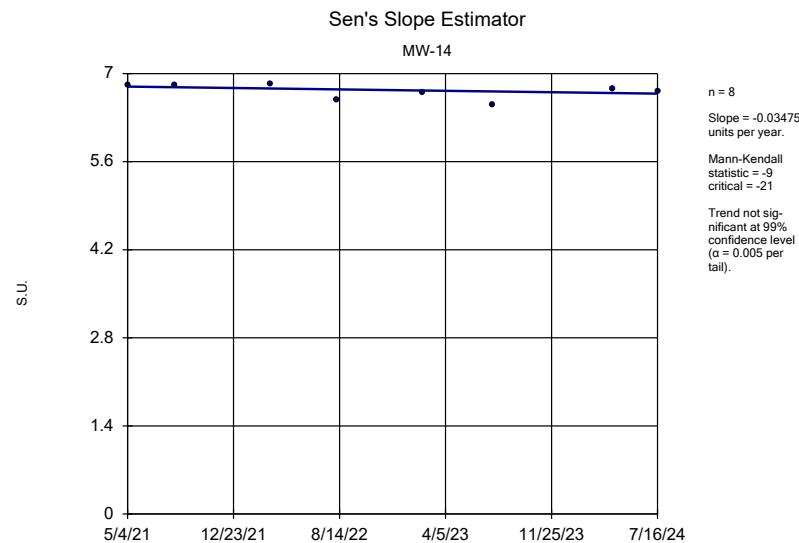
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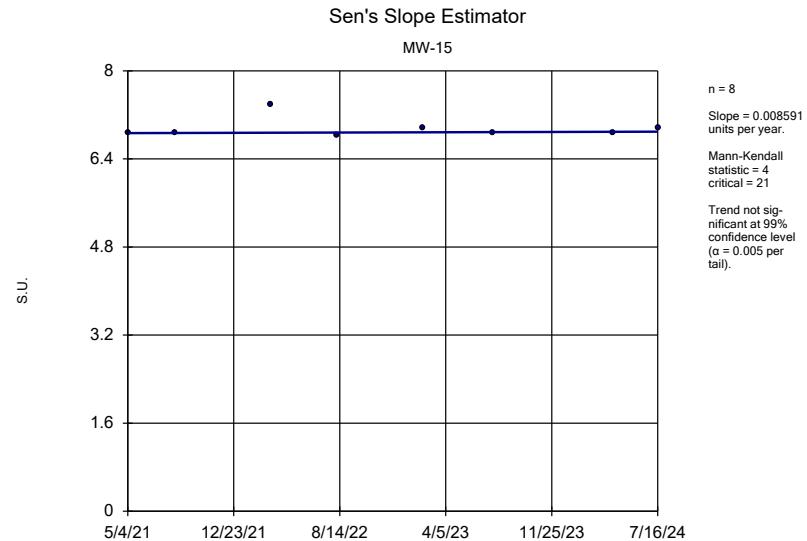
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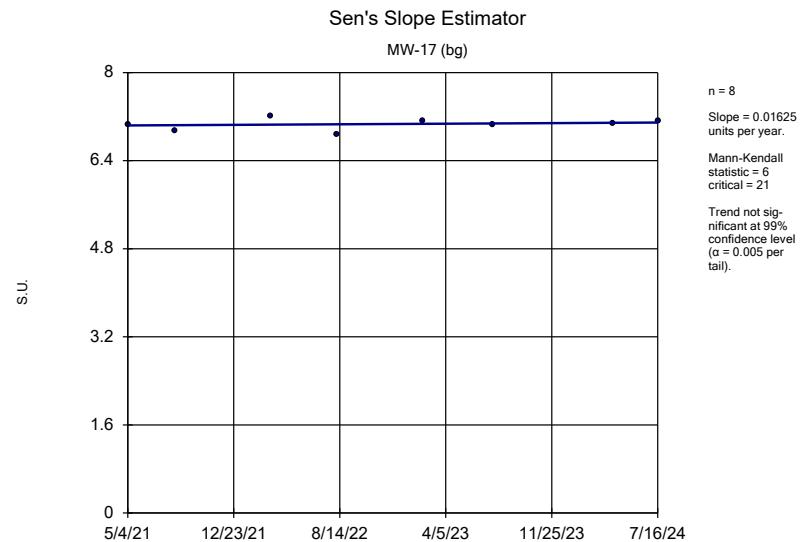
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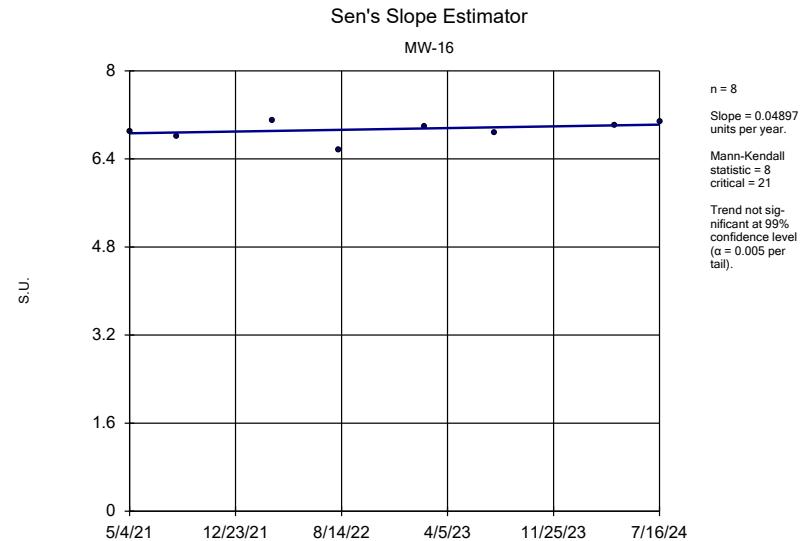
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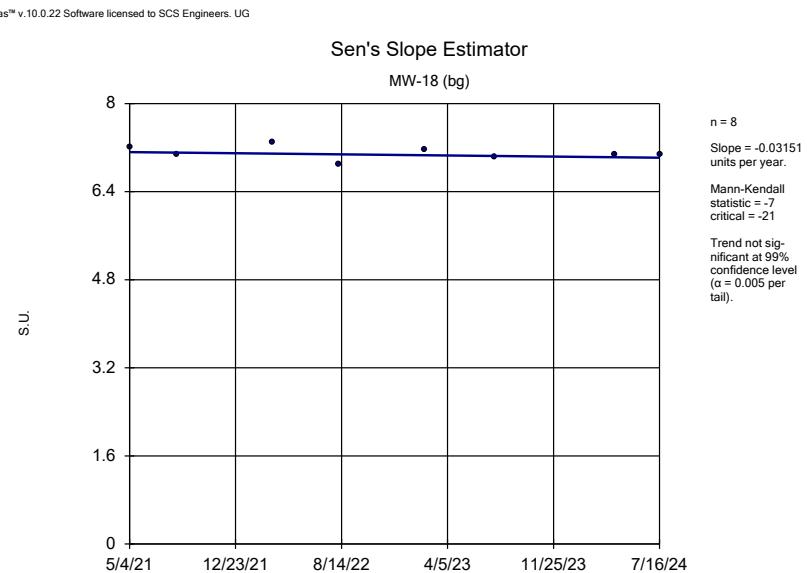
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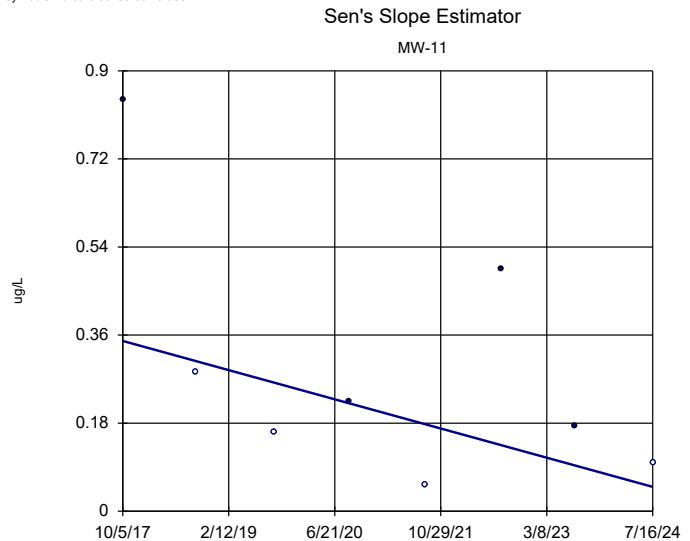


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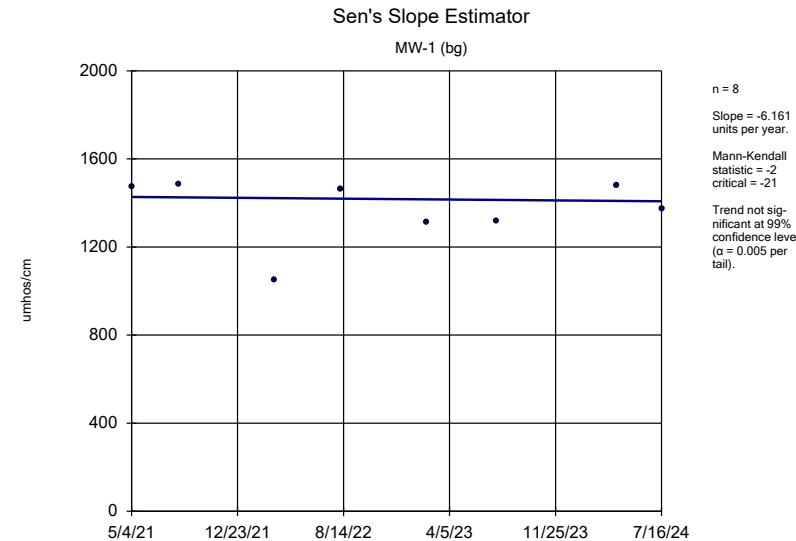


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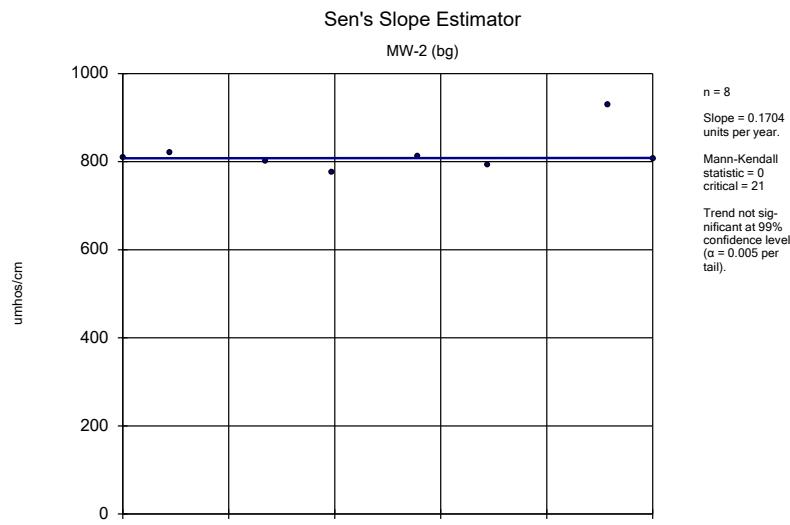
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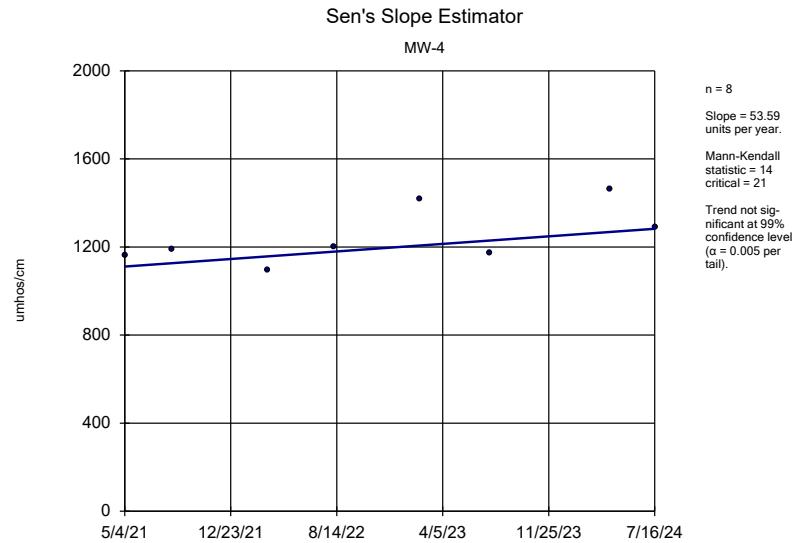


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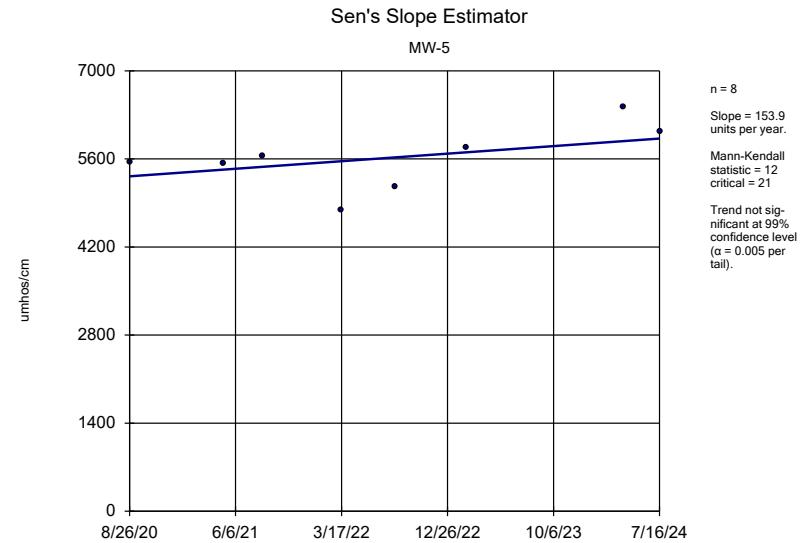


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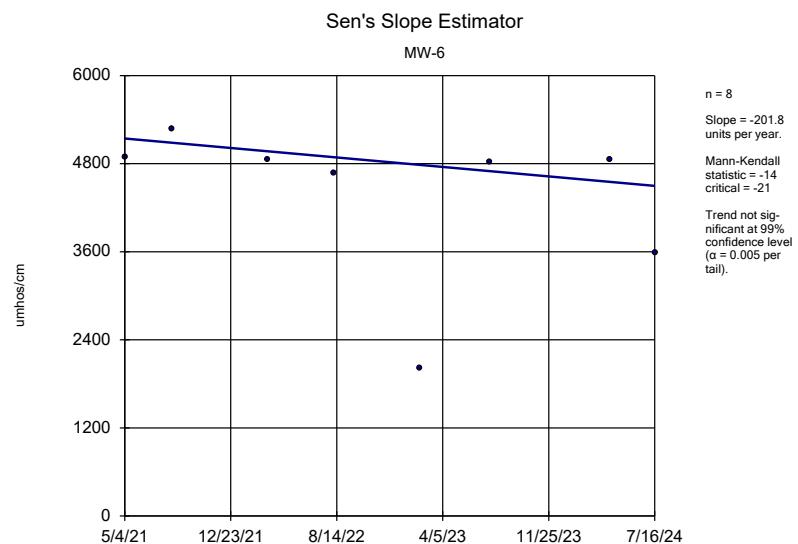




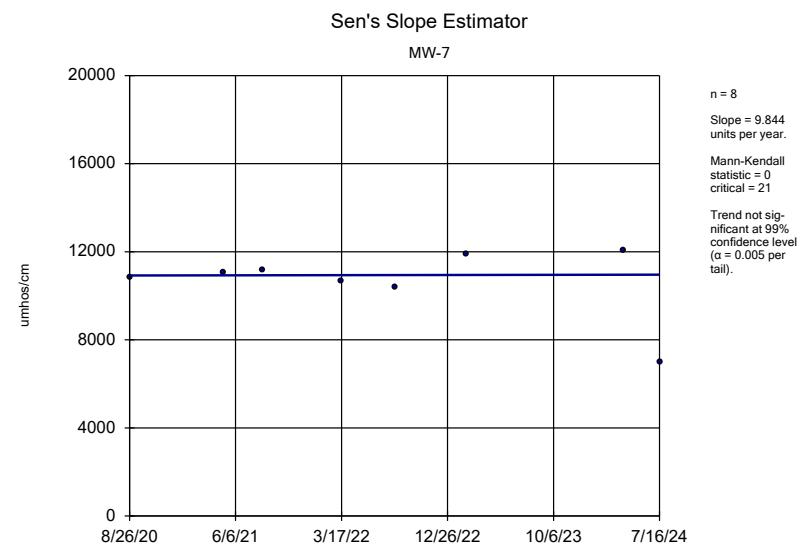
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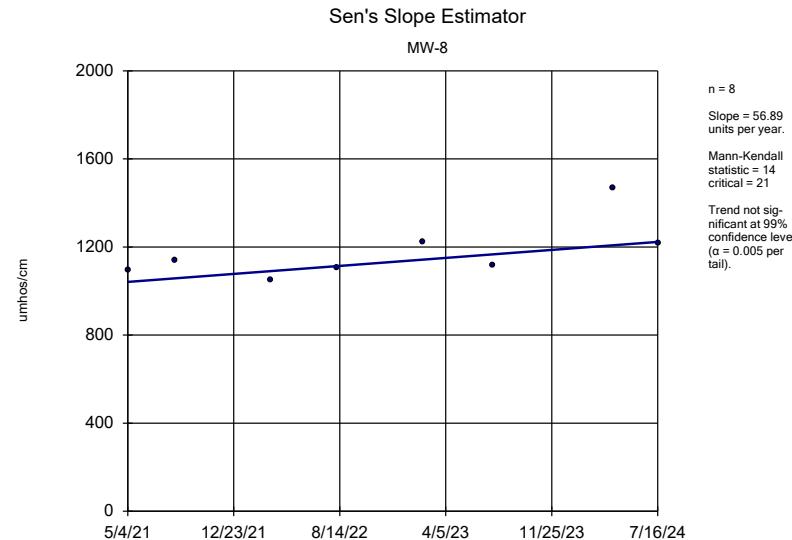
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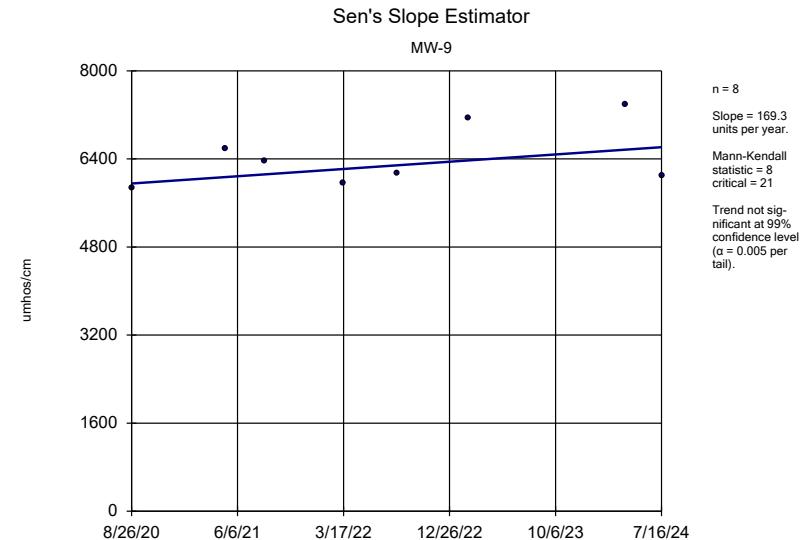
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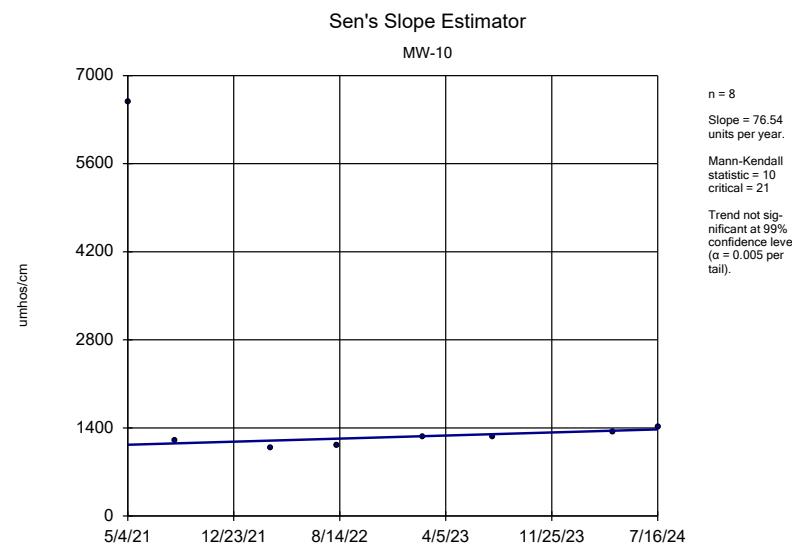
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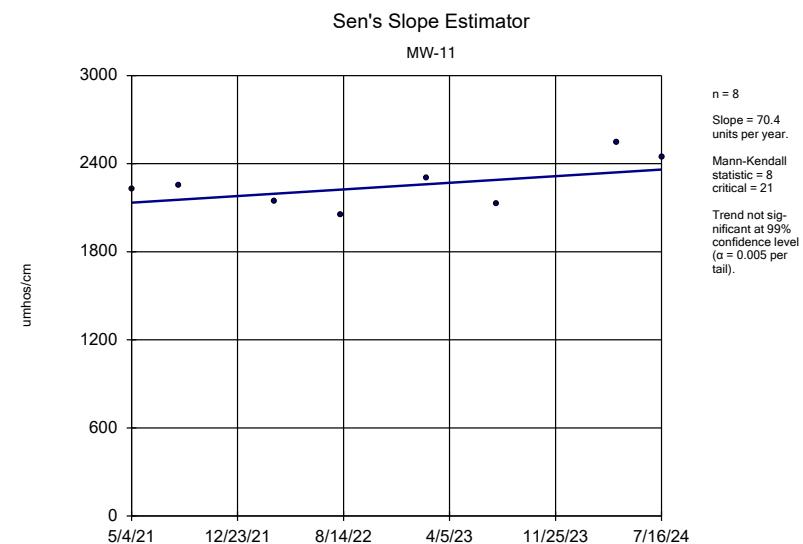
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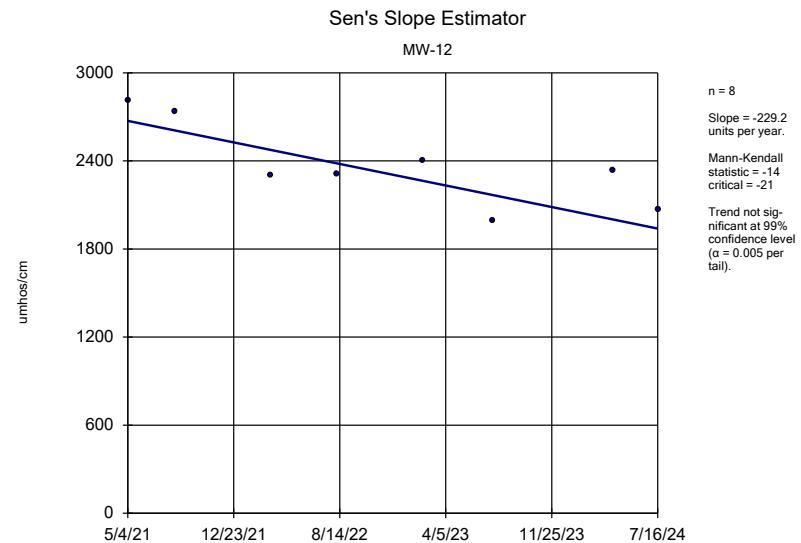
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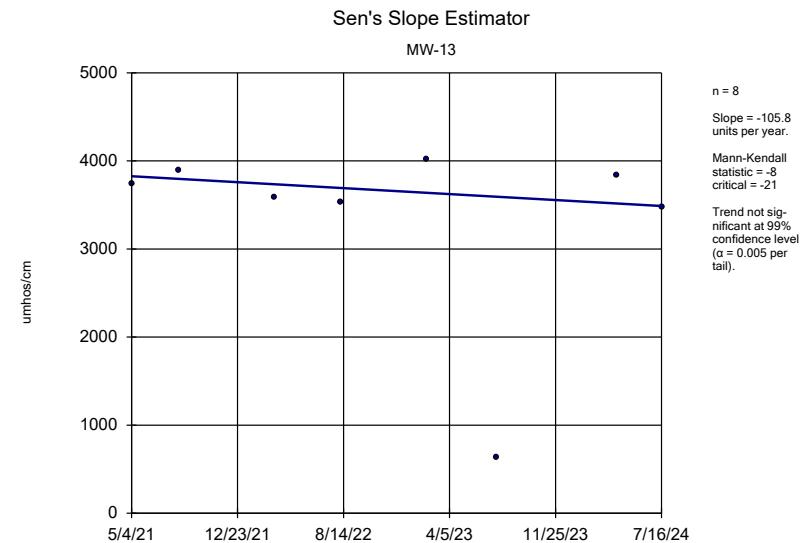
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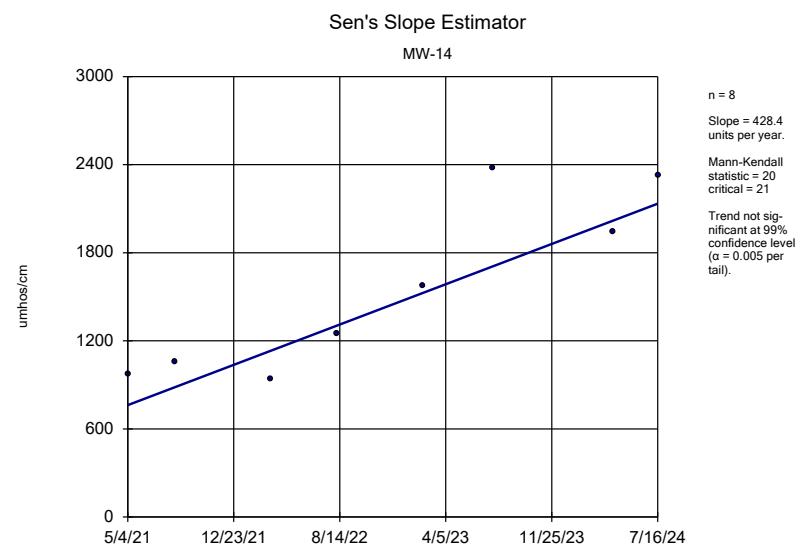
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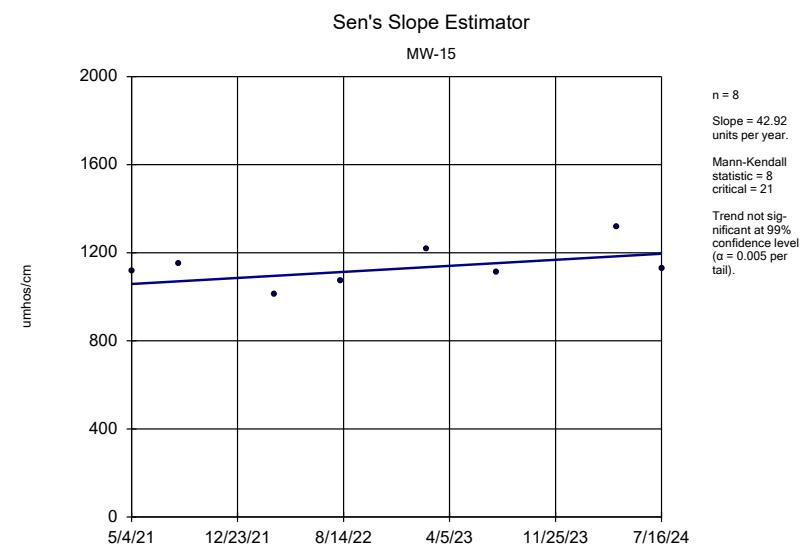
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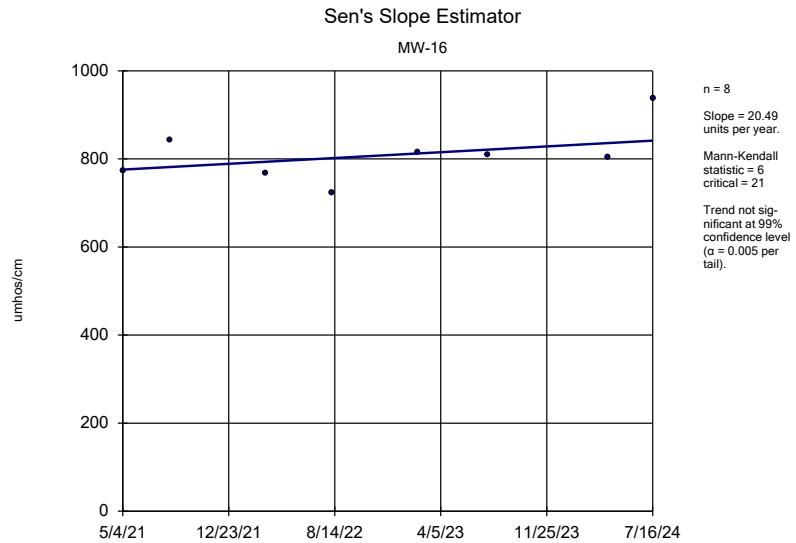
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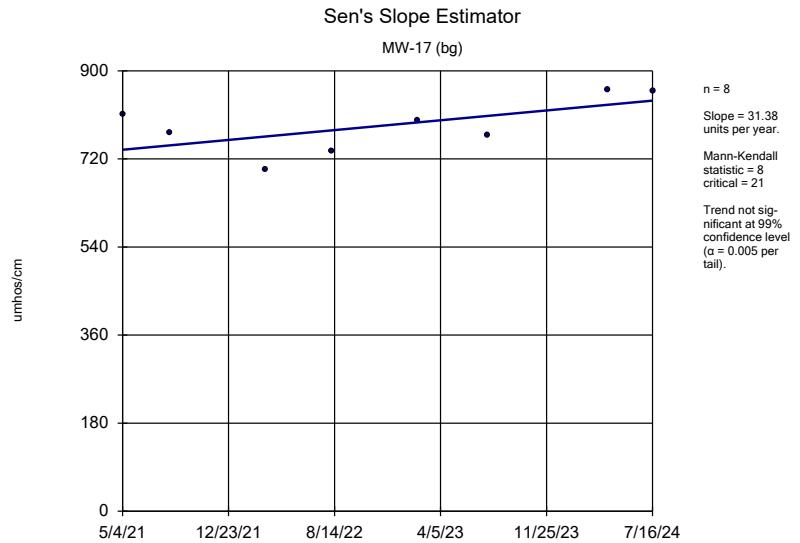
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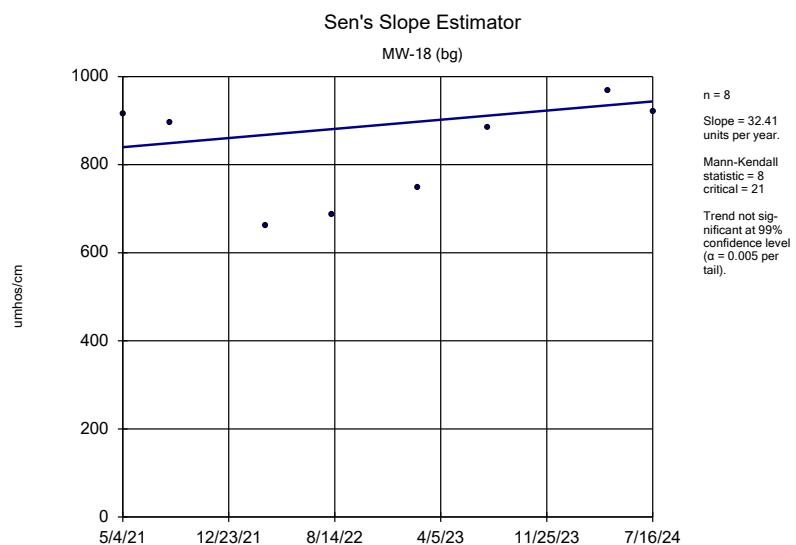
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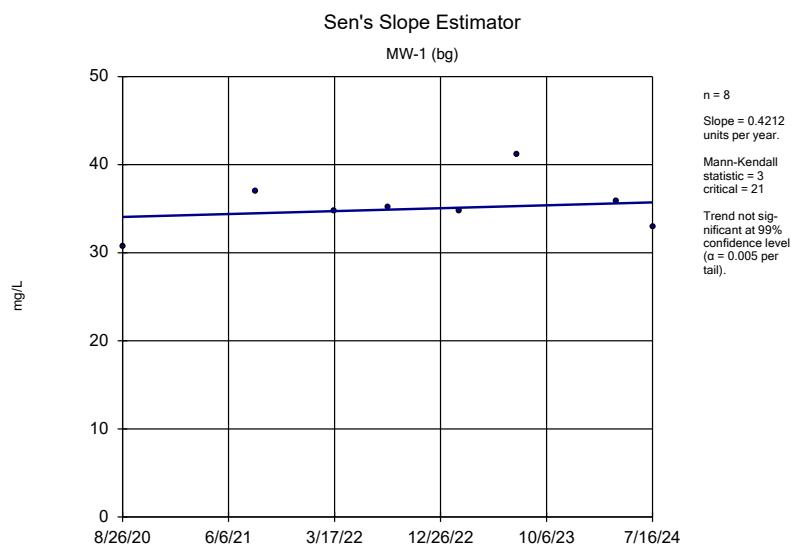
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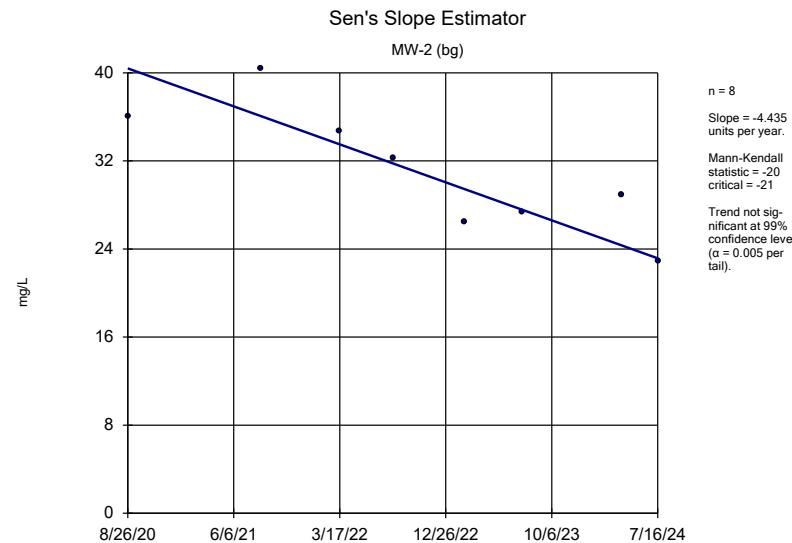
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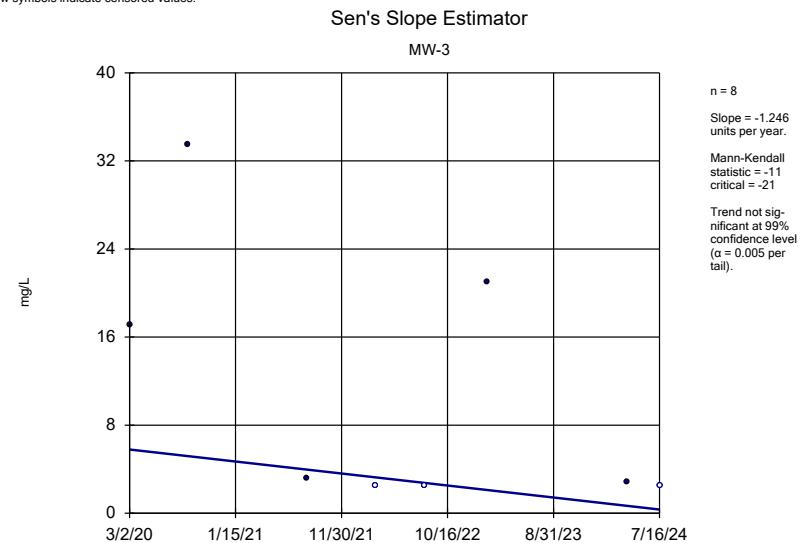
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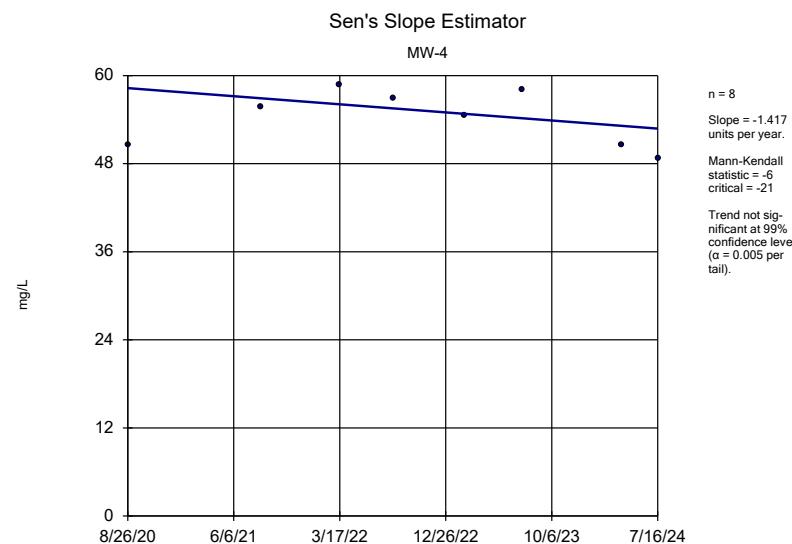
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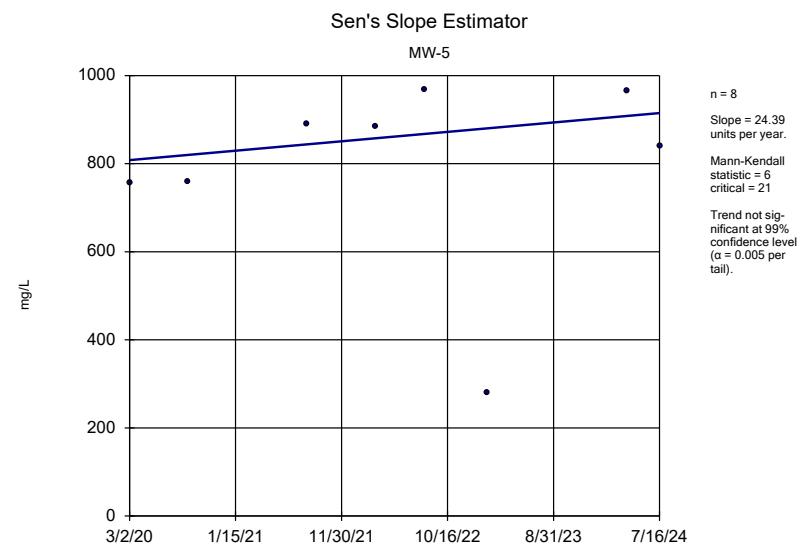
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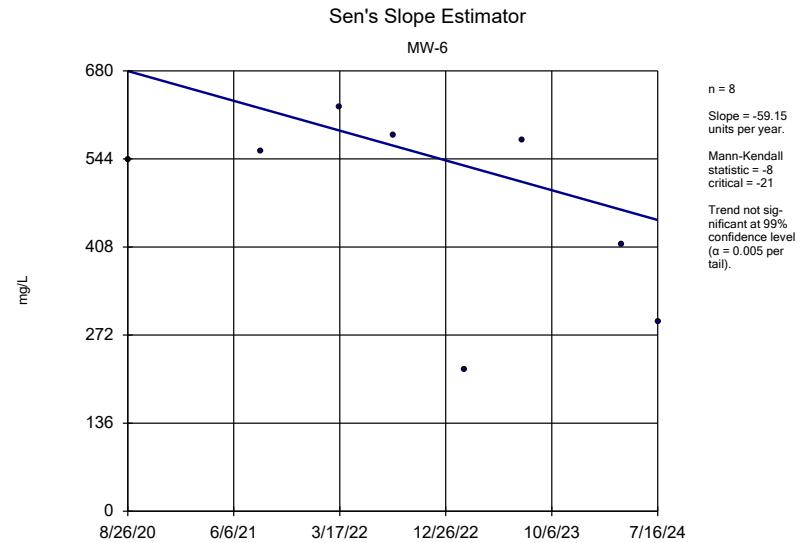
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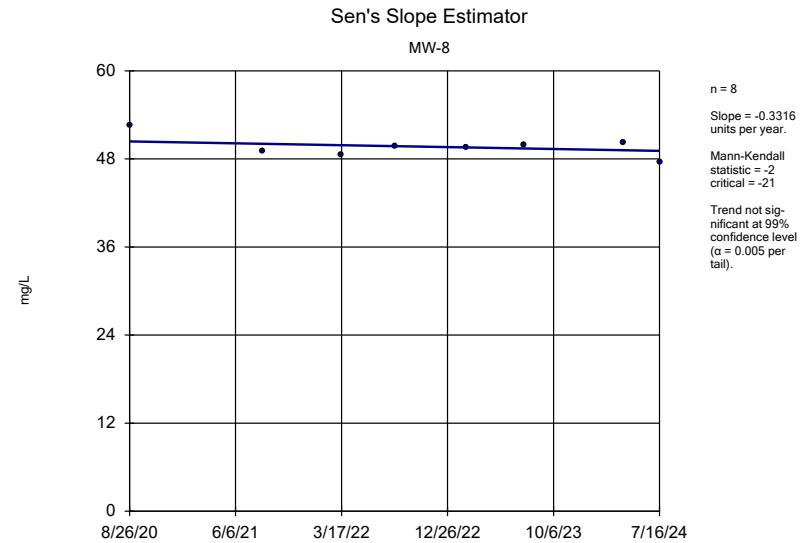
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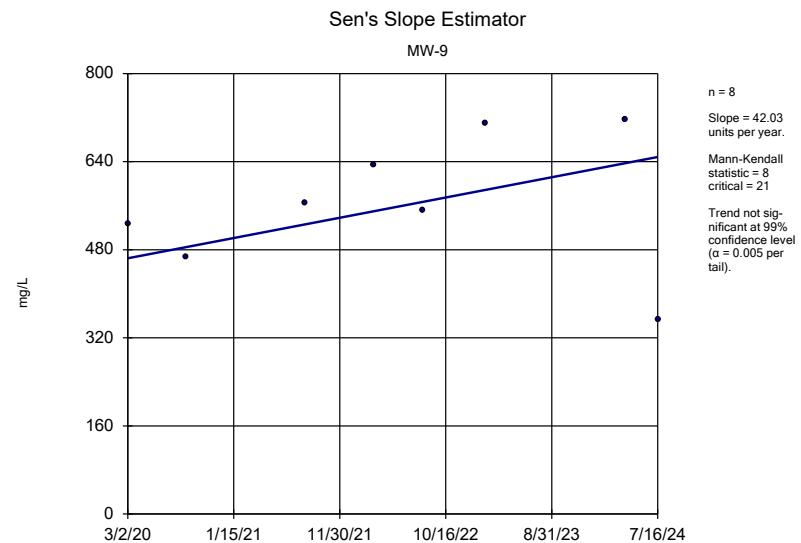
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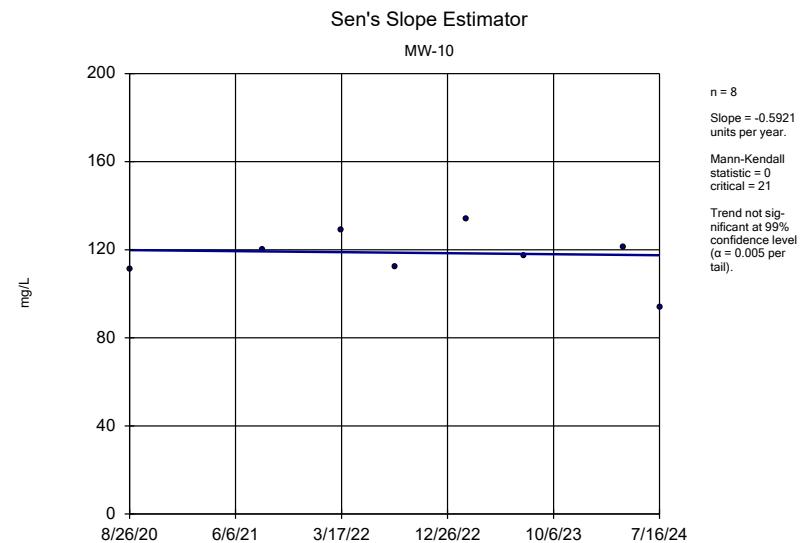
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR



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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR

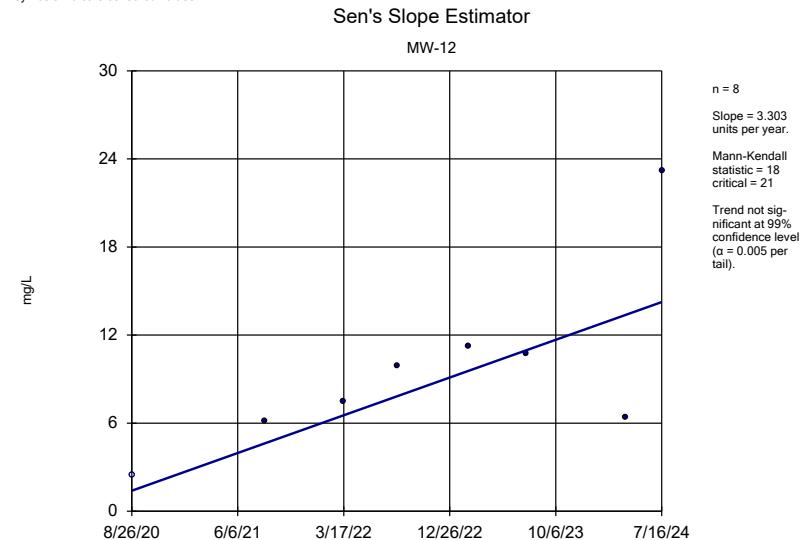


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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR

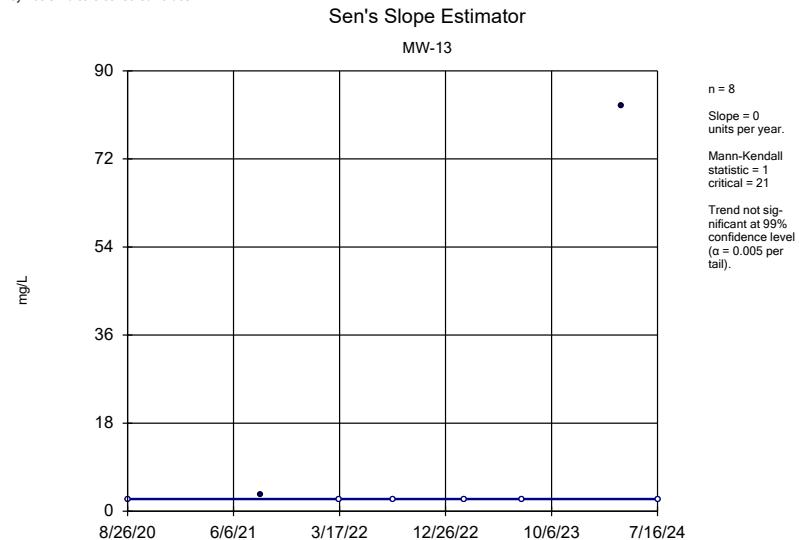


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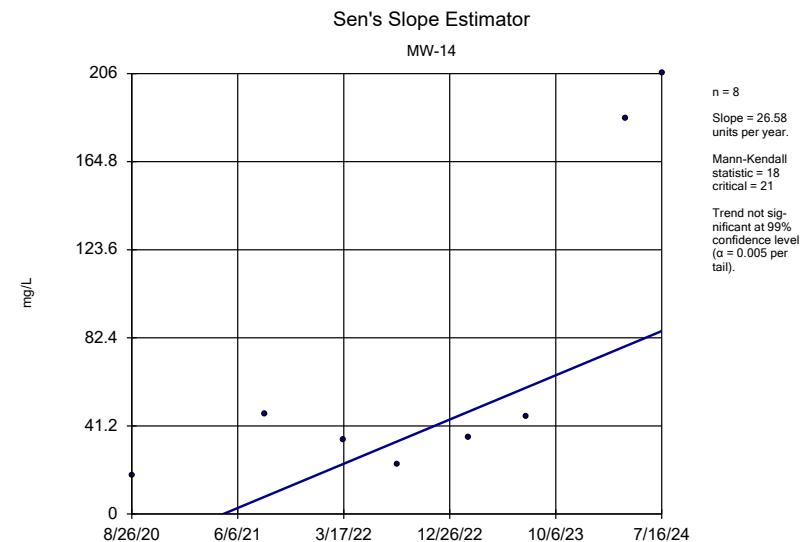
Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG  
Hollow symbols indicate censored values.



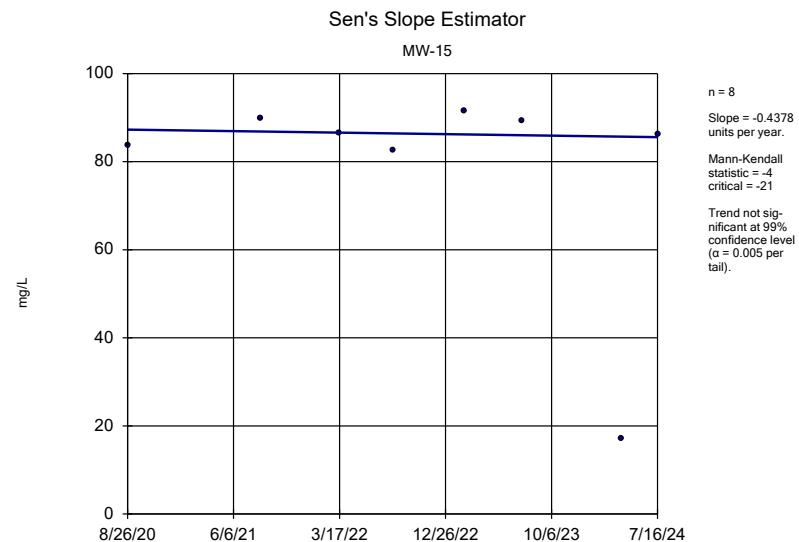
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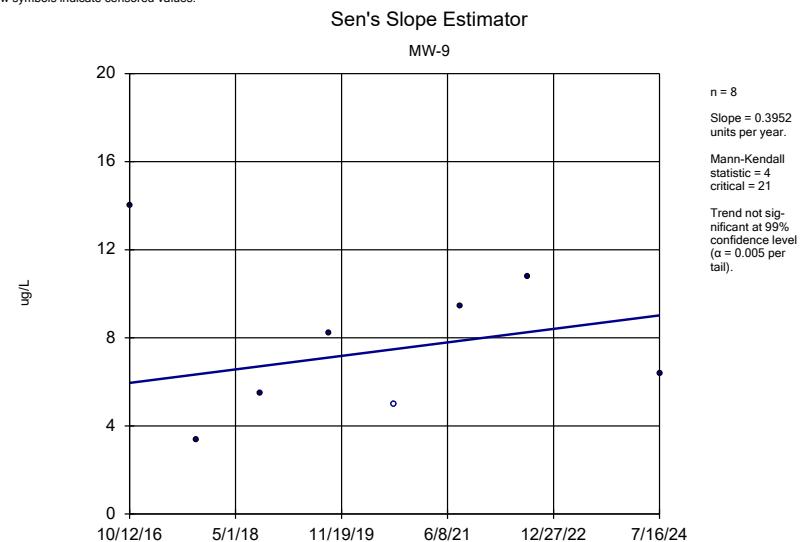
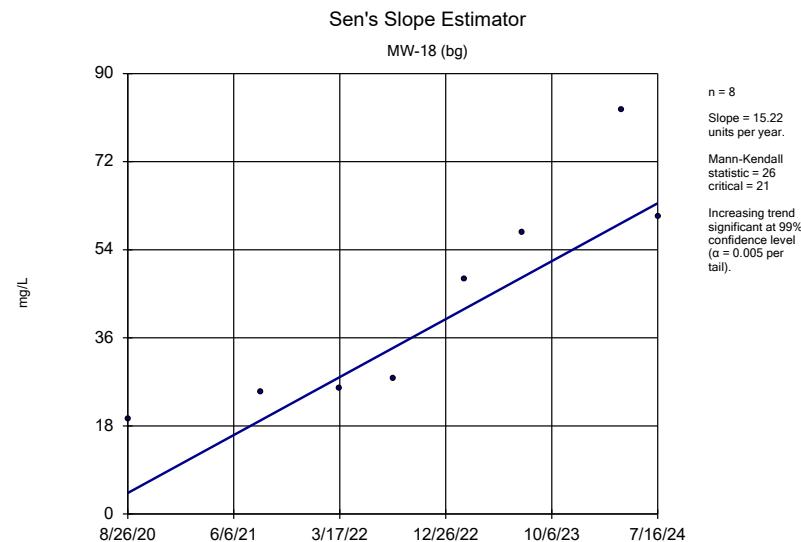
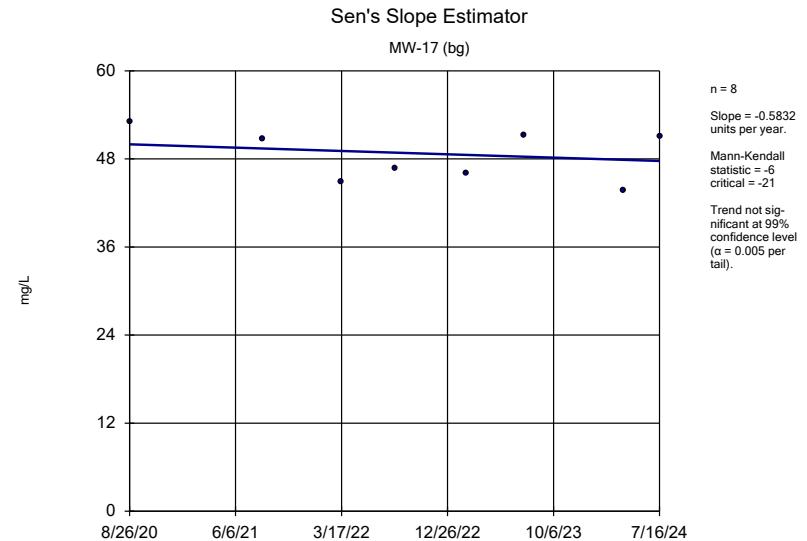
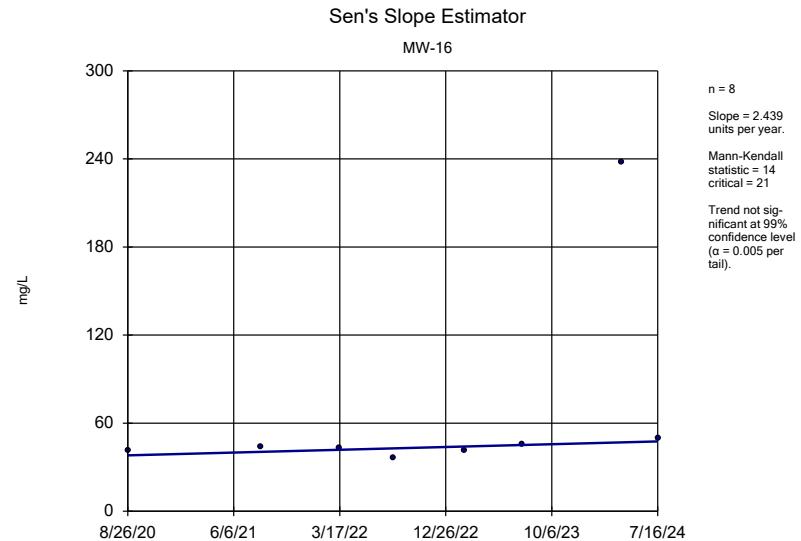


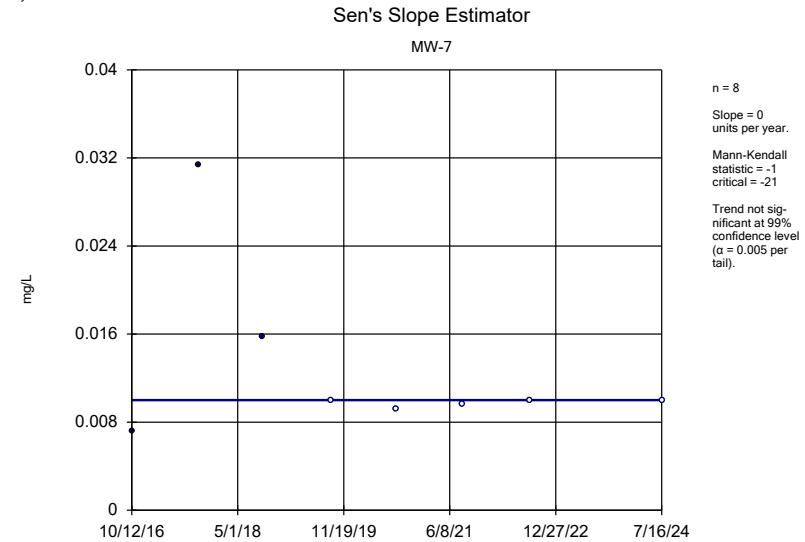
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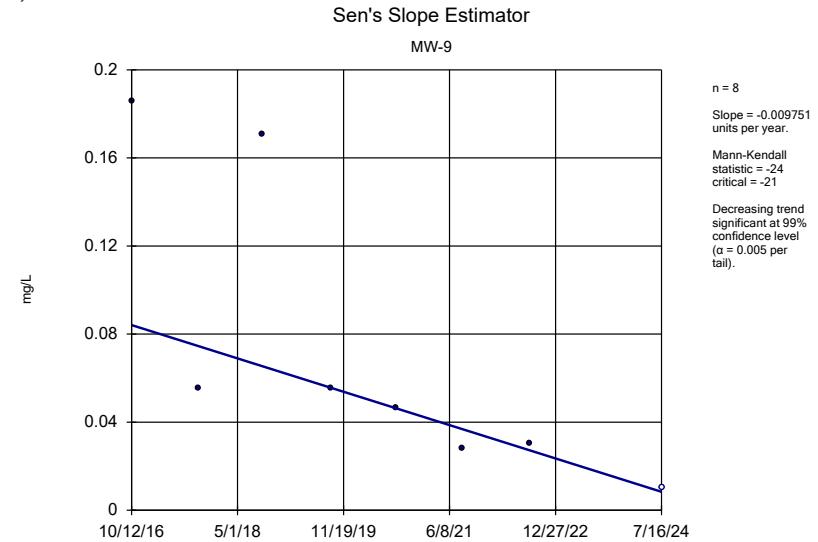
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Constituent: Total Phenols Analysis Run 9/24/2024 9:41 AM View: 2024AWQR - Mann Kendall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR



Constituent: Total Phenols Analysis Run 9/24/2024 9:41 AM View: 2024AWQR - Mann Kendall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO-AM 2024AWQR

Attachment B  
Control Limits

# Unconsolidated Control Limit Spring 2024

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas Printed 8/28/2024, 3:33 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)	<b>MW-11</b>	<b>0.031</b>	n/a	4/9/2024	<b>0.0762</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.007008</b>	<b>0.012</b>	<b>47.06</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Arsenic (mg/L)	MW-14	0.031	n/a	4/9/2024	0.000738J	No	34	MW-18,MW-2	0.007008	0.012	47.06	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-16	0.031	n/a	4/9/2024	0.0009375J	No	34	MW-18,MW-2	0.007008	0.012	47.06	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-3	0.031	n/a	4/9/2024	0.0164	No	34	MW-18,MW-2	0.007008	0.012	47.06	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	<b>MW-5</b>	<b>0.031</b>	n/a	4/9/2024	<b>0.0509</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.007008</b>	<b>0.012</b>	<b>47.06</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Arsenic (mg/L)	<b>MW-7</b>	<b>0.031</b>	n/a	4/9/2024	<b>0.0446</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.007008</b>	<b>0.012</b>	<b>47.06</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Arsenic (mg/L)	<b>MW-9</b>	<b>0.031</b>	n/a	4/9/2024	<b>0.0907</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.007008</b>	<b>0.012</b>	<b>47.06</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	<b>MW-11</b>	<b>0.4418</b>	n/a	4/9/2024	<b>1.12</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	MW-13	0.4418	n/a	4/9/2024	0.288	No	34	MW-18,MW-2	0.2949	0.07346	0	None	No	0.0003117	Param Inter 1 of 2
<b>Boron (mg/L)</b>	<b>MW-14</b>	<b>0.4418</b>	n/a	4/9/2024	<b>0.774</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	MW-16	0.4418	n/a	4/9/2024	0.3435	No	34	MW-18,MW-2	0.2949	0.07346	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	<b>MW-3</b>	<b>0.4418</b>	n/a	4/9/2024	<b>4.03</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	<b>MW-5</b>	<b>0.4418</b>	n/a	4/9/2024	<b>20.1</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	<b>MW-7</b>	<b>0.4418</b>	n/a	4/9/2024	<b>34.6</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Boron (mg/L)	<b>MW-9</b>	<b>0.4418</b>	n/a	4/9/2024	<b>11.4</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.2949</b>	<b>0.07346</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	<b>MW-11</b>	<b>49.89</b>	n/a	4/9/2024	<b>156</b>	Yes	128	<b>MW-18,MW-2</b>	<b>20.08</b>	<b>14.91</b>	<b>11.72</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-14	49.89	n/a	4/9/2024	12.4	No	128	MW-18,MW-2	20.08	14.91	11.72	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-16	49.89	n/a	4/9/2024	5.19	No	128	MW-18,MW-2	20.08	14.91	11.72	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-3	49.89	n/a	4/9/2024	40.4	No	128	MW-18,MW-2	20.08	14.91	11.72	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	<b>MW-5</b>	<b>49.89</b>	n/a	4/9/2024	<b>141</b>	Yes	128	<b>MW-18,MW-2</b>	<b>20.08</b>	<b>14.91</b>	<b>11.72</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	<b>MW-7</b>	<b>49.89</b>	n/a	4/9/2024	<b>429</b>	Yes	128	<b>MW-18,MW-2</b>	<b>20.08</b>	<b>14.91</b>	<b>11.72</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	<b>MW-9</b>	<b>49.89</b>	n/a	4/9/2024	<b>511</b>	Yes	128	<b>MW-18,MW-2</b>	<b>20.08</b>	<b>14.91</b>	<b>11.72</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-11</b>	<b>73.46</b>	n/a	4/9/2024	<b>129</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-13</b>	<b>73.46</b>	n/a	4/9/2024	<b>97.1</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-14</b>	<b>73.46</b>	n/a	4/9/2024	<b>195</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-16</b>	<b>73.46</b>	n/a	4/9/2024	<b>194.1</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-3</b>	<b>73.46</b>	n/a	4/9/2024	<b>420</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-5</b>	<b>73.46</b>	n/a	4/9/2024	<b>166</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	<b>MW-7</b>	<b>73.46</b>	n/a	4/9/2024	<b>168</b>	Yes	128	<b>MW-18,MW-2</b>	<b>26.75</b>	<b>23.36</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Chloride (mg/L)	MW-9	73.46	n/a	4/9/2024	27.3	No	128	MW-18,MW-2	26.75	23.36	0	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	<b>MW-11</b>	<b>0.004394</b>	n/a	4/9/2024	<b>0.0194</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.001439</b>	<b>0.001478</b>	<b>11.76</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Cobalt (mg/L)	MW-14	0.004394	n/a	4/9/2024	0.000196J	No	34	MW-18,MW-2	0.001439	0.001478	11.76	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	<b>MW-3</b>	<b>0.004394</b>	n/a	4/9/2024	<b>0.00454</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.001439</b>	<b>0.001478</b>	<b>11.76</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Cobalt (mg/L)	<b>MW-5</b>	<b>0.004394</b>	n/a	4/9/2024	<b>0.00805</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.001439</b>	<b>0.001478</b>	<b>11.76</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Cobalt (mg/L)	<b>MW-7</b>	<b>0.004394</b>	n/a	4/9/2024	<b>0.00571</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.001439</b>	<b>0.001478</b>	<b>11.76</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Cobalt (mg/L)	MW-9	0.004394	n/a	4/9/2024	0.00286	No	34	MW-18,MW-2	0.001439	0.001478	11.76	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	<b>MW-11</b>	<b>1.608</b>	n/a	4/9/2024	<b>69.4</b>	Yes	10	<b>MW-18,MW-2</b>	<b>0.4447</b>	<b>0.5814</b>	<b>40</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Iron (mg/L)	MW-13	1.608	n/a	4/9/2024	0.0563J	No	10	MW-18,MW-2	0.4447	0.5814	40	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-16	1.608	n/a	4/9/2024	0.06245J	No	10	MW-18,MW-2	0.4447	0.5814	40	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	<b>MW-3</b>	<b>1.608</b>	n/a	4/9/2024	<b>31.2</b>	Yes	10	<b>MW-18,MW-2</b>	<b>0.4447</b>	<b>0.5814</b>	<b>40</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Iron (mg/L)	<b>MW-5</b>	<b>1.608</b>	n/a	4/9/2024	<b>38.9</b>	Yes	10	<b>MW-18,MW-2</b>	<b>0.4447</b>	<b>0.5814</b>	<b>40</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Iron (mg/L)	MW-7	1.608	n/a	4/9/2024	0.583J	No	10	MW-18,MW-2	0.4447	0.5814	40	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-11</b>	<b>38.14</b>	n/a	4/9/2024	<b>97.8</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-13</b>	<b>38.14</b>	n/a	4/9/2024	<b>53.1</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-14</b>	<b>38.14</b>	n/a	4/9/2024	<b>84</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-3</b>	<b>38.14</b>	n/a	4/9/2024	<b>96.3</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-5</b>	<b>38.14</b>	n/a	4/9/2024	<b>463</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-7</b>	<b>38.14</b>	n/a	4/9/2024	<b>321</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Magnesium (mg/L)	<b>MW-9</b>	<b>38.14</b>	n/a	4/9/2024	<b>265</b>	Yes	34	<b>MW-18,MW-2</b>	<b>30.35</b>	<b>3.894</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Manganese (mg/L)	MW-11	1.078	n/a	4/9/2024	1.04	No	34	MW-18,MW-2	0.4491	0.3146	0	None	No	0.0003117	Param Inter 1 of 2

# Unconsolidated Control Limit Spring 2024

Page 2

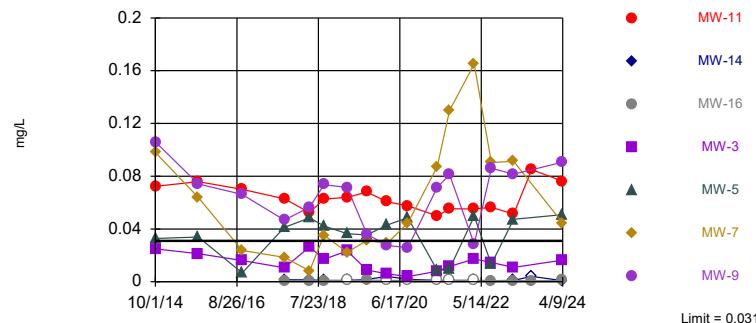
Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO HMSP Sanitas   Printed 8/28/2024, 3:33 PM

<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>
Manganese (mg/L)	MW-14	1.078	n/a	4/9/2024	0.0805	No	34	MW-18,MW-2	0.4491	0.3146	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-3	<b>1.078</b>	n/a	<b>4/9/2024</b>	<b>5.68</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.4491</b>	<b>0.3146</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Manganese (mg/L)	MW-5	<b>1.078</b>	n/a	<b>4/9/2024</b>	<b>2.43</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.4491</b>	<b>0.3146</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Manganese (mg/L)	MW-7	1.078	n/a	4/9/2024	0.463	No	34	MW-18,MW-2	0.4491	0.3146	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-9	<b>1.078</b>	n/a	<b>4/9/2024</b>	<b>1.48</b>	Yes	34	<b>MW-18,MW-2</b>	<b>0.4491</b>	<b>0.3146</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-11	<b>5.386</b>	n/a	<b>4/9/2024</b>	<b>32.1</b>	Yes	128	<b>MW-18,MW-2</b>	<b>1.96</b>	<b>1.713</b>	<b>17.19</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-3	5.386	n/a	4/9/2024	2.22	No	128	MW-18,MW-2	1.96	1.713	17.19	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-5	<b>5.386</b>	n/a	<b>4/9/2024</b>	<b>71.4</b>	Yes	128	<b>MW-18,MW-2</b>	<b>1.96</b>	<b>1.713</b>	<b>17.19</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-7	<b>5.386</b>	n/a	<b>4/9/2024</b>	<b>104</b>	Yes	128	<b>MW-18,MW-2</b>	<b>1.96</b>	<b>1.713</b>	<b>17.19</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-9	<b>5.386</b>	n/a	<b>4/9/2024</b>	<b>326</b>	Yes	128	<b>MW-18,MW-2</b>	<b>1.96</b>	<b>1.713</b>	<b>17.19</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
pH (S.U.)	MW-11	7.884	6.207	4/9/2024	6.48	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-13	7.884	6.207	4/9/2024	6.86	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-14	7.884	6.207	4/9/2024	6.76	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-16	7.884	6.207	4/9/2024	7.01	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-3	7.884	6.207	4/9/2024	6.79	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-5	7.884	6.207	4/9/2024	6.58	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-7	7.884	6.207	4/9/2024	7.09	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-9	7.884	6.207	4/9/2024	6.72	No	128	MW-18,MW-2	7.045	0.4193	0	None	No	0.0001558	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-11	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>2541</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-13	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>3831</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-14	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>1940</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-16	1422	n/a	4/9/2024	805	No	128	MW-18,MW-2	925.5	248.4	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-3	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>3382</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-5	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>6432</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-7	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>12081</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-9	<b>1422</b>	n/a	<b>4/9/2024</b>	<b>7381</b>	Yes	128	<b>MW-18,MW-2</b>	<b>925.5</b>	<b>248.4</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-13	<b>78.47</b>	n/a	<b>4/9/2024</b>	<b>82.8</b>	Yes	28	<b>MW-18,MW-2</b>	<b>37</b>	<b>20.74</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-14	<b>78.47</b>	n/a	<b>4/9/2024</b>	<b>185</b>	Yes	28	<b>MW-18,MW-2</b>	<b>37</b>	<b>20.74</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-16	<b>78.47</b>	n/a	<b>4/9/2024</b>	<b>237.8</b>	Yes	28	<b>MW-18,MW-2</b>	<b>37</b>	<b>20.74</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-3	78.47	n/a	4/9/2024	2.88J	No	28	MW-18,MW-2	37	20.74	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-5	<b>78.47</b>	n/a	<b>4/9/2024</b>	<b>965</b>	Yes	28	<b>MW-18,MW-2</b>	<b>37</b>	<b>20.74</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-9	<b>78.47</b>	n/a	<b>4/9/2024</b>	<b>717</b>	Yes	28	<b>MW-18,MW-2</b>	<b>37</b>	<b>20.74</b>	<b>0</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

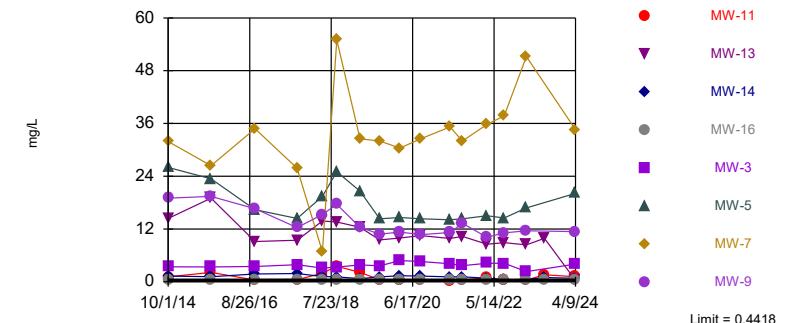


Background Data Summary: Mean=0.007008, Std. Dev.=0.012, n=34, 47.06% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Exceeds Limit: MW-11, MW-14, MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.2949, Std. Dev.=0.07346, n=34. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

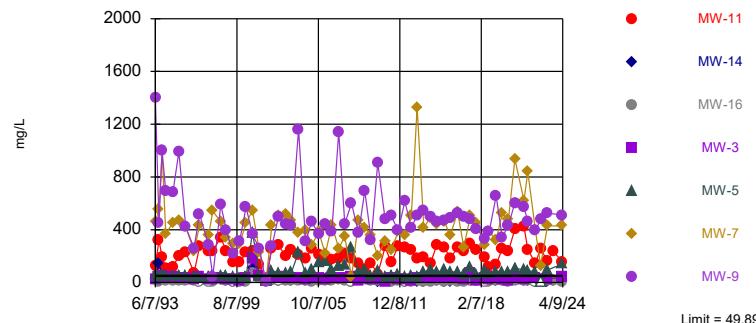
Constituent: Arsenic Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Boron Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

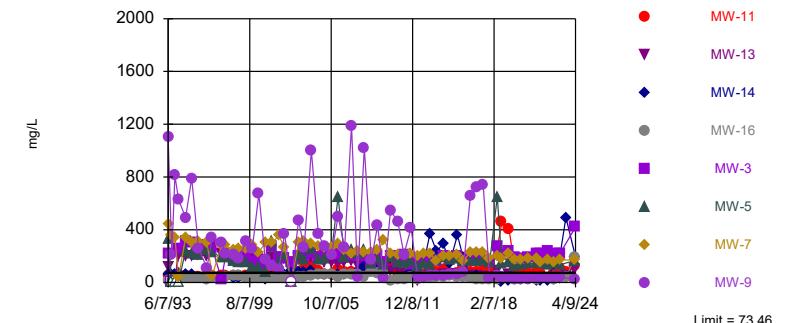


Background Data Summary: Mean=20.08, Std. Dev.=14.91, n=128, 11.72% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-14, MW-16, MW-3, MW-5, MW-7

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=26.75, Std. Dev.=23.36, n=128. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

Constituent: Chemical Oxygen Demand Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limi  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

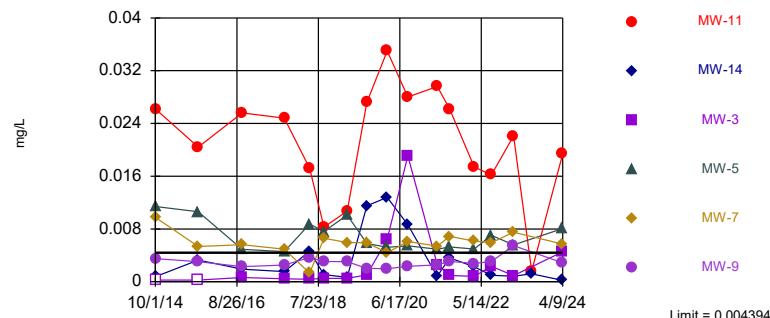
Constituent: Chloride Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-3, MW-5, MW-7

Prediction Limit  
Interwell Parametric



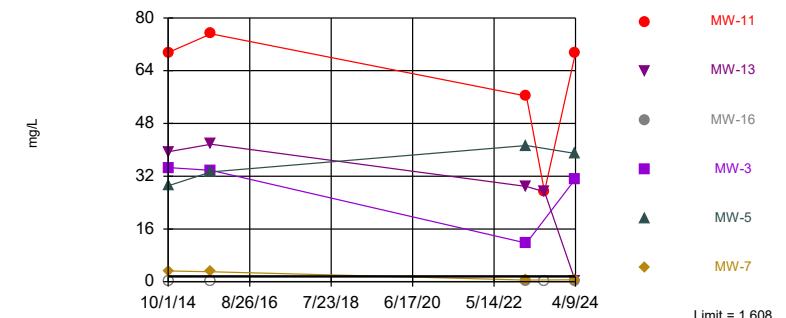
Background Data Summary: Mean=0.001439, Std. Dev.=0.001478, n=34, 11.76% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-3, MW-5

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.4447, Std. Dev.=0.5814, n=10, 40% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

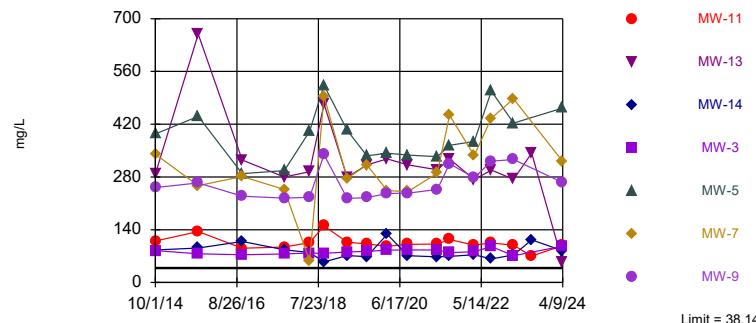
Constituent: Cobalt Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Iron Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Exceeds Limit: MW-11, MW-13, MW-14, MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

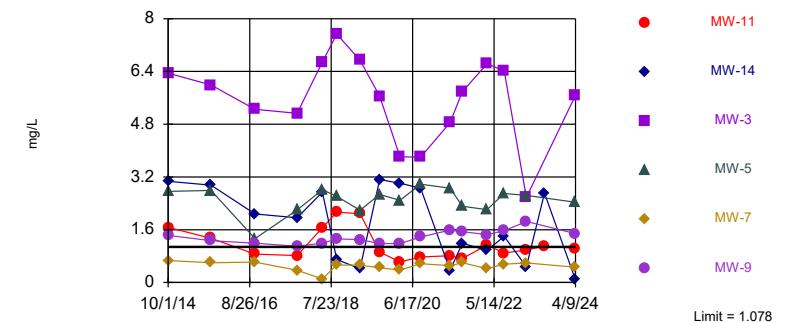


Background Data Summary: Mean=30.35, Std. Dev.=3.894, n=34. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Exceeds Limit: MW-3, MW-5, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.4491, Std. Dev.=0.3146, n=34. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

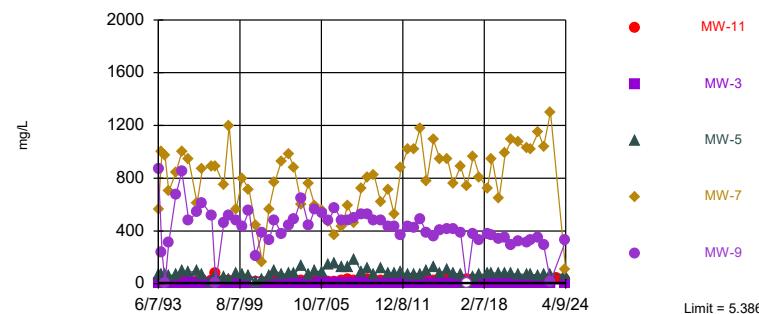
Constituent: Magnesium Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spr  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Manganese Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spr  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

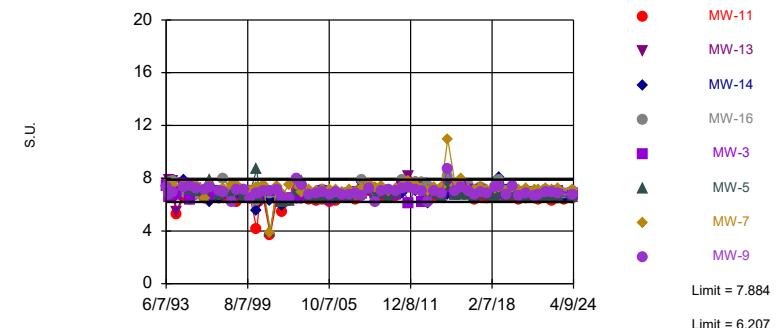


Background Data Summary: Mean=1.96, Std. Dev.=1.713, n=128, 17.19% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 5 points to limit. Assumes 8 future values. Kappa overridden to 2.

