

December 1, 2025
File No. 27224515.26

Mr. Mike Smith, P.E.
Iowa Department of Natural Resources
Land Quality Bureau
6200 Park Avenue
Des Moines, Iowa 50321

Subject: 2024-2025 Biennial Water Quality Report
Henry County Sanitary Landfill
Permit No. 44-SDP-01-75C

Dear Mike:

SCS Engineers, on behalf of the Henry County Solid Waste Commission, has completed the water quality assessment for the closed Henry County Sanitary Landfill for the years 2024-2025. Our services were performed in general accordance with the requirements of the 1989 Iowa Administrative Code 567-103.2(8)"d," the site permit, and applicable permit amendments for implementation of the Hydrologic Monitoring System Plan. Please find enclosed a copy of the 2024-2025 Biennial Annual Water Quality Report for the Henry County Sanitary Landfill.

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

Sincerely,



Nathan Ohrt
Senior Project Professional
SCS Engineers



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

NPO/TCB

Copies: Mr. Steve Brimhall, Henry County Solid Waste Commission



2024-2025 Biennial Water Quality Report

Henry County Sanitary Landfill
Mount Pleasant, IA 52641

Permit No. 44-SDP-01-75C

SCS ENGINEERS

27224515.26 | December 2025

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1.0 INTRODUCTION

SCS Engineers (SCS), on behalf of the Henry County Solid Waste Commission, has completed the required groundwater sampling and data evaluation for the closed Henry County Sanitary Landfill (Landfill) for the years 2024-2025. This report was prepared in general accordance with the requirements of the 1989 Iowa Administrative Code (IAC) 567-103(455B), the site permit issued March 30, 1994 (Doc #20420), and applicable permit amendments. Correspondence dated February 9, 2023 (Doc #105793) approved sampling for a subset of samples on a two-year cycle. A biennial report for the entire two-year period is due on November 30 of the second year of the period, beginning with this report. This report summarizes the groundwater monitoring program and provides an analysis of the collected data.

1.1 REPORT PRIORITY

There are no groundwater monitoring items that require review or approval by the Iowa Department of Natural Resources (DNR) at this time.

1.2 RESPONSE TO DNR CORRESPONDENCE

There is currently no correspondence from the DNR requiring a response regarding groundwater quality items.

1.3 SITE LOCATION

The Landfill property is depicted in **Figure 1**, Approved Monitoring Network. The Landfill is located on Kentucky Avenue, approximately 4 miles south of Mount Pleasant, Iowa. The Landfill consists of approximately 27 acres and is situated in the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 34 and part of the NE $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 33, T71N, R6W, in Henry County, Iowa.

1.4 BACKGROUND

The Landfill property was leased by the Henry County Solid Waste Commission for use as a sanitary landfill from 1975 until closure activities were initiated in June 1990. Waste streams deposited at the site included typical solid wastes from municipalities, industries, and unincorporated areas within Henry County. Before use as a landfill, the site consisted of a wooded ravine with surrounding upland areas periodically used for agriculture. The closure permit was issued on March 30, 1994.

1.5 HSMP GROUNDWATER MONITORING

Table 1 summarizes the groundwater sampling performed during the 2024 and 2025 sampling events.

The “Supplemental VOCs” listed in Table 1 and further referenced throughout this report are benzene, cis-1,2-dichloroethene, methylene chloride, trichloroethene, 1,1-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene, and vinyl chloride.

Table 1. 2024-2025 Reporting Period Monitoring Summary

Unit	Monitoring Point	April 2024	July 2025
Glacial Till	MW-19		No Sample (not located)
	MW-20	Supplemental VOCs	
	MW-23	Supplemental VOCs	
	MW-24		Supplemental VOCs
	MW-27		Supplemental VOCs
	MW-29	Supplemental VOCs	
Deep Sand	MW-32		Supplemental VOCs
	MW-13		No Sample (wrong well sampled)
	MW-21		Supplemental VOCs
	MW-22	Supplemental VOCs	
	MW-25	Supplemental VOCs	
	MW-26	Supplemental VOCs	
	MW-30	Supplemental VOCs	
	MW-36	Supplemental VOCs	
	MW-37	Supplemental VOCs	
Bedrock	MW-6		Cobalt, Nickel, TSS, Appendix I VOCs

TSS – Total Suspended Solids

Field sampling forms and laboratory analytical data sheets for the 2024-2025 sampling events are included in **Appendices A** and **B-1**, respectively. A summary of analytical results for this reporting period is included in **Appendix C**.

1.6 LEACHATE LEVELS

In accordance with the site permit, leachate levels from leachate piezometers LP-1, LP-2, and LP-3 were measured during the 2024-2025 sampling events. Leachate level data and graphs from April 1994 through October 2008 and October 2012 through July 2025 are included in **Appendix D**. The leachate thicknesses measured in leachate piezometers LP-2 and LP-3 during this reporting period were within historical ranges. The thicknesses in leachate piezometer LP-3 in April 2024 and July 2025 were within the historical range, but the lowest since 2001.

1.7 METHANE MONITORING

In accordance with correspondence dated June 3, 2024 (Doc #110188), the quarterly methane results for the previous two years are to be included in the Biennial Water Quality Reports.

In email correspondence dated September 5, 2024 (Doc #110838), the DNR was notified of an exceedance of the action level of greater than 25% of the lower explosive limit (LEL) measured in the larger on-site building (office) on September 5, 2024. The gas exceedance was measured in a storage closet used to store business records next to the building's kitchen. The initial reading was 43% of the LEL and a recheck was 39% of the LEL. During the September 5, 2024, monitoring event, monitoring throughout the rest of the building, including areas near the closet, did not detect methane. Subsequent monitoring events detected methane in the closet and in the void space beneath the closet, but not in the rest of the building.

In response to the methane exceedance, the DNR required a mitigation plan to address the gas level exceedance, as noted in correspondence dated September 24, 2024 (Doc #110923). To identify the source of the gas in the void space, a gas sample was collected and analyzed. The results of the first sample were inconclusive as to the source of the gas, as discussed in correspondence dated May 13, 2025 (Doc #113049).

To allow time for additional gas sampling to identify the source of the gas in the void space and prepare the mitigation plan, a submittal date of December 31, 2025, was established (Doc #113062). The additional gas sampling identified the landfill as the source of the gas in the void space. The results of the additional gas sampling and a mitigation plan will be submitted under separate cover by December 31, 2025.

The reporting period methane monitoring results are included in the 2024-2025 Landfill Gas Annual Report in **Appendix H**.

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Approved Monitoring Network

Legend

- ▲ HMSP Monitoring Well
- ▲ Approximate Monitoring Well Location
- ▲ Approximate Gas Monitoring Point Location
- ▲ Approximate Leachate Monitoring Location
- Approximate Waste Boundary
- Approximate Property Boundary

Henry County Sanitary
 Landfill
 Mt. Pleasant, Iowa
 Project No: 27224515.26
 Drawing Date: September
 2025

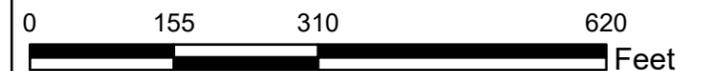
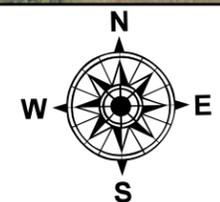


Figure 1

Map, COGNIS, USGS, Source: Esri, TomTom, Garmin, Bing, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, USDA NRI, Iowa State University GIS Facility

2.0 HYDROGEOLOGIC SITE SUMMARY

2.1 GEOLOGY

The geology in the Landfill area was described in previous assessments. Below is an excerpt from the Hydrogeologic Investigation Report and Hydrologic Monitoring System Plan, Shive-Hattery Engineers and Architects, Inc., March 1992, revised September 1992.

The typical upland soil profile at the site is as follows:

- Loess - 10 to 20 feet: sandy/clayey silt.*
- Glacial Till - 15 to 80 feet, upper 15 to 25 feet typically weathered: sandy/silty clay; trace gravel and sand seams.*
- Sand - 15 to 25 feet, mainly in depressions above bedrock.*
- Bedrock - Mississippian System, Osagean Series.*

The Mississippian Aquifer was encountered at elevations ranging from 610 to 627 feet USGS Datum in the previous borings at the site, and as high as 658 feet in the recent study. Overall, the Mississippian age rock is between 200 and 300 feet thick in this area and consists primarily of water bearing limestone and dolostone. It also includes less conductive zones of shale and siltstone.

Based on the bedrock map taken from "The Stratigraphic and Structural Geology of Henry County, Iowa," 1967 M.S. Thesis by Mark A. Sholes, Department of Geology, University of Iowa, and confirmed by observations of both outcrops and rock cuttings, the uppermost bedrock below the site belongs to the upper formation of the middle Mississippian, referred to as the Warsaw Shale. The Warsaw formation is an erosional surface with variable thickness from 15 to 60 feet. The upper part consists of relatively soft light gray slightly dolomitic shale, and the lower part is a light bluish-gray dolomitic shale which is characteristically blocky and harder than the upper part. The upper and lower portions are separated by 1 to 3 feet of geode bearing argillaceous dolomite. The rock cuttings obtained during this investigation also correlate to the Keokuk formation below, which is described as 40 to 90 feet of thin gray to brownish gray, argillaceous beds of limestone and dolomitic limestone interbedded with layers of soft, bluish-gray shale. The deepest boring during this investigation may have penetrated the coarsely crystalline limestone of the Cedar Fork formation situated below the Keokuk formation.

Siltstone and shale are abundant at the contact between the Devonian and Mississippian deposits. The shale of the Yellow Spring Group, which forms the upper part of the Devonian, presents a barrier to groundwater flow between the Mississippian and Devonian Aquifers.

The additional excerpt below is from the Second Expanded Groundwater Assessment Report, Shive-Hattery, Inc., September 1996.