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Within Limits

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=7.045, Std. Dev.=0.4193, n=128. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

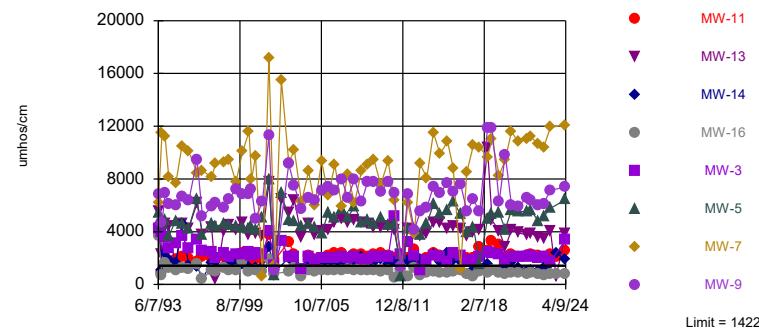
Constituent: Nitrogen, Ammonia Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unc  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: pH Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

Exceeds Limit: MW-11, MW-13, MW-14,  
MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

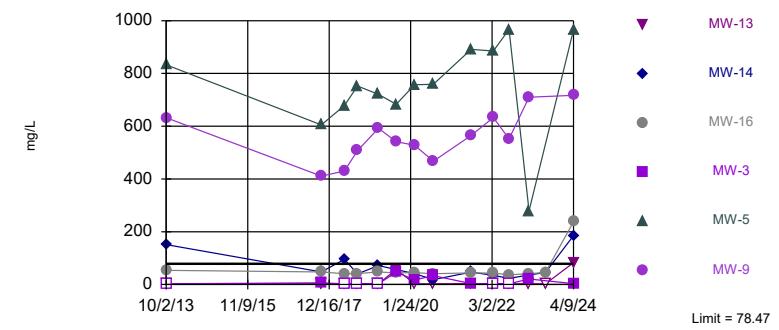


Background Data Summary: Mean=925.5, Std. Dev.=248.4, n=128. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Exceeds Limit: MW-13, MW-14, MW-16,  
MW-5, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=37, Std. Dev.=20.74, n=28. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: Specific Conductance Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-U  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Sulfate Analysis Run 8/28/2024 3:32 PM View: 2024AWQR - Control Limit-Unconsol-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

# Bedrock Control Limit Spring 2024

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas Printed 8/28/2024, 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)	MW-12	0.001172	n/a	4/9/2024	0.0895	Yes	34	MW-1,MW-17	0.0009644	0.000104	85.29	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-15	0.001172	n/a	4/9/2024	0.102	Yes	34	MW-1,MW-17	0.0009644	0.000104	85.29	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-6	0.001172	n/a	4/9/2024	0.0295	Yes	34	MW-1,MW-17	0.0009644	0.000104	85.29	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-10	0.9976	n/a	4/9/2024	0.519	No	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-12	0.9976	n/a	4/9/2024	1.87	Yes	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-15	0.9976	n/a	4/9/2024	7.68	Yes	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-4	0.9976	n/a	4/9/2024	0.332	No	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-6	0.9976	n/a	4/9/2024	14.1	Yes	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-8	0.9976	n/a	4/9/2024	0.772	No	34	MW-1,MW-17	0.4022	0.2977	2.941	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-10	19.3	n/a	4/9/2024	5.36	No	98	MW-1,MW-17	6.675	6.315	54.08	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-12	19.3	n/a	4/9/2024	25.2	Yes	98	MW-1,MW-17	6.675	6.315	54.08	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-15	19.3	n/a	4/9/2024	102	Yes	98	MW-1,MW-17	6.675	6.315	54.08	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-6	19.3	n/a	4/9/2024	85.8	Yes	98	MW-1,MW-17	6.675	6.315	54.08	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-10	225.4	n/a	4/9/2024	49.3	No	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-12	225.4	n/a	4/9/2024	302	Yes	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-15	225.4	n/a	4/9/2024	78.7	No	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-4	225.4	n/a	4/9/2024	186	No	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-6	225.4	n/a	4/9/2024	317	Yes	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-8	225.4	n/a	4/9/2024	176	No	97	MW-1,MW-17	90.23	67.59	0	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-12	0.0005694	n/a	4/9/2024	0.00158	Yes	34	MW-1,MW-17	0.000284	0.0001427	47.06	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-15	0.0005694	n/a	4/9/2024	0.00183	Yes	34	MW-1,MW-17	0.000284	0.0001427	47.06	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-6	0.0005694	n/a	4/9/2024	0.00386	Yes	34	MW-1,MW-17	0.000284	0.0001427	47.06	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-8	0.0005694	n/a	4/9/2024	0.000382J	No	34	MW-1,MW-17	0.000284	0.0001427	47.06	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-10	0.05	n/a	4/9/2024	0.206	Yes	10	MW-1,MW-17	0.05	0	100	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-12	0.05	n/a	4/9/2024	26.8	Yes	10	MW-1,MW-17	0.05	0	100	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-15	0.05	n/a	4/9/2024	19.6	Yes	10	MW-1,MW-17	0.05	0	100	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-4	0.05	n/a	4/9/2024	0.0535J	No	10	MW-1,MW-17	0.05	0	100	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-6	0.05	n/a	4/9/2024	14.3	Yes	10	MW-1,MW-17	0.05	0	100	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-10	57.75	n/a	4/9/2024	51.4	No	34	MW-1,MW-17	39.21	9.271	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-12	57.75	n/a	4/9/2024	69.9	Yes	34	MW-1,MW-17	39.21	9.271	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-15	57.75	n/a	4/9/2024	278	Yes	34	MW-1,MW-17	39.21	9.271	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-6	57.75	n/a	4/9/2024	324	Yes	34	MW-1,MW-17	39.21	9.271	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-10	1.166	n/a	4/9/2024	0.209	No	34	MW-1,MW-17	0.2597	0.453	50	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-12	1.166	n/a	4/9/2024	0.942	No	34	MW-1,MW-17	0.2597	0.453	50	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-6	1.166	n/a	4/9/2024	0.319	No	34	MW-1,MW-17	0.2597	0.453	50	None	No	0.0003117	Param Inter 1 of 2
Nickel (mg/L)	MW-6	0.005074	n/a	4/9/2024	0.0458	Yes	32	MW-1,MW-17	0.00292	0.001077	68.75	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-10	1.306	n/a	4/9/2024	0.195J	No	98	MW-1,MW-17	0.2658	0.5202	84.69	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-12	1.306	n/a	4/9/2024	16.1	Yes	98	MW-1,MW-17	0.2658	0.5202	84.69	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-15	1.306	n/a	4/9/2024	68.5	Yes	98	MW-1,MW-17	0.2658	0.5202	84.69	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-6	1.306	n/a	4/9/2024	128	Yes	98	MW-1,MW-17	0.2658	0.5202	84.69	None	No	0.0003117	Param Inter 1 of 2
pH (S.U.)	MW-10	7.777	6.225	4/9/2024	6.72	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-12	7.777	6.225	4/9/2024	6.62	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-15	7.777	6.225	4/9/2024	6.88	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-4	7.777	6.225	4/9/2024	6.92	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-6	7.777	6.225	4/9/2024	6.62	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-8	7.777	6.225	4/9/2024	6.98	No	99	MW-1,MW-17	7.001	0.3881	0	None	No	0.0001558	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-10	1596	n/a	4/9/2024	1342	No	100	MW-1,MW-17	1082	257.2	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-12	1596	n/a	4/9/2024	2337	Yes	100	MW-1,MW-17	1082	257.2	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-15	1596	n/a	4/9/2024	1316	No	100	MW-1,MW-17	1082	257.2	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-4	1596	n/a	4/9/2024	1464	No	100	MW-1,MW-17	1082	257.2	0	None	No	0.0003117	Param Inter 1 of 2

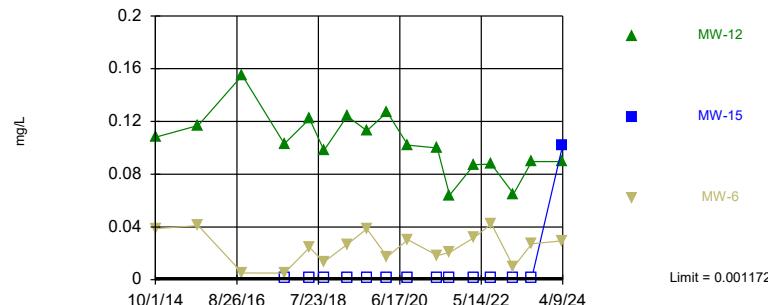
# Bedrock Control Limit Spring 2024

Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO HMSP Sanitas   Printed 8/28/2024, 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>
Specific Conductance (umhos/cm)	<b>MW-6</b>	<b>1596</b>	n/a	4/9/2024	<b>4852</b>	Yes	100	MW-1,MW-17	1082	257.2	0	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-8	1596	n/a	4/9/2024	1467	No	100	MW-1,MW-17	1082	257.2	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	<b>MW-10</b>	<b>70.74</b>	n/a	4/9/2024	<b>121</b>	Yes	27	MW-1,MW-17	<b>42.57</b>	<b>14.09</b>	<b>3.704</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-12	70.74	n/a	4/9/2024	6.43	No	27	MW-1,MW-17	42.57	14.09	3.704	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-15	70.74	n/a	4/9/2024	17.2	No	27	MW-1,MW-17	42.57	14.09	3.704	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-4	70.74	n/a	4/9/2024	50.6	No	27	MW-1,MW-17	42.57	14.09	3.704	None	No	0.0003117	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-6</b>	<b>70.74</b>	n/a	<b>4/9/2024</b>	<b>412</b>	Yes	27	<b>MW-1,MW-17</b>	<b>42.57</b>	<b>14.09</b>	<b>3.704</b>	None	No	<b>0.0003117</b>	Param Inter 1 of 2
Sulfate (mg/L)	MW-8	70.74	n/a	4/9/2024	50.2	No	27	MW-1,MW-17	42.57	14.09	3.704	None	No	0.0003117	Param Inter 1 of 2

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MW-12, MW-15, MW-6

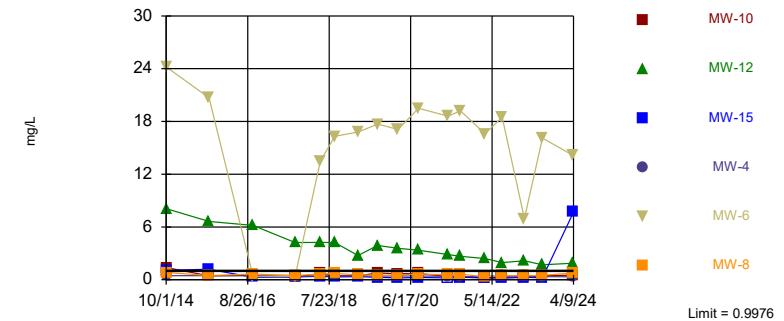
Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.0009644, Std. Dev.=0.000104, n=34, 85.29% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MW-12, MW-15, MW-6

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.4022, Std. Dev.=0.2977, n=34, 2.941% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

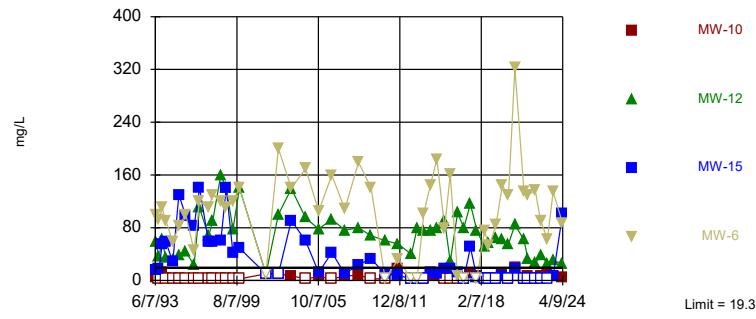
Constituent: Arsenic Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Boron Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-15, MW-6

Prediction Limit  
Interwell Parametric

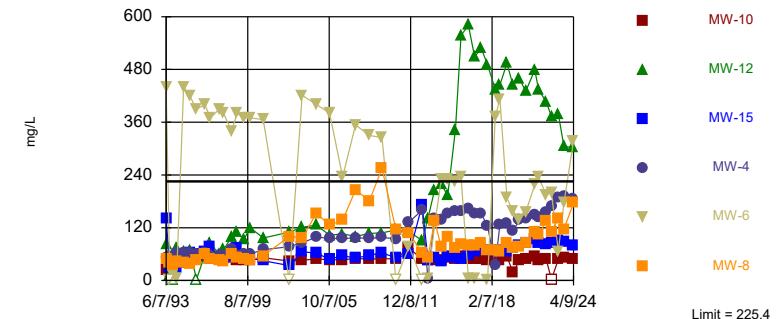


Background Data Summary: Mean=6.675, Std. Dev.=6.315, n=98, 54.08% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-6

Prediction Limit  
Interwell Parametric



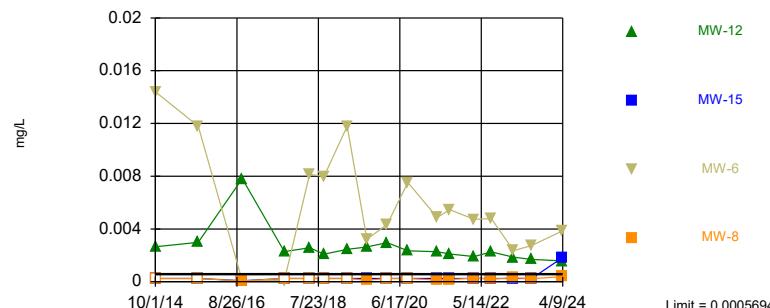
Background Data Summary: Mean=90.23, Std. Dev.=67.59, n=97. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: Chemical Oxygen Demand Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limi  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Chloride Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MW-12, MW-15, MW-6

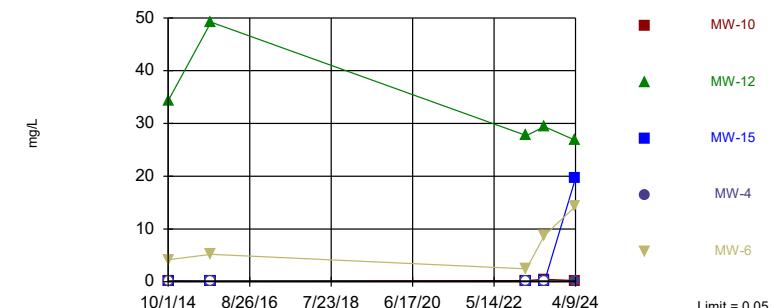
Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.000284, Std. Dev.=0.0001427, n=34, 47.06% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MW-10, MW-12, MW-15, MW-6

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.05, Std. Dev.=0, n=10, 100% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 5 points to limit. Assumes 8 future values. Kappa overridden to 2.

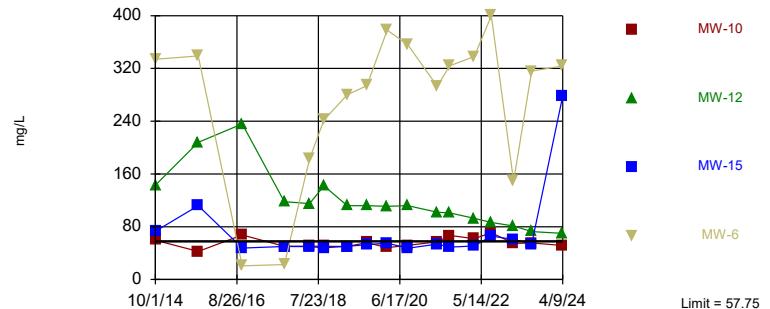
Constituent: Cobalt Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Iron Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Exceeds Limit: MW-12, MW-15, MW-6

Prediction Limit  
Interwell Parametric

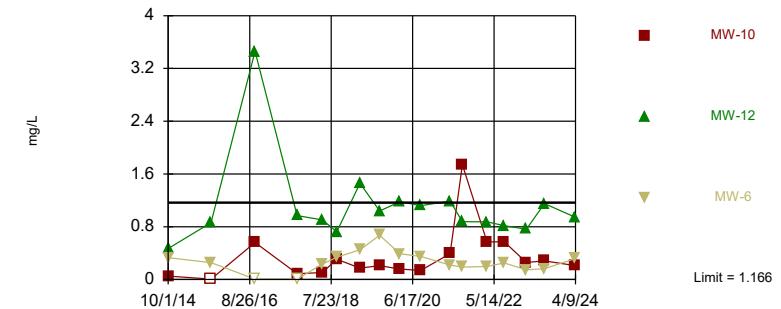


Background Data Summary: Mean=39.21, Std. Dev.=9.271, n=34. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.2597, Std. Dev.=0.453, n=34, 50% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

Constituent: Magnesium Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

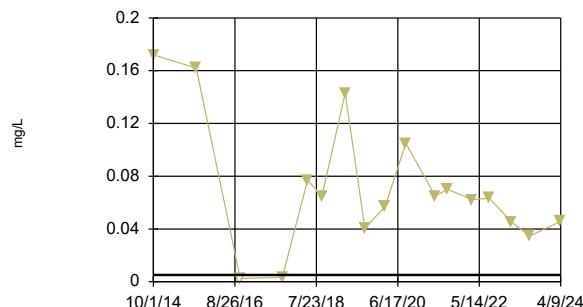
Constituent: Manganese Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-6

### Prediction Limit

Interwell Parametric

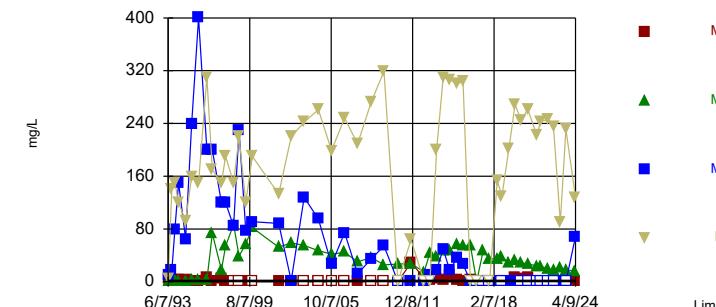


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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-15, MW-6

### Prediction Limit

Interwell Parametric

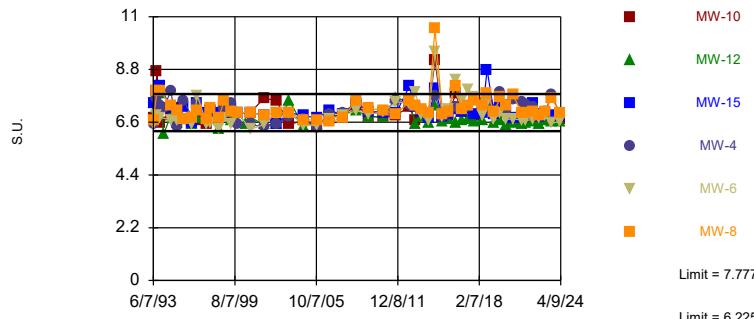


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Within Limits

### Prediction Limit

Interwell Parametric

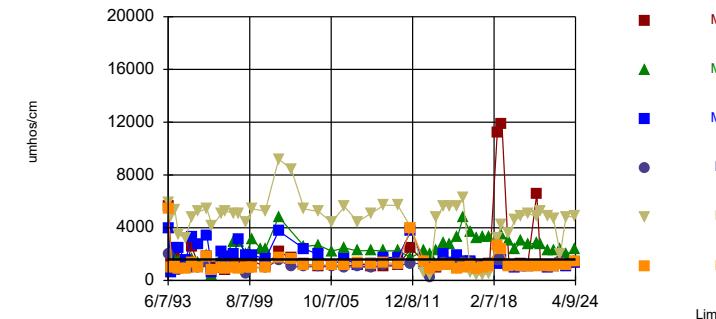


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Exceeds Limit: MW-12, MW-6

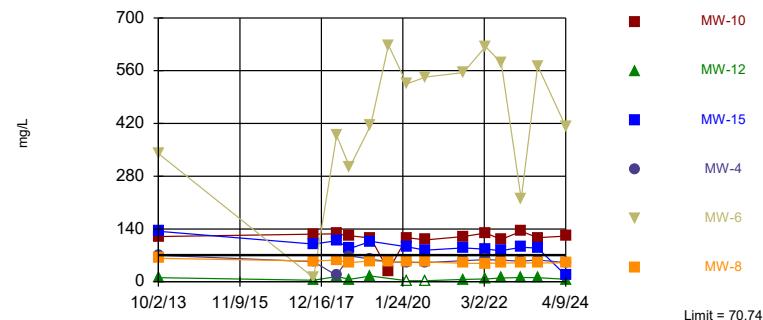
### Prediction Limit

Interwell Parametric



## Prediction Limit

Interwell Parametric



Background Data Summary: Mean=42.57, Std. Dev.=14.09, n=27, 3.704% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: Sulfate Analysis Run 8/28/2024 3:06 PM View: 2024AWQR - Control Limit-Bedrock-Spring

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

# Unconsolidated Control Limit Fall 2024

Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO HMSP Sanitas   Printed 8/28/2024, 3:43 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-11	0.03017	n/a	7/16/2024	0.0575	Yes	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-13	0.03017	n/a	7/16/2024	0.0952	Yes	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-14	0.03017	n/a	7/16/2024	0.000948J	No	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-16	0.03017	n/a	7/16/2024	0.00067J	No	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-3	0.03017	n/a	7/16/2024	0.0272	No	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
<b>Arsenic (mg/L)</b>	<b>MW-5</b>	<b>0.03017</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.051</b>	<b>Yes</b>	<b>36</b>	<b>MW-18,MW-2</b>	<b>0.006786</b>	<b>0.01169</b>	<b>47.22</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Arsenic (mg/L)	MW-7	0.03017	n/a	7/16/2024	0.0297	No	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Arsenic (mg/L)	MW-9	0.03017	n/a	7/16/2024	0.0485	Yes	36	MW-18,MW-2	0.006786	0.01169	47.22	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-11	0.4426	n/a	7/16/2024	1.74	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-13	0.4426	n/a	7/16/2024	9.79	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-14	0.4426	n/a	7/16/2024	1.54	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-16	0.4426	n/a	7/16/2024	0.264	No	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-3	0.4426	n/a	7/16/2024	3.81	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-5	0.4426	n/a	7/16/2024	22.4	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-7	0.4426	n/a	7/16/2024	31.6	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-9	0.4426	n/a	7/16/2024	12.9	Yes	36	MW-18,MW-2	0.2961	0.07324	0	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-11	49.75	n/a	7/16/2024	122	Yes	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-13	49.75	n/a	7/16/2024	114	Yes	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-14	49.75	n/a	7/16/2024	22.8	No	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-16	49.75	n/a	7/16/2024	12.6	No	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-3	49.75	n/a	7/16/2024	43.8	No	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
<b>Chemical Oxygen Demand (mg/L)</b>	<b>MW-5</b>	<b>49.75</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>217</b>	<b>Yes</b>	<b>130</b>	<b>MW-18,MW-2</b>	<b>20.08</b>	<b>14.83</b>	<b>11.54</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Chemical Oxygen Demand (mg/L)	MW-7	49.75	n/a	7/16/2024	305	Yes	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-9	49.75	n/a	7/16/2024	280	Yes	130	MW-18,MW-2	20.08	14.83	11.54	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-11	73.28	n/a	7/16/2024	293	Yes	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-13	73.28	n/a	7/16/2024	64.6	No	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-14	73.28	n/a	7/16/2024	357	Yes	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-16	73.28	n/a	7/16/2024	68.3	No	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-3	73.28	n/a	7/16/2024	298	Yes	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-5	73.28	n/a	7/16/2024	192	Yes	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-7	73.28	n/a	7/16/2024	195	Yes	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-9	73.28	n/a	7/16/2024	38.9	No	130	MW-18,MW-2	26.87	23.2	0	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-11	0.004364	n/a	7/16/2024	0.01	Yes	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-13	0.004364	n/a	7/16/2024	0.00239	No	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-14	0.004364	n/a	7/16/2024	0.00107	No	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-3	0.004364	n/a	7/16/2024	0.000835	No	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
<b>Cobalt (mg/L)</b>	<b>MW-5</b>	<b>0.004364</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.013</b>	<b>Yes</b>	<b>36</b>	<b>MW-18,MW-2</b>	<b>0.001445</b>	<b>0.00146</b>	<b>11.11</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Cobalt (mg/L)	MW-7	0.004364	n/a	7/16/2024	0.0042	No	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	MW-9	0.004364	n/a	7/16/2024	0.00349J	No	36	MW-18,MW-2	0.001445	0.00146	11.11	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-11	1.964	n/a	7/16/2024	63.6	Yes	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-13	1.964	n/a	7/16/2024	29.2	Yes	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-3	1.964	n/a	7/16/2024	42.7	Yes	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-5	1.964	n/a	7/16/2024	39.9	Yes	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-7	1.964	n/a	7/16/2024	11.1	Yes	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	MW-9	1.964	n/a	7/16/2024	0.0497J	No	12	MW-18,MW-2	0.5455	0.7094	33.33	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-11	38.09	n/a	7/16/2024	95.4	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-13	38.09	n/a	7/16/2024	263	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-14	38.09	n/a	7/16/2024	102	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-3	38.09	n/a	7/16/2024	84.9	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-5	38.09	n/a	7/16/2024	514	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2

# Unconsolidated Control Limit Fall 2024

Page 2

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas Printed 8/28/2024, 3:43 PM

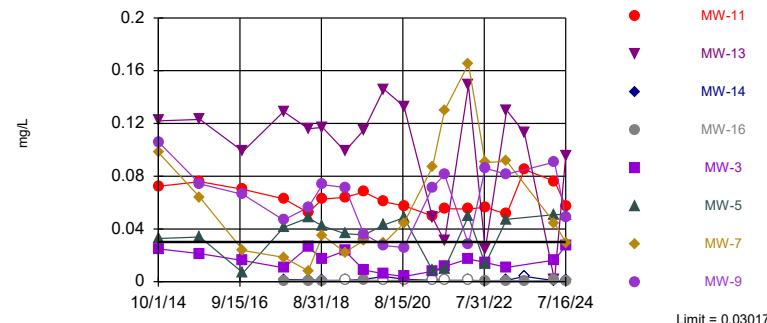
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Magnesium (mg/L)	MW-7	38.09	n/a	7/16/2024	240	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Magnesium (mg/L)	MW-9	38.09	n/a	7/16/2024	251	Yes	36	MW-18,MW-2	30.36	3.866	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-11	1.128	n/a	7/16/2024	1.3	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-13	1.128	n/a	7/16/2024	1.71	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-14	1.128	n/a	7/16/2024	1.14	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-3	1.128	n/a	7/16/2024	5.69	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-5	1.128	n/a	7/16/2024	2.2	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-7	1.128	n/a	7/16/2024	0.709	No	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-9	1.128	n/a	7/16/2024	1.13	Yes	36	MW-18,MW-2	0.465	0.3317	0	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-11	5.367	n/a	7/16/2024	26.1	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-13	5.367	n/a	7/16/2024	59.3	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-14	5.367	n/a	7/16/2024	11.5	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-3	5.367	n/a	7/16/2024	3.08	No	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-5	5.367	n/a	7/16/2024	125	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-7	5.367	n/a	7/16/2024	572	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
Nitrogen, Ammonia (mg/L)	MW-9	5.367	n/a	7/16/2024	389	Yes	130	MW-18,MW-2	1.965	1.701	16.92	None	No	0.0003117	Param Inter 1 of 2
pH (S.U.)	MW-11	7.877	6.212	7/16/2024	6.51	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-13	7.877	6.212	7/16/2024	6.81	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-14	7.877	6.212	7/16/2024	6.72	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-16	7.877	6.212	7/16/2024	7.07	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-3	7.877	6.212	7/16/2024	6.72	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-5	7.877	6.212	7/16/2024	6.72	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-7	7.877	6.212	7/16/2024	7.1	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-9	7.877	6.212	7/16/2024	6.9	No	130	MW-18,MW-2	7.045	0.4162	0	None	No	0.0001558	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-11	1418	n/a	7/16/2024	2446	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-13	1418	n/a	7/16/2024	3480	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-14	1418	n/a	7/16/2024	2324	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-16	1418	n/a	7/16/2024	938.5	No	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-3	1418	n/a	7/16/2024	2367	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-5	1418	n/a	7/16/2024	6040	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-7	1418	n/a	7/16/2024	7002	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-9	1418	n/a	7/16/2024	6097	Yes	130	MW-18,MW-2	924.6	246.7	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-14	78.62	n/a	7/16/2024	206	Yes	30	MW-18,MW-2	37.32	20.65	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-16	78.62	n/a	7/16/2024	49.5	No	30	MW-18,MW-2	37.32	20.65	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-5	78.62	n/a	7/16/2024	840	Yes	30	MW-18,MW-2	37.32	20.65	0	None	No	0.0003117	Param Inter 1 of 2
Sulfate (mg/L)	MW-9	78.62	n/a	7/16/2024	354	Yes	30	MW-18,MW-2	37.32	20.65	0	None	No	0.0003117	Param Inter 1 of 2

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-5, MW-9

Prediction Limit  
Interwell Parametric



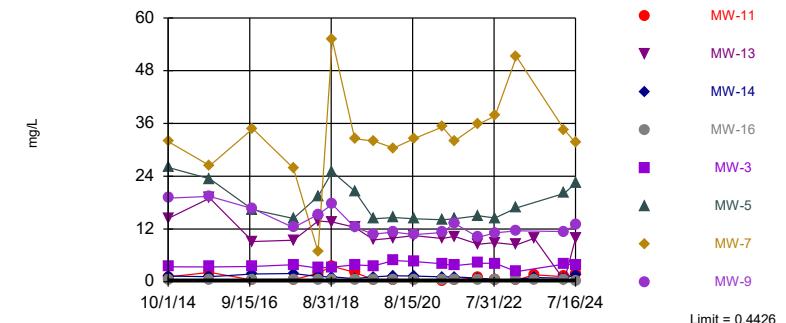
Background Data Summary: Mean=0.006786, Std. Dev.=0.01169, n=36, 47.22% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-14, MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.2961, Std. Dev.=0.07324, n=36. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

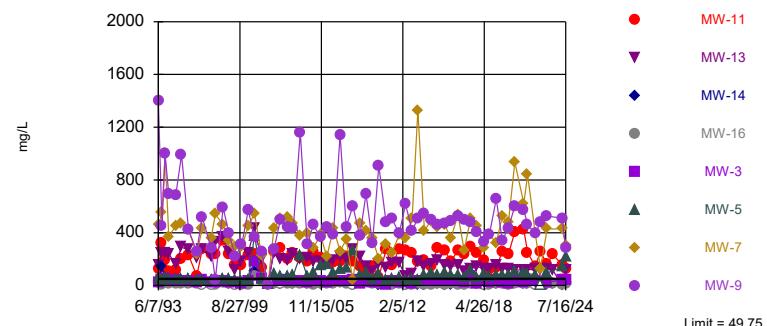
Constituent: Arsenic Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Boron Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

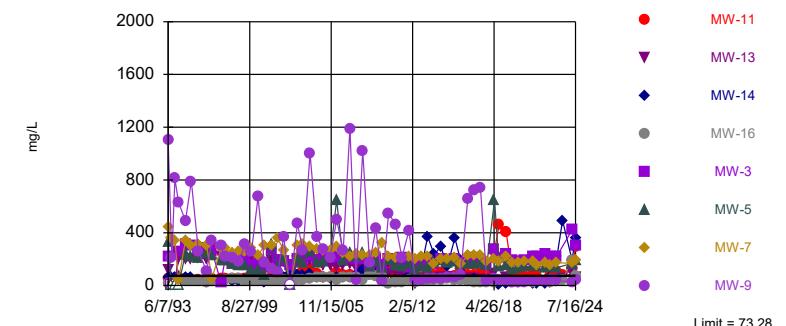


Background Data Summary: Mean=20.08, Std. Dev.=14.83, n=130, 11.54% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-14, MW-3, MW-5, MW-7

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=26.87, Std. Dev.=23.2, n=130. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

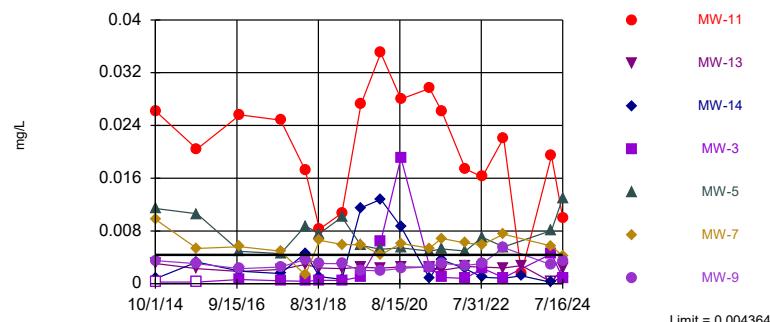
Constituent: Chemical Oxygen Demand Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limi  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Chloride Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-5

Prediction Limit  
Interwell Parametric

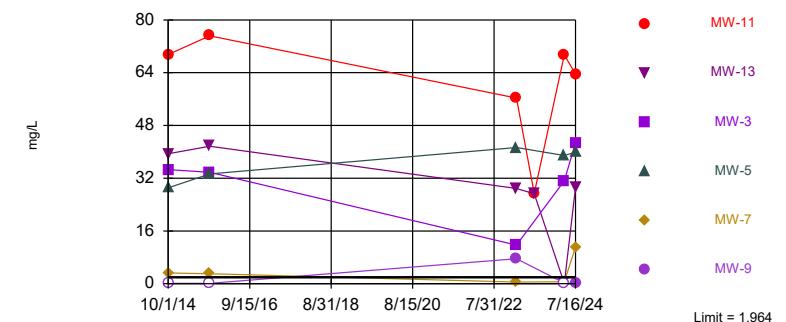


Background Data Summary: Mean=0.001445, Std. Dev.=0.00146, n=36, 11.11% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-3, MW-5, MW-7

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.5455, Std. Dev.=0.7094, n=12, 33.33% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

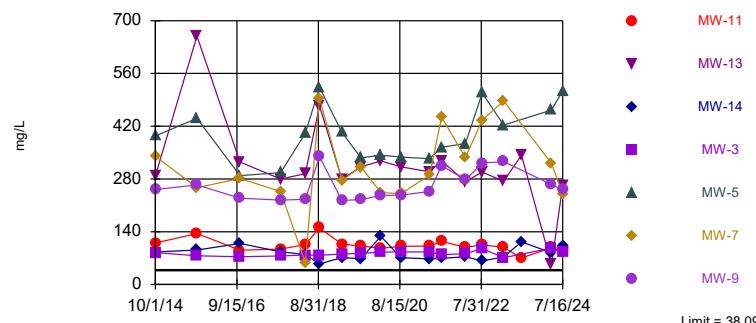
Constituent: Cobalt Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Iron Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Exceeds Limit: MW-11, MW-13, MW-14,  
MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

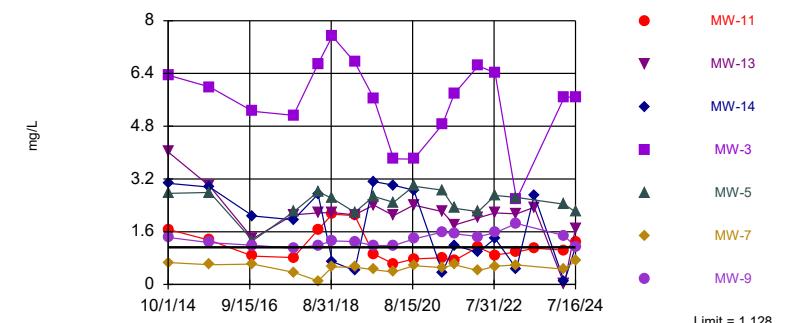


Background Data Summary: Mean=30.36, Std. Dev.=3.866, n=36. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Exceeds Limit: MW-11, MW-13, MW-14,  
MW-3, MW-5, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.465, Std. Dev.=0.3317, n=36. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

Constituent: Magnesium Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

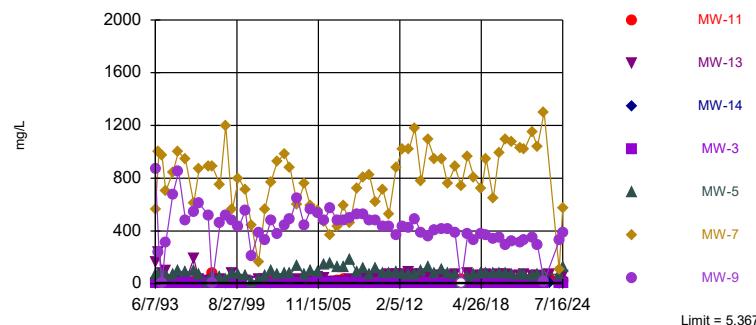
Constituent: Manganese Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-11, MW-13, MW-14,  
MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

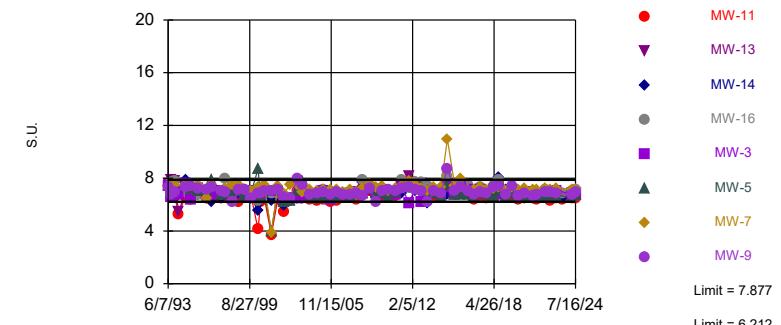


Background Data Summary: Mean=1.965, Std. Dev.=1.701, n=130, 16.92% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 7 points to limit. Assumes 6 future values. Kappa overridden to 2.