The uppermost soil in the upland areas of the site is loess, or wind blown deposits, which consists primarily of silt and silty clay. In the low lying areas of the site,

characterized by well locations MW-14/MW-15 and MW-4, the loess is absent, and the uppermost soil is comprised of alluvium, fine silty sand. Underlying the loess and alluvium is glacial till, typically silty clay with occurrences of sand and gravel. The till varies in thickness from over 80 feet in well location MW-11/MW-12 to absent near well location MW-4, where bedrock outcrops have been noted. The bedrock underlying the site is the Mississippian aquifer, which consists of dolomite and/or limestone, with some occurrences of shale. The unit is estimated to be approximately 200 to 300 feet in thickness, and is underlain by Devonian shale, a regional confining unit. The most likely contaminant pathway at the site is cracks, fissures, fracture planes, sand seams, and lenses within the glacial till.

2.2 HYDROGEOLOGY

The hydrogeology in the immediate vicinity of the Landfill was described in previous assessments. Below is an excerpt from the Hydrogeologic Investigation Report and Hydrologic Monitoring System Plan, Shive-Hattery Engineers and Architects, Inc., March 1992, revised September 1992.

The unconsolidated loess and glacial deposits include a variety of soil types. Most of the waste boundary is located in the weathered or unweathered silty clay glacial till. For all practical purposes, water movement in these deposits is limited to fractures and sand seams scattered throughout the tight silty clay matrix. Tiny cracks, fissures, fracture planes, sand seams, and sand lenses were observed far more frequently in the weathered till than in the unweathered till, as is generally the case. The hydraulic conductivity estimated for the weathered till screened by well MW-10 was approximately ten times greater than that of the unweathered till screened by MW-11. Well[s] MW-8 and MW-13 are both finished in sand lenses which are approximately 100 times more conductive than the weathered till.

Sand lenses encountered during landfill operation were excavated and replaced with a minimum of 5 feet of compacted clay. Other than the sand lenses, the cross sections indicate a minimum separation distance between the waste and bedrock or sand deposits to be approximately 10 feet. We estimate that the average hydraulic conductivity at the waste boundary is similar to that of the weathered and unweathered till; between approximately 10^{-6} to 10^{-5} cm/sec.

The potential for significant downward movement of leachate from the landfill base, through the glacial deposits and into the bedrock is fairly low given the more numerous opportunities for horizontal movement. The bedrock formation is itself prohibitive to vertical flow. The two uppermost formations directly below the landfill (Warsaw and Keokuk) contain considerable shale and are not to our knowledge use[d] as a drinking water source. Shallow bedrock contamination is most likely to be detected in monitoring well MW-8.

Based on the water level measurements and estimated water table surface contours, most of the waste is located above the level of saturation...Contaminants leached from the waste in this area would most likely be detected in monitoring wells MW-15 and MW-4 or in surface water sample S-3.

The presence of two primary stratigraphic layers, the weathered glacial till and an extensive deep sand layer, was summarized in the Groundwater Quality Assessment Work Plan, Barker Lemar Engineering Consultants, February 2013 (Doc #75975).

Based on review of the previous assessment information, the two primary potential groundwater migration pathways at the site appear to be the sand and gravel seams generally present within the weathered glacial till layer and a much thicker and more extensive sand layer present at a greater depth. Many of the soil borings advanced at the site encountered thick sand layers, sometimes within depressions above the bedrock as mentioned in an earlier report citation, but also within the weathered and unweathered glacial till. These larger sand layers varied in thickness from 5 feet to more than 30 feet thick. These thick sand layers were generally encountered below and potentially separate from the sand and gravel seams present within the weathered glacial till layer. The thick sands appear particularly extensive in the western portion of the site, as evidenced by the soil boring logs/cross-sections for soil boring B-16; monitoring wells MW-13, MW-22, MW-25, MW-26, and MW-27; and recovery well RW-4. Monitoring wells MW-18 and MW-24 and recovery well RW-3 located in the same area were not installed to a sufficient depth to encounter the thicker sand layer. Monitoring well MW-23 encountered a thicker sand layer but at a shallower depth. This sand may not be connected to the deeper apparently more extensive sand layer. Additionally, it appears that the sand layer in monitoring wells MW-22 and MW-23 may be connected based on groundwater elevation information and not connected to the sand in monitoring well MW-13, also based on groundwater elevation information.

3.0 MONITORING WELL MAINTENANCE AND PERFORMANCE EVALUATION

DNR correspondence dated March 14, 2016 (Doc #85670) approved replacing the monitoring well maintenance and performance requirements of 1989 IAC 567-103.2(8)"d" with those of 2009 IAC 567-113.10(2)"f."

3.1 HIGH AND LOW WATER LEVELS EVALUATION

IAC 567-113.10(2)"f"(1) requires a biennial examination of the high and low water levels, along with a discussion of the acceptability of well location both vertically and horizontally, and of the exposure of the screened interval of the groundwater monitoring wells to the atmosphere. The results of the water level measurements collected during the 2024 and 2025 sampling events for the monitoring wells are shown in Table 2.

Table 2. Summary of 2024-2025 Groundwater Levels

Monitoring Well	Top of Screen	Datum	Date of Measurement	
			April 2024	July 20025
MW-6	604.00	Groundwater Level	NM	32.37
		Groundwater Elevation	NA	631.01
MW-13*	656.00	Groundwater Level	NM	NM
		Groundwater Elevation	NA	NA
MW-19*	665.00	Groundwater Level	NM	NM
		Groundwater Elevation	NA	NA
MW-20	654.00	Groundwater Level	14.86	NM
		Groundwater Elevation	658.77	NA
MW-21	662.00	Groundwater Level	NM	25.17
		Groundwater Elevation	NA	659.42
MW-22	665.00	Groundwater Level	14.92	NM
		Groundwater Elevation	674.98	NA
MW-23	672.00	Groundwater Level	16.68	NM
		Groundwater Elevation	675.43	NA
MW-24	679.00	Groundwater Level	NM	22.06
		Groundwater Elevation	NA	676.72
MW-25	666.00	Groundwater Level	27.21	NM
		Groundwater Elevation	659.88	NA
MW-26	658.40	Groundwater Level	33.92	NM
		Groundwater Elevation	656.44	NA
MW-27	679.60	Groundwater Level	NM	21.02
		Groundwater Elevation	NA	679.50
MW-29	671.91	Groundwater Level	27.21	NM
		Groundwater Elevation	660.13	NA

Monitoring Well	Top of Screen	Datum	Date of Measurement	
			April 2024	July 20025
MW-30	660.48	Groundwater Level	33.69	NM
		Groundwater Elevation	664.60	NA
MW-32	666.50	Groundwater Level	NM	21.02
		Groundwater Elevation	NA	679.50
MW-36	648.58	Groundwater Level	25.16	NM
		Groundwater Elevation	660.50	NA
MW-37	656.40	Groundwater Level	15.75	NM
		Groundwater Elevation	660.97	NA

 - Water level within the screened interval.
 * - Water levels not measured during this reporting period
 NM - Not measured.
 NA - Not available.

Water levels were observed to be within the screened interval during the 2024 and 2025 sampling events in monitoring wells MW-21, MW-24, MW-25, MW-26, MW-27, and MW-29.

During the July 2025 sampling event, the field technician was unable to determine which well in the well nest was monitoring MW-13, as the nested wells did not have depths matching the installed depth. The sampling results were significantly different from historical concentrations, indicating that the incorrect well was sampled. Monitoring well MW-13 will be identified, marked, and sampled in Spring 2026.

Monitoring well MW-19 could not be located during this reporting period. Monitoring well MW-19 will be located, marked, and sampled in Spring 2026.

The monitoring wells are placed appropriately, both horizontally and vertically, to monitor groundwater from two separate units: the weathered glacial till and the deep sand. These units are described in detail in the Groundwater Quality Assessment Work Plan (Doc #75975). Many of the wells west of the Landfill were installed to monitor the impact of CVOCs in the area.

3.2 GROUNDWATER FLOW

Groundwater flow is mainly reflective of the surface topography, which consists of deeply cut ravines. Several well nests have been used to monitor vertical groundwater flow: MW-1/MW-11/MW-12 (now abandoned), MW-5/MW-6, MW-7/MW-8, and MW-14/MW-15.

Groundwater contours for the glacial till and deeper sand units were determined from groundwater elevation data collected during the July 2025 sampling event and are presented in Figure 2 (Glacial Till Groundwater Contours) and Figure 3 (Deep Sand Groundwater Contours). Groundwater flow in the glacial till is generally directed toward ravines surrounding the site, especially those to the north-northeast and west-southwest. Groundwater flow in the deep sand varies, with indications of flow to the east and to the southwest during this reporting period. The water elevation in the bedrock monitoring well MW-6 was not used in developing the groundwater contours, but it is included next to the monitoring well in Figure 2.

3.3 WELL DEPTH EVALUATION

IAC 567-113.10(2)"f"(3) requires annual measurements of well depths without dedicated sampling pumps to ensure that wells are physically intact and not filling with sediment. The monitoring well depths measured during the 2024 and 2025 sampling events are included in Table 3 below.

Table 3. Summary of 2024-2025 Well Depths

Monitoring Well	Installed Depth	April 2024		July 2025	
		Measured	Difference	Measured	Difference
MW-6	57.0	NM	NA	59.6	-2.6
MW-13*	47.5	NM	NA	NM	NA
MW-16R	34.7	NM	NA	33.2	1.5
MW-19*	29.3	NM	NA	NM	NA
MW-20	30.5	NM	NA	30.2	0.3
MW-21	33.3	NM	NA	32.9	0.4
MW-22	23.8	22.0	1.8	22.0	1.8
MW-23	30.1	29.9	0.2	29.7	0.4
MW-24	30.5	NM	NA	30.5	0.0
MW-25	35.0	33.2	1.8	33.1	0.1
MW-26	41.6	42.4	-0.8	42.1	-0.5
MW-27	34.0	NM	NA	33.8	0.2
MW-29	27.7	28.2	-0.5	28.2	-0.5
MW-30	44.8	44.5	0.3	43.9	0.9
MW-32	32.0	NM	NA	32.4	-0.4
MW-36	47.1	47.5	-0.4	47.4	-0.3
MW-37	25.3	23.7	1.6	23.6	1.7

Note: All measurements in feet.

NA - Not available

* - Water depth not measured during this reporting period

Measured well depths during the 2024 and 2025 sampling events were within 1.8 feet of the installed depths, with the exception of monitoring well MW-6. It is unclear why MW-6 had a significant discrepancy between the installed and measured depth during this reporting period. The depth of monitoring well MW-6 will be verified during the 2026 sampling event. As the monitoring wells produced samples during the 2024 and 2025 sampling events, it is unlikely that siltation is affecting their functionality.

During the July 2025 sampling event, the field technician was unable to determine which well in the well nest was monitoring MW-13, as the nested wells did not have depths matching the installed depth. The sampling results were significantly different from historical concentrations, indicating that the incorrect well was sampled. Monitoring well MW-13 will be identified, marked, and sampled in Spring 2026.

Monitoring well MW-19 could not be located during this reporting period. Monitoring well MW-19 will be located, marked, and sampled in Spring 2026.

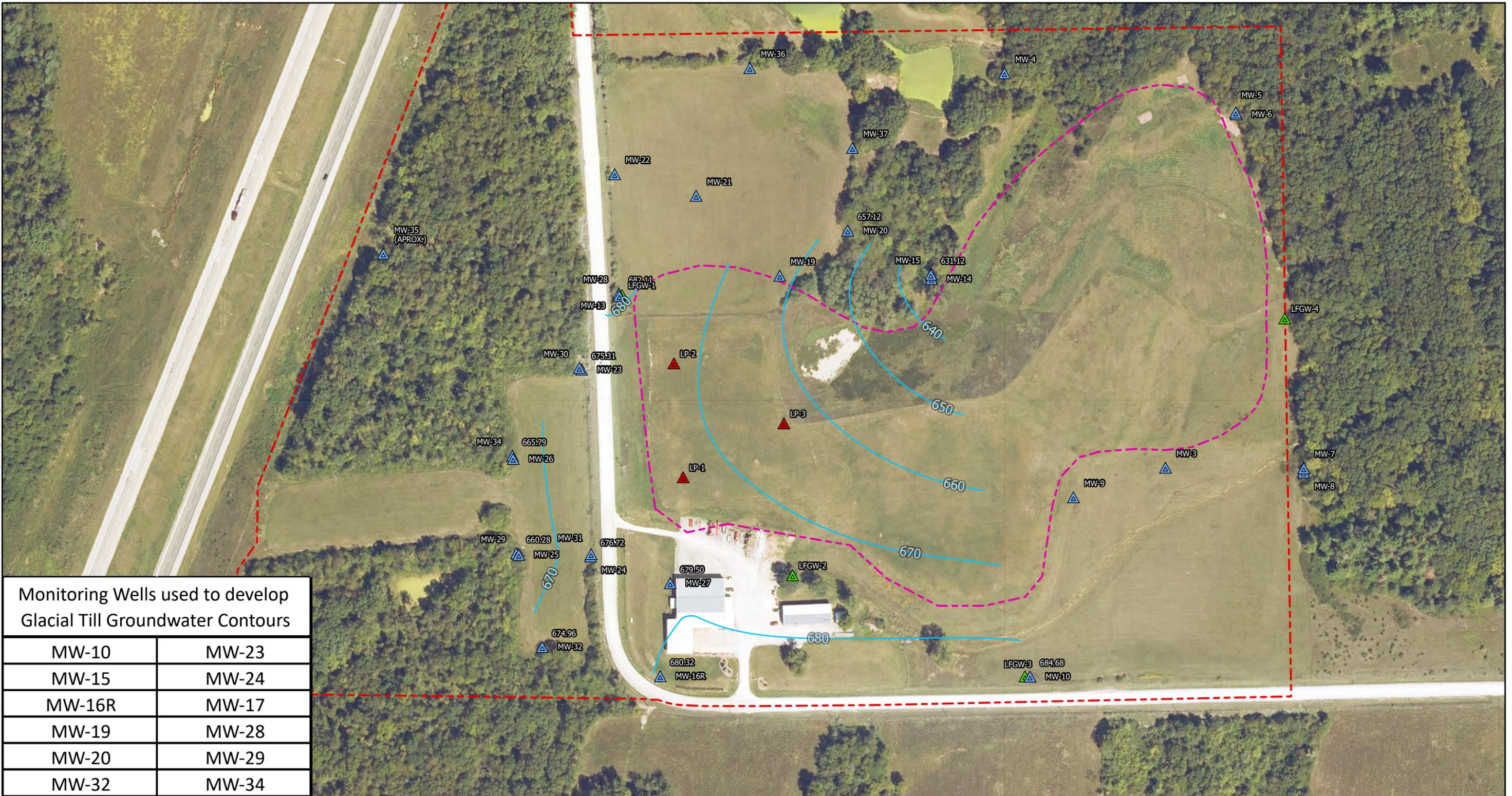
3.4 WELL RECHARGE EVALUATION

If a decrease in well performance is observed, an evaluation of well recharge rates and chemistry will be performed to determine if well deterioration is occurring.

3.5 MONITORING NETWORK SUMMARY

The Iowa Department of Natural Resources (DNR) approved the monitoring network in correspondence dated February 9, 2023 (Doc #105793).

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Monitoring Wells used to develop
Glacial Till Groundwater Contours

MW-10	MW-23
MW-15	MW-24
MW-16R	MW-17
MW-19	MW-28
MW-20	MW-29
MW-32	MW-34

Glacial Till Groundwater Contours

Legend

- Approximate Glacial Till Groundwater Contours Based on Field Measurements Taken on July 16-17, 2025*
- ▲ Approximate Monitoring Well Location
- ▲ Approximate Leachate Monitoring Location
- ▲ Approximate Gas Monitoring Point Location
- - - Approximate Waste Boundary
- - - Approximate Property Boundary

Henry County Sanitary Landfill
Mt. Pleasant, Iowa
Project No: 27224515.26
Drawing Date: September 2025

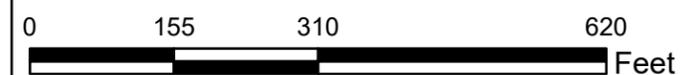
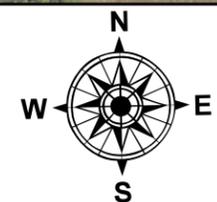


Figure 2



*Groundwater elevations in Bedrock Monitoring Wells were not used to generate contours

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Monitoring Wells used to develop Deeper Sand Groundwater Contours

MW-8	MW-30
MW-13	MW-31
MW-21	MW-36
MW-22	MW-37
MW-25	MW-26

Deep Sand Groundwater Contours

Legend Approximate Deep Sand Groundwater Contours Based on Field Measurements Taken on July 16-17, 2025*	Approximate Monitoring Well Location	Approximate Leachate Monitoring Location
	Approximate Gas Monitoring Point Location	Approximate Waste Boundary
		Approximate Property Boundary

Henry County Sanitary Landfill
 Mt. Pleasant, Iowa
 Project No: 27224515.26
 Drawing Date: September 2025

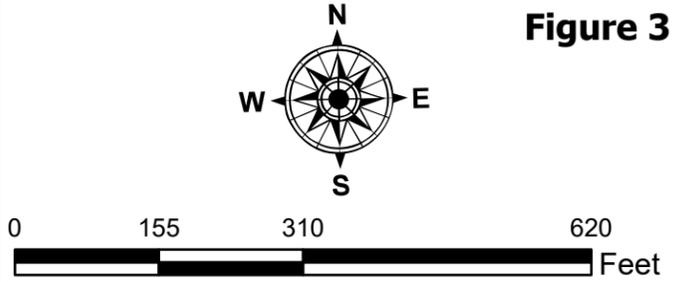


Figure 3



*Groundwater elevations in Bedrock Monitoring Wells were not used to generate contours
 Data Source: Esri, DeLorme, Garmin, Bing, Google, Swatch, OpenStreetMap contributors, and the GIS User Community, USDA NASS, Iowa State University GIS Facility

4.0 EVALUATION OF WATER QUALITY PARAMETERS

In accordance with correspondence dated February 9, 2023 (Doc #105793), the monitoring wells at the Landfill are sampled biennially, with a subset of wells sampled each year. This Biennial Water Quality Report encompasses the monitoring data and statistical evaluation from the previous two years (2024-2025). The laboratory analytical results from this reporting period are presented in **Appendix C**, 2024-2025 Analytical Data. Historical analytical data prior to 2024 can be found in the 2023 Annual Water Quality Report, dated November 2023 (Doc #108209). Time series graphs for the monitoring wells depicting the changes in concentration of each parameter are included in **Appendix E**.

There are two primary areas of focus for the groundwater monitoring program at the Landfill. The first concerns monitoring for landfill impacts in the event of a release. Monitoring wells MW-6 and MW-19 are monitored for cobalt, nickel, total suspended solids (TSS), and Appendix I volatile organic compounds (VOCs) to monitor landfill impact. The second area of focus is related to CVOC impact, primarily to the west of the Landfill. The monitoring wells to the west are sampled for benzene and numerous chlorinated volatile organic compounds (CVOCs), and do not appear to be impacted by a release from the Landfill. Some monitoring wells to the northwest, especially monitoring wells MW-13 and MW-21, indicate potential impact by both the Landfill and CVOCs. Multiple monitoring wells are sampled for benzene and the CVOCs to delineate the impact measured at MW-21.