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Within Limits

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=7.045, Std. Dev.=0.4162, n=130. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

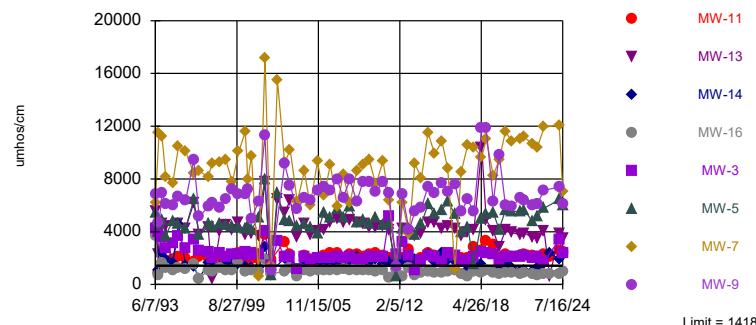
Constituent: Nitrogen, Ammonia Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unc  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: pH Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Exceeds Limit: MW-11, MW-13, MW-14,  
MW-3, MW-5, MW-7, MW-9

Prediction Limit  
Interwell Parametric

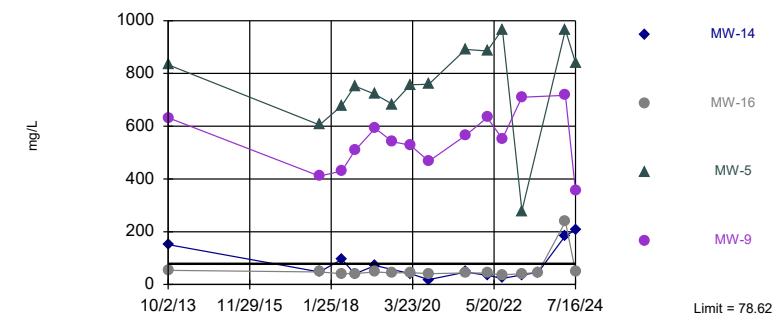


Background Data Summary: Mean=924.6, Std. Dev.=246.7, n=130. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 8 points to limit. Assumes 5 future values. Kappa overridden to 2.

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Exceeds Limit: MW-14, MW-5, MW-9

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=37.32, Std. Dev.=20.65, n=30. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

Constituent: Specific Conductance Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-U  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Sulfate Analysis Run 8/28/2024 3:41 PM View: 2024AWQR - Control Limit-Unconsol-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

# Bedrock Control Limit Fall 2024

Archer Daniels Midland Landfill   Client: SCS Engineers   Data: ADMCO HMSP Sanitas   Printed 8/28/2024, 3:28 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-10	0.001169	n/a	7/16/2024	0.000736J	No	36	MW-1,MW-17	0.0009663	0.0001013	86.11	None	No	0.0003117	Param Inter 1 of 2
<b>Arsenic (mg/L)</b>	<b>MW-12</b>	<b>0.001169</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.0704</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.0009663</b>	<b>0.0001013</b>	<b>86.11</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
<b>Arsenic (mg/L)</b>	<b>MW-6</b>	<b>0.001169</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.0238</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.0009663</b>	<b>0.0001013</b>	<b>86.11</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Boron (mg/L)	<b>MW-10</b>	<b>1.128</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>1.67</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.4253</b>	<b>0.3514</b>	<b>2.778</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
<b>Boron (mg/L)</b>	<b>MW-12</b>	<b>1.128</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>2.41</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.4253</b>	<b>0.3514</b>	<b>2.778</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Boron (mg/L)	MW-15	1.128	n/a	7/16/2024	0.215	No	36	MW-1,MW-17	0.4253	0.3514	2.778	None	No	0.0003117	Param Inter 1 of 2
Boron (mg/L)	MW-4	1.128	n/a	7/16/2024	0.331	No	36	MW-1,MW-17	0.4253	0.3514	2.778	None	No	0.0003117	Param Inter 1 of 2
<b>Boron (mg/L)</b>	<b>MW-6</b>	<b>1.128</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>10</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.4253</b>	<b>0.3514</b>	<b>2.778</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Boron (mg/L)	MW-8	1.128	n/a	7/16/2024	0.358	No	36	MW-1,MW-17	0.4253	0.3514	2.778	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-10	19.18	n/a	7/16/2024	18.2	No	100	MW-1,MW-17	6.647	6.266	54	None	No	0.0003117	Param Inter 1 of 2
<b>Chemical Oxygen Demand (mg/L)</b>	<b>MW-12</b>	<b>19.18</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>28.7</b>	<b>Yes</b>	<b>100</b>	<b>MW-1,MW-17</b>	<b>6.647</b>	<b>6.266</b>	<b>54</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Chemical Oxygen Demand (mg/L)	MW-15	19.18	n/a	7/16/2024	11.6	No	100	MW-1,MW-17	6.647	6.266	54	None	No	0.0003117	Param Inter 1 of 2
Chemical Oxygen Demand (mg/L)	MW-4	19.18	n/a	7/16/2024	5.455	No	100	MW-1,MW-17	6.647	6.266	54	None	No	0.0003117	Param Inter 1 of 2
<b>Chemical Oxygen Demand (mg/L)</b>	<b>MW-6</b>	<b>19.18</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>46.9</b>	<b>Yes</b>	<b>100</b>	<b>MW-1,MW-17</b>	<b>6.647</b>	<b>6.266</b>	<b>54</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Chemical Oxygen Demand (mg/L)	MW-8	19.18	n/a	7/16/2024	6.31	No	100	MW-1,MW-17	6.647	6.266	54	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-10	226.1	n/a	7/16/2024	76.3	No	99	MW-1,MW-17	90.98	67.58	0	None	No	0.0003117	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MW-12</b>	<b>226.1</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>298</b>	<b>Yes</b>	<b>99</b>	<b>MW-1,MW-17</b>	<b>90.98</b>	<b>67.58</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MW-15	226.1	n/a	7/16/2024	90.1	No	99	MW-1,MW-17	90.98	67.58	0	None	No	0.0003117	Param Inter 1 of 2
Chloride (mg/L)	MW-4	226.1	n/a	7/16/2024	178.5	No	99	MW-1,MW-17	90.98	67.58	0	None	No	0.0003117	Param Inter 1 of 2
<b>Chloride (mg/L)</b>	<b>MW-6</b>	<b>226.1</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>385</b>	<b>Yes</b>	<b>99</b>	<b>MW-1,MW-17</b>	<b>90.98</b>	<b>67.58</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Chloride (mg/L)	MW-8	226.1	n/a	7/16/2024	146	No	99	MW-1,MW-17	90.98	67.58	0	None	No	0.0003117	Param Inter 1 of 2
Cobalt (mg/L)	<b>MW-10</b>	<b>0.0005597</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.00104</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.0002821</b>	<b>0.0001388</b>	<b>50</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Cobalt (mg/L)	<b>MW-12</b>	<b>0.0005597</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.00175</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.0002821</b>	<b>0.0001388</b>	<b>50</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Cobalt (mg/L)	<b>MW-6</b>	<b>0.0005597</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>0.00143</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>0.0002821</b>	<b>0.0001388</b>	<b>50</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Cobalt (mg/L)	MW-8	0.0005597	n/a	7/16/2024	0.000225J	No	36	MW-1,MW-17	0.0002821	0.0001388	50	None	No	0.0003117	Param Inter 1 of 2
Iron (mg/L)	<b>MW-10</b>	<b>0.05</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>1.4</b>	<b>Yes</b>	<b>12</b>	<b>MW-1,MW-17</b>	<b>0.05</b>	<b>0</b>	<b>100</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Iron (mg/L)	<b>MW-12</b>	<b>0.05</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>25</b>	<b>Yes</b>	<b>12</b>	<b>MW-1,MW-17</b>	<b>0.05</b>	<b>0</b>	<b>100</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Iron (mg/L)	<b>MW-6</b>	<b>0.05</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>11.3</b>	<b>Yes</b>	<b>12</b>	<b>MW-1,MW-17</b>	<b>0.05</b>	<b>0</b>	<b>100</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Magnesium (mg/L)	<b>MW-10</b>	<b>57.93</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>67.6</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>39.23</b>	<b>9.349</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Magnesium (mg/L)	<b>MW-12</b>	<b>57.93</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>77.8</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>39.23</b>	<b>9.349</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Magnesium (mg/L)	MW-15	57.93	n/a	7/16/2024	51.7	No	36	MW-1,MW-17	39.23	9.349	0	None	No	0.0003117	Param Inter 1 of 2
<b>Magnesium (mg/L)</b>	<b>MW-6</b>	<b>57.93</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>159</b>	<b>Yes</b>	<b>36</b>	<b>MW-1,MW-17</b>	<b>39.23</b>	<b>9.349</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Manganese (mg/L)	MW-10	1.134	n/a	7/16/2024	0.279	No	36	MW-1,MW-17	0.2485	0.4425	50	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-12	1.134	n/a	7/16/2024	0.93	No	36	MW-1,MW-17	0.2485	0.4425	50	None	No	0.0003117	Param Inter 1 of 2
Manganese (mg/L)	MW-6	1.134	n/a	7/16/2024	0.244	No	36	MW-1,MW-17	0.2485	0.4425	50	None	No	0.0003117	Param Inter 1 of 2
Nickel (mg/L)	MW-6	0.004992	n/a	7/16/2024	0.018J	No	34	MW-1,MW-17	0.002895	0.001049	70.59	None	No	0.0003117	Param Inter 1 of 2
<b>Nitrogen, Ammonia (mg/L)</b>	<b>MW-10</b>	<b>1.293</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>9.38</b>	<b>Yes</b>	<b>100</b>	<b>MW-1,MW-17</b>	<b>0.2625</b>	<b>0.5155</b>	<b>85</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
<b>Nitrogen, Ammonia (mg/L)</b>	<b>MW-12</b>	<b>1.293</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>17.7</b>	<b>Yes</b>	<b>100</b>	<b>MW-1,MW-17</b>	<b>0.2625</b>	<b>0.5155</b>	<b>85</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
<b>Nitrogen, Ammonia (mg/L)</b>	<b>MW-6</b>	<b>1.293</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>167</b>	<b>Yes</b>	<b>100</b>	<b>MW-1,MW-17</b>	<b>0.2625</b>	<b>0.5155</b>	<b>85</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
pH (S.U.)	MW-10	7.77	6.232	7/16/2024	6.93	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-12	7.77	6.232	7/16/2024	6.65	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-15	7.77	6.232	7/16/2024	6.96	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-4	7.77	6.232	7/16/2024	6.92	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-6	7.77	6.232	7/16/2024	6.74	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
pH (S.U.)	MW-8	7.77	6.232	7/16/2024	7.1	No	101	MW-1,MW-17	7.001	0.3845	0	None	No	0.0001558	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-10	1597	n/a	7/16/2024	1405	No	102	MW-1,MW-17	1083	257.3	0	None	No	0.0003117	Param Inter 1 of 2
<b>Specific Conductance (umhos/cm)</b>	<b>MW-12</b>	<b>1597</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>2072</b>	<b>Yes</b>	<b>102</b>	<b>MW-1,MW-17</b>	<b>1083</b>	<b>257.3</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Specific Conductance (umhos/cm)	MW-15	1597	n/a	7/16/2024	1129	No	102	MW-1,MW-17	1083	257.3	0	None	No	0.0003117	Param Inter 1 of 2
Specific Conductance (umhos/cm)	MW-4	1597	n/a	7/16/2024	1290	No	102	MW-1,MW-17	1083	257.3	0	None	No	0.0003117	Param Inter 1 of 2
<b>Specific Conductance (umhos/cm)</b>	<b>MW-6</b>	<b>1597</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>3588</b>	<b>Yes</b>	<b>102</b>	<b>MW-1,MW-17</b>	<b>1083</b>	<b>257.3</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>

## Bedrock Control Limit Fall 2024

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas Printed 8/28/2024, 3:28 PM

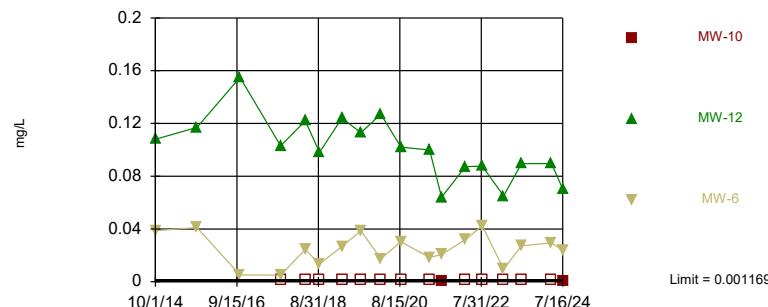
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>Bg Wells</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Specific Conductance (umhos/cm)	MW-8	1597	n/a	7/16/2024	1215	No	102	MW-1,MW-17	1083	257.3	0	None	No	0.0003117	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-10</b>	<b>70.1</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>94</b>	<b>Yes</b>	<b>29</b>	<b>MW-1,MW-17</b>	<b>42.53</b>	<b>13.79</b>	<b>3.448</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MW-12	70.1	n/a	7/16/2024	23.2	No	29	MW-1,MW-17	42.53	13.79	3.448	None	No	0.0003117	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-15</b>	<b>70.1</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>86.1</b>	<b>Yes</b>	<b>29</b>	<b>MW-1,MW-17</b>	<b>42.53</b>	<b>13.79</b>	<b>3.448</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MW-4	70.1	n/a	7/16/2024	48.8	No	29	MW-1,MW-17	42.53	13.79	3.448	None	No	0.0003117	Param Inter 1 of 2
<b>Sulfate (mg/L)</b>	<b>MW-6</b>	<b>70.1</b>	<b>n/a</b>	<b>7/16/2024</b>	<b>293</b>	<b>Yes</b>	<b>29</b>	<b>MW-1,MW-17</b>	<b>42.53</b>	<b>13.79</b>	<b>3.448</b>	<b>None</b>	<b>No</b>	<b>0.0003117</b>	<b>Param Inter 1 of 2</b>
Sulfate (mg/L)	MW-8	70.1	n/a	7/16/2024	47.5	No	29	MW-1,MW-17	42.53	13.79	3.448	None	No	0.0003117	Param Inter 1 of 2

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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-6

### Prediction Limit

Interwell Parametric



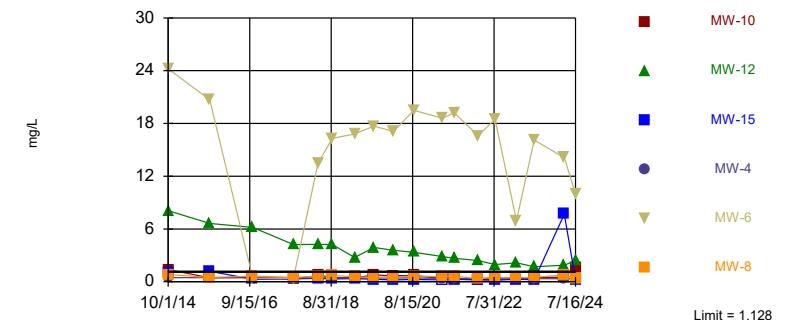
Background Data Summary: Mean=0.0009663, Std. Dev.=0.0001013, n=36, 86.11% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-10, MW-12, MW-6

### Prediction Limit

Interwell Parametric



Background Data Summary: Mean=0.4253, Std. Dev.=0.3514, n=36, 2.778% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: Arsenic Analysis Run 8/28/2024 3:26 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

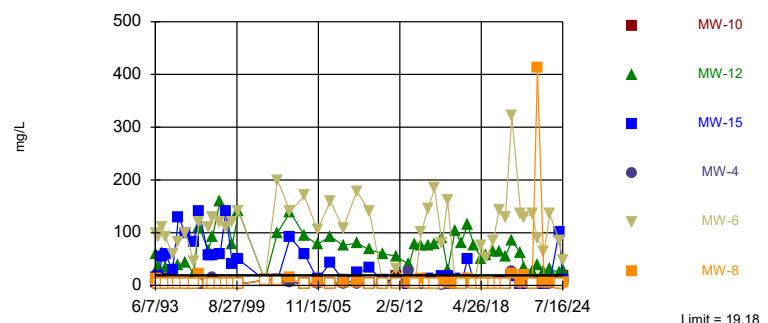
Constituent: Boron Analysis Run 8/28/2024 3:26 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-6

### Prediction Limit

Interwell Parametric



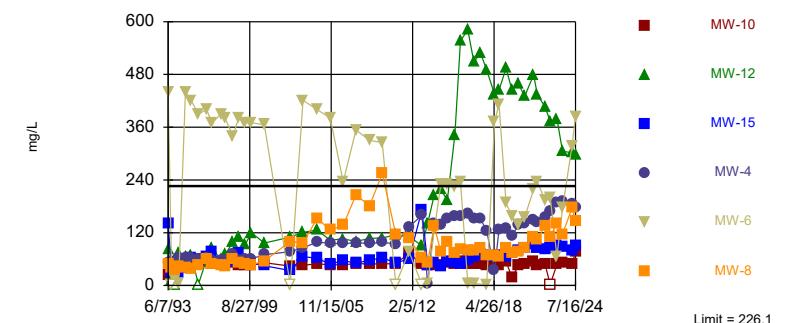
Background Data Summary: Mean=6.647, Std. Dev.=6.266, n=100, 54% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-12, MW-6

### Prediction Limit

Interwell Parametric



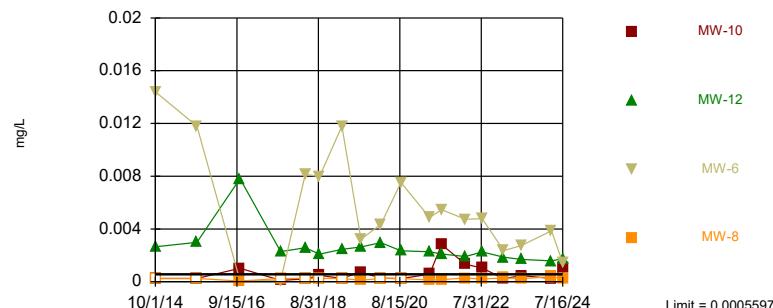
Background Data Summary: Mean=90.98, Std. Dev.=67.58, n=99. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: Chemical Oxygen Demand Analysis Run 8/28/2024 3:26 PM View: 2024AWQR - Control Limi  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Chloride Analysis Run 8/28/2024 3:26 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.  
Exceeds Limit: MW-10, MW-12, MW-6

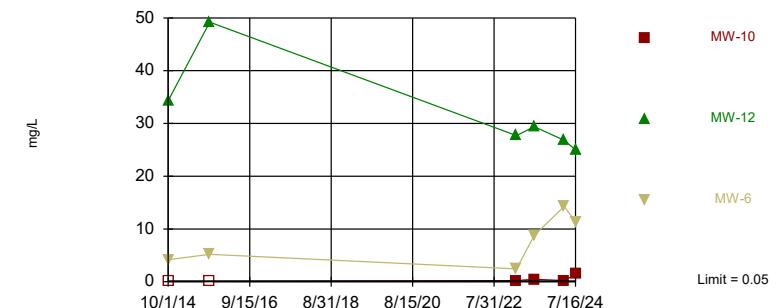
Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.0002821, Std. Dev.=0.0001388, n=36, 50% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.  
Exceeds Limit: MW-10, MW-12, MW-6

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.05, Std. Dev.=0, n=12, 100% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

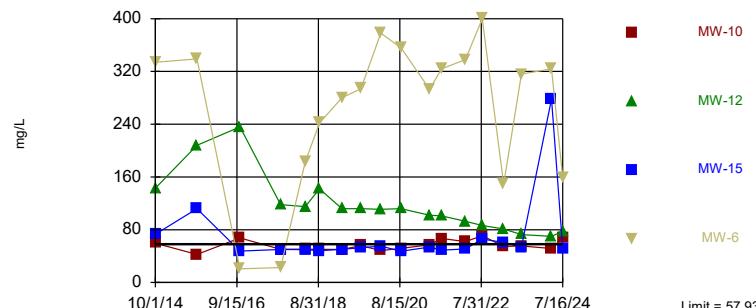
Constituent: Cobalt Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Iron Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Exceeds Limit: MW-10, MW-12, MW-6

Prediction Limit  
Interwell Parametric

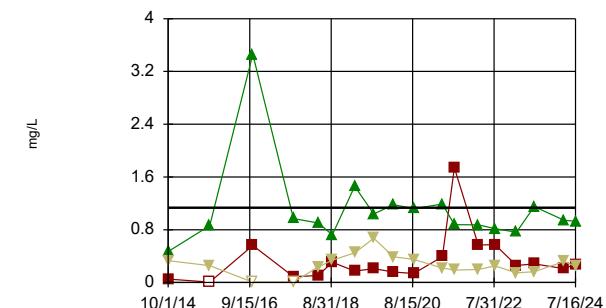


Background Data Summary: Mean=39.23, Std. Dev.=9.349, n=36. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 4 points to limit. Assumes 9 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.2485, Std. Dev.=0.4425, n=36, 50% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

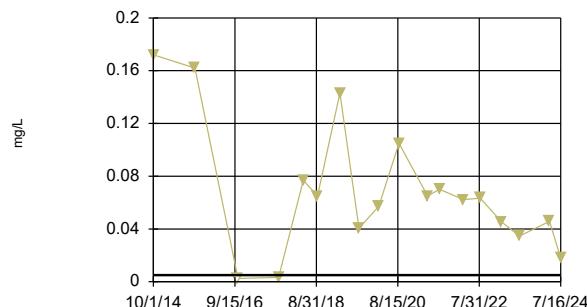
Constituent: Magnesium Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Manganese Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit  
Interwell Parametric

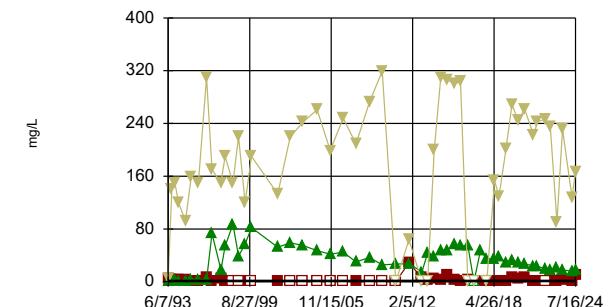


Background Data Summary: Mean=0.002895, Std. Dev.=0.001049, n=34, 70.59% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Assumes 12 future values. Kappa overridden to 2.

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Hollow symbols indicate censored values.

Exceeds Limit: MW-10, MW-12, MW-6

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.2625, Std. Dev.=0.5155, n=100, 85% NDs (user selected parametric test despite non-detects). Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 3 points to limit. Assumes 10 future values. Kappa overridden to 2.

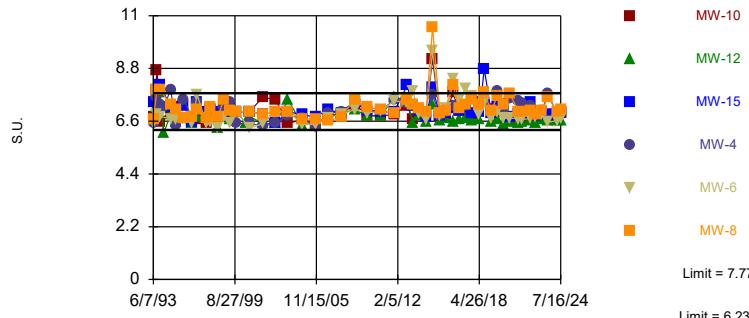
Constituent: Nickel Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Nitrogen, Ammonia Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedro  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Within Limits

Prediction Limit  
Interwell Parametric

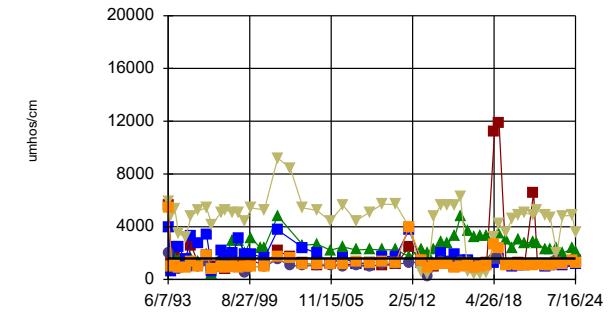


Background Data Summary: Mean=7.001, Std. Dev.=0.3845, n=101. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

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Exceeds Limit: MW-12, MW-6

Prediction Limit  
Interwell Parametric



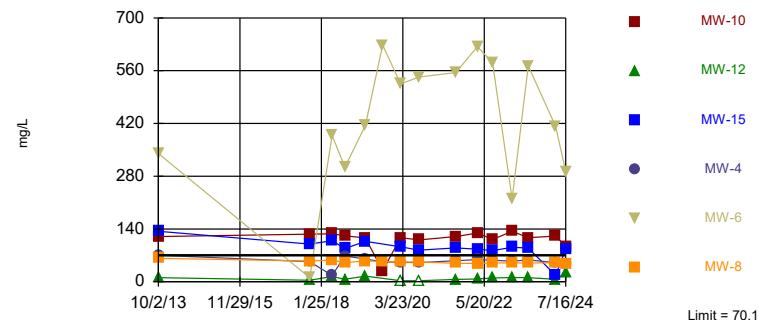
Background Data Summary: Mean=1083, Std. Dev.=257.3, n=102. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

Constituent: pH Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Constituent: Specific Conductance Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Be  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

## Prediction Limit

Interwell Parametric



Background Data Summary: Mean=42.53, Std. Dev.=13.79, n=29, 3.448% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test was disabled. Comparing 6 points to limit. Assumes 7 future values. Kappa overridden to 2.

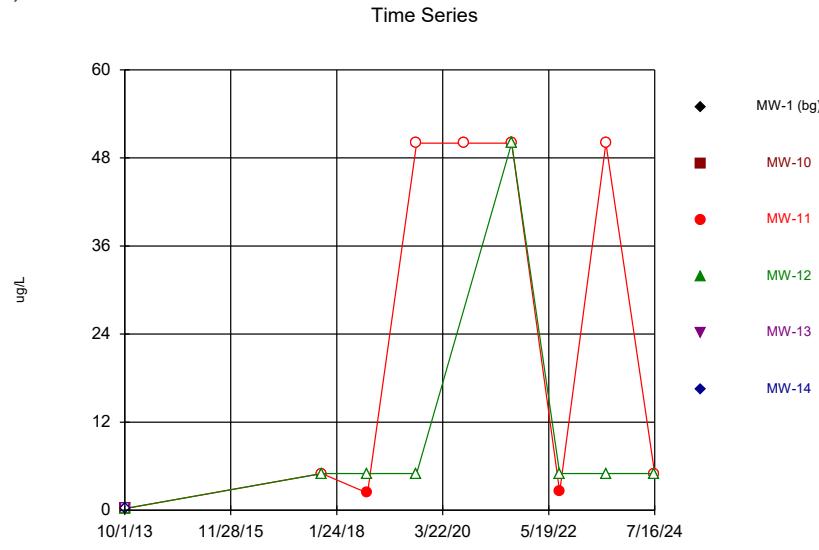
Constituent: Sulfate Analysis Run 8/28/2024 3:27 PM View: 2024AWQR - Control Limit-Bedrock-Fall

Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

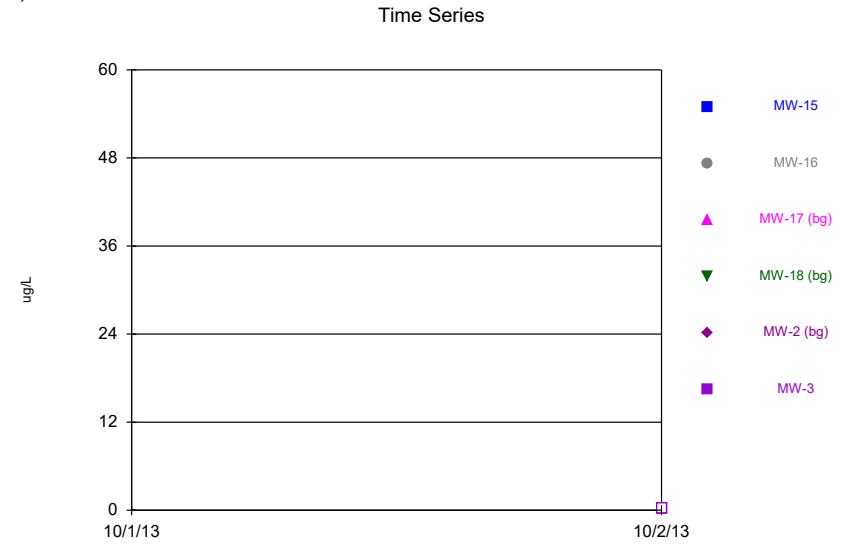
## Attachment C

### Time Series Graphs

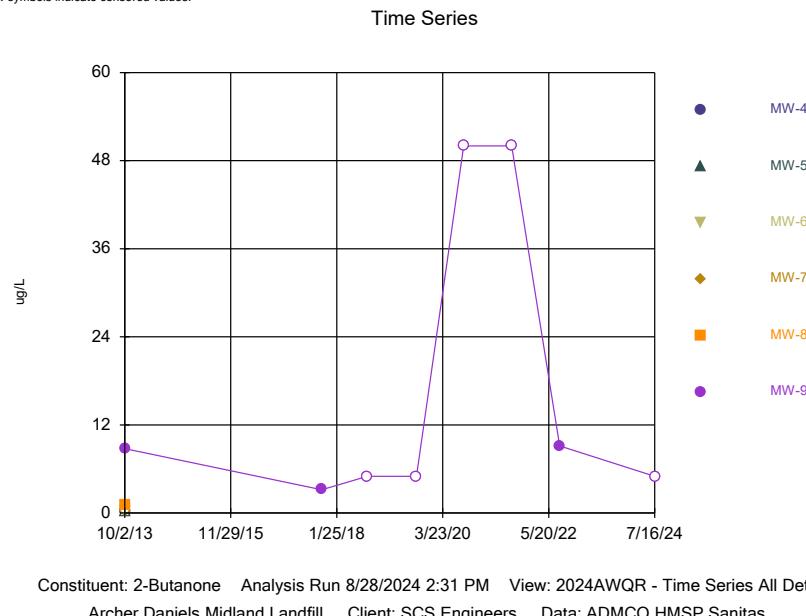
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Hollow symbols indicate censored values.



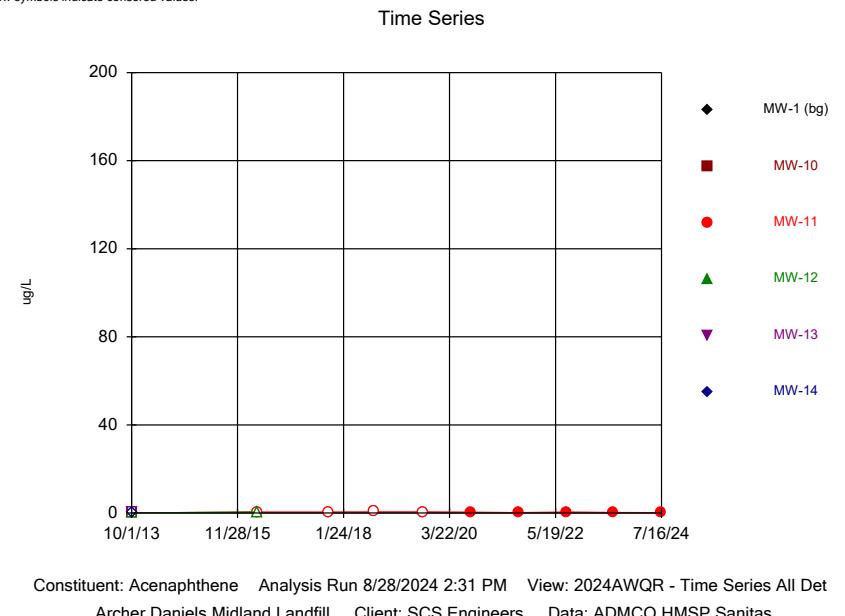
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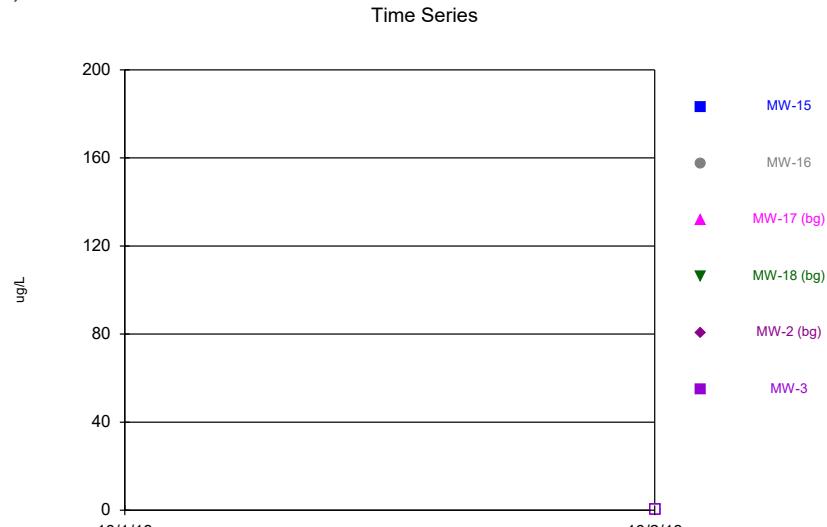
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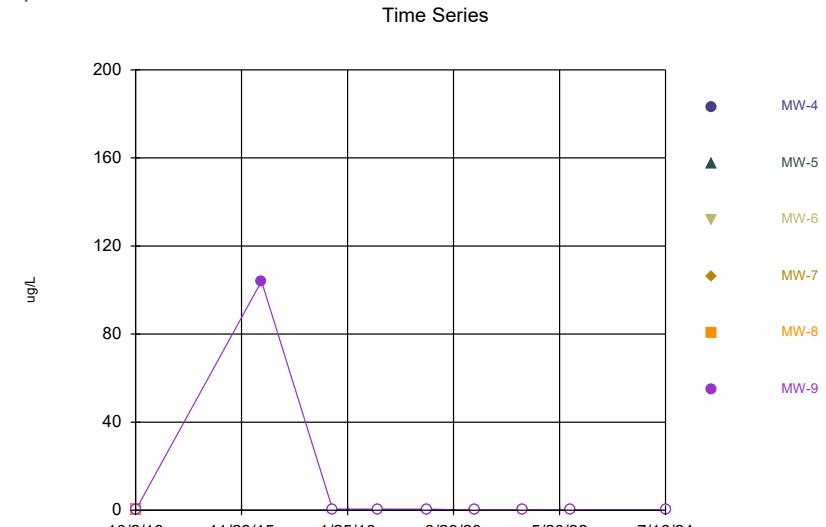


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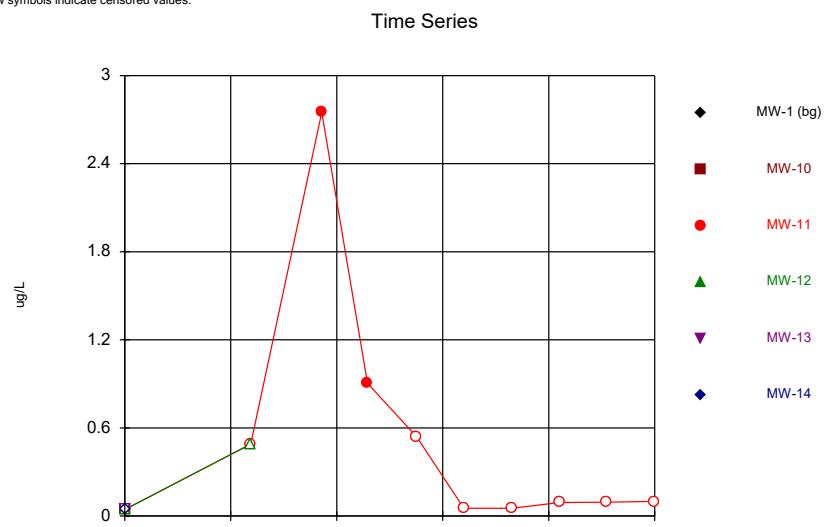
Constituent: Acenaphthene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.



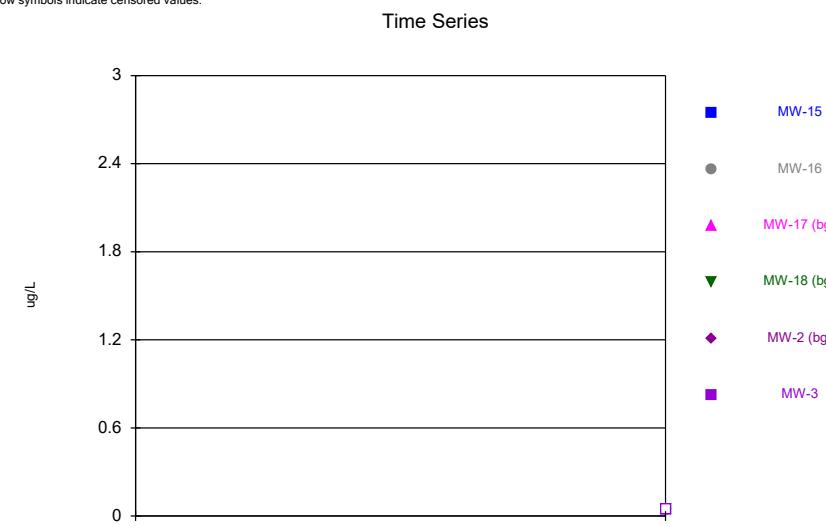
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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Hollow symbols indicate censored values.



Constituent: Acenaphthylene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

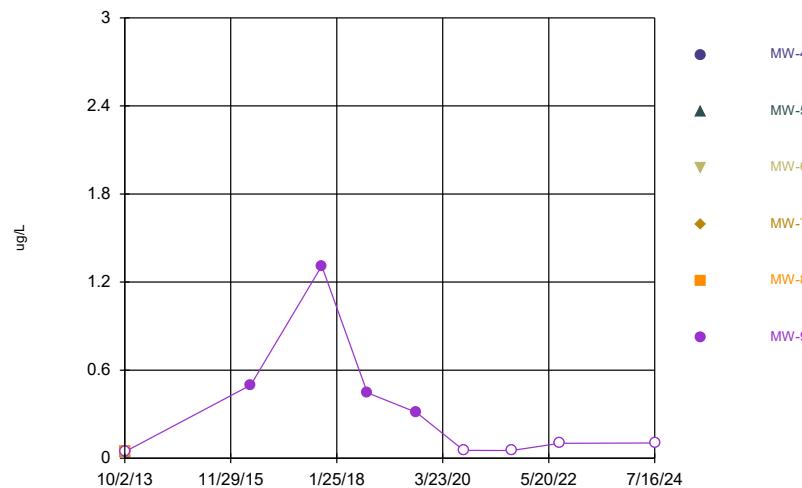
Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.