4.1 CVOC SUMMARY

To evaluate the trends in CVOC concentrations to the west of the Landfill, a Mann-Kendall trend analysis was performed on the entire historical dataset for the Supplemental VOCs. It should be noted that the historical dataset varies significantly between monitoring wells. The number of samples per monitoring well was included in the “N” column of the summary table. The Mann-Kendall summary table and graphs for the CVOC wells are included in **Appendix G-1**. Historically, monitoring wells MW-13, MW-21, MW-24, MW-27, and MW-32 have had the most significant impact from CVOCs, and the analytical trending results for these wells is discussed below.

Monitoring well MW-13 has mixed results. Although benzene and tetrachloroethene have statistically significant decreasing trends, five of the six remaining trends are increasing, with four increasing at statistically significant rates. However, as the four increasing trends (trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride) are daughter products of tetrachloroethene biodegradation, it appears that natural attenuation processes may be occurring in the area of monitoring well MW-13.

Monitoring well MW-21 shows similarities to MW-13: benzene, tetrachloroethene, and 1,1-dichloroethene are decreasing at statistically significant rates, while the trends for cis-1,2-dichloroethene and vinyl chloride are statistically significant increases, again indicating tetrachloroethene biodegradation. Of the remaining trends, two are decreasing and one is increasing at a non-statistically significant rates. The monitoring wells installed to define the CVOC impact at monitoring well MW-21, including MW-20, MW-22, MW-36, and MW-37, did not have quantified VOC detections during this reporting period. Monitoring wells MW-13 and MW-19, which are also used to define the impact at MW-21, were not sampled during this reporting period.

Monitoring well MW-24 shows improving water quality. Of the eight trends analyzed, each trend is decreasing, with seven at statistically significant rates. 1,1-dichloroethene is declining at a non-statistically significant rate.

Monitoring well MW-27 also indicates improving water quality, with no increasing trends and five of the eight decreasing at statistically significant rates.

Monitoring well MW-32 has three increasing trends at non-statistically significant rates. However, two of the increasing trends are for methylene chloride, with a single detection in 2016, and cis-1,2-dichloroethene, with a single quantified detection in 2018. Vinyl chloride had a historically high concentration during this reporting period.

Outside of monitoring wells MW-13, MW-21, MW-24, MW-27, and MW-32, statistically significant increasing trends were observed for cis-1,2-dichloroethene in monitoring wells MW-23, MW-25, and MW-30, and for trans-1,2-dichloroethene in monitoring well MW-29. Statistically significant decreasing trends were indicated for trans-1,2-dichloroethene, methylene chloride, tetrachloroethene, trichloroethene, and vinyl chloride in monitoring well MW-23 and for cis-1,2-dichloroethene, tetrachloroethene, and trichloroethene in monitoring well MW-20.

4.2 LANDFILL IMPACT SUMMARY

Monitoring wells MW-6 and MW-19 are sampled for cobalt, nickel, TSS, and Appendix I VOCs to assess landfill impact. Monitoring well MW-19 was unable to be located during this reporting period due to thick vegetation; the monitoring well will be located, marked, and sampled in Spring 2026.

Confidence intervals were calculated for the Appendix I wells during this reporting period. Statistically significant increases (SSLs) above the groundwater protection standards (GWPS) were measured for cobalt in monitoring wells MW-6 and MW-19. Although six samples for MW-19 and eight samples for MW-6 are available, and the Unified Guidance recommends 8-10 sampling events for confidence interval development, the concentrations of cobalt measured in monitoring wells MW-6 and MW-19 have all been above the GWPS; the SSLs for cobalt are unlikely to change in the short term. Confidence interval and confidence band summary tables and graphs are included in **Appendix F**.

Mann-Kendall statistics can indicate general trending in the data. The Mann-Kendall statistics used the existing 6-8 samples and a trend threshold of 99% confidence ($\alpha=0.01$). A summary of Mann-Kendall statistics for monitoring wells MW-6 and MW-19 is included in **Appendix G-2**. Mann-Kendall trend analysis indicated generally stable concentrations, except for a statistically significant decreasing trend for cis-1,2-dichloroethane in monitoring well MW-19 and a statistically significant increasing trend for arsenic in monitoring well MW-6.

4.3 REGULATORY ACTION LIMITS

In addition to evaluating parameter concentrations relative to groundwater protection standards, the concentrations were also compared with current United States Environmental Protection Agency Maximum Contaminant Levels (MCLs), Negligible Risk Levels (NRLs), and Health Advisory Levels (HALs). DNR guidance documents define the “action level” for groundwater as the following:

“As defined by 567 - 133.2 (455B, 455E), action level means the HAL, if one exists. If there is no HAL, then the NRL, if one exists. If there is no HAL or NRL, then the MCL. If there is no HAL, NRL, or MCL, an action level may be established by the department based on current technical literature and recommended guidelines of the USEPA and recognized experts, on a case-by-case basis.”

Table 4 summarizes action limit exceedances measured during this reporting period and the applicable HAL, NRL, and/or MCL.

Table 4. Action Level Exceedances

Parameters	Action Level	Action Level Concentration	MW-21	MW-23	MW-24	MW-27	MW-29	MW-30	MW-32
cis-1,2-Dichloroethene	HAL	10 µg/L	X	X	X	X	X	X	
	MCL	70 µg/L	X		X	X			
Trichloroethene	MCL	5 µg/L			X		X		
	NRL	3 µg/L			X		X		
Vinyl Chloride	MCL	2 µg/L	X	X	X	X		X	X
	NRL	0.02 µg/L	X	X	X	X		X	X

4.4 POTENTIAL RECEPTORS

Pursuant to DNR requirements, if MCLs are exceeded at any groundwater monitoring point, information is to be provided on potential receptors. MCLs were exceeded in monitoring wells MW-MW-21, MW-23, MW-24, MW-27, MW-29, MW-30, and MW-32.

The property located directly to the east of the Landfill property is zoned agricultural. It includes two residences, with the nearest building located approximately 650 feet from the eastern Landfill property line, and adjacent wooded areas and farm fields. Agricultural land separated by wooded ravines surrounds the remainder of the site. Intermittent surface water extending north-northeast from the Landfill property flows to Big Creek, eventually discharging to the Skunk River approximately five miles southeast of the property. Surface water flowing to the southwest beyond the Landfill property flows along natural ravines directly to the Skunk River, which is a tributary of the Mississippi River. A well search indicated that five water supply wells are located within 1,000 feet of the Landfill, only one of which is residential. Well search documentation was included in the 2018 Annual Water Quality Report (Doc #93583).

4.5 QA/QC INFORMATION

The quality assurance/quality control (QA/QC) program for the Landfill followed protocols as specified in this section. Data validation procedures were performed on analytical results for laboratory quality control samples and a quality assurance assessment of the data was conducted as the data was generated. The QA review procedure provided documentation of the accuracy and precision of the analytical data. SCS then conducted QA/QC data validation of the produced data, which included review of sample handling, analytical sensitivity, and blanks, accuracy, and precision. An explanation of the laboratory QA/QC and data validation procedures is described in more detail below.

4.5.1 Sample Collection and Sample Handling

Sample receipt forms were reviewed by SCS and checked to verify that samples were received in good condition and within the acceptable temperature range. Chain of custody records for each sampling event were reviewed to confirm that information was complete, custody was not breached, and samples were analyzed within the acceptable hold time. It was determined that the incorrect well was sampled for monitoring well MW-13. With the exception of the incorrect sample at MW-13, sample collection and sample handling procedures were within the acceptable criteria.

4.5.2 Analytical Sensitivity and Blanks

Laboratory QA/QC procedures and post-analysis data validation assist in producing data of acceptable quality and reliability. Eurofins is a certified laboratory in Iowa and performed QA/QC procedures that included analyzing laboratory method blanks alongside samples collected for the project to assess whether laboratory-based contamination contributed to the analytical results. No detections were observed in the method or trip blanks.

4.5.3 Accuracy

Laboratory analytical accuracy can be assessed by evaluating the constituent recoveries from continuing calibration verification (CCV), laboratory control sample (LCS), and LCS duplicate (LCSD). LCS/LCSD samples assess the accuracy of analytical procedures by checking the ability to recover constituents added to clean aqueous matrices. In some cases, the laboratory spikes project samples as matrix spike (MS) and MS duplicate (MSD) samples to assess the ability to recover constituents from a matrix similar to that of project samples. The post-analysis data validation conducted by SCS confirmed that the laboratory had performed QA/QC of its laboratory control samples. Recommendations were made on how to proceed with data that had possibly been compromised.

4.5.4 Precision

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

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

A duplicate sample was collected during the sampling event to evaluate the precision of analytical measurements and the reproducibility of the sampling technique. Duplicate samples were chosen at random. The relative percent difference (RPD; the difference between the sample and its field duplicate divided by the mean of the two) was calculated to assess data precision. The RPD can be evaluated only if the analyses of both duplicates yield quantitative results (above the reporting limit).

The concentrations reported for the sample at monitoring point MW-22 and the duplicate sample MW-D during the April 2024 sampling event showed <50% relative difference for the analyzed constituents. This result indicates that a problem with sampling or analysis is unlikely to have occurred.

4.5.5 Data Quality Summary

Based on the above QA/QC procedures, the groundwater samples collected during this reporting period were considered representative of site conditions at the locations and times they were collected. Based on the QA review, no samples were rejected as unusable due to QC failures. Data validation documentation is included in Appendix B-2. In general, the quality of the analytical data for this reporting period does not appear to have been compromised by analytical irregularities and results affected by QC anomalies were qualified with the appropriate data flags, which were listed in the laboratory reports in Appendix B-1.

4.6 CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE MONITORING

For the 2026-2027 reporting period, the monitoring program is recommended to continue as specified by the correspondence dated February 9, 2023 (Doc #105793). The recommended sampling schedule for the upcoming reporting period is included in Table 5.

Table 5. 2026-2027 Sampling Schedule

Monitoring Point	2026 Biennial Sampling Event	2027 Biennial Sampling Event
MW-6	Well Depth	Cobalt, Nickel, TSS, Appendix I VOCs
MW-19	Cobalt, Nickel, TSS, Appendix I VOCs	Cobalt, Nickel, TSS, Appendix I VOCs (if no sample is obtained in 2026)
MW-13	Supplemental VOCs	
MW-20	Supplemental VOCs	
MW-21		Supplemental VOCs
MW-22	Supplemental VOCs	
MW-23	Supplemental VOCs	
MW-24		Supplemental VOCs
MW-25	Supplemental VOCs	
MW-26	Supplemental VOCs	
MW-27		Supplemental VOCs
MW-29	Supplemental VOCs	
MW-30	Supplemental VOCs	
MW-32		Supplemental VOCs
MW-36	Supplemental VOCs	
MW-37	Supplemental VOCs	

5.0 GENERAL COMMENTS

The analysis and opinions expressed in this report are based upon data obtained from the samples collected at the indicated locations and from any other information discussed in this report. This report does not reflect any variations in subsurface stratigraphy, hydrogeology, or chemical concentrations that may occur between sampling locations or across the site. Actual subsurface conditions may vary and may not become evident without further exploration.

SCS has prepared this report for the exclusive use of our client for the specific application to the project discussed. No warranty is expressly stated or implied in this report. SCS has relied upon information furnished by others as noted in the report, and SCS accepts no responsibility for any deficiency, misstatements, or inaccuracy in this report as a result of misstatements, omissions, misrepresentations, fraudulent, or inaccurate information or data provided by others.

6.0 REFERENCES

1. Carberry Environmental Services, *2008 Annual Water Quality Report for the Closed Henry County Landfill*, September 2009 (Doc #30274).
2. Barker Lemar Engineering Consultants, *Groundwater Quality Assessment Work Plan, Henry County Sanitary Landfill*, February 2013 (Doc #75975).
3. Barker Lemar Engineering Consultants, *Groundwater Quality Assessment Report, Henry County Sanitary Landfill (Closed)*, June 2018 (Doc #92688).
4. Evora Consulting, *2023 Annual Water Quality Report, Henry County Sanitary Landfill (Closed)*, November 2023 (Doc #108209).

Appendix A

Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project: ~~Henry County~~ *Henry County*
 Monitoring Well/Piezometer ID: *MW - 22 + Duplicate*
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: ~~Kosner Roth~~ *Michael Morgan* Date: *4/25/24*

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes No If No, explain:

Litter/Standing Water? (circle one): Yes No If Yes, explain:

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

Measured Well Total Depth (feet): *22.00* Peri Tubing Used (feet):

Initial Static Water Level (feet): *14.92* Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)	
Purging start time								
<i>9:32</i>	<i>13.4</i>	<i>6.76</i>	<i>1220</i>	<i>7.06</i>	<i>77.5</i>	<i>172.02</i>	<i>16.71</i>	
Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected								
<i>9:24</i>	← Final SWL Record Time		Finished collecting sample			Final SWL after sampling →		<i>16.71</i>

Quantity of Water Removed from Well (circle units: liters / gallons)

Was well pumped/bailed dry? *NO*

Total Amount of Time Purged (minutes) ~~15~~ *10*

Color Describe: *CLOUDY YELLOW*

Odor Describe: *NONE*

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes No

If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes No

Additional Comments/Sampling Issues:

V_{3w} = 22 - 14.92 / 2 = $\frac{7.08}{.33}$ ^{gal} = 21.45 bawls
Purged ~ 10 min

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: mw-23 Date: 4/25/28
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: Konner Roth Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes No If No, explain:

Litter/Standing Water? (circle one): Yes No If Yes, explain:

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

Measured Well Total Depth (feet): 29.89 Peri Tubing Used (feet):

Initial Static Water Level (feet): 16.68 Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time						
<u>9:58</u>	<u>11.9</u>	<u>8.76</u>	<u>1466</u>	<u>6.63</u>	<u>117.9</u>	<u>29.12</u>	<u>16.66</u>
<u>9:49</u>	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected ← Final SWL Record Time Finished collecting sample Final SWL after sampling →						<u>16.66</u>

Quantity of Water Removed from Well (circle units: liters gallons) 6.5

Was well pumped/bailed dry? No

Total Amount of Time Purged (minutes) 11

Color Describe: Slight yellow

Odor Describe: None

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes No

If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:

$$(29.89 - 16.68) / 2 = 6.605 \text{ GALS} \times 0.33 = 20 \text{ BAILERS}$$

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: MW-25 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: ~~Kenner Roth~~ Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes No If No, explain:

Litter/Standing Water? (circle one): Yes No If Yes, explain:

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

Measured Well Total Depth (feet): 33.17 Peri Tubing Used (feet):

Initial Static Water Level (feet): 27.21 Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time						
10:27	12.6	5.68	3338	6.59	82.2	750.66	27.74
10:20	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected ← Final SWL Record Time Finished collecting sample Final SWL after sampling →						27.74

Quantity of Water Removed from Well (circle units: liters / gallons) 3

Was well pumped/bailed dry? No

Total Amount of Time Purged (minutes) 6

Color Describe: brown turbid

Odor Describe: slight earthy

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes No

If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes No

Additional Comments/Sampling Issues:

$$(33.17 - 27.21) / 2 = 2.98 \text{ GALS} \times 0.33 = 10 \text{ BAILERS}$$

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: MW - 26 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: Konner Both Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes No If No, explain:

Litter/Standing Water? (circle one): Yes No If Yes, explain:

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

Measured Well Total Depth (feet): 42.43 Peri Tubing Used (feet):

Initial Static Water Level (feet): 33.92 Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)	
	Purging start time							
10:17	13.1	4.58	2631	6.56	-23.7	135.28	33.93	
	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected							
10:12	← Final SWL Record Time		Finished collecting sample			Final SWL after sampling →		33.93

Quantity of Water Removed from Well (circle units: liters / gallons): 4

Was well pumped/bailed dry? NO

Total Amount of Time Purged (minutes) 8

Color Describe: light brown

Odor Describe: None

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes No
 If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:

$(42.43 - 33.92) / 2 = 4.255$ ^{gal} = 12.89 bails
 $- 33$
 ~ 8 min bail

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: MW-29 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: ~~Kenner Beth~~ Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes No If No, explain:

Litter/Standing Water? (circle one): Yes No If Yes, explain:

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

Measured Well Total Depth (feet): 28.16 Peri Tubing Used (feet):

Initial Static Water Level (feet): 27.21 Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)	
	Purging start time							
10:36	11.8	5.09	3241	6.72	62.1	58.62	27.35	
10:29	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected							
	← Final SWL Record Time		Finished collecting sample			Final SWL after sampling →		27.35

Quantity of Water Removed from Well (circle units: liters / gallons): 0.5

Was well pumped/bailed dry? No

Total Amount of Time Purged (minutes) 2

Color Describe: Orange to deep red

Odor Describe: None

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes / No
 If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:
 $(28.16 - 27.21) / 2 = 0.475 \text{ GALS} \times 0.33 = 2 \text{ BAILERS}$
 CLEANED OUT A LOT OF CLAY AROUND CASING

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: mw-30 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: ~~Konner Roth~~, Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped? (circle one): Yes / No If No, explain:

Litter/Standing Water? (circle one): Yes / No If Yes, explain:

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

Measured Well Total Depth (feet): 44.50 Peri Tubing Used (feet):

Initial Static Water Level (feet): 33.69 Sub Tubing Used (feet):

Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time						
10:05	12.0	8.76	1615	6.66	110.3	427.45	33.63
9:59	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected ← Final SWL Record Time Finished collecting sample Final SWL after sampling →						33.63

Quantity of Water Removed from Well (circle units: liters / gallons): 5.5 gallons

Was well pumped/bailed dry? NO

Total Amount of Time Purged (minutes) 12

Color Describe: CLOUDY LIGHT BROWN
 Odor Describe: NONE

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes / No
 If yes, explain:

Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:
 $(44.50 - 33.69) / 2 = 5.405 \text{ GALS} \times 0.33 = 17 \text{ BAILERS}$

FORM FOR GROUNDWATER SAMPLING

Project: Hann County
 Monitoring Well/Piezometer ID: MW-36 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: ~~Kenneth Roth~~ Michael Hobson

A. MW/PIEZOMETER CONDITIONS
 Well/Piezometer Capped? (circle one): Yes No If No, explain:
 Litter/Standing Water? (circle one): Yes No If Yes, explain:

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)
 Measured Well Total Depth (feet): 47.32 Peri Tubing Used (feet):
 Initial Static Water Level (feet): 25.16 Sub Tubing Used (feet):
 Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time						
<u>9:18</u> ↓	<u>13.0</u>	<u>6.17</u>	<u>3599</u>	<u>6.63</u>	<u>4.3</u>	<u>33.62</u>	<u>40.73</u>
	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected						
<u>9:13</u>	← Final SWL Record Time		Finished collecting sample	Final SWL after sampling →			<u>40.73</u>

Quantity of Water Removed from Well (circle units: liters / gallons): 1
 Was well pumped/bailed dry? NO
 Total Amount of Time Purged (minutes) 23
 Color Describe: CLEAR
 Odor Describe: NONE

D. WELL MAINTENANCE
 Does the monitoring well/piezometer require any future maintenance? Yes / No
 If yes, explain:
 Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:
(47.32 - 25.16) / 2 = 11.08 GAL = 34 BAILERS

FORM FOR GROUNDWATER SAMPLING

Project: Henry County
 Monitoring Well/Piezometer ID: mw-37 Date: 4/25/24
 Gradient (circle one): Up / Down / Supp / Compliance Sampler: Konner Roth