Constituent: Acenaphthylene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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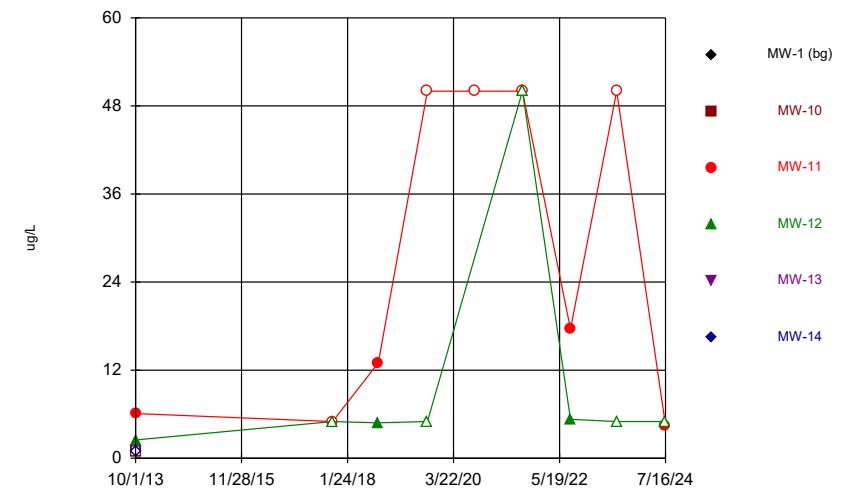
Time Series



Constituent: Acenaphthylene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Time Series



Constituent: Acetone Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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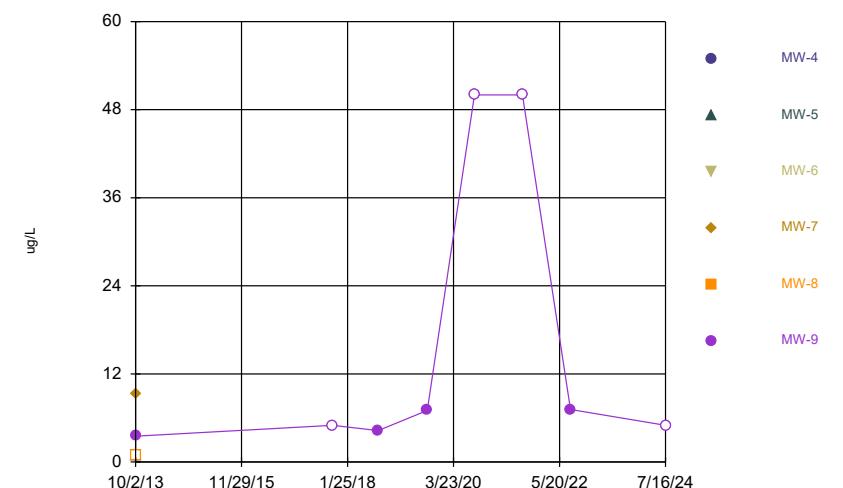
Time Series



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Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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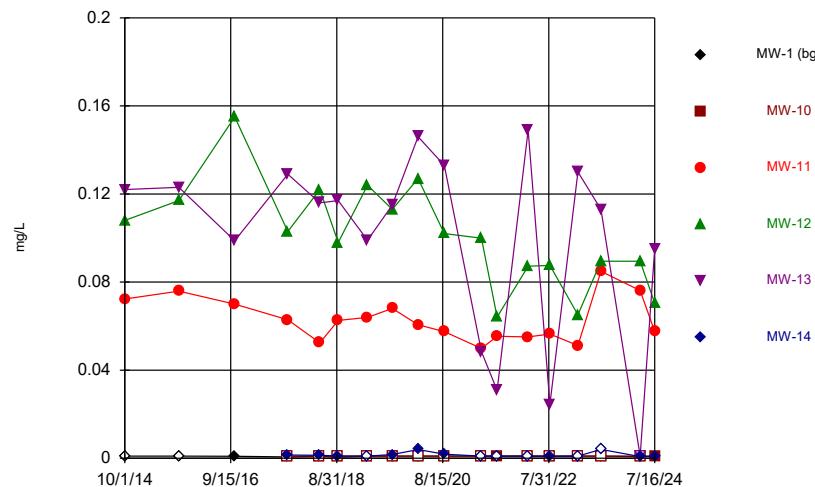
Time Series



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Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

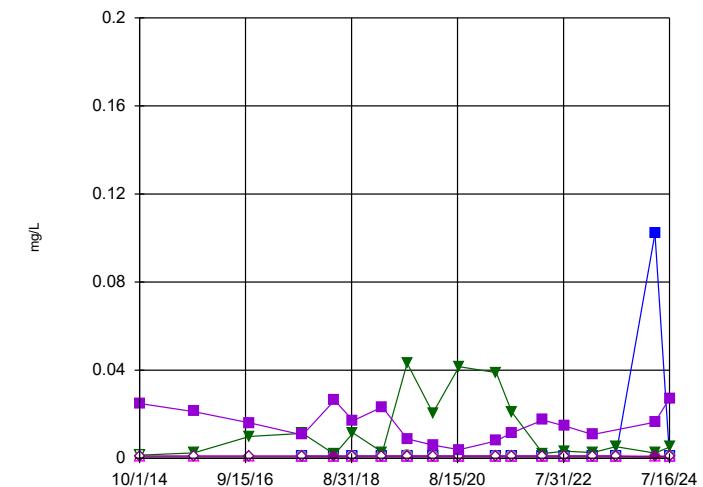
Time Series



Constituent: Arsenic Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
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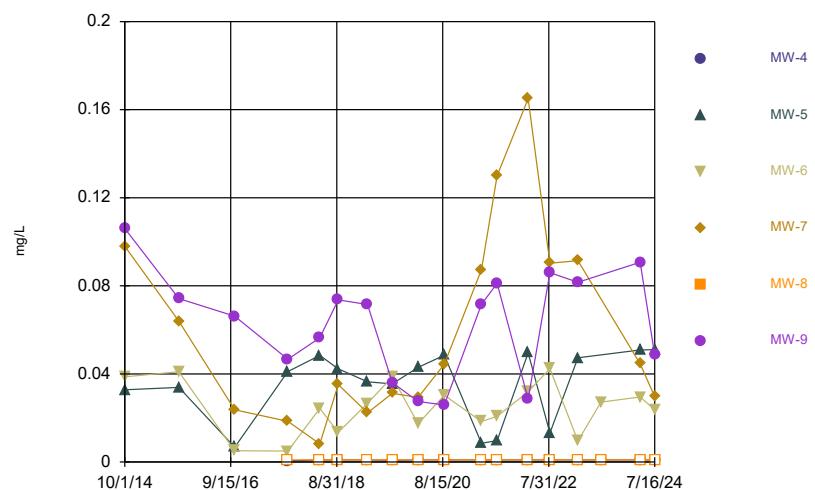
Time Series



Constituent: Arsenic Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

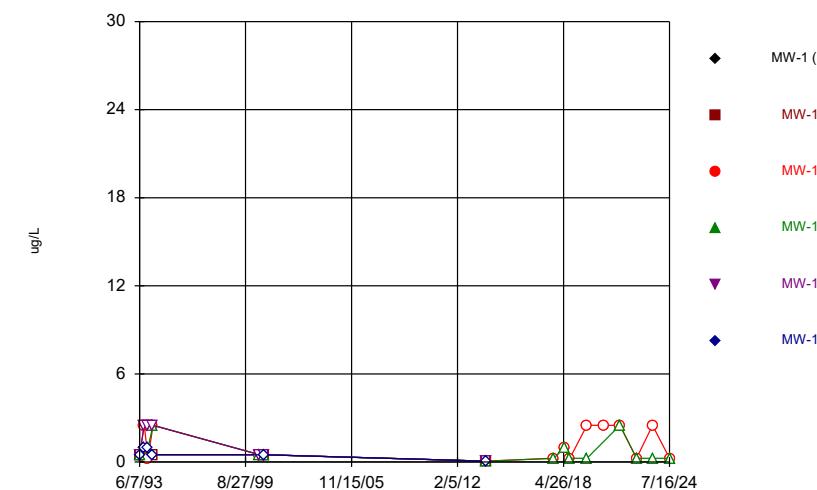
Time Series



Constituent: Arsenic Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

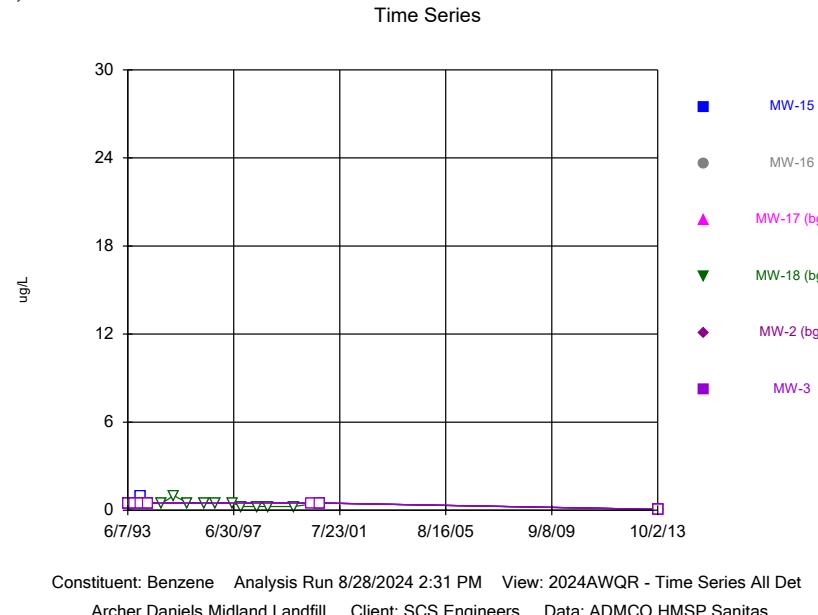
Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Time Series

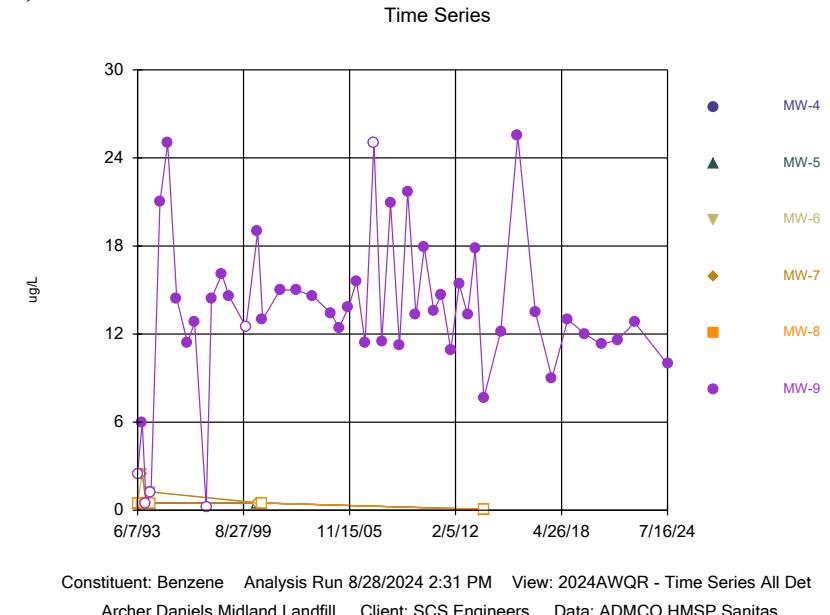


Constituent: Benzene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

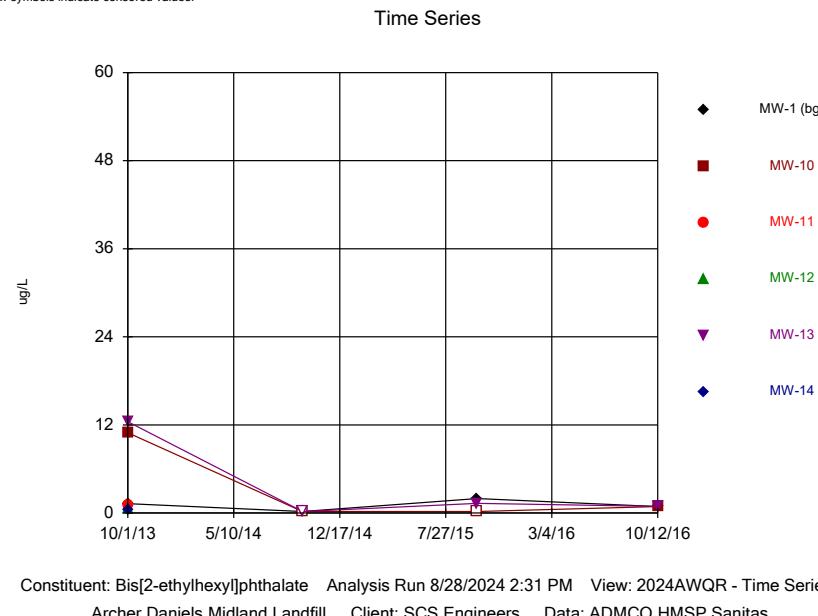
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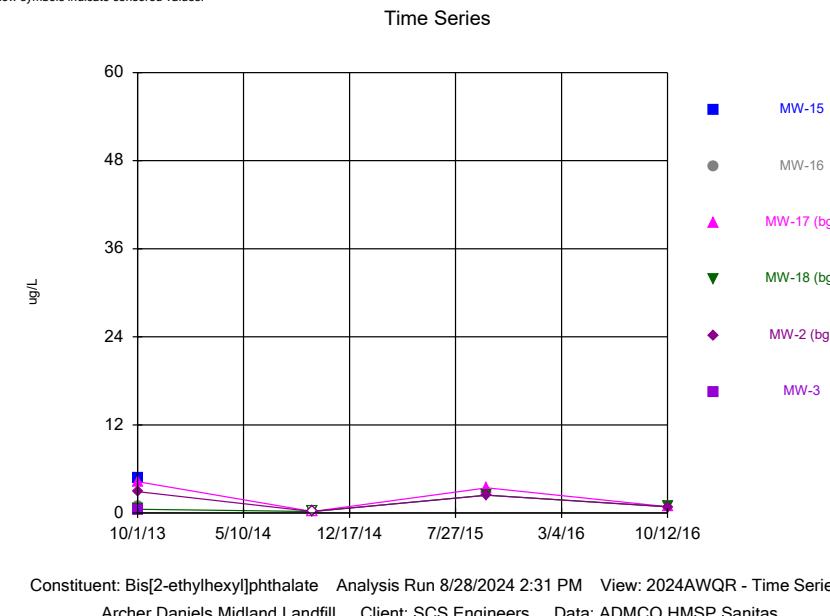
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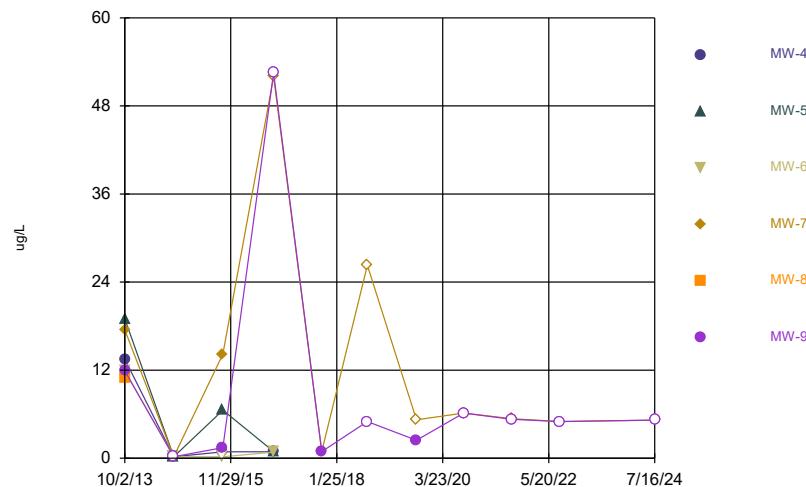


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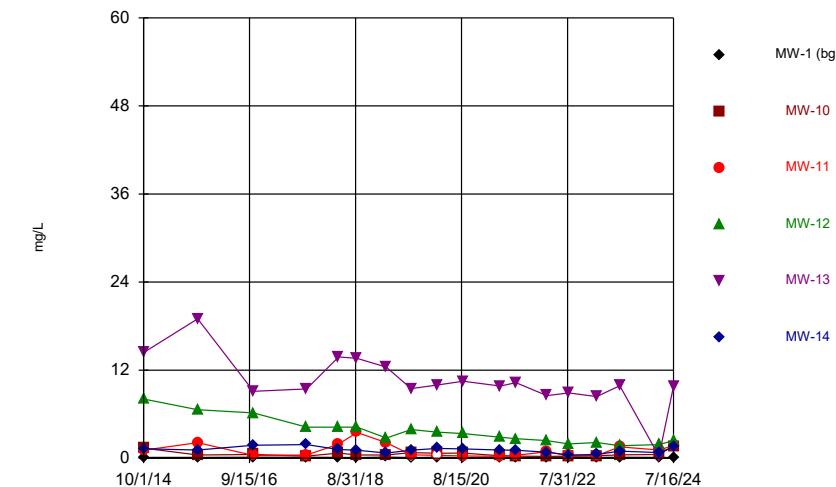
### Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

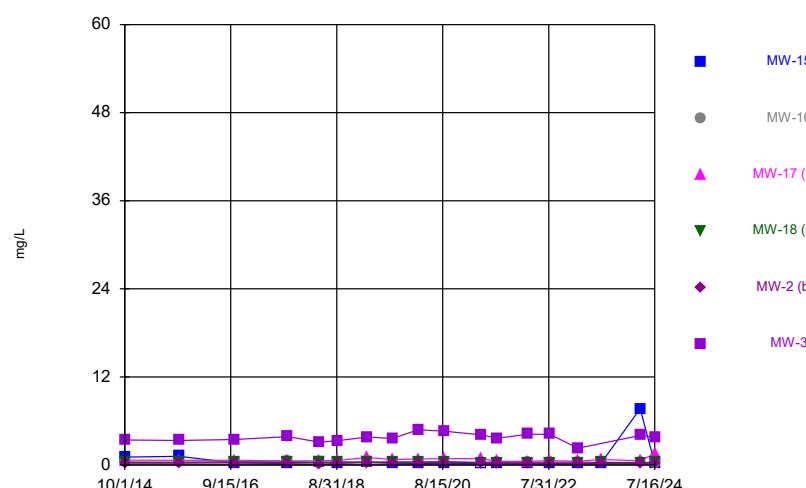
### Time Series



Constituent: Boron Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

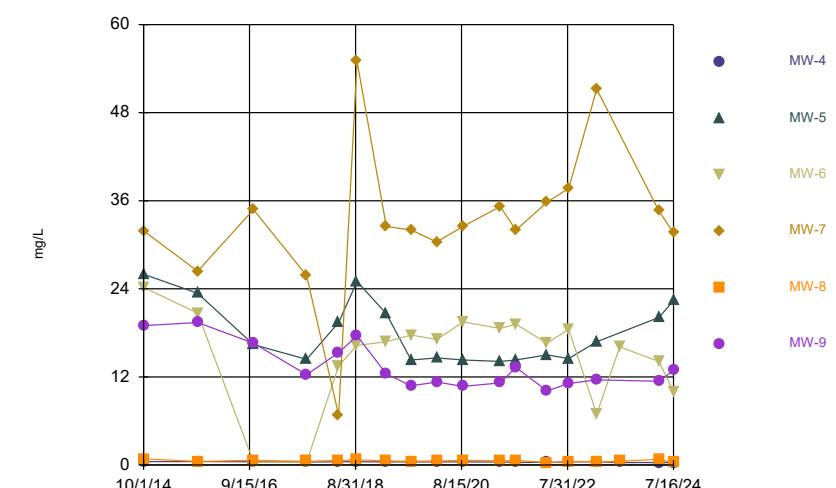
### Time Series



Constituent: Boron Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

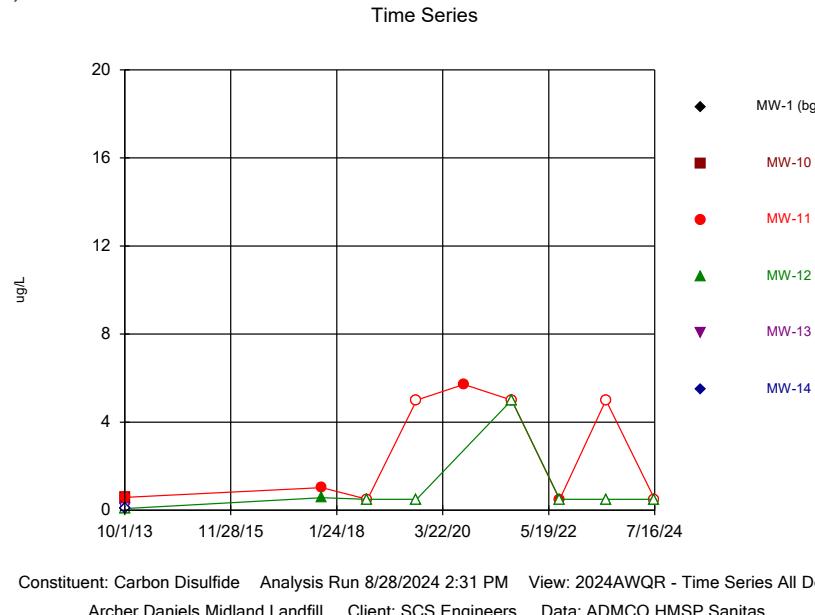
Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

### Time Series

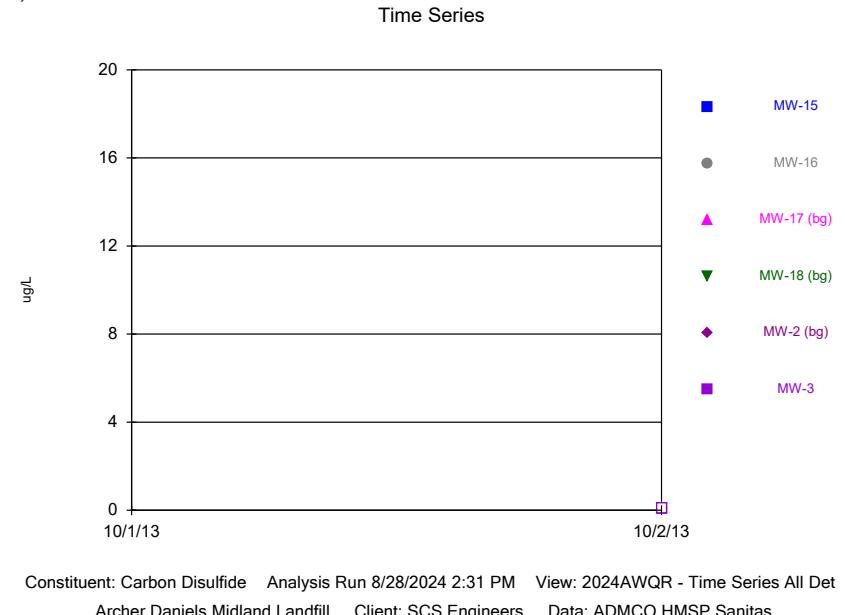


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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

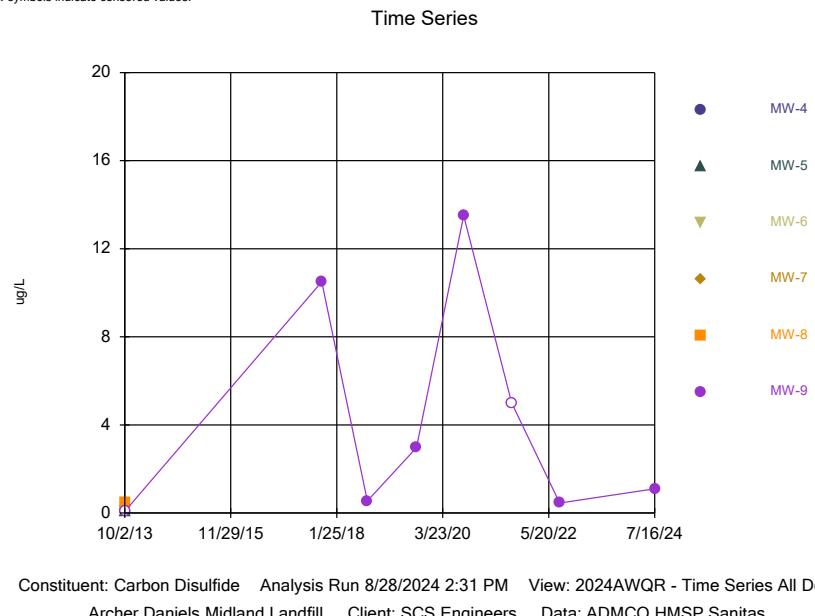
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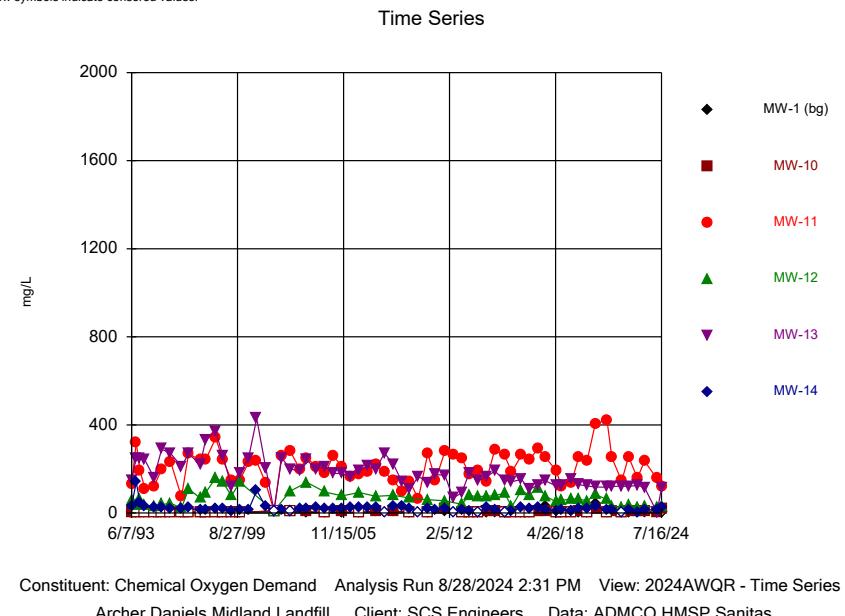
Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.



Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

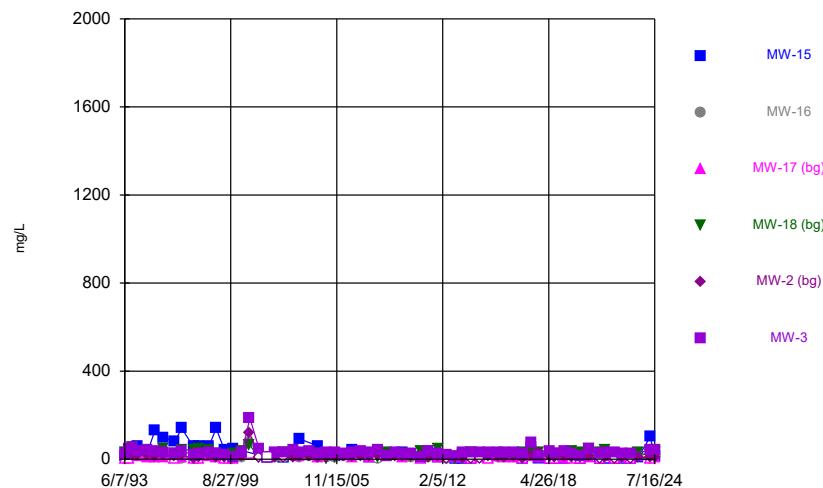


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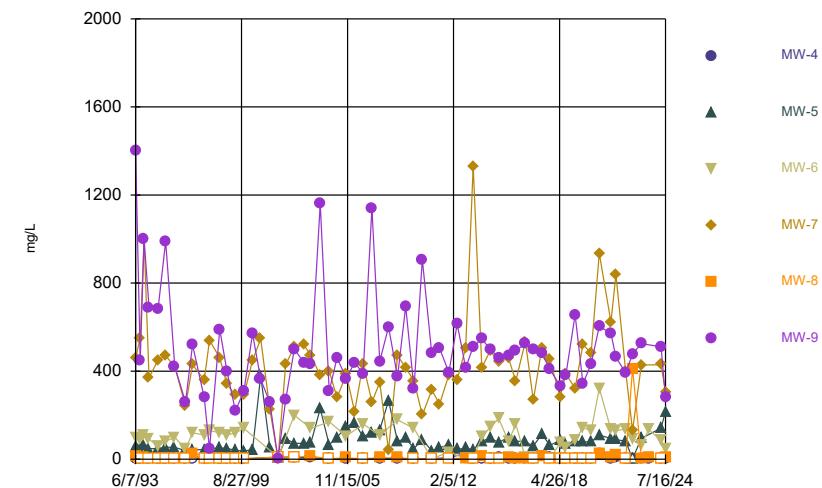
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Time Series



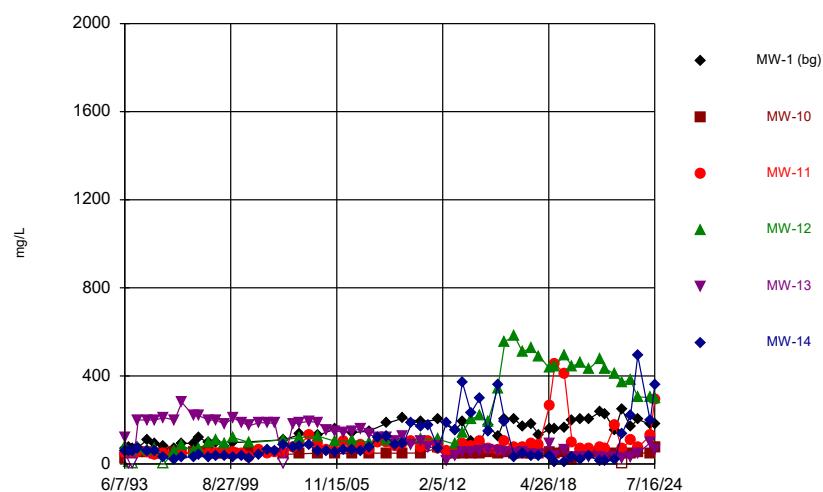
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Time Series



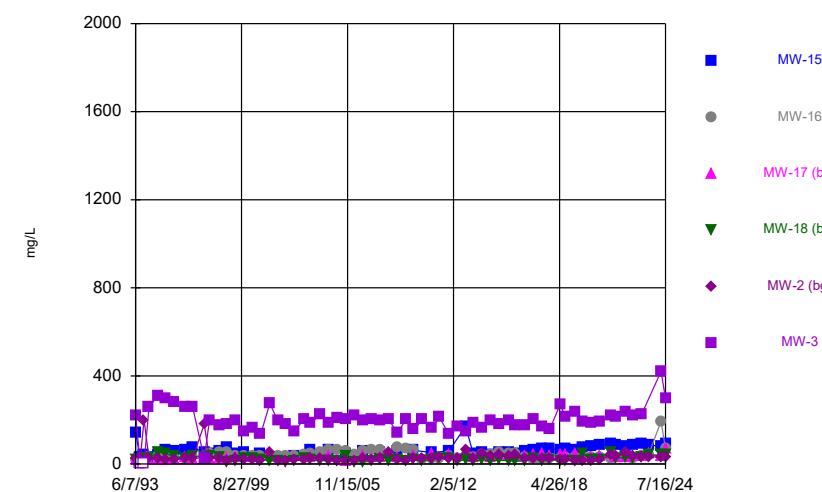
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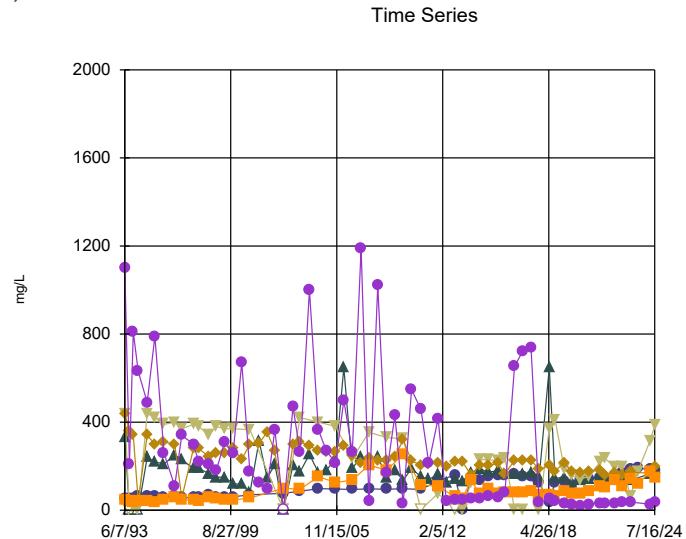


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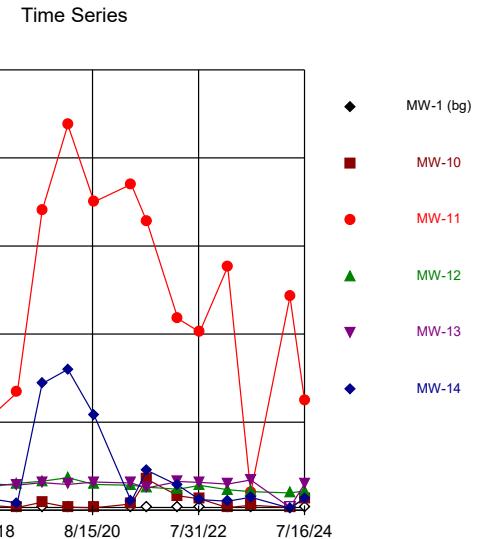
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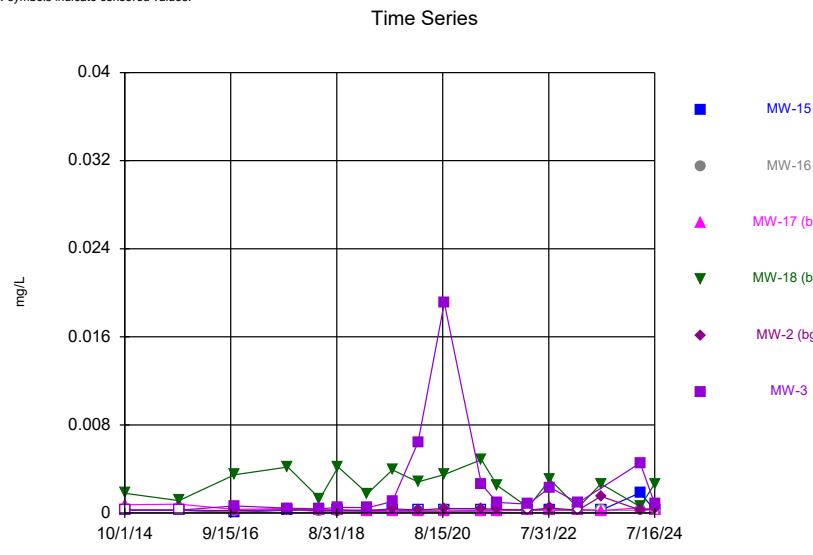
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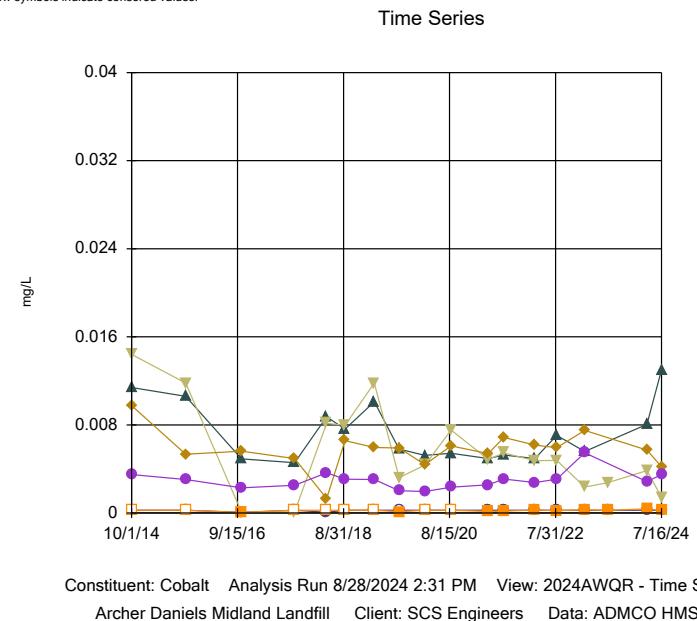
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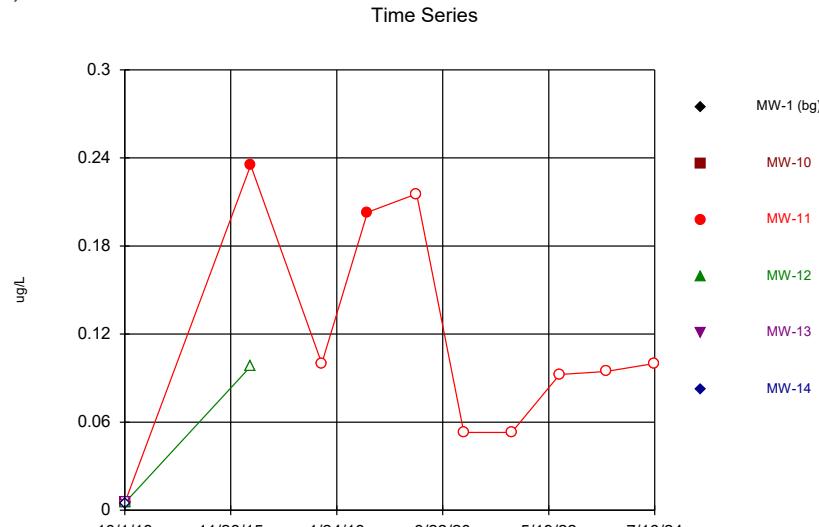
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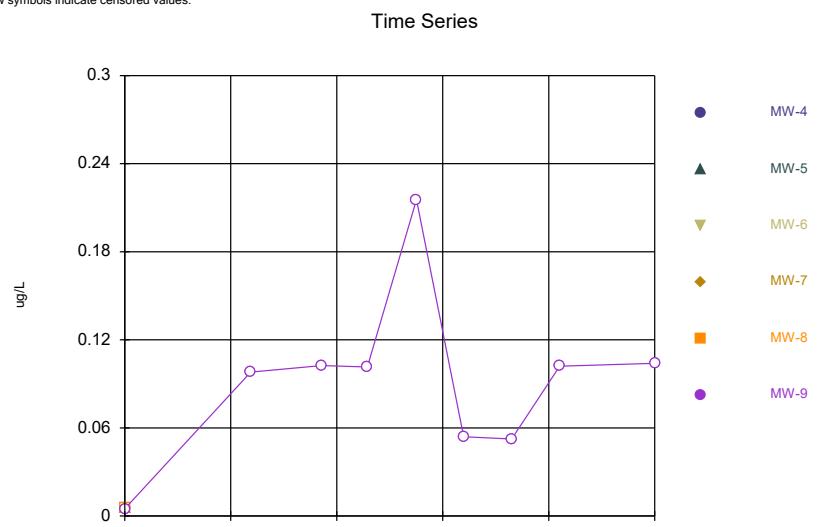
Constituent: Fluoranthene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.



Constituent: Fluoranthene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
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Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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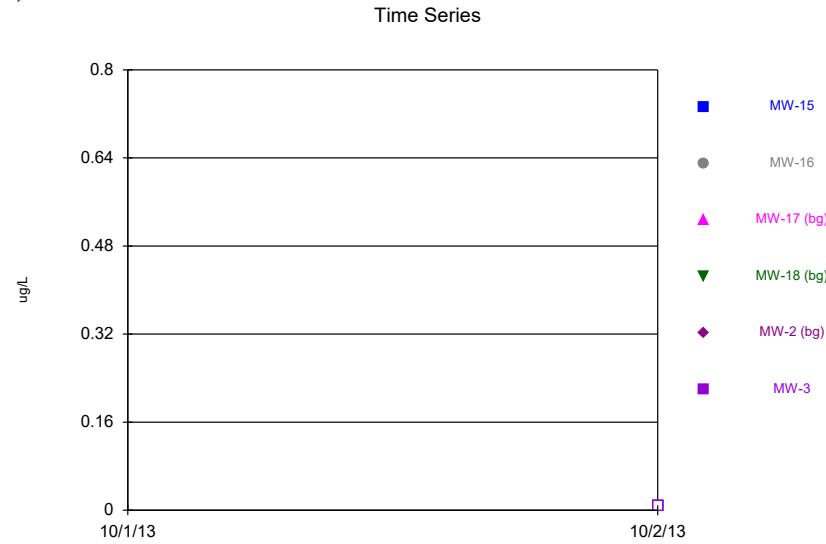
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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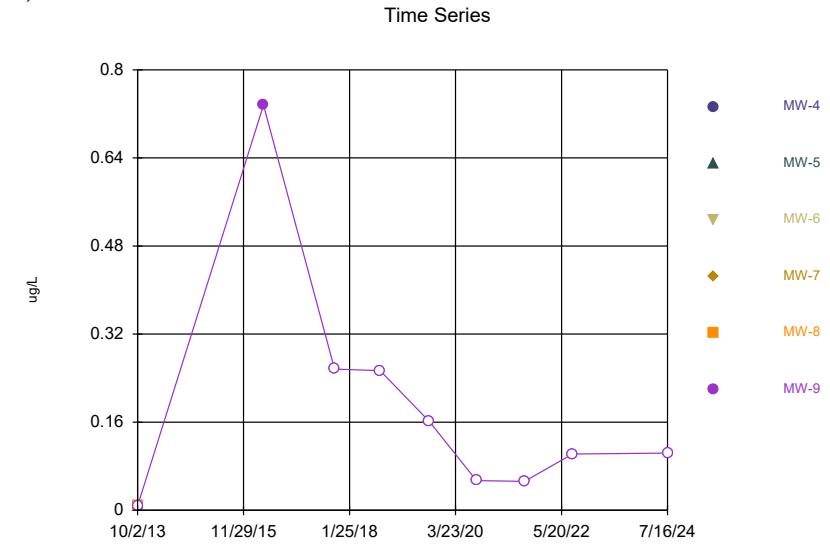


Constituent: Fluorene Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

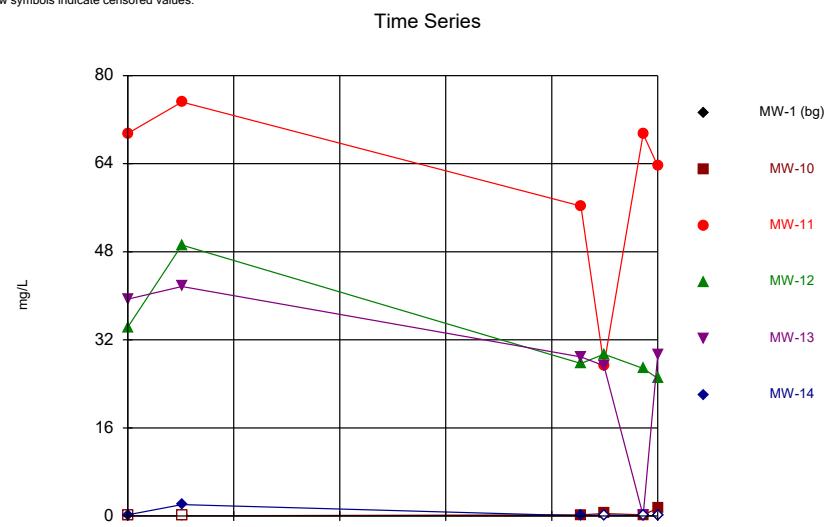
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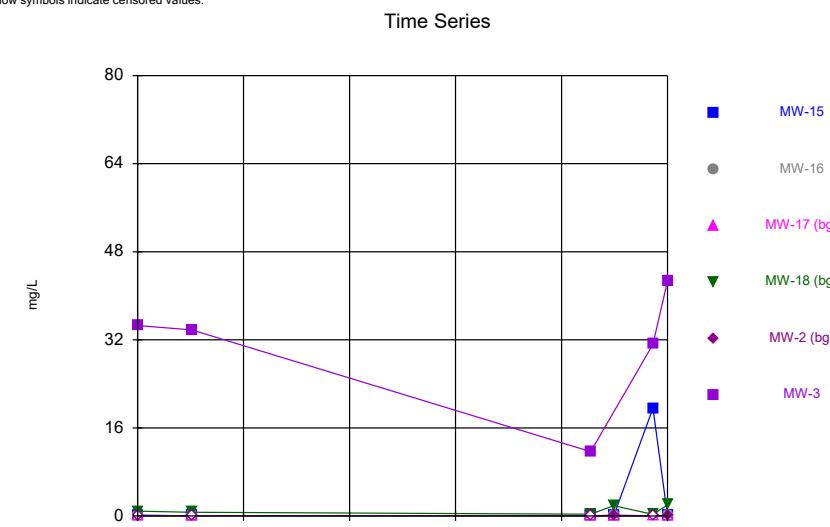
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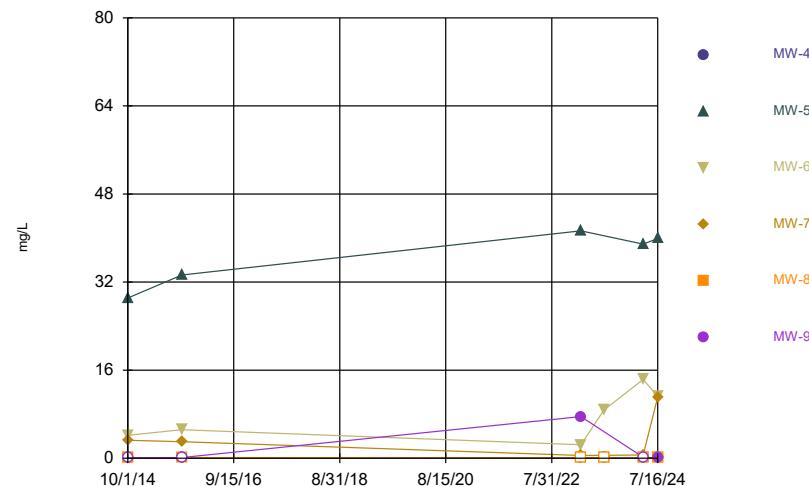


Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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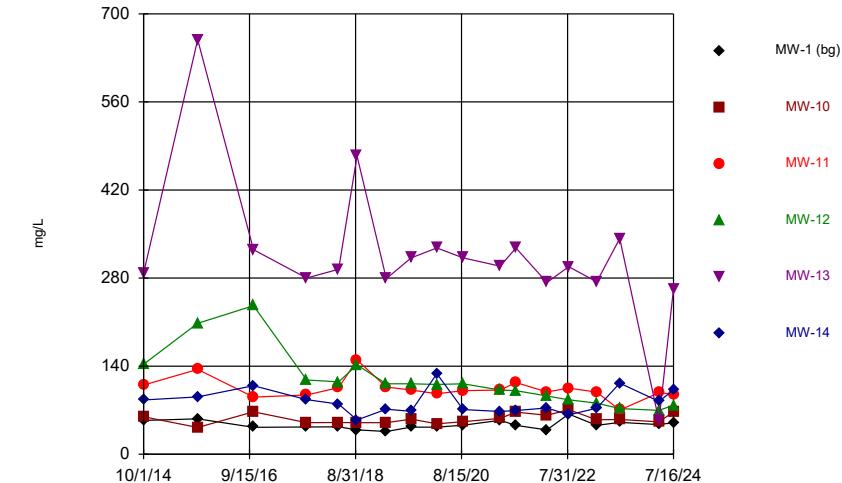
### Time Series



Constituent: Iron Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

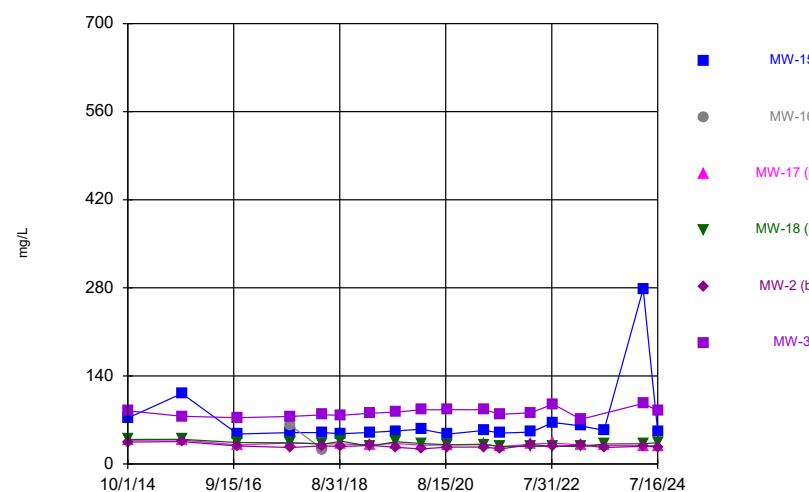
### Time Series



Constituent: Magnesium Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

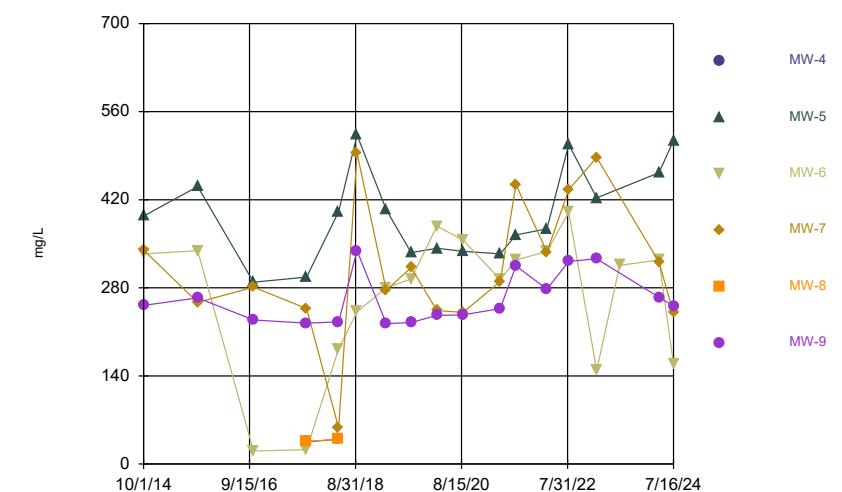
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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

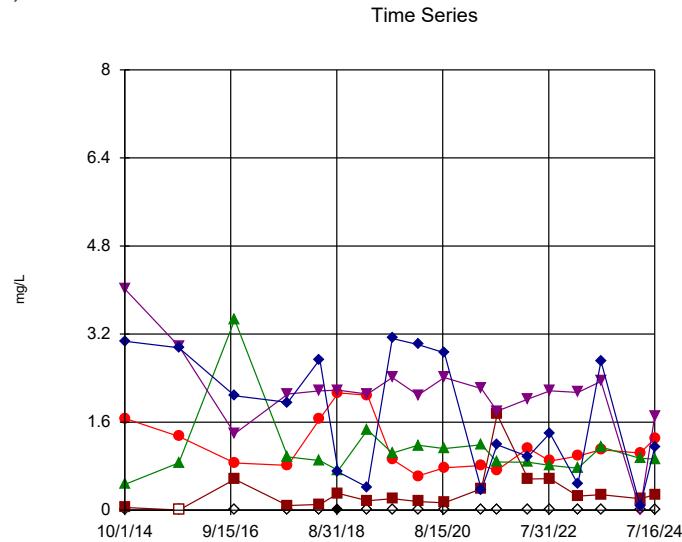
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### Time Series



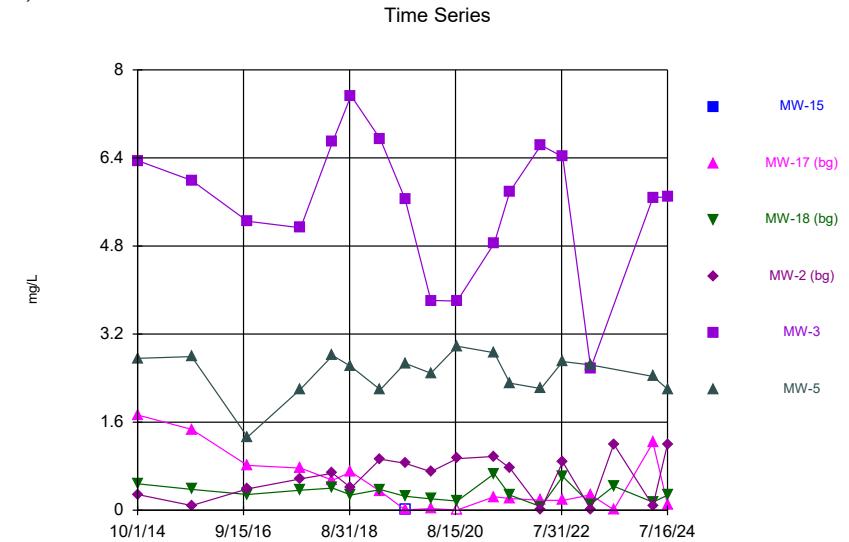
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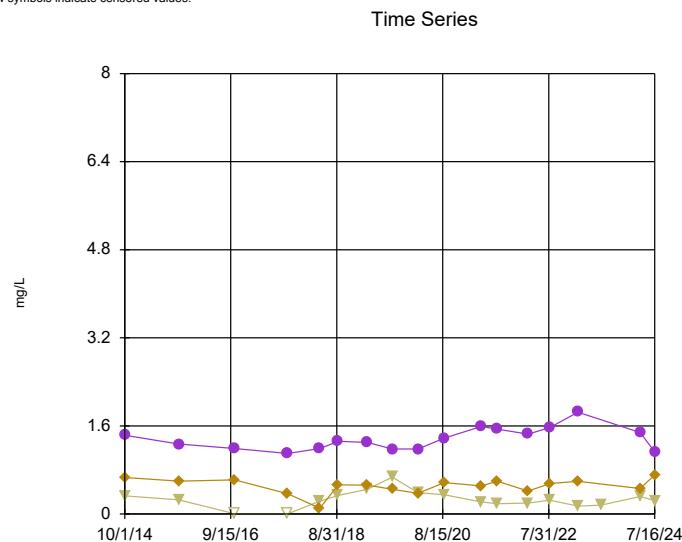
Constituent: Manganese Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
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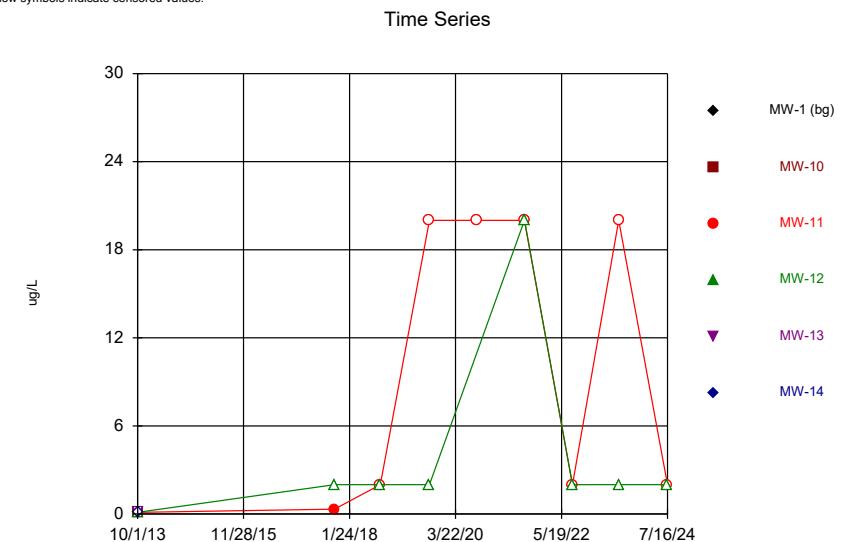
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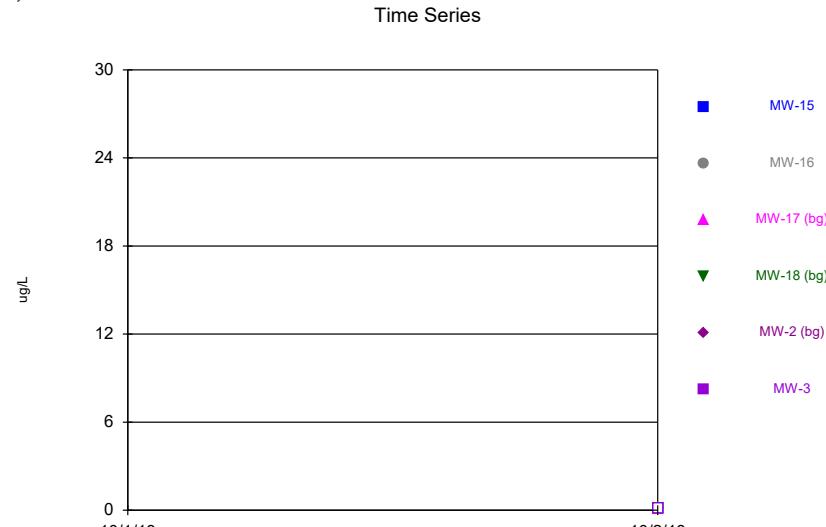
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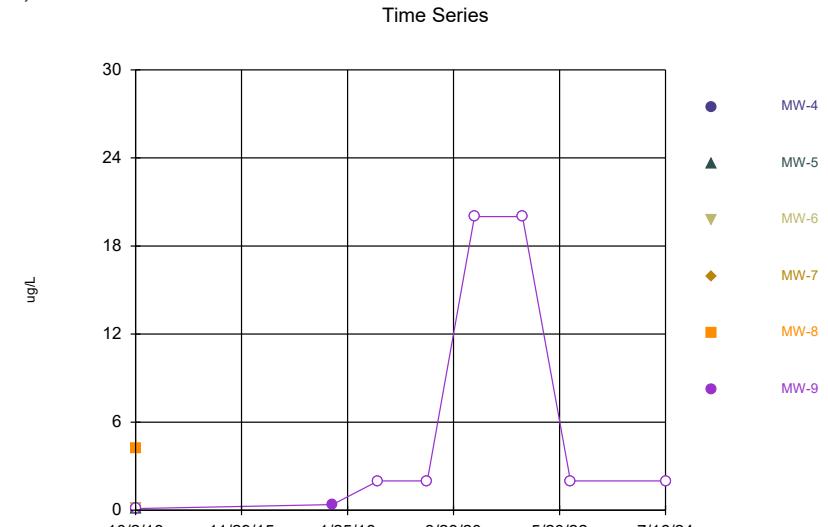


Constituent: Methyl bromide Analysis Run 8/28/2024 2:31 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

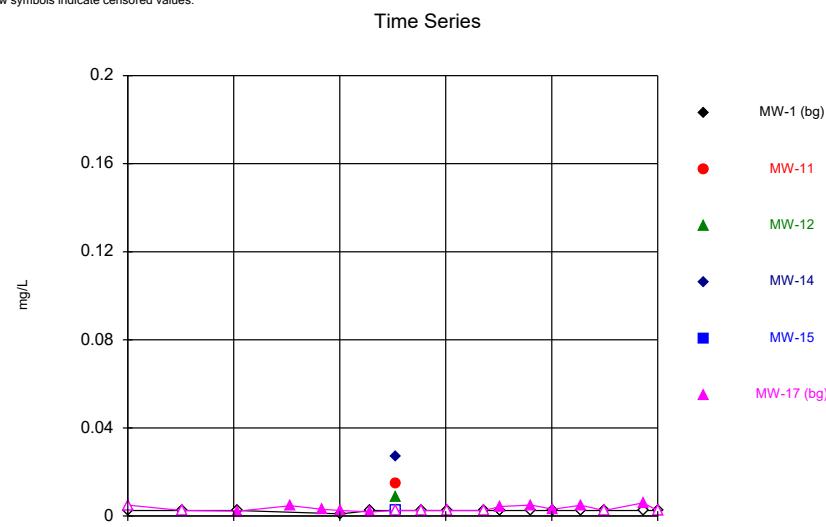
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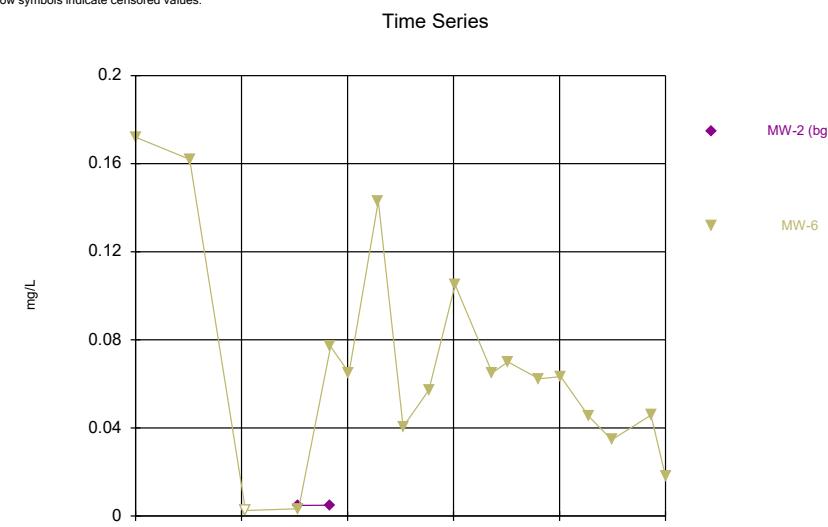
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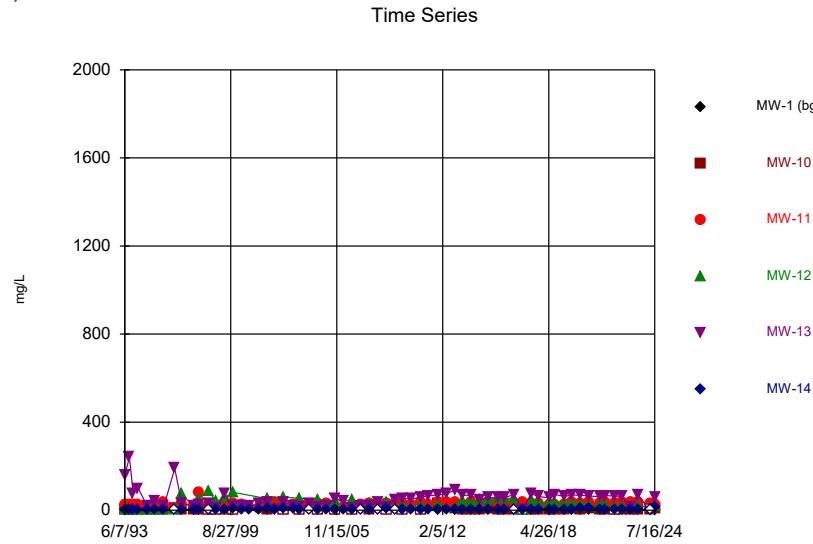
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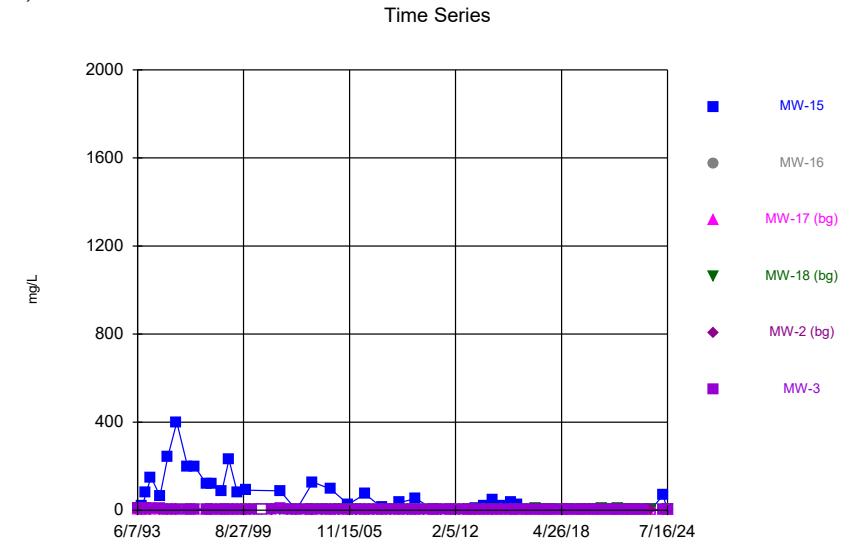
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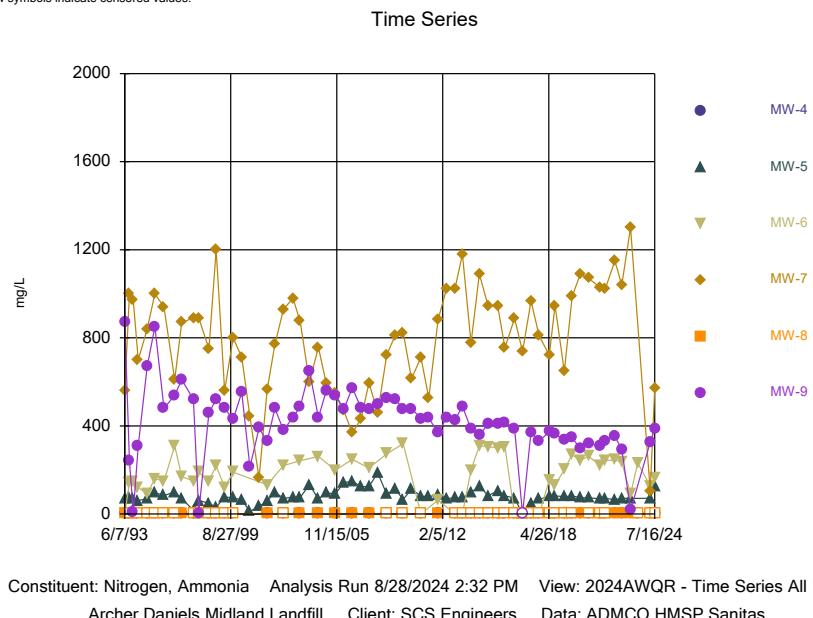
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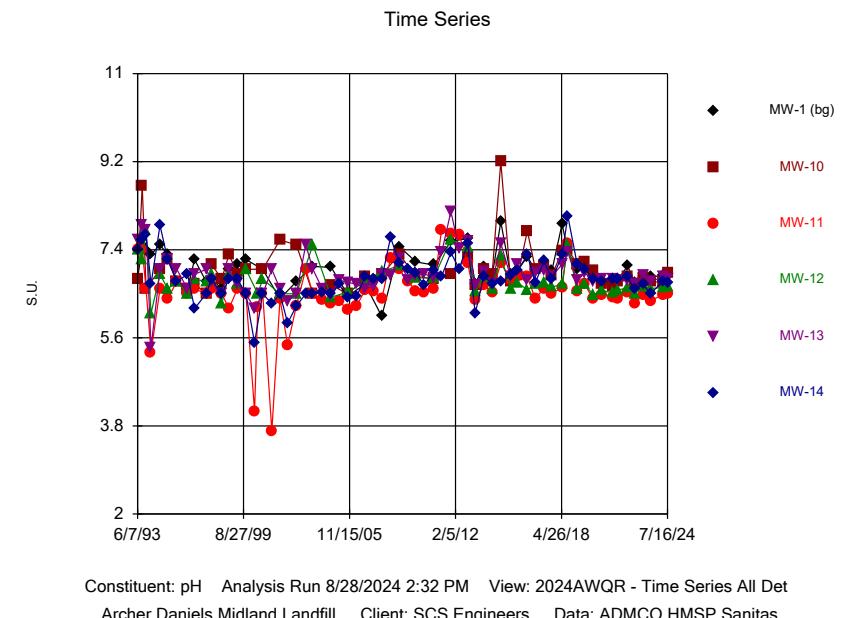
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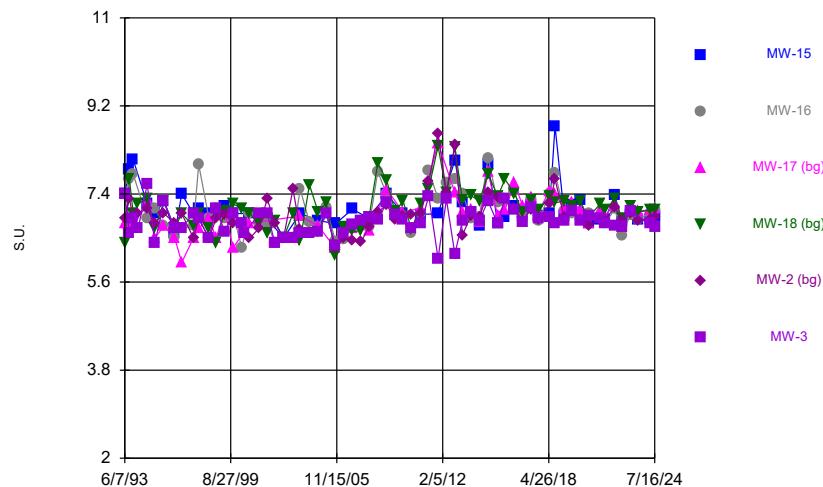
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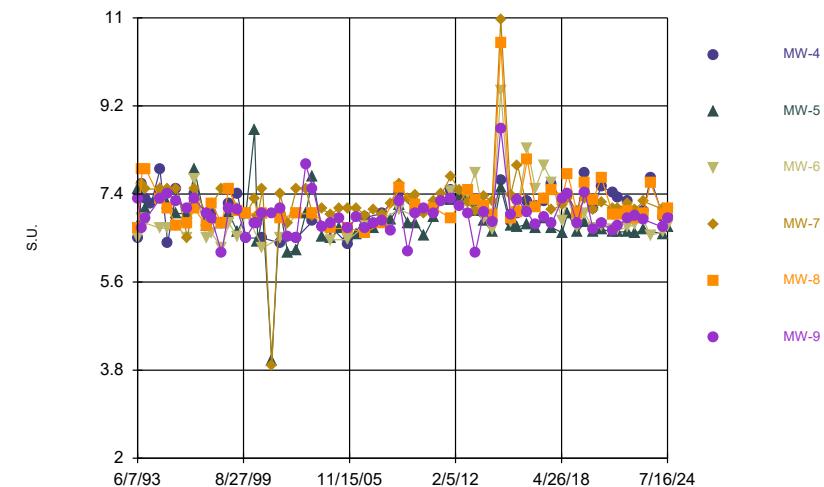
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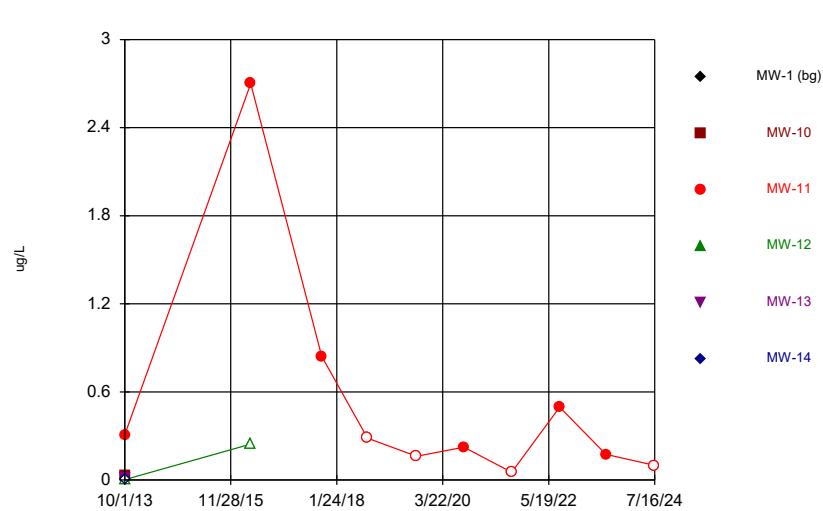
Time Series



Time Series



Time Series

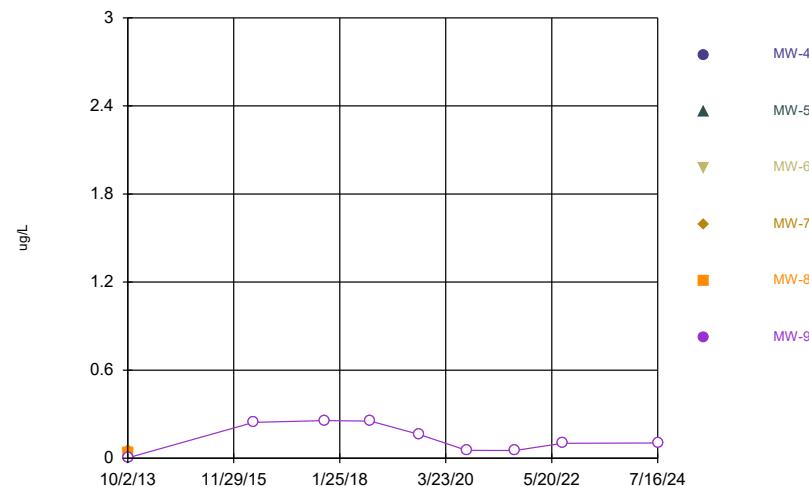


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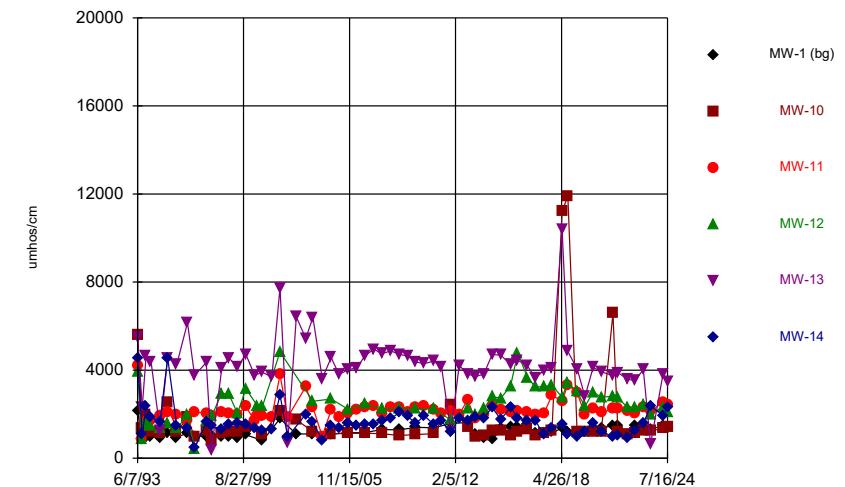
Time Series



Constituent: Phenanthrene Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

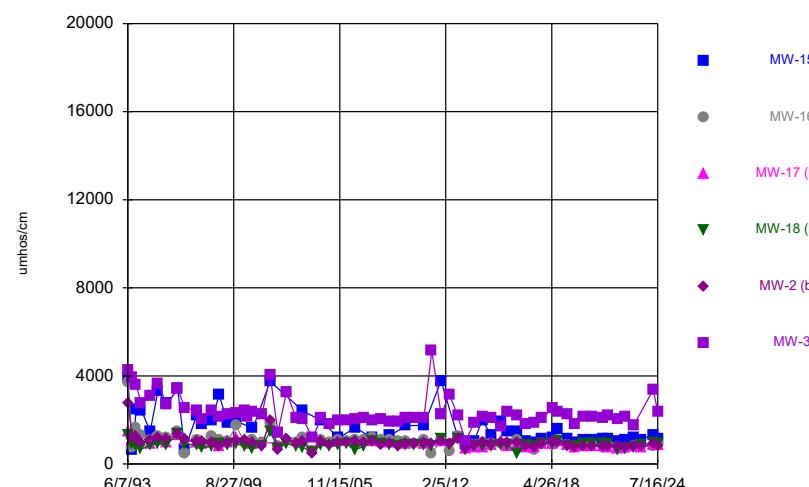
Time Series



Constituent: Specific Conductance Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

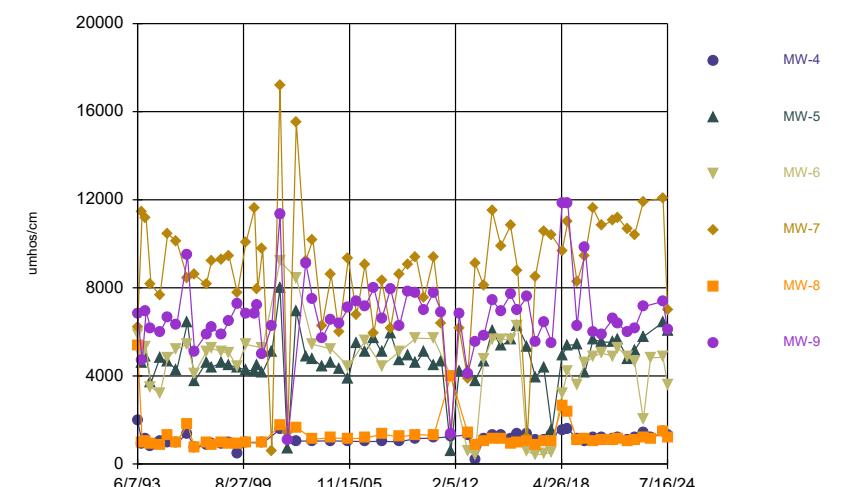
Time Series



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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG

Time Series

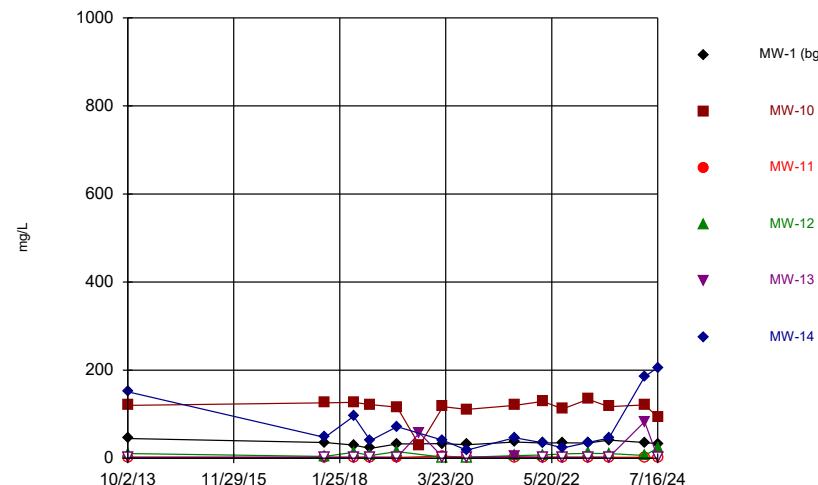


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Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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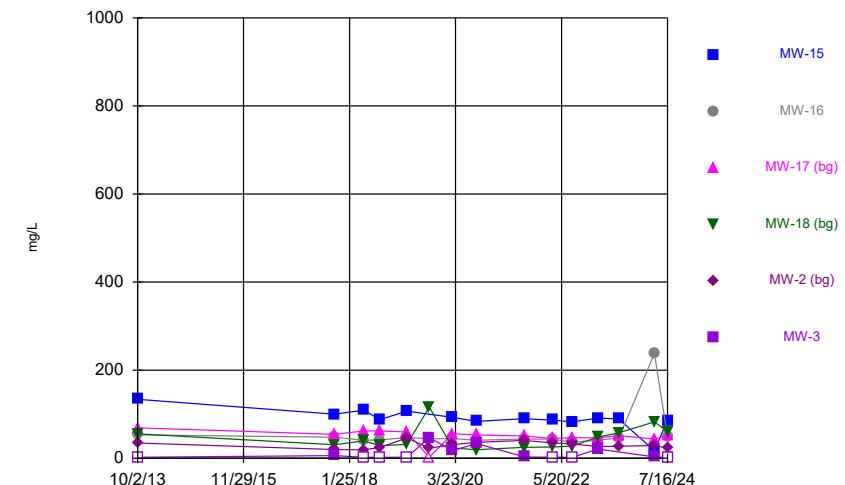
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Hollow symbols indicate censored values.