A. MW/PIEZOMETER CONDITIONS
 Well/Piezometer Capped? (circle one): Yes No If No, explain:
 Litter/Standing Water? (circle one): Yes No If Yes, explain:

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)
 Measured Well Total Depth (feet): 23.74 Peri Tubing Used (feet):
 Initial Static Water Level (feet): 15.75 Sub Tubing Used (feet):
 Equipment Used (check one): Dedicated Peristaltic Tubing Dedicated Submersible Pump*
 Dedicated Bailer Other: *Controller Type: G / Y / BR

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	Temperature (°C) +/- 10%	Dissolved Oxygen (mg/L)	Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time						
9:00	10.6	5.21	1330	6.94	118.7	30.95	15.79
8:54	Parameters stabilized for 3 consecutive readings, YSI stopped recording, sample collected						15.79
	← Final SWL Record Time		Finished collecting sample			Final SWL after sampling →	

Quantity of Water Removed from Well (circle units: liters / gallons)
 Was well pumped/bailed dry? No
 Total Amount of Time Purged (minutes) 5
 Color Describe: clear
 Odor Describe: none

D. WELL MAINTENANCE

Does the monitoring well/piezometer require any future maintenance? Yes / No
 If yes, explain: fluid mount cap impedes proper fit of well cap - can't put in screws. Photo taken
 Is the monitoring well/piezometer correctly labeled with a physical tag visible on the outside of the protective well casing? Yes / No

Additional Comments/Sampling Issues:

$$V_{3W} = (23.74 - 15.75) / 2 = 3.995 \text{ gal} = 12 \text{ bailers}$$

$$1 \text{ bailer} = .33 \text{ gallons}$$
~ 6 bailers to dry well

FORM FOR GROUNDWATER SAMPLING

Project: Henry County Sanitary Landfill	
Monitoring Well/Piezometer ID: MW-19	Date: 7/17/2025
Gradient: Down	Sampler: Michael Morgan

A. MW/PIEZOMETER CONDITIONS

Well/Piezometer Capped?	
Litter/Standing Water?	

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

Measured Well Total Depth (feet):
Initial Static Water Level (feet):
Initial Groundwater Elevation (ft-amsl):
Equipment Used:

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES							
Time	Temperature (°C) 10%	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm) +/- 10%	pH (S.U.) +/- 0.1	ORP (mV)	Turbidity (FNU)	Static Water Level (feet)
	Purging start time.						
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	
If yes, explain:	

Additional Comments:	Unable to locate well. Metal detector used. Well will be located, marked, and sampled in 2026. No sample.
----------------------	---

Appendix B-1

Laboratory Analytical Data Sheets



ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/8/2024 10:58:21 PM

JOB DESCRIPTION

Henry County Sanitary Landfill 2024 Sampling

JOB NUMBER

310-279849-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization



Generated
5/8/2024 10:58:21 PM

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



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Case Narrative

Client: SCS Engineers
Project: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Job ID: 310-279849-1

Eurofins Cedar Falls

Job Narrative 310-279849-1

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

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

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

Receipt

The samples were received on 4/25/2024 4:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-420475 recovered above the upper control limit for Vinyl chloride (26.1%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-420475/4).

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-279849-1	MW-20	Water	04/25/24 08:38	04/25/24 16:25
310-279849-2	MW-22	Water	04/25/24 09:32	04/25/24 16:25
310-279849-3	MW-23	Water	04/25/24 09:58	04/25/24 16:25
310-279849-4	MW-25	Water	04/25/24 10:27	04/25/24 16:25
310-279849-5	MW-26	Water	04/25/24 10:17	04/25/24 16:25
310-279849-6	MW-29	Water	04/25/24 10:36	04/25/24 16:25
310-279849-7	MW-30	Water	04/25/24 10:05	04/25/24 16:25
310-279849-8	MW-36	Water	04/25/24 09:18	04/25/24 16:25
310-279849-9	MW-37	Water	04/25/24 09:00	04/25/24 16:25
310-279849-10	MW-D	Water	04/25/24 09:32	04/25/24 16:25

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

Detection Summary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-20

Lab Sample ID: 310-279849-1

No Detections.

Client Sample ID: MW-22

Lab Sample ID: 310-279849-2

No Detections.

Client Sample ID: MW-23

Lab Sample ID: 310-279849-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.590		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	45.9		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.426	J	1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	5.11		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-25

Lab Sample ID: 310-279849-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.81		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.429	J	1.00	0.270	ug/L	1		8260D	Total/NA

Client Sample ID: MW-26

Lab Sample ID: 310-279849-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.324	J	1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	1.58		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-29

Lab Sample ID: 310-279849-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	39.2		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.93		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	6.75		1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: MW-30

Lab Sample ID: 310-279849-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.516		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	36.2		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.427	J	1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	4.28		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-36

Lab Sample ID: 310-279849-8

No Detections.

Client Sample ID: MW-37

Lab Sample ID: 310-279849-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.303	J	1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.352	J	1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-D

Lab Sample ID: 310-279849-10

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-20

Lab Sample ID: 310-279849-1

Date Collected: 04/25/24 08:38

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 13:18	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/02/24 13:18	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 13:18	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 13:18	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 13:18	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 13:18	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 13:18	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 13:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120					05/02/24 13:18	1
Dibromofluoromethane (Surr)	110		73 - 130					05/02/24 13:18	1
Toluene-d8 (Surr)	99		80 - 120					05/02/24 13:18	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-22

Lab Sample ID: 310-279849-2

Date Collected: 04/25/24 09:32

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 13:41	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/02/24 13:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 13:41	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 13:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 13:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 13:41	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 13:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					05/02/24 13:41	1
Dibromofluoromethane (Surr)	110		73 - 130					05/02/24 13:41	1
Toluene-d8 (Surr)	99		80 - 120					05/02/24 13:41	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-23

Lab Sample ID: 310-279849-3

Date Collected: 04/25/24 09:58

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.590		0.500	0.220	ug/L			05/02/24 14:04	1
cis-1,2-Dichloroethene	45.9		1.00	0.210	ug/L			05/02/24 14:04	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 14:04	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 14:04	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 14:04	1
trans-1,2-Dichloroethene	0.426 J		1.00	0.270	ug/L			05/02/24 14:04	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 14:04	1
Vinyl chloride	5.11		1.00	0.180	ug/L			05/02/24 14:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120					05/02/24 14:04	1
Dibromofluoromethane (Surr)	109		73 - 130					05/02/24 14:04	1
Toluene-d8 (Surr)	102		80 - 120					05/02/24 14:04	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-25

Lab Sample ID: 310-279849-4

Date Collected: 04/25/24 10:27

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 14:26	1
cis-1,2-Dichloroethene	7.81		1.00	0.210	ug/L			05/02/24 14:26	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 14:26	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 14:26	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 14:26	1
trans-1,2-Dichloroethene	0.429 J		1.00	0.270	ug/L			05/02/24 14:26	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 14:26	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 14:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120					05/02/24 14:26	1
Dibromofluoromethane (Surr)	110		73 - 130					05/02/24 14:26	1
Toluene-d8 (Surr)	100		80 - 120					05/02/24 14:26	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-26

Lab Sample ID: 310-279849-5

Date Collected: 04/25/24 10:17

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 14:49	1
cis-1,2-Dichloroethene	0.324	J	1.00	0.210	ug/L			05/02/24 14:49	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 14:49	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 14:49	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 14:49	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 14:49	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 14:49	1
Vinyl chloride	1.58		1.00	0.180	ug/L			05/02/24 14:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					05/02/24 14:49	1
Dibromofluoromethane (Surr)	109		73 - 130					05/02/24 14:49	1
Toluene-d8 (Surr)	99		80 - 120					05/02/24 14:49	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-29

Lab Sample ID: 310-279849-6

Date Collected: 04/25/24 10:36

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 15:12	1
cis-1,2-Dichloroethene	39.2		1.00	0.210	ug/L			05/02/24 15:12	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 15:12	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 15:12	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 15:12	1
trans-1,2-Dichloroethene	1.93		1.00	0.270	ug/L			05/02/24 15:12	1
Trichloroethene	6.75		1.00	0.430	ug/L			05/02/24 15:12	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					05/02/24 15:12	1
Dibromofluoromethane (Surr)	109		73 - 130					05/02/24 15:12	1
Toluene-d8 (Surr)	101		80 - 120					05/02/24 15:12	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-30

Lab Sample ID: 310-279849-7

Date Collected: 04/25/24 10:05

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.516		0.500	0.220	ug/L			05/02/24 15:34	1
cis-1,2-Dichloroethene	36.2		1.00	0.210	ug/L			05/02/24 15:34	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 15:34	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 15:34	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 15:34	1
trans-1,2-Dichloroethene	0.427 J		1.00	0.270	ug/L			05/02/24 15:34	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 15:34	1
Vinyl chloride	4.28		1.00	0.180	ug/L			05/02/24 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					05/02/24 15:34	1
Dibromofluoromethane (Surr)	111		73 - 130					05/02/24 15:34	1
Toluene-d8 (Surr)	100		80 - 120					05/02/24 15:34	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-36

Lab Sample ID: 310-279849-8

Date Collected: 04/25/24 09:18

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 15:57	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/02/24 15:57	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 15:57	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 15:57	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 15:57	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 15:57	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 15:57	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					05/02/24 15:57	1
Dibromofluoromethane (Surr)	111		73 - 130					05/02/24 15:57	1
Toluene-d8 (Surr)	98		80 - 120					05/02/24 15:57	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-37

Lab Sample ID: 310-279849-9

Date Collected: 04/25/24 09:00

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/03/24 01:02	1
cis-1,2-Dichloroethene	0.303	J	1.00	0.210	ug/L			05/03/24 01:02	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/03/24 01:02	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/03/24 01:02	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/03/24 01:02	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/03/24 01:02	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/03/24 01:02	1
Vinyl chloride	0.352	J	1.00	0.180	ug/L			05/07/24 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		05/03/24 01:02	1
4-Bromofluorobenzene (Surr)	103		80 - 120		05/07/24 16:51	1
Dibromofluoromethane (Surr)	110		73 - 130		05/03/24 01:02	1
Dibromofluoromethane (Surr)	113		73 - 130		05/07/24 16:51	1
Toluene-d8 (Surr)	101		80 - 120		05/03/24 01:02	1
Toluene-d8 (Surr)	99		80 - 120		05/07/24 16:51	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-D

Lab Sample ID: 310-279849-10

Date Collected: 04/25/24 09:32

Matrix: Water

Date Received: 04/25/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			05/03/24 01:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/03/24 01:25	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/03/24 01:25	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/03/24 01:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/03/24 01:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/03/24 01:25	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/03/24 01:25	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/03/24 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					05/03/24 01:25	1
Dibromofluoromethane (Surr)	111		73 - 130					05/03/24 01:25	1
Toluene-d8 (Surr)	99		80 - 120					05/03/24 01:25	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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.