Time Series



Constituent: Sulfate Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

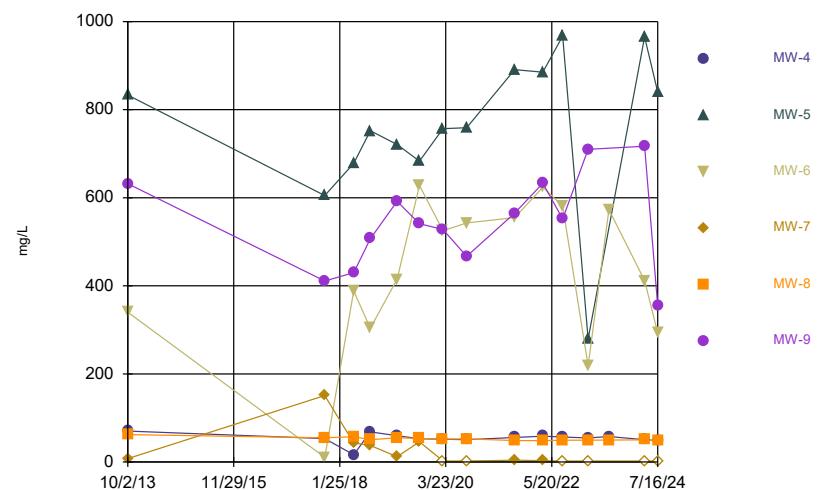
Time Series



Constituent: Sulfate Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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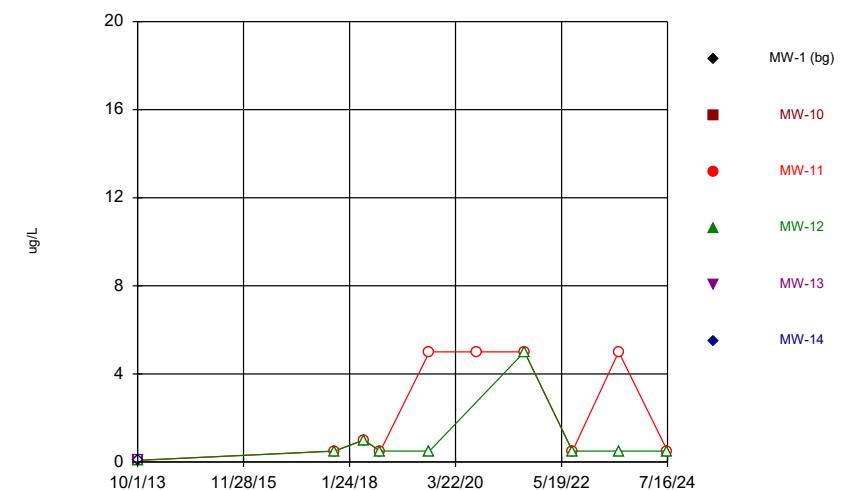
Time Series



Constituent: Sulfate Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

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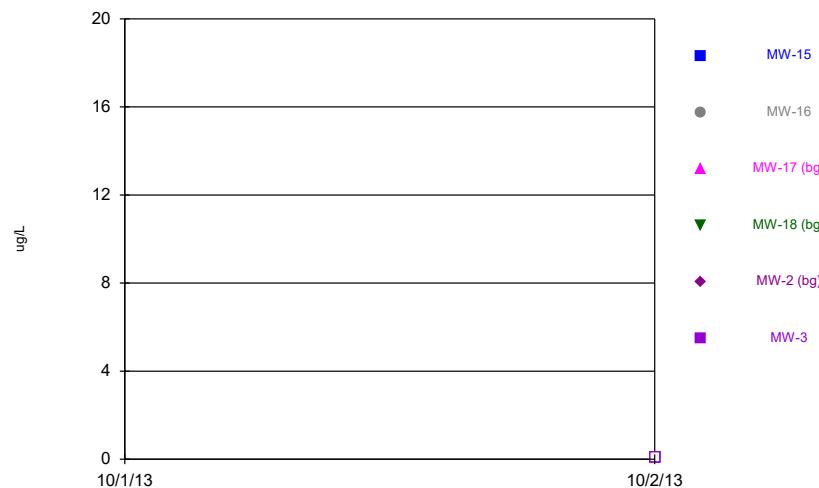
Time Series



Constituent: Toluene Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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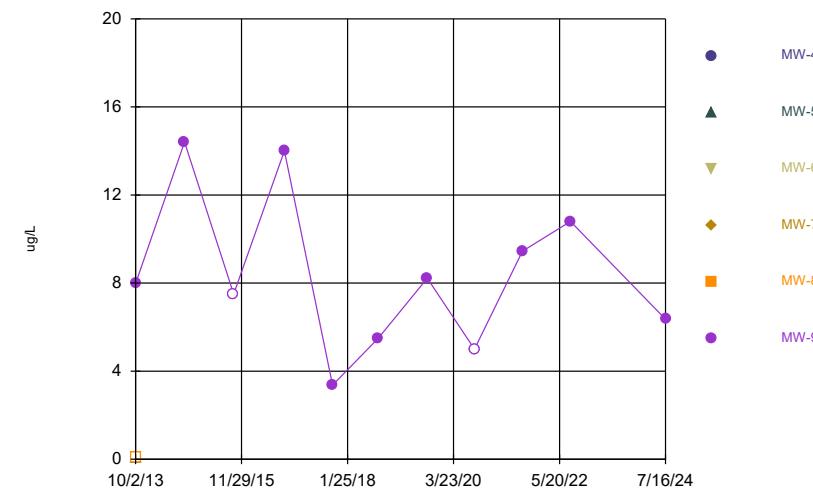
Time Series



Constituent: Toluene Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
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Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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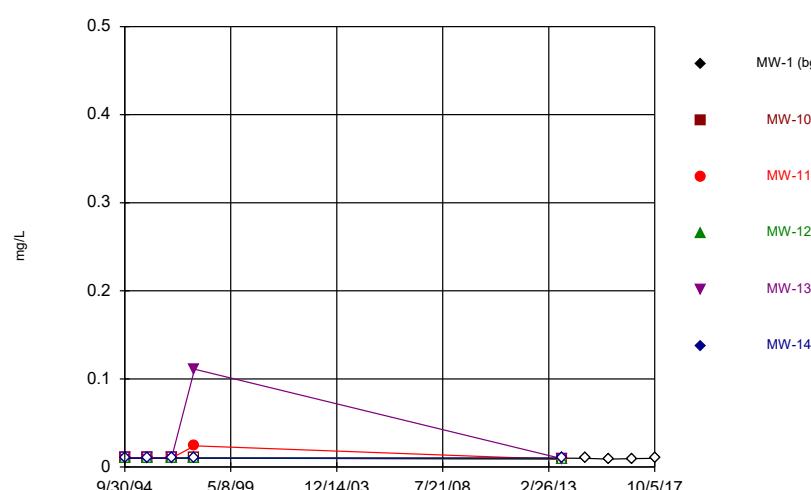
Time Series



Constituent: Toluene Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
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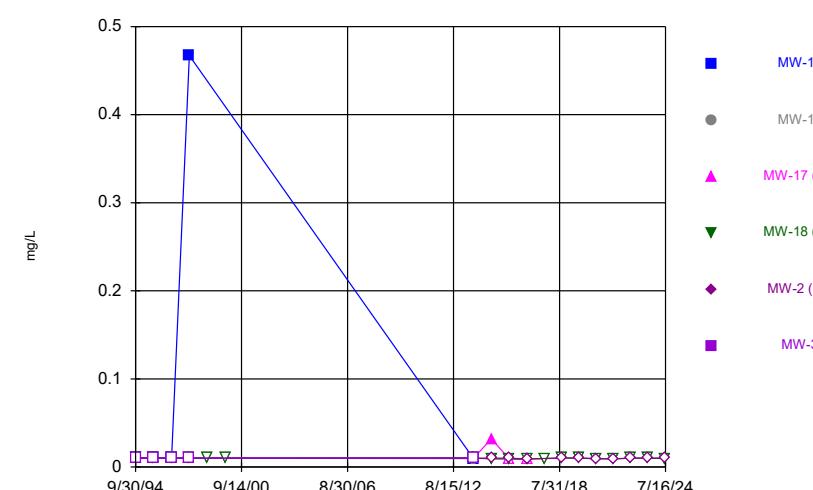
Time Series



Constituent: Total Phenols Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

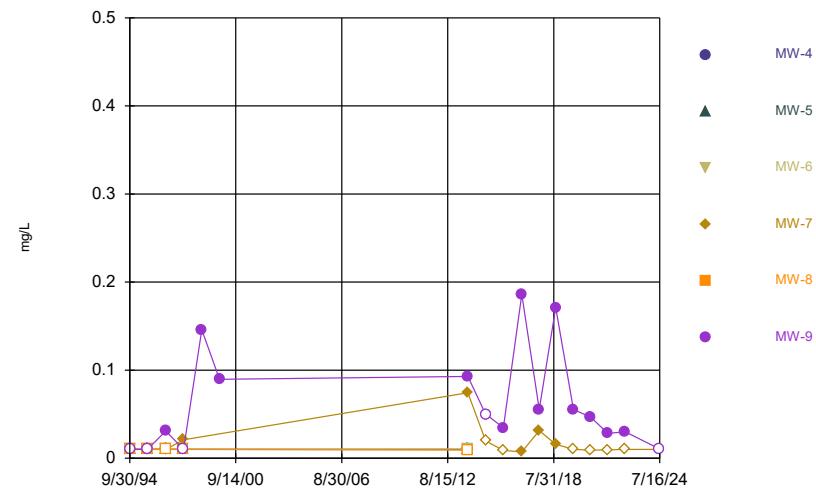
Sanitas™ v.9.6.37 Software licensed to SCS Engineers, UG  
Hollow symbols indicate censored values.

Time Series



Constituent: Total Phenols Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

### Time Series



Constituent: Total Phenols Analysis Run 8/28/2024 2:32 PM View: 2024AWQR - Time Series All Det  
Archer Daniels Midland Landfill Client: SCS Engineers Data: ADMCO HMSP Sanitas

## Appendix E

### Mann-Kendall Trend Table

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-1	Boron		-12	
	Chemical Oxygen Demand		-10	
	Chloride		-6	
	Magnesium		0	
	pH		12	
	Specific Conductance		-2	
	Sulfate		3	
MW-2	Boron		-3	
	Chemical Oxygen Demand			13
	Chloride	-16		
	Cobalt		3	
	Iron		5	
	Magnesium		1	
	Manganese		5	
	Nitrogen, Ammonia		-8	
	pH		-2	
	Specific Conductance		0	
MW-3	Sulfate	-20		
	Arsenic			18
	Boron		-12	
	Chemical Oxygen Demand		2	
	Chloride			18
	Cobalt		-10	
	Iron		0	
	Magnesium		2	
	Manganese		4	
	Nitrogen, Ammonia		8	
	pH		-12	
	Specific Conductance		6	
MW-4	Sulfate		-11	
	Boron		-12	
	Chemical Oxygen Demand		2	
	Chloride			16
	Nitrogen, Ammonia		-3	
	pH	-15		
	Specific Conductance			14
MW-5	Sulfate		-6	
	Arsenic			16
	Boron			23
	Chemical Oxygen Demand		6	
	Chloride		8	
	Cobalt			18
	Iron		6	
	Magnesium			22
	Manganese	-16		
	Nitrogen, Ammonia		7	
	pH		0	
	Specific Conductance		12	
	Sulfate		6	

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-6	Arsenic		4	
	Boron	-18		
	Chemical Oxygen Demand	-15		
	Chloride		4	
	Cobalt	-18		
	Iron		9	
	Magnesium		-3	
	Manganese		4	
	Nickel	-20		
	Nitrogen, Ammonia		-10	
	pH		2	
	Specific Conductance	-14		
MW-7	Sulfate		-8	
	Arsenic		-4	
	Boron		2	
	Chemical Oxygen Demand	-14		
	Chloride		2	
	Cobalt		-6	
	Iron		0	
	Magnesium		2	
	Manganese		4	
	Nitrogen, Ammonia		-6	
	pH		-7	
	Specific Conductance		0	
MW-8	Total Phenols		-1	
	Boron		-2	
	Chemical Oxygen Demand		-1	
	Chloride			18
	Iron		-3	
	Nitrogen, Ammonia		-6	
	pH		9	
	Specific Conductance			14
MW-9	Sulfate		-2	
	Acenaphthene	-14		
	Acenaphthylene	-16		
	Arsenic		12	
	Benzene		-8	
	Boron		10	
	Carbon Disulfide		2	
	Chemical Oxygen Demand		-12	
	Chloride		8	
	Cobalt			16
	Fluorene	-18		
	Iron		0	
	Magnesium		8	
	Manganese		-2	
	Nitrogen, Ammonia		4	
	pH		7	
	Specific Conductance		8	
	Sulfate		8	
	Toluene		4	
	Total Phenols	-24		

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-10	Boron			18
	Chemical Oxygen Demand		11	
	Chloride		8	
	Cobalt		-9	
	Iron			10
	Magnesium		-4	
	Manganese	-14		
	Nitrogen, Ammonia		6	
	pH		10	
	Specific Conductance		10	
	Sulfate		0	
MW-11	Acenaphthene	-18		
	Acenaphthylene		-9	
	Acetone		2	
	Arsenic			14
	Boron			18
	Carbon Disulfide		-2	
	Chemical Oxygen Demand	-16		
	Chloride		12	
	Cobalt	-16		
	Fluorene		-6	
	Iron		-5	
	Magnesium	-18		
	Manganese			16
	Nitrogen, Ammonia		-6	
	pH		6	
	Phenanthrene		-12	
	Specific Conductance		8	
MW-12	Arsenic		1	
	Boron	-15		
	Chemical Oxygen Demand	-14		
	Chloride	-26		
	Cobalt	-20		
	Iron	-11		
	Magnesium	-24		
	Manganese		-4	
	Nitrogen, Ammonia	-17		
	pH			13
	Specific Conductance	-14		
	Sulfate			18
MW-13	Arsenic		-4	
	Boron		-8	
	Chemical Oxygen Demand		-9	
	Chloride			20
	Cobalt		-2	
	Iron		-7	
	Magnesium		-10	
	Manganese		-6	
	Nitrogen, Ammonia		-8	
	pH		4	
	Specific Conductance		-8	
	Sulfate		1	

Monitoring Well	Constituent Name	Calculated Statistic		
		Decreasing Trend	Stable Trend	Increasing Trend
MW-14	Boron		-2	
	Chemical Oxygen Demand		10	
	Chloride			20
	Cobalt		-6	
	Iron		-6	
	Magnesium			16
	Manganese		2	
	Nitrogen, Ammonia		-4	
	pH		-9	
	Specific Conductance			20
MW-15	Sulfate			18
	Arsenic		5	
	Boron		8	
	Chemical Oxygen Demand			16
	Chloride		-4	
	Cobalt		5	
	Iron		-1	
	Magnesium		7	
	Nitrogen, Ammonia		7	
	pH		4	
MW-16	Specific Conductance		8	
	Sulfate		-4	
	Boron	-14		
	Chemical Oxygen Demand		4	
	Chloride			20
	pH		8	
MW-17	Specific Conductance		6	
	Sulfate			14
	Boron		8	
	Chemical Oxygen Demand		2	
	Chloride		12	
	Magnesium		-12	
	Manganese		-6	
	Nickel		1	
	pH		6	
MW-18	Specific Conductance		8	
	Sulfate		-6	
	Arsenic		-8	
	Boron		8	
	Chemical Oxygen Demand		-2	
	Chloride		8	
	Cobalt		-4	
	Iron		1	
	Magnesium		12	
	Manganese		-6	
	Nitrogen, Ammonia		-4	

## Appendix F

### 2024 Leachate Control System Performance Evaluation Report

**Table F1**  
**Leachate Management Summary**  
**2024 Leachate Control System Performance Evaluation Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Date of Measurement	Column in Piezometer (ft)										Discharge to Sanitary Sewer Line (gal)	Leachate Testing Results		Precipitation (in)
	PZ-1	PZ-3	PZ-5R	PZ-6R	PZ-7	PZ-8	PZ-9	PZ-10	PZ-11	PZ-12		pH (S.U.)	TKN (mg/L)	
9/6/2023	11.09	23.22	2.25	0.90	12.37	17.70	7.75	17.49	14.02	10.89	-	-	-	3.31
10/10/2023	7.68	22.00	1.20	0.76	10.85	17.75	5.09	16.79	13.99	9.96	-	-	-	4.03
11/28/2023	7.53	21.97	1.11	0.71	10.60	17.66	5.08	16.25	14.20	9.91	-	-	-	0.76
12/19/2023	7.53	21.99	1.04	0.69	10.55	17.61	5.06	16.22	19.17	9.90	-	-	-	2.91
1/30/2024	6.69	21.96	1.03	0.20	10.45	17.12	5.48	16.19	15.19	9.83	-	-	-	2.86
2/28/2024	6.90	20.16	0.90	0.30	10.79	17.66	5.70	17.75	14.63	11.86	-	-	-	0.11
3/14/2024	6.63	21.91	0.98	0.15	10.45	17.10	25.46	16.15	14.17	9.80	-	-	-	2.55
4/10/2023	6.54	23.55	2.89	8.72	9.98	17.66	5.75	16.54	14.11	11.58	-	-	-	4.88
5/2/2024	6.61	23.56	2.27	6.17	10.02	17.95	24.10	16.55	13.97	11.44	-	-	-	2.70
6/18/2024	11.21	22.81	1.88	2.50	10.73	18.10	6.67	17.13	13.97	11.07	-	-	-	3.80
7/18/2024	12.09	23.28	13.82	2.26	10.94	17.27	16.54	16.65	14.75	10.83	-	-	-	5.19
8/14/2024	11.66	23.48	1.70	1.04	10.93	16.93	16.29	16.61	14.72	10.79	5,000	8.10	845	3.66
9/4/2024	9.57	23.35	1.66	0.73	11.14	17.38	7.37	16.50	13.97	10.89	-	-	-	0.54
Reporting Period Total											5,000			37.30

Notes:

- 1) Leachate column thicknesses for the reporting period generally remained consistent with historical measurements.
- 2) Historical leachate levels and graphs are provided in Attachment A.
- 3) Precipitation data for September 2023 - September 2024 obtained from weather.gov.
- 4) NA - Not Available.
- 5) NM - Not Measured.

Comments:

**Reporting Period:** September 2023 - September 2024.

**Approved Changes to Leachate Collection System:** None.

**Proposed Changes to Leachate Collection System:** None.

**Maintenance Performed on Leachate Collection System:** Extraction wells were flushed and verified for proper operation on 11/06/23 & 5/24/2024.

**Last Date of Cleaning and Inspection:** May 24, 2024

**Date of Next Cleaning and Inspection:** Anticipated semi-annually in 2024.

**Volume of Leachate Recirculated:** Not Applicable.

**Volume of Leachate Treated Off-Site:** 5,000 gallons were released to the City of Clinton POTW.

**Leachate Quality Testing Results:** Leachate quality testing results for the reporting period are provided in Table F1 and Appendix C.



**SCS  
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environmental consultants and contractors

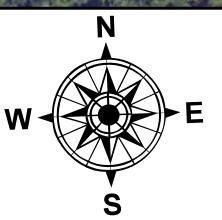
## Leachate Control System

### Legend

- ▲ Approximate Monitoring Well Location
- ▲ Approximate Location of Leachate Piezometer
- ▲ Approximate Location of Extraction Well
- ▲ Approximate Location of Wet Well

- Leachate Storage Tank
- Leachate Piping
- - - Approximate Waste Boundary
- - - Approximate Property Boundary

ADM Clinton Landfill  
Clinton, Iowa  
Project No: 27224044.00  
Drawing Date: November 2024

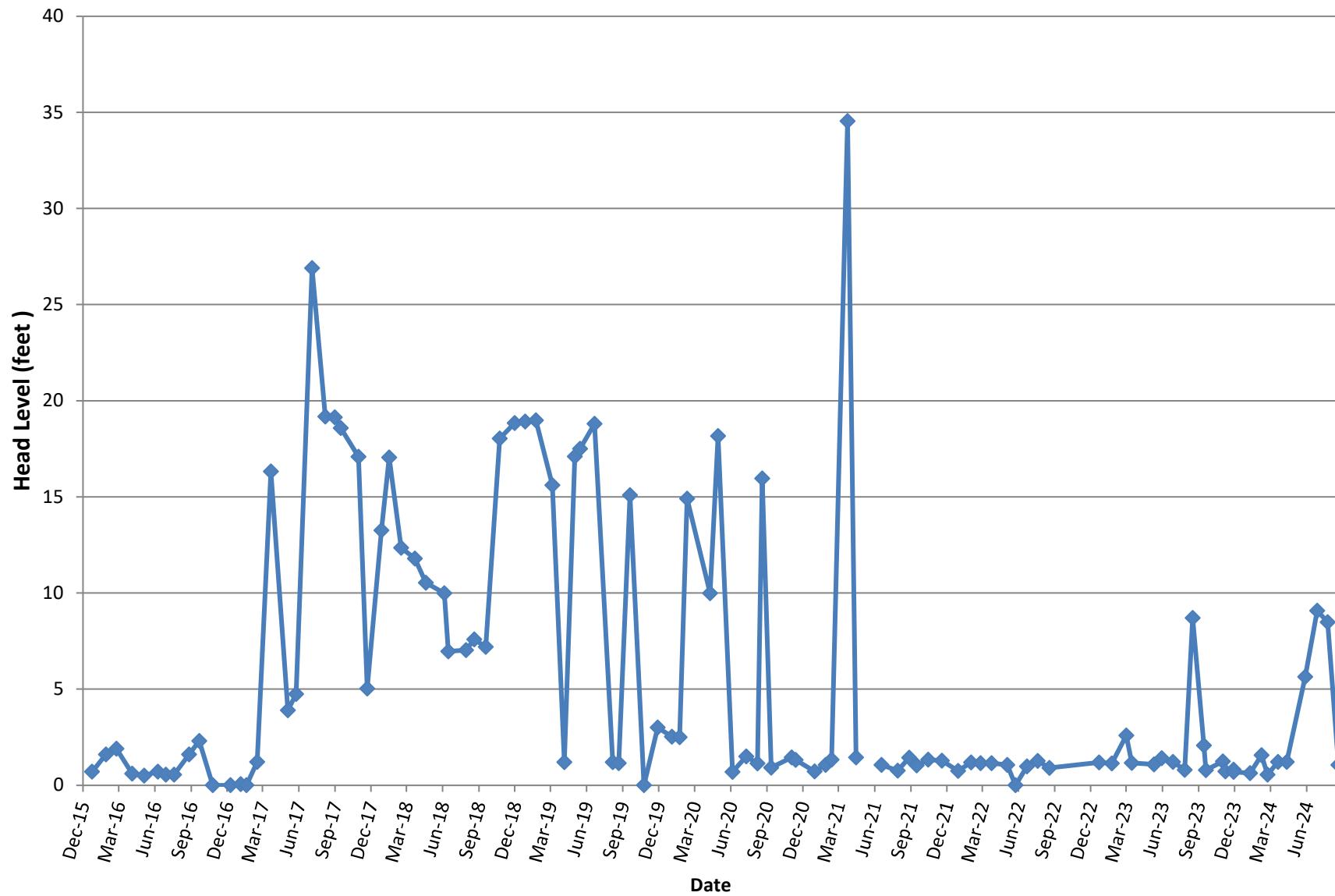


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Feet

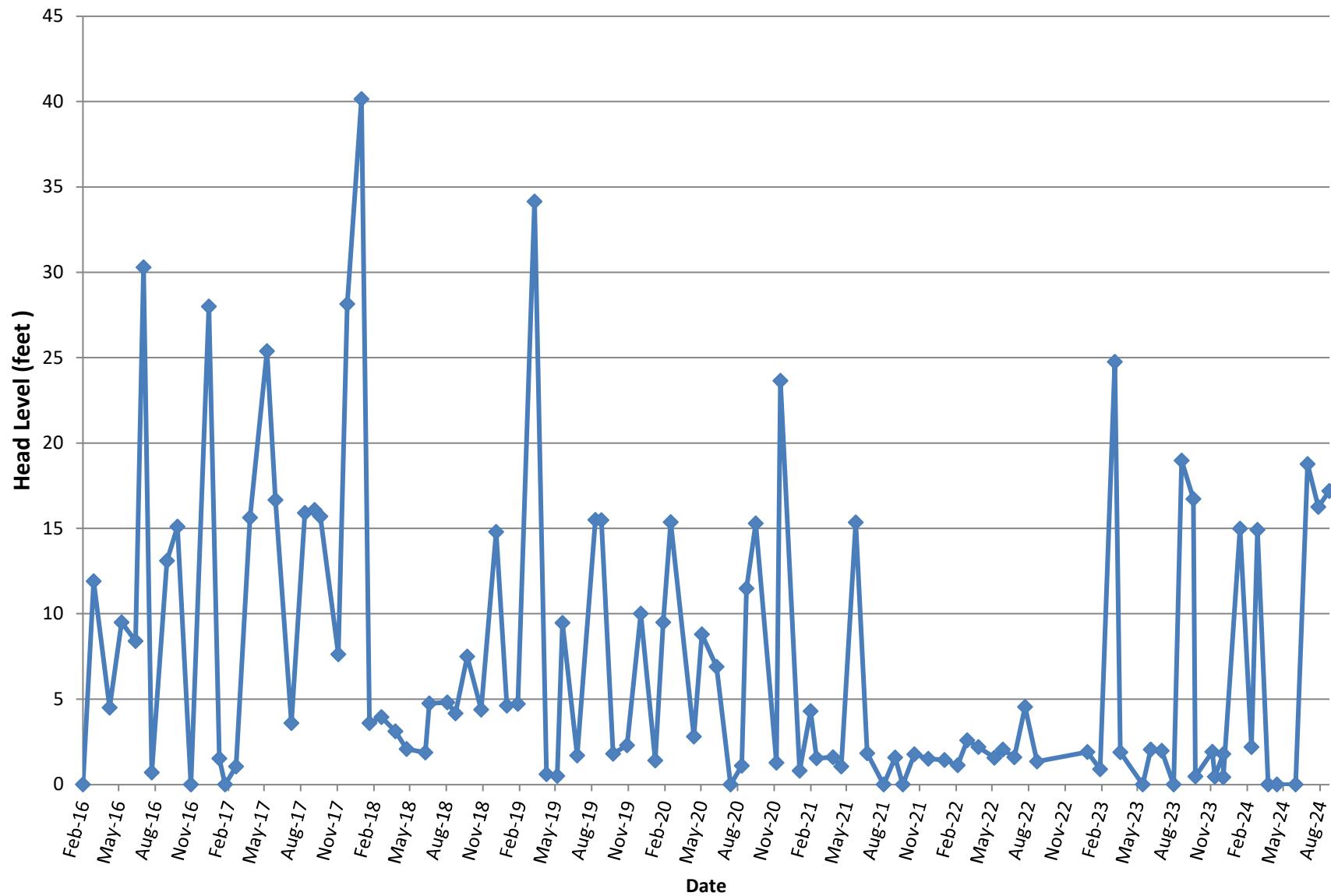
**Figure 1**

Attachment A  
Historical Leachate Level Graphs

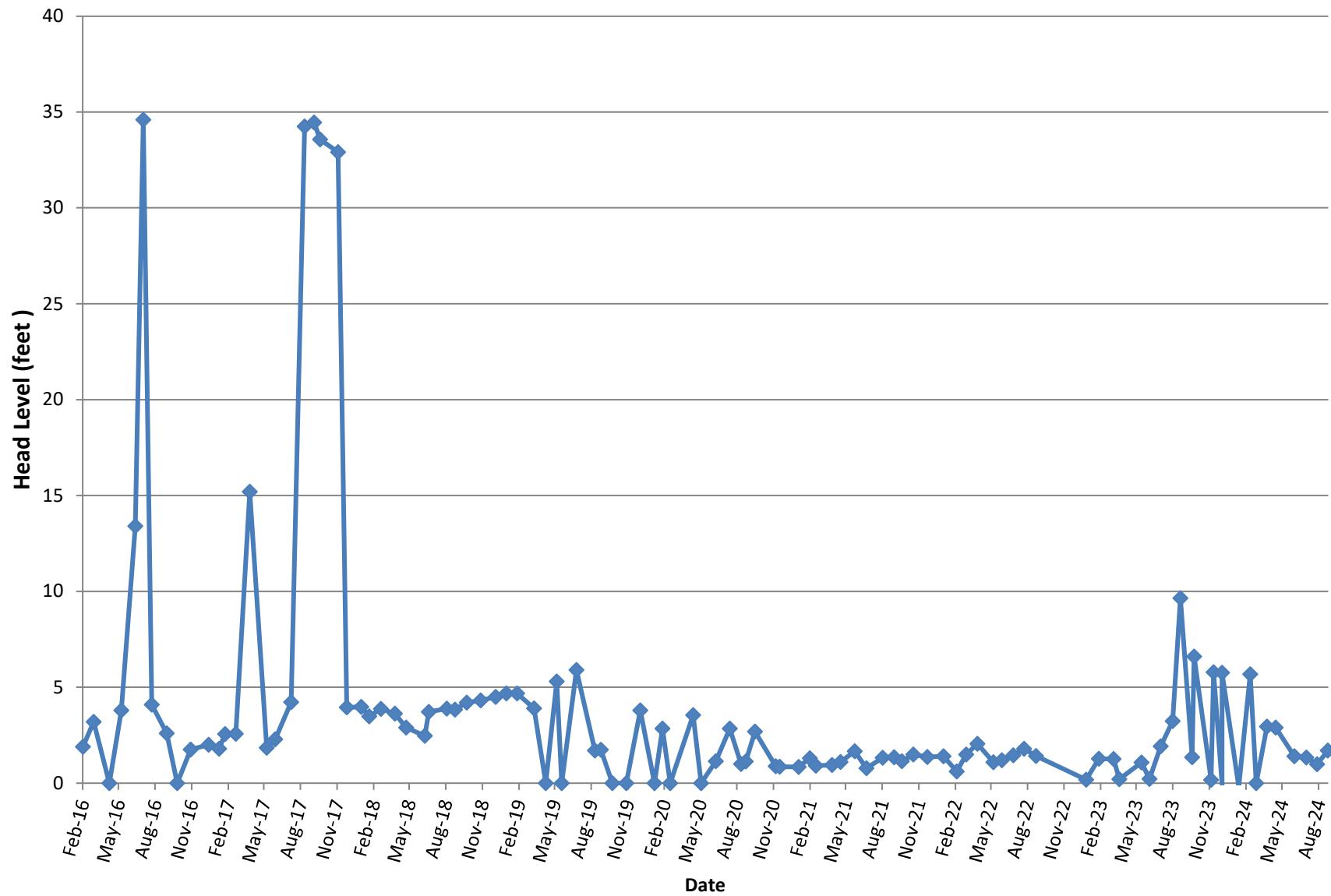
## EW-1 Historical Leachate Column Thicknesses



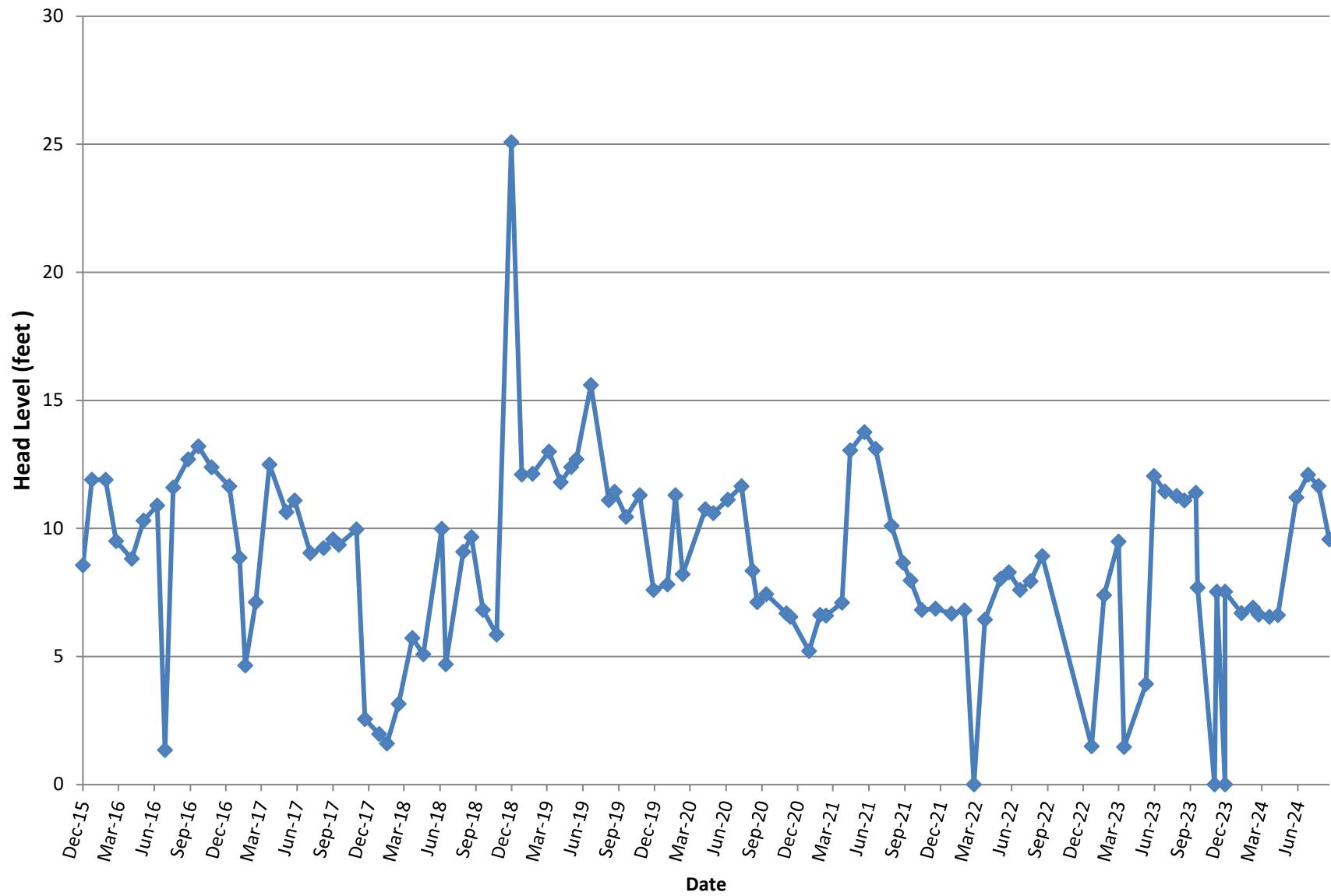
## EW-2 Historical Leachate Column Thicknesses



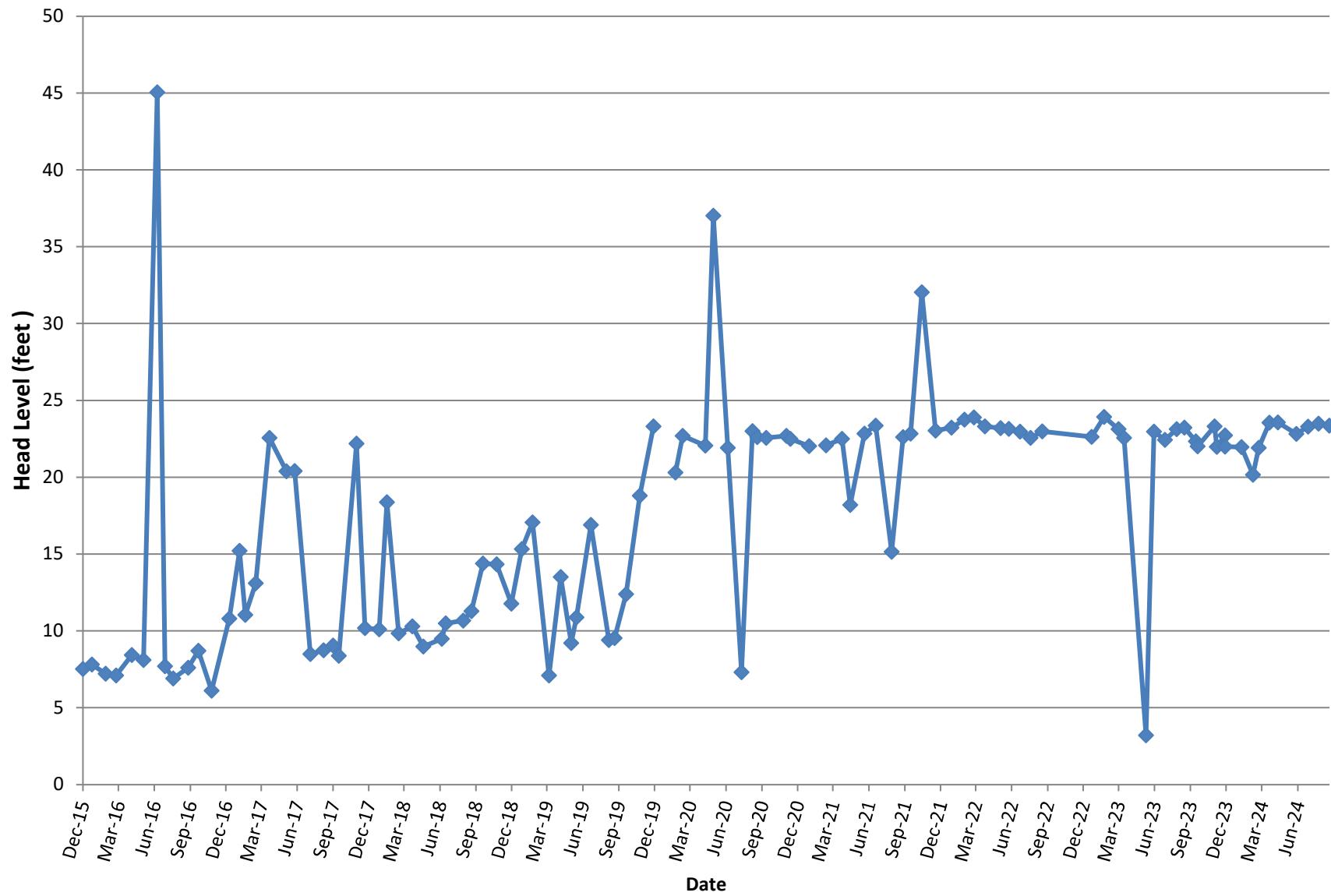
## EW-3 Historical Leachate Column Thicknesses



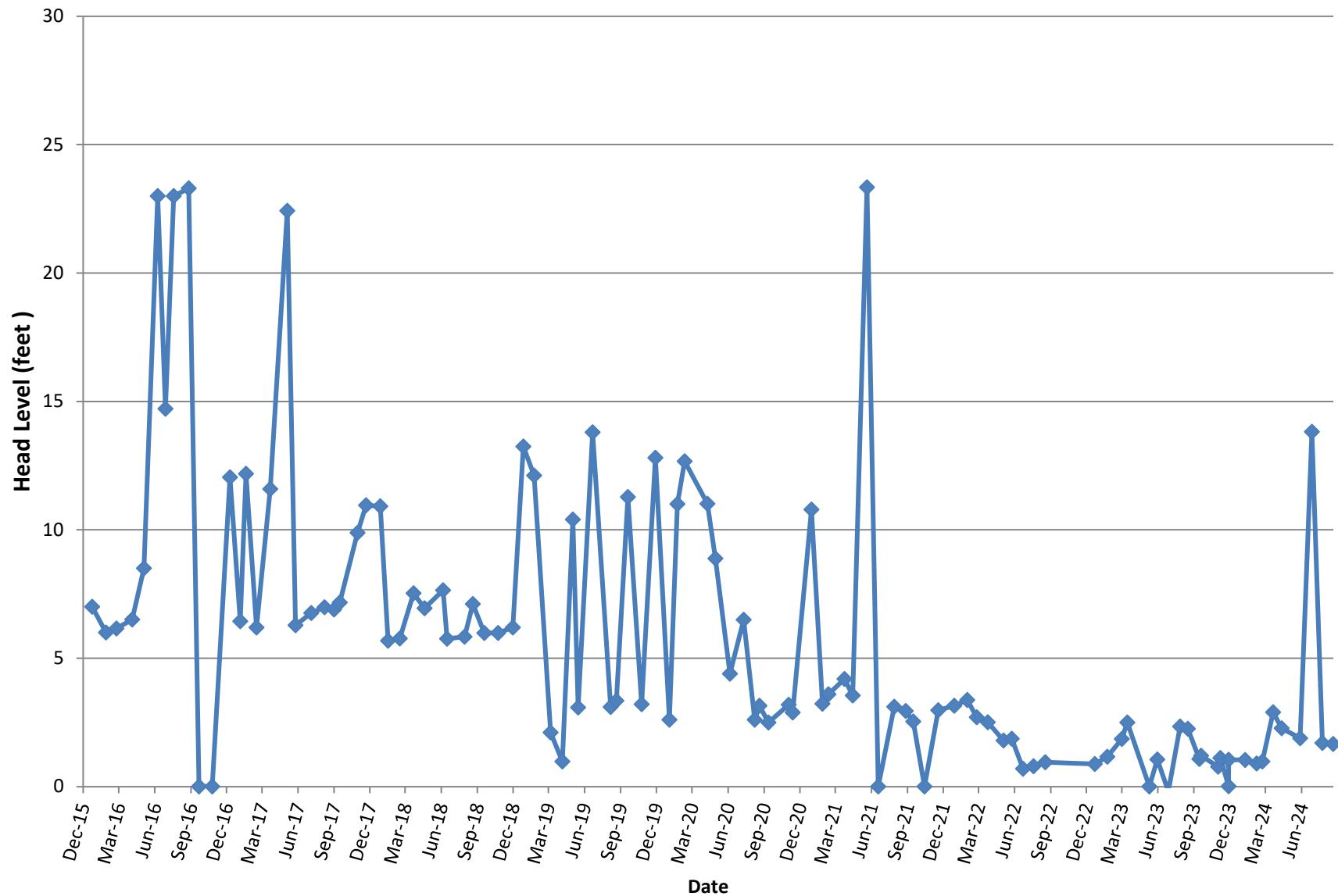
## PZ-1 Historical Leachate Column Thicknesses



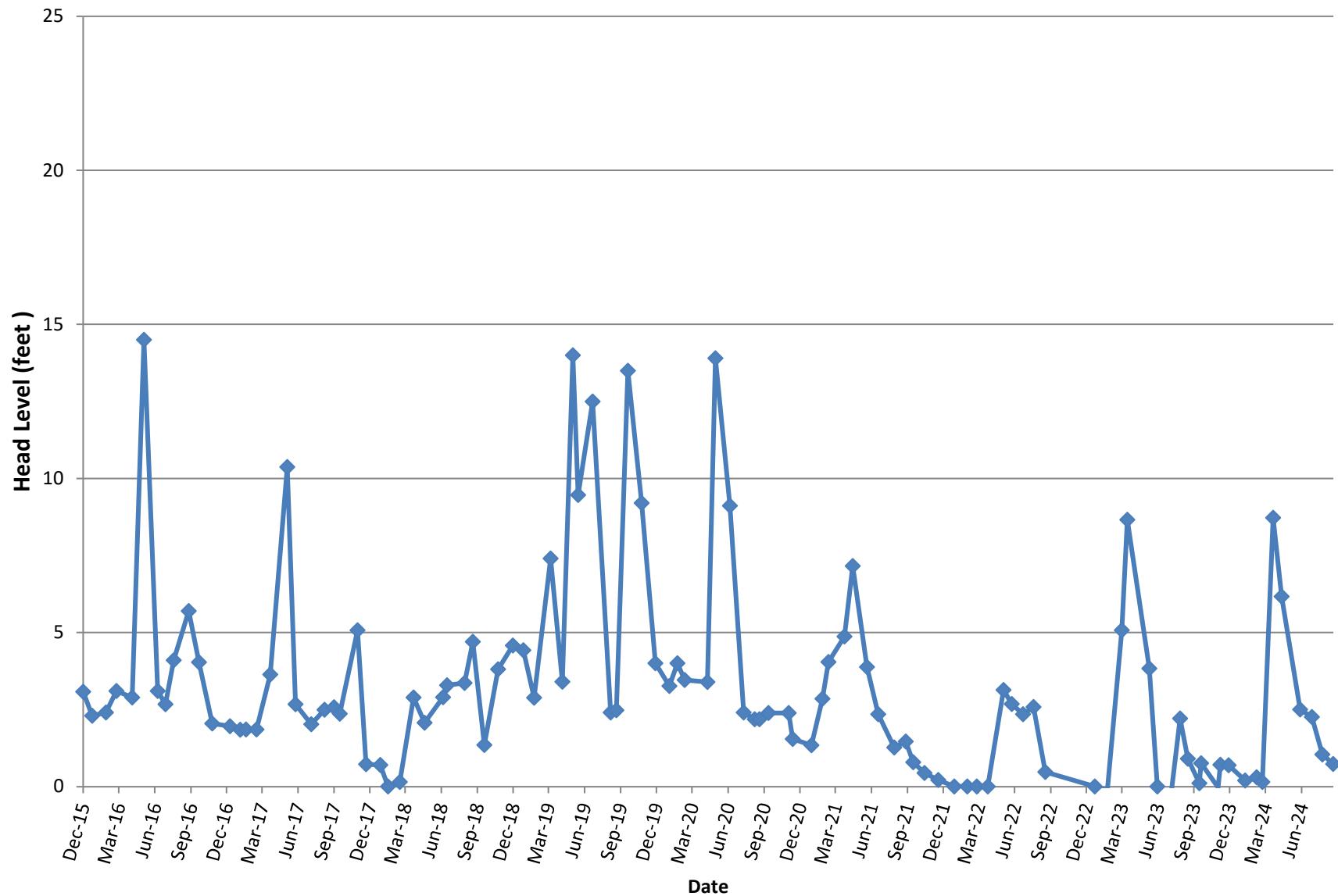
## PZ-3 Historical Leachate Column Thicknesses



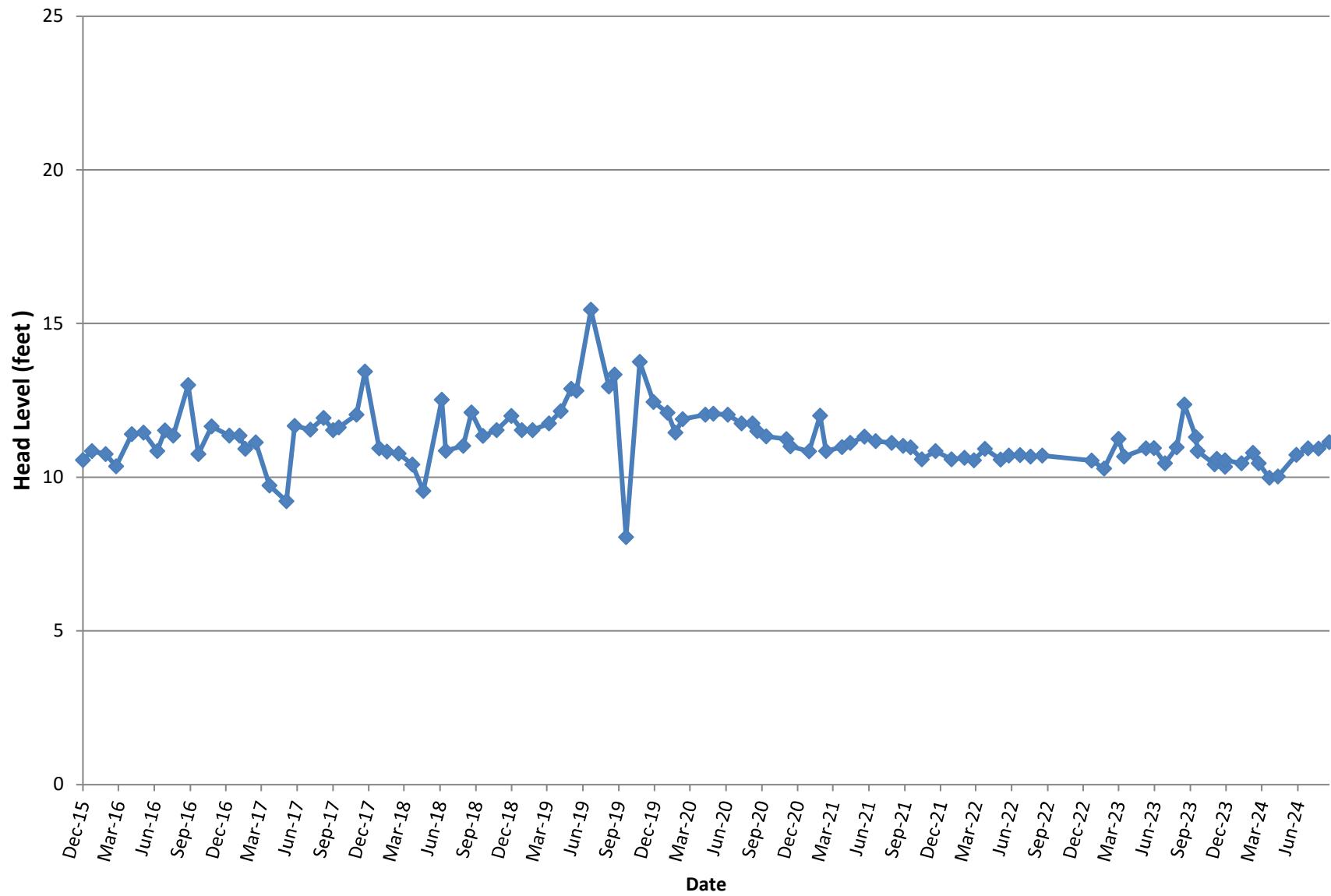
## PZ-5R Historical Leachate Column Thicknesses



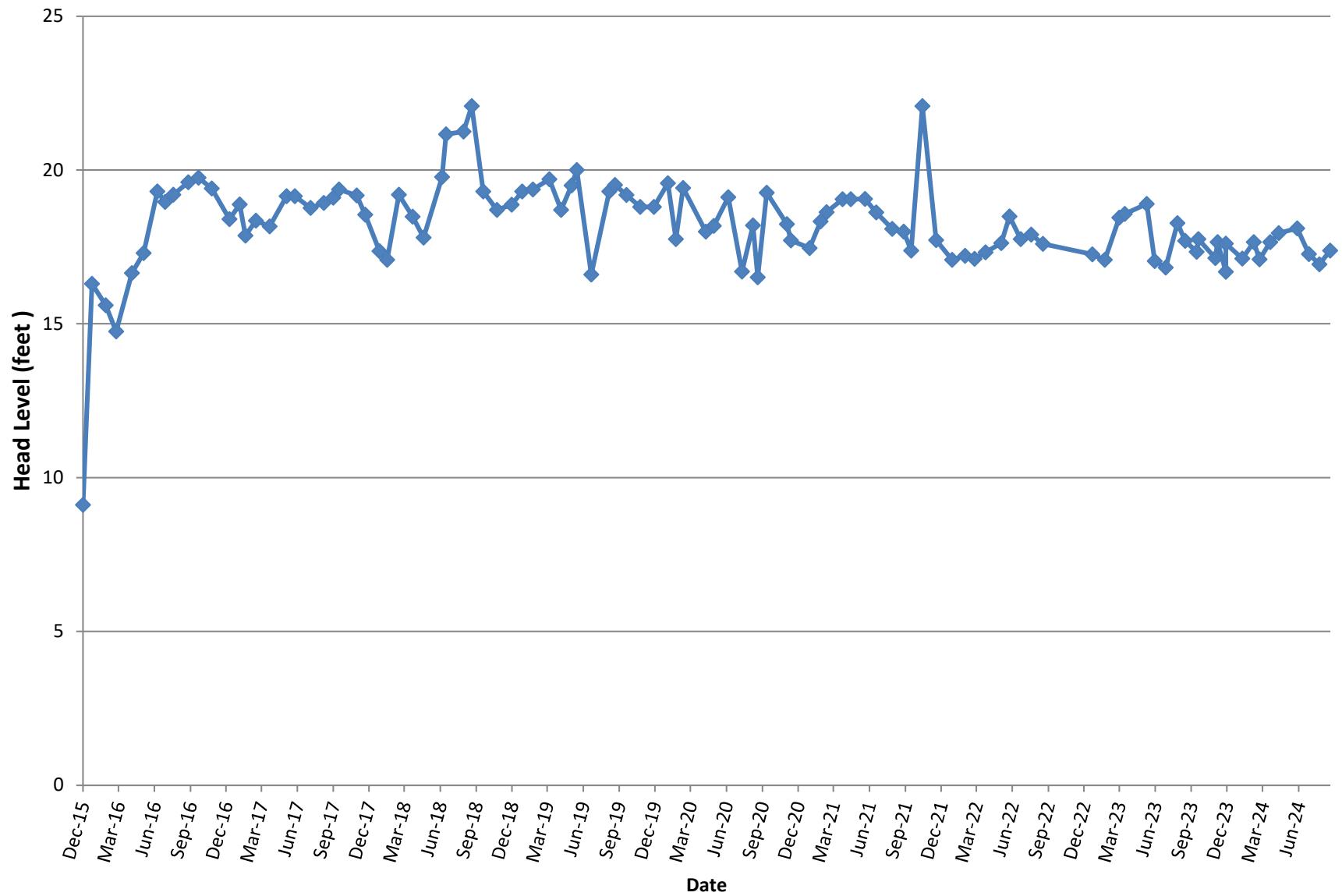
## PZ-6R Historical Leachate Column Thicknesses



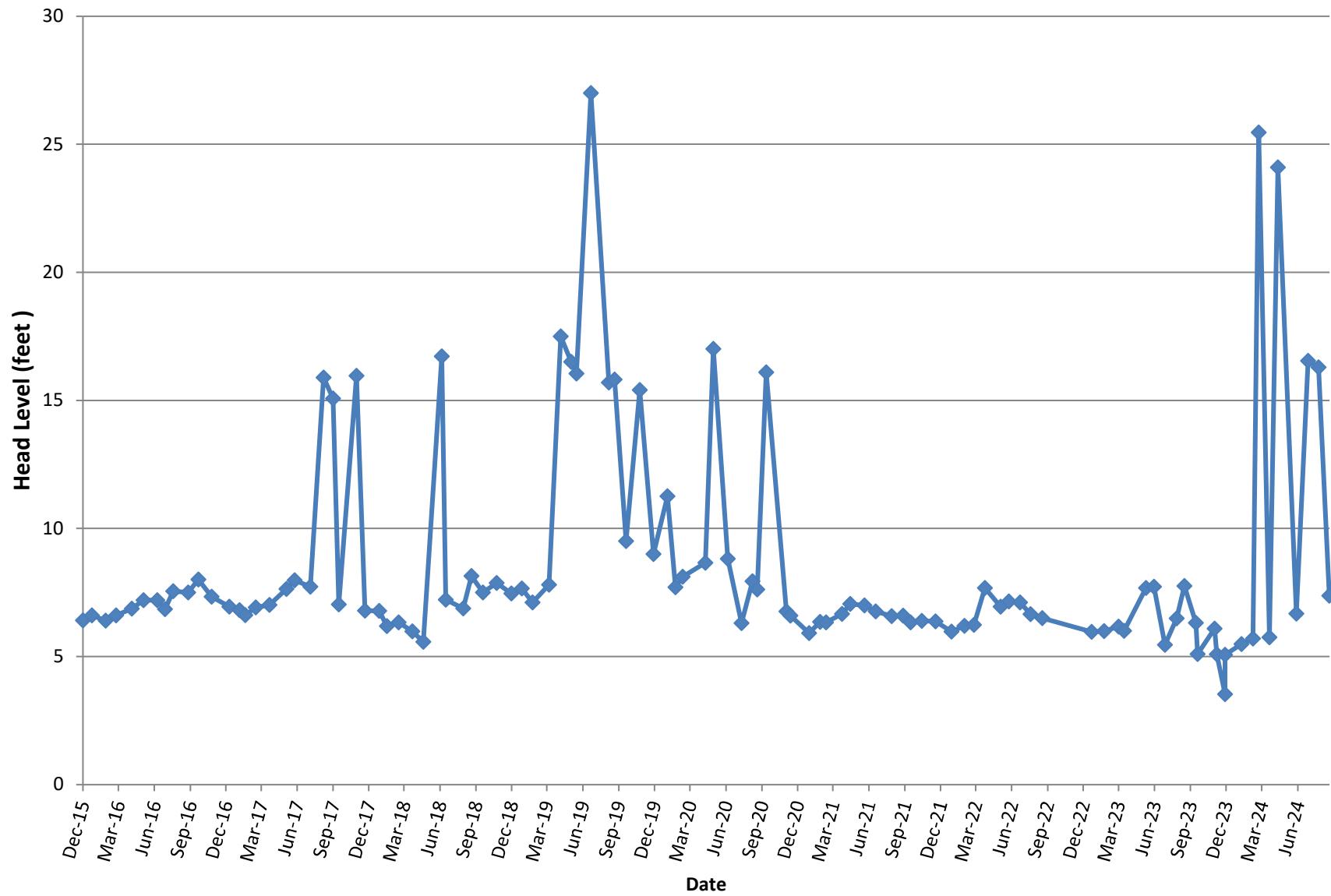
## PZ-7 Historical Leachate Column Thicknesses



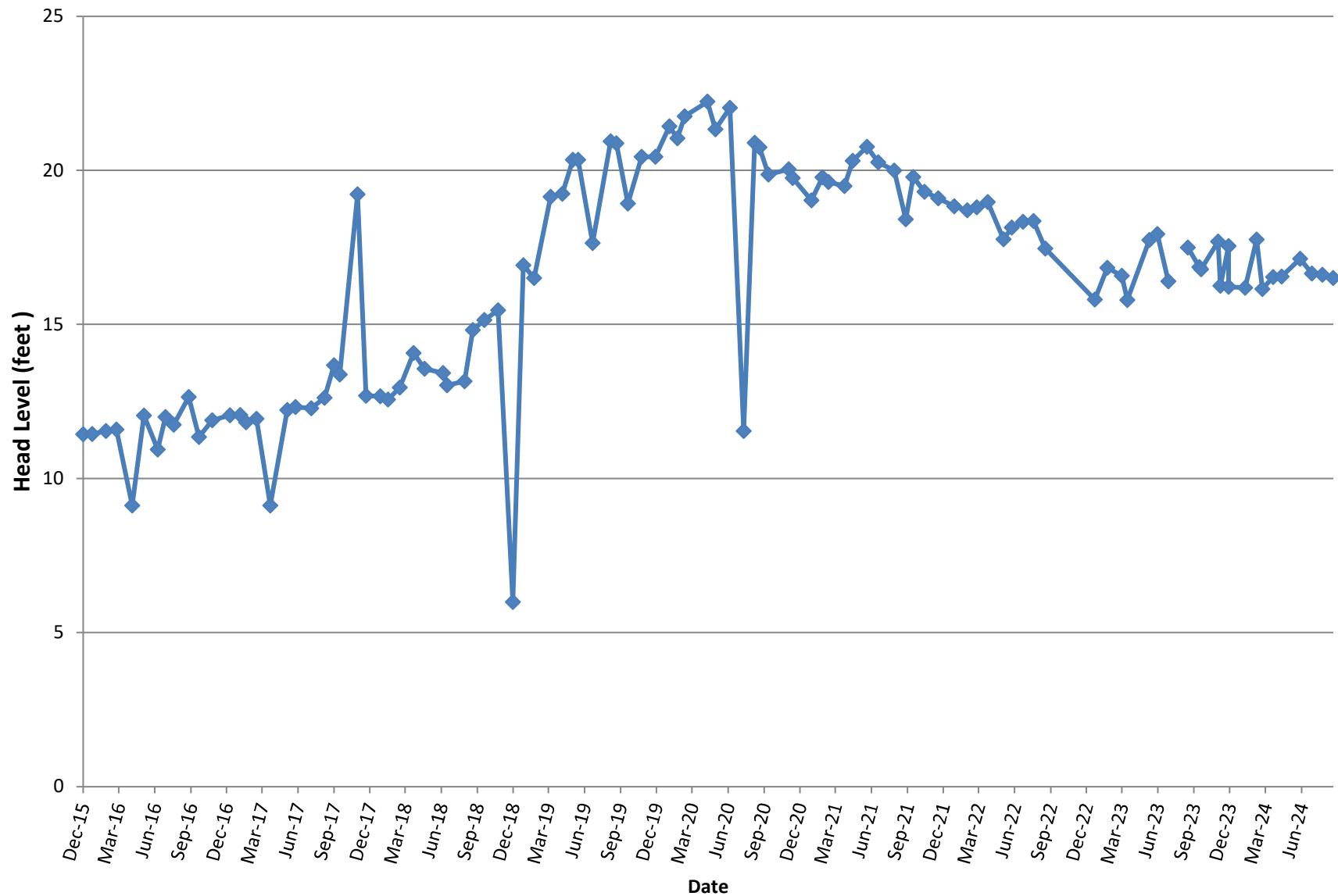
## PZ-8 Historical Leachate Column Thicknesses



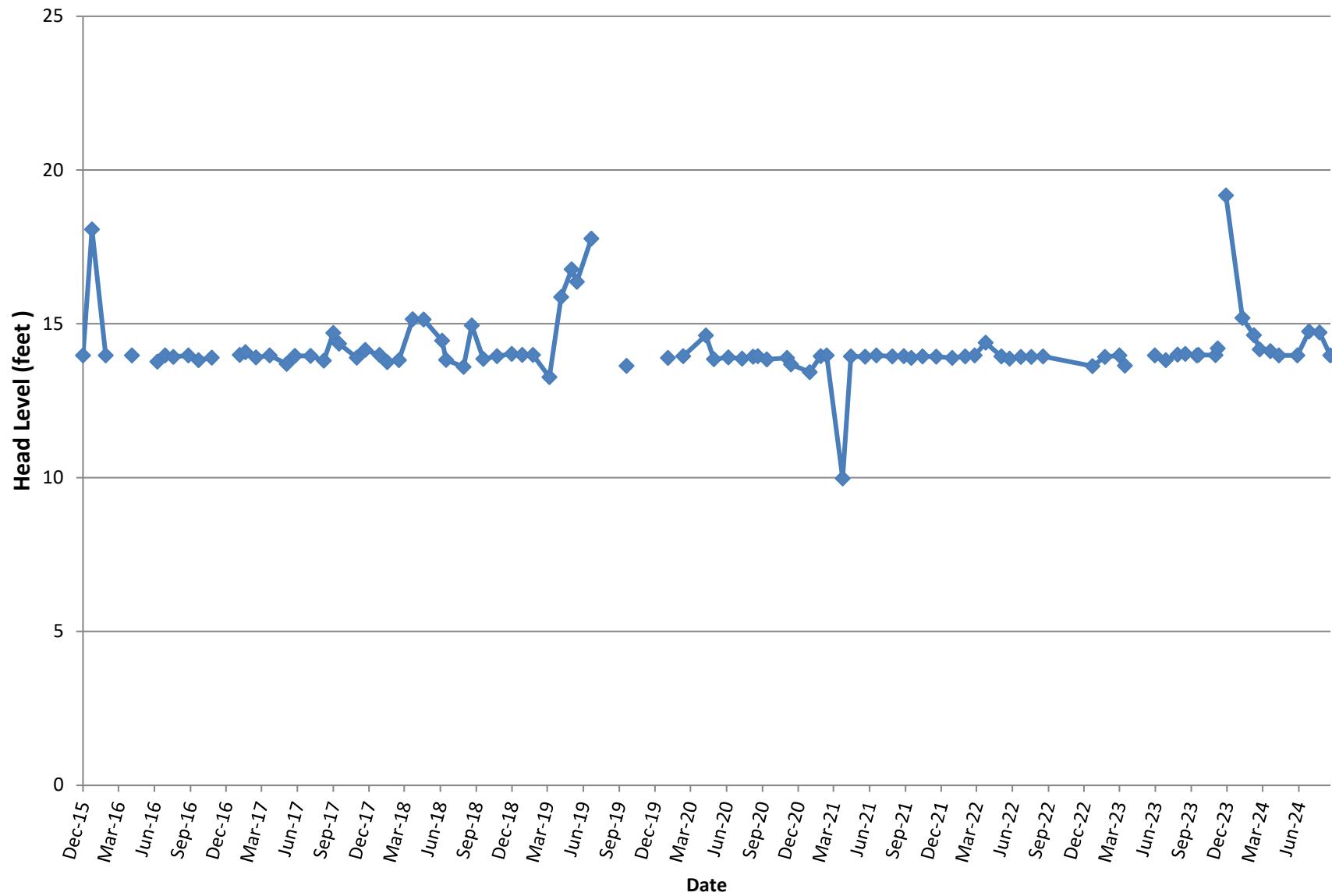
## PZ-9 Historical Leachate Column Thicknesses



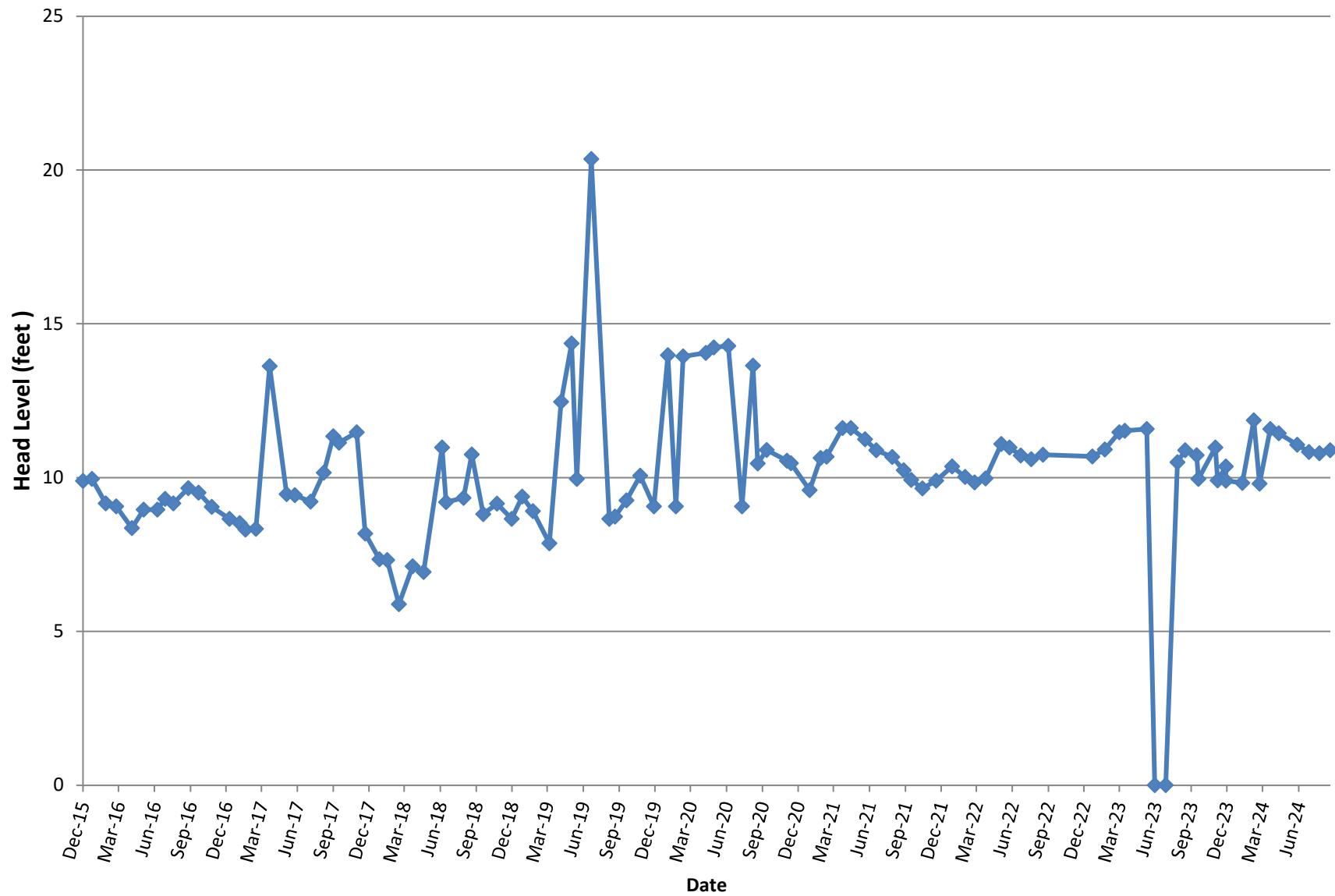
## PZ-10 Historical Leachate Column Thicknesses



## PZ-11 Historical Leachate Column Thicknesses



## PZ-12 Historical Leachate Column Thicknesses





## Appendix G

### 2024 Landfill Gas Annual Report

**Table G1**  
**Landfill Gas Monitoring Summary**  
**2024 Landfill Gas Monitoring Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Monitoring Points			Methane Results (% LEL)	
Name	Type	Description	11/28/2023	S (Y/N)
#1	Outdoor, ambient	Near MW-1/MW-2	0%	X
#2	Outdoor, ambient	Near PZ-4; Destroyed	0%	X
#3	Outdoor, ambient	Near MW-3/MW-4	0%	X
#4	Outdoor, ambient	Near MW-5/MW-6	0%	X
#5	Outdoor, ambient	Near MW-7/MW-8	0%	X
#6	Outdoor, ambient	Near MW-9/MW-10	0%	X
#7	Outdoor, ambient	Southwest side of landfill	0%	X
#8	Outdoor, ambient	Near MW-13	0%	X
#9	Outdoor, ambient	Near MW-14/MW-15	0%	X
#10	Outdoor, ambient	Near MW-16	0%	X
#11	Outdoor, ambient	North side of west half of landfill	0%	X
#12	Outdoor, ambient	Near MW-17/MW-18	0%	X
#13	Outdoor, ambient	North side of east half of landfill	0%	X
#14	Outdoor, ambient	Near PZ-1	0%	X
#15	Outdoor, ambient	Near PZ-2; Destroyed	0%	X
#16	Outdoor, ambient	Near PZ-3	0%	X
#17	Outdoor, ambient	Near PZ-5R	0%	X
#18	Outdoor, ambient	Near PZ-6R	0%	X
#19	Passive Vent Opening	Western-most Passive Gas Vent (PGV), near PZ-3	12%	X
#20	Passive Vent Opening	Vent East of PGV #1	9%	X
#21	Passive Vent Opening	Vent East of PGV #2	8%	X
#22	Passive Vent Opening	Vent East of PGV #3	7%	X
#23	Passive Vent Opening	Vent East of PGV #4	0%	X
#24	Passive Vent Opening	Vent East of PGV #5	0%	X
#25	Passive Vent Opening	Vent East of PGV #6	0%	X
#26	Passive Vent Opening	Vent East of PGV #7	0%	X
#27	Passive Vent Opening	Vent East of PGV #8	0%	X
#28	Passive Vent Opening	Vent East of PGV #9	9%	X
#29	Passive Vent Opening	Vent SE of Staging Area	0%	X
#30	Passive Vent Opening	Vent NE of Staging Area	5%	X

S(Y/N) - Was screen submerged, yes or no.

**Table G1 - continued**  
**Landfill Gas Monitoring Summary**  
**2024 Landfill Gas Monitoring Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Monitoring Points			Methane Results (% LEL)	
Name	Type	Description	2/28/2024	S (Y/N)
#1	Outdoor, ambient	Near MW-1/MW-2	0%	X
#2	Outdoor, ambient	Near PZ-4; Destroyed	0%	X
#3	Outdoor, ambient	Near MW-3/MW-4	0%	X
#4	Outdoor, ambient	Near MW-5/MW-6	0%	X
#5	Outdoor, ambient	Near MW-7/MW-8	0%	X
#6	Outdoor, ambient	Near MW-9/MW-10	0%	X
#7	Outdoor, ambient	Southwest side of landfill	0%	X
#8	Outdoor, ambient	Near MW-13	0%	X
#9	Outdoor, ambient	Near MW-14/MW-15	0%	X
#10	Outdoor, ambient	Near MW-16	0%	X
#11	Outdoor, ambient	North side of west half of landfill	0%	X
#12	Outdoor, ambient	Near MW-17/MW-18	0%	X
#13	Outdoor, ambient	North side of east half of landfill	0%	X
#14	Outdoor, ambient	Near PZ-1	0%	X
#15	Outdoor, ambient	Near PZ-2; Destroyed	0%	X
#16	Outdoor, ambient	Near PZ-3	0%	X
#17	Outdoor, ambient	Near PZ-5R	0%	X
#18	Outdoor, ambient	Near PZ-6R	0%	X
#19	Passive Vent Opening	Western-most Passive Gas Vent (PGV), near PZ-3	0%	X
#20	Passive Vent Opening	Vent East of PGV #1	0%	X
#21	Passive Vent Opening	Vent East of PGV #2	0%	X
#22	Passive Vent Opening	Vent East of PGV #3	0%	X
#23	Passive Vent Opening	Vent East of PGV #4	0%	X
#24	Passive Vent Opening	Vent East of PGV #5	0%	X
#25	Passive Vent Opening	Vent East of PGV #6	0%	X
#26	Passive Vent Opening	Vent East of PGV #7	0%	X
#27	Passive Vent Opening	Vent East of PGV #8	0%	X
#28	Passive Vent Opening	Vent East of PGV #9	0%	X
#29	Passive Vent Opening	Vent SE of Staging Area	0%	X
#30	Passive Vent Opening	Vent NE of Staging Area	0%	X

S(Y/N) - Was screen submerged, yes or no.

**Table G1 - continued**  
**Landfill Gas Monitoring Summary**  
**2024 Landfill Gas Monitoring Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Monitoring Points			Methane Results (% LEL)	
Name	Type	Description	5/2/2024	S (Y/N)
#1	Outdoor, ambient	Near MW-1/MW-2	0%	X
#2	Outdoor, ambient	Near PZ-4; Destroyed	0%	X
#3	Outdoor, ambient	Near MW-3/MW-4	0%	X
#4	Outdoor, ambient	Near MW-5/MW-6	0%	X
#5	Outdoor, ambient	Near MW-7/MW-8	0%	X
#6	Outdoor, ambient	Near MW-9/MW-10	0%	X
#7	Outdoor, ambient	Southwest side of landfill	0%	X
#8	Outdoor, ambient	Near MW-13	0%	X
#9	Outdoor, ambient	Near MW-14/MW-15	0%	X
#10	Outdoor, ambient	Near MW-16	0%	X
#11	Outdoor, ambient	North side of west half of landfill	0%	X
#12	Outdoor, ambient	Near MW-17/MW-18	0%	X
#13	Outdoor, ambient	North side of east half of landfill	0%	X
#14	Outdoor, ambient	Near PZ-1	0%	X
#15	Outdoor, ambient	Near PZ-2; Destroyed	0%	X
#16	Outdoor, ambient	Near PZ-3	0%	X
#17	Outdoor, ambient	Near PZ-5R	0%	X
#18	Outdoor, ambient	Near PZ-6R	0%	X
#19	Passive Vent Opening	Western-most Passive Gas Vent (PGV), near PZ-3	0%	X
#20	Passive Vent Opening	Vent East of PGV #1	0%	X
#21	Passive Vent Opening	Vent East of PGV #2	11%	X
#22	Passive Vent Opening	Vent East of PGV #3	7%	X
#23	Passive Vent Opening	Vent East of PGV #4	9%	X
#24	Passive Vent Opening	Vent East of PGV #5	0%	X
#25	Passive Vent Opening	Vent East of PGV #6	0%	X
#26	Passive Vent Opening	Vent East of PGV #7	20%	X
#27	Passive Vent Opening	Vent East of PGV #8	0%	X
#28	Passive Vent Opening	Vent East of PGV #9	0%	X
#29	Passive Vent Opening	Vent SE of Staging Area	0%	X
#30	Passive Vent Opening	Vent NE of Staging Area	0%	X

S(Y/N) - Was screen submerged, yes or no.

**Table G1 - continued**  
**Landfill Gas Monitoring Summary**  
**2024 Landfill Gas Monitoring Report**  
**ADM-Clinton Landfill**  
**Permit No. 23-SDP-05-88C**

Monitoring Points			Methane Results (% LEL)	
Name	Type	Description	8/14/2024	S (Y/N)
#1	Outdoor, ambient	Near MW-1/MW-2	0%	X
#2	Outdoor, ambient	Near PZ-4; Destroyed	0%	X
#3	Outdoor, ambient	Near MW-3/MW-4	0%	X
#4	Outdoor, ambient	Near MW-5/MW-6	0%	X
#5	Outdoor, ambient	Near MW-7/MW-8	0%	X
#6	Outdoor, ambient	Near MW-9/MW-10	0%	X
#7	Outdoor, ambient	Southwest side of landfill	0%	X
#8	Outdoor, ambient	Near MW-13	0%	X
#9	Outdoor, ambient	Near MW-14/MW-15	0%	X
#10	Outdoor, ambient	Near MW-16	0%	X
#11	Outdoor, ambient	North side of west half of landfill	0%	X
#12	Outdoor, ambient	Near MW-17/MW-18	0%	X
#13	Outdoor, ambient	North side of east half of landfill	0%	X
#14	Outdoor, ambient	Near PZ-1	0%	X
#15	Outdoor, ambient	Near PZ-2; Destroyed	0%	X
#16	Outdoor, ambient	Near PZ-3	0%	X
#17	Outdoor, ambient	Near PZ-5R	0%	X
#18	Outdoor, ambient	Near PZ-6R	0%	X
#19	Passive Vent Opening	Western-most Passive Gas Vent (PGV), near PZ-3	12%	X
#20	Passive Vent Opening	Vent East of PGV #1	13%	X
#21	Passive Vent Opening	Vent East of PGV #2	12%	X
#22	Passive Vent Opening	Vent East of PGV #3	6%	X
#23	Passive Vent Opening	Vent East of PGV #4	5%	X
#24	Passive Vent Opening	Vent East of PGV #5	1%	X
#25	Passive Vent Opening	Vent East of PGV #6	6%	X
#26	Passive Vent Opening	Vent East of PGV #7	1%	X
#27	Passive Vent Opening	Vent East of PGV #8	3%	X
#28	Passive Vent Opening	Vent East of PGV #9	2%	X
#29	Passive Vent Opening	Vent SE of Staging Area	0%	X
#30	Passive Vent Opening	Vent NE of Staging Area	0%	X

S(Y/N) - Was screen submerged, yes or no.



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environmental consultants and contractors

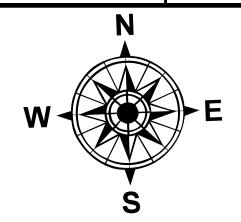
## Methane Monitoring Network

### Legend

- ▲ Methane Monitoring Point
- ▲ Approximate Location of Extraction Well
- ▲ Approximate Monitoring Well Location
- ▲ Approximate Location of Leachate Piezometer

- Approximate Waste Boundary
- Approximate Property Boundary

ADM Clinton Landfill  
Clinton, Iowa  
Project No: 27224044.00  
Drawing Date: November  
2024



**Figure 1**

0 120 240 480 720  
Feet