Glossary

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

Surrogate Summary

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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)		
		BFB (80-120)	DBFM (73-130)	TOL (80-120)
310-279849-1	MW-20	104	110	99
310-279849-1 MS	MW-20	100	101	101
310-279849-1 MSD	MW-20	100	104	101
310-279849-2	MW-22	103	110	99
310-279849-3	MW-23	104	109	102
310-279849-4	MW-25	105	110	100
310-279849-5	MW-26	99	109	99
310-279849-6	MW-29	102	109	101
310-279849-7	MW-30	99	111	100
310-279849-8	MW-36	100	111	98
310-279849-9	MW-37	103	110	101
310-279849-9	MW-37	103	113	99
310-279849-10	MW-D	100	111	99
LCS 310-420473/6	Lab Control Sample	98	100	101
LCS 310-420473/7	Lab Control Sample	100	113	99
LCS 310-420475/6	Lab Control Sample	101	100	101
LCS 310-420475/7	Lab Control Sample	100	110	98
LCS 310-420876/6	Lab Control Sample	99	101	100
LCS 310-420876/7	Lab Control Sample	102	115	99
MB 310-420473/5	Method Blank	103	115	99
MB 310-420475/5	Method Blank	101	112	99
MB 310-420876/5	Method Blank	102	110	99

Surrogate Legend

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

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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

Lab Sample ID: MB 310-420473/5
Matrix: Water
Analysis Batch: 420473

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 11:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/02/24 11:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 11:47	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 11:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 11:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 11:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 11:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 11:47	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	103		80 - 120		05/02/24 11:47	1
Dibromofluoromethane (Surr)	115		73 - 130		05/02/24 11:47	1
Toluene-d8 (Surr)	99		80 - 120		05/02/24 11:47	1

Lab Sample ID: LCS 310-420473/6
Matrix: Water
Analysis Batch: 420473

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	20.0	22.03		ug/L		110	72 - 124
cis-1,2-Dichloroethene	20.0	20.64		ug/L		103	74 - 123
1,1-Dichloroethene	20.0	20.49		ug/L		102	63 - 132
Methylene Chloride	20.0	21.12		ug/L		106	50 - 150
Tetrachloroethene	20.0	22.01		ug/L		110	71 - 130
trans-1,2-Dichloroethene	20.0	21.29		ug/L		106	70 - 126
Trichloroethene	20.0	21.00		ug/L		105	72 - 126

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

Lab Sample ID: LCS 310-420473/7
Matrix: Water
Analysis Batch: 420473

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Vinyl chloride	20.0	23.17		ug/L		116	56 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	113		73 - 130
Toluene-d8 (Surr)	99		80 - 120

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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

Lab Sample ID: 310-279849-1 MS

Client Sample ID: MW-20

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 420473

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.500		20.0	18.67		ug/L		93		46 - 130
cis-1,2-Dichloroethene	<1.00		20.0	16.65		ug/L		83		45 - 130
1,1-Dichloroethene	<2.00		20.0	16.23		ug/L		81		37 - 132
Methylene Chloride	<5.00		20.0	16.59		ug/L		83		37 - 150
Tetrachloroethene	<1.00		20.0	15.37		ug/L		77		47 - 130
trans-1,2-Dichloroethene	<1.00		20.0	17.30		ug/L		86		48 - 130
Trichloroethene	<1.00		20.0	15.92		ug/L		80		51 - 130
MS MS										
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	100		80 - 120							
Dibromofluoromethane (Surr)	101		73 - 130							
Toluene-d8 (Surr)	101		80 - 120							

Lab Sample ID: 310-279849-1 MSD

Client Sample ID: MW-20

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 420473

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						Limit	
Benzene	<0.500		20.0	18.36		ug/L		92		46 - 130	2	20
cis-1,2-Dichloroethene	<1.00		20.0	16.78		ug/L		84		45 - 130	1	20
1,1-Dichloroethene	<2.00		20.0	15.83		ug/L		79		37 - 132	2	26
Methylene Chloride	<5.00		20.0	17.05		ug/L		85		37 - 150	3	24
Tetrachloroethene	<1.00		20.0	15.45		ug/L		77		47 - 130	1	20
trans-1,2-Dichloroethene	<1.00		20.0	16.53		ug/L		83		48 - 130	5	22
Trichloroethene	<1.00		20.0	15.72		ug/L		79		51 - 130	1	20
MSD MSD												
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	100		80 - 120									
Dibromofluoromethane (Surr)	104		73 - 130									
Toluene-d8 (Surr)	101		80 - 120									

Lab Sample ID: MB 310-420475/5

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 420475

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.220	ug/L			05/02/24 22:46	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/02/24 22:46	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/02/24 22:46	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/02/24 22:46	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/02/24 22:46	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/02/24 22:46	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/02/24 22:46	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/02/24 22:46	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	101		80 - 120		05/02/24 22:46	1			

Eurofins Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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

Lab Sample ID: MB 310-420475/5
Matrix: Water
Analysis Batch: 420475

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	112		73 - 130		05/02/24 22:46	1
Toluene-d8 (Surr)	99		80 - 120		05/02/24 22:46	1

Lab Sample ID: LCS 310-420475/6
Matrix: Water
Analysis Batch: 420475

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	20.0	22.27		ug/L		111	72 - 124
cis-1,2-Dichloroethene	20.0	20.44		ug/L		102	74 - 123
1,1-Dichloroethene	20.0	20.40		ug/L		102	63 - 132
Methylene Chloride	20.0	20.57		ug/L		103	50 - 150
Tetrachloroethene	20.0	21.90		ug/L		109	71 - 130
trans-1,2-Dichloroethene	20.0	20.83		ug/L		104	70 - 126
Trichloroethene	20.0	20.83		ug/L		104	72 - 126

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

Lab Sample ID: LCS 310-420475/7
Matrix: Water
Analysis Batch: 420475

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Vinyl chloride	20.0	26.15		ug/L		131	56 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	110		73 - 130
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: MB 310-420876/5
Matrix: Water
Analysis Batch: 420876

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.220	ug/L			05/07/24 12:40	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/07/24 12:40	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/07/24 12:40	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/07/24 12:40	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/07/24 12:40	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/07/24 12:40	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/07/24 12:40	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/07/24 12:40	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

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

Lab Sample ID: MB 310-420876/5
Matrix: Water
Analysis Batch: 420876

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	102		80 - 120		05/07/24 12:40	1
Dibromofluoromethane (Surr)	110		73 - 130		05/07/24 12:40	1
Toluene-d8 (Surr)	99		80 - 120		05/07/24 12:40	1

Lab Sample ID: LCS 310-420876/6
Matrix: Water
Analysis Batch: 420876

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	20.0	18.34		ug/L		92	74 - 123
1,1-Dichloroethene	20.0	18.51		ug/L		93	63 - 132
Methylene Chloride	20.0	18.32		ug/L		92	50 - 150
Tetrachloroethene	20.0	19.53		ug/L		98	71 - 130
trans-1,2-Dichloroethene	20.0	18.76		ug/L		94	70 - 126
Trichloroethene	20.0	19.11		ug/L		96	72 - 126

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		73 - 130
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 310-420876/7
Matrix: Water
Analysis Batch: 420876

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	115		73 - 130
Toluene-d8 (Surr)	99		80 - 120

QC Association Summary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

GC/MS VOA

Analysis Batch: 420473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279849-1	MW-20	Total/NA	Water	8260D	
310-279849-2	MW-22	Total/NA	Water	8260D	
310-279849-3	MW-23	Total/NA	Water	8260D	
310-279849-4	MW-25	Total/NA	Water	8260D	
310-279849-5	MW-26	Total/NA	Water	8260D	
310-279849-6	MW-29	Total/NA	Water	8260D	
310-279849-7	MW-30	Total/NA	Water	8260D	
310-279849-8	MW-36	Total/NA	Water	8260D	
MB 310-420473/5	Method Blank	Total/NA	Water	8260D	
LCS 310-420473/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-420473/7	Lab Control Sample	Total/NA	Water	8260D	
310-279849-1 MS	MW-20	Total/NA	Water	8260D	
310-279849-1 MSD	MW-20	Total/NA	Water	8260D	

Analysis Batch: 420475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279849-9	MW-37	Total/NA	Water	8260D	
310-279849-10	MW-D	Total/NA	Water	8260D	
MB 310-420475/5	Method Blank	Total/NA	Water	8260D	
LCS 310-420475/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-420475/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 420876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-279849-9	MW-37	Total/NA	Water	8260D	
MB 310-420876/5	Method Blank	Total/NA	Water	8260D	
LCS 310-420876/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-420876/7	Lab Control Sample	Total/NA	Water	8260D	

Lab Chronicle

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-20

Date Collected: 04/25/24 08:38

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 13:18

Client Sample ID: MW-22

Date Collected: 04/25/24 09:32

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 13:41

Client Sample ID: MW-23

Date Collected: 04/25/24 09:58

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 14:04

Client Sample ID: MW-25

Date Collected: 04/25/24 10:27

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 14:26

Client Sample ID: MW-26

Date Collected: 04/25/24 10:17

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 14:49

Client Sample ID: MW-29

Date Collected: 04/25/24 10:36

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 15:12

Client Sample ID: MW-30

Date Collected: 04/25/24 10:05

Date Received: 04/25/24 16:25

Lab Sample ID: 310-279849-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 15:34

Lab Chronicle

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Client Sample ID: MW-36

Lab Sample ID: 310-279849-8

Date Collected: 04/25/24 09:18

Matrix: Water

Date Received: 04/25/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420473	FE5V	EET CF	05/02/24 15:57

Client Sample ID: MW-37

Lab Sample ID: 310-279849-9

Date Collected: 04/25/24 09:00

Matrix: Water

Date Received: 04/25/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420475	FE5V	EET CF	05/03/24 01:02
Total/NA	Analysis	8260D		1	420876	FE5V	EET CF	05/07/24 16:51

Client Sample ID: MW-D

Lab Sample ID: 310-279849-10

Date Collected: 04/25/24 09:32

Matrix: Water

Date Received: 04/25/24 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	420475	FE5V	EET CF	05/03/24 01:25

Laboratory References:

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Laboratory: Eurofins Cedar Falls

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

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

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Method Summary

Client: SCS Engineers
Project/Site: Henry County Sanitary Landfill 2024 Sampling

Job ID: 310-279849-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

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

Laboratory References:

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





Environment Testing
America



310-279849 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS</u>			
City/State:	CITY	STATE	Project:
Receipt Information			
Date/Time Received:	DATE <u>4-25-24</u>	TIME <u>11:25</u>	Received By: <u>ML</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input 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: <u>X</u>		Correction Factor (°C): <u>0</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>5.6</u>		Corrected Temp (°C): <u>5.6</u>	
• Sample Container Temperature			
Container(s) used:	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-279849-1

Login Number: 279849

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

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



ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Henry Co Landfill 2025 HMSP
Henry County Sanitary Landfill

JOB NUMBER

310-311460-1

Eurofins Cedar Falls

Job Notes

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

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

Authorization

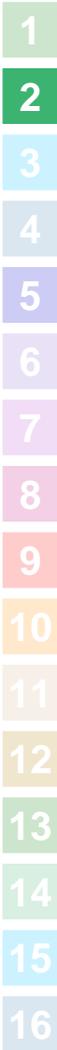


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Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)595-2008

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Case Narrative

Client: SCS Engineers
Project: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1

Job ID: 310-311460-1

Eurofins Cedar Falls

Job Narrative 310-311460-1

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

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

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

Receipt

The samples were received on 7/18/2025 5:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-461230 recovered above the upper control limit for 2-Hexanone (20.8%D). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is:(CCV 310-461230/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-461230 recovered above the upper control limit for Trichlorofluoromethane (39.6%D), Vinyl chloride (34.7%D), Chloromethane (39.2%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-461230/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-461230 recovered above the upper control limit for Chloroethane (25.3%D) and Dichlorodifluoromethane (22.9%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 310-461230/4).

Method 8260D: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container: Trip Blank (310-311460-8).

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

Metals

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

General Chemistry

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

Eurofins Cedar Falls

Sample Summary

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-311460-1	MW-6	Ground Water	07/17/25 17:57	07/18/25 17:30
310-311460-2	MW-13	Ground Water	07/17/25 16:02	07/18/25 17:30
310-311460-3	MW-21	Ground Water	07/17/25 16:27	07/18/25 17:30
310-311460-4	MW-24	Ground Water	07/17/25 16:53	07/18/25 17:30
310-311460-5	MW-27	Ground Water	07/17/25 17:26	07/18/25 17:30
310-311460-6	MW-32	Ground Water	07/17/25 17:10	07/18/25 17:30
310-311460-7	MW-D	Ground Water	07/17/25 16:10	07/18/25 17:30
310-311460-8	Trip Blank	Water	07/17/25 00:00	07/18/25 17:30

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Detection Summary

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

Client Sample ID: MW-6

Lab Sample ID: 310-311460-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.66		1.00	0.220	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.512	J	1.00	0.230	ug/L	1		8260D	Total/NA
Benzene	0.243	J	0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.44		1.00	0.210	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.721	J	1.00	0.480	ug/L	1		8260D	Total/NA
Trichloroethene	0.723	J	1.00	0.430	ug/L	1		8260D	Total/NA
Cobalt	0.00840		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0200		0.00500	0.00230	mg/L	1		6020B	Total/NA
Total Suspended Solids	73.0		15.0	10.5	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 310-311460-2

No Detections.

Client Sample ID: MW-21

Lab Sample ID: 310-311460-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.690		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	366		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.72		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	2.26		1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	94.1		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-24

Lab Sample ID: 310-311460-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.926		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	475		10.0	2.10	ug/L	10		8260D	Total/NA
Tetrachloroethene	0.664	J	1.00	0.480	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	5.24		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	9.19		1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	37.1		10.0	1.80	ug/L	10		8260D	Total/NA

Client Sample ID: MW-27

Lab Sample ID: 310-311460-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.433	J	0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	458		1.00	0.210	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.37		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	1.49		1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	8.36		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-32

Lab Sample ID: 310-311460-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	51.5		1.00	0.180	ug/L	1		8260D	Total/NA

Client Sample ID: MW-D

Lab Sample ID: 310-311460-7

No Detections.

Client Sample ID: Trip Blank

Lab Sample ID: 310-311460-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

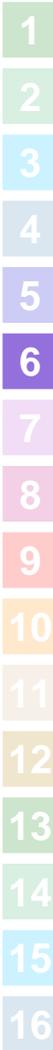
Quantitation Limit Exceptions Summary

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

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



Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-6
 Date Collected: 07/17/25 17:57
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-1
 Matrix: Ground Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/22/25 13:16	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/22/25 13:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/22/25 13:16	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/22/25 13:16	1
1,1-Dichloroethane	1.66		1.00	0.220	ug/L			07/22/25 13:16	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 13:16	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/22/25 13:16	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			07/22/25 13:16	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			07/22/25 13:16	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/22/25 13:16	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/22/25 13:16	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/22/25 13:16	1
1,4-Dichlorobenzene	0.512	J	1.00	0.230	ug/L			07/22/25 13:16	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/22/25 13:16	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/22/25 13:16	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/22/25 13:16	1
Acetone	<10.0		10.0	3.10	ug/L			07/22/25 13:16	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			07/22/25 13:16	1
Benzene	0.243	J	0.500	0.220	ug/L			07/22/25 13:16	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/22/25 13:16	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/22/25 13:16	1
Bromoform	<5.00		5.00	0.780	ug/L			07/22/25 13:16	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/22/25 13:16	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/22/25 13:16	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/22/25 13:16	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/22/25 13:16	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/22/25 13:16	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/22/25 13:16	1
Chloroform	<3.00		3.00	1.30	ug/L			07/22/25 13:16	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/22/25 13:16	1
cis-1,2-Dichloroethene	1.44		1.00	0.210	ug/L			07/22/25 13:16	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/22/25 13:16	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/22/25 13:16	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/22/25 13:16	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/22/25 13:16	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 13:16	1
Styrene	<1.00		1.00	0.370	ug/L			07/22/25 13:16	1
Tetrachloroethene	0.721	J	1.00	0.480	ug/L			07/22/25 13:16	1
Toluene	<1.00		1.00	0.430	ug/L			07/22/25 13:16	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 13:16	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/22/25 13:16	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/22/25 13:16	1
Trichloroethene	0.723	J	1.00	0.430	ug/L			07/22/25 13:16	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/22/25 13:16	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/22/25 13:16	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/22/25 13:16	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/22/25 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		76 - 130		07/22/25 13:16	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-6

Lab Sample ID: 310-311460-1

Date Collected: 07/17/25 17:57

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		07/22/25 13:16	1
4-Bromofluorobenzene (Surr)	101		80 - 120		07/22/25 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00840		0.000500	0.000170	mg/L		07/22/25 08:40	07/22/25 18:49	1
Nickel	0.0200		0.00500	0.00230	mg/L		07/22/25 08:40	07/22/25 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	73.0		15.0	10.5	mg/L			07/21/25 15:35	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-13

Lab Sample ID: 310-311460-2

Date Collected: 07/17/25 16:02

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			07/22/25 18:10	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/22/25 18:10	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 18:10	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 18:10	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 18:10	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 18:10	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/22/25 18:10	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/22/25 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					07/22/25 18:10	1
Dibromofluoromethane (Surr)	107		76 - 130					07/22/25 18:10	1
Toluene-d8 (Surr)	96		80 - 120					07/22/25 18:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-21

Lab Sample ID: 310-311460-3

Date Collected: 07/17/25 16:27

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.690		0.500	0.220	ug/L			07/22/25 13:39	1
cis-1,2-Dichloroethene	366		1.00	0.210	ug/L			07/22/25 13:39	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 13:39	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 13:39	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 13:39	1
trans-1,2-Dichloroethene	1.72		1.00	0.270	ug/L			07/22/25 13:39	1
Trichloroethene	2.26		1.00	0.430	ug/L			07/22/25 13:39	1
Vinyl chloride	94.1		1.00	0.180	ug/L			07/24/25 18:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					07/22/25 13:39	1
4-Bromofluorobenzene (Surr)	103		80 - 120					07/24/25 18:50	1
Dibromofluoromethane (Surr)	111		76 - 130					07/22/25 13:39	1
Dibromofluoromethane (Surr)	105		76 - 130					07/24/25 18:50	1
Toluene-d8 (Surr)	95		80 - 120					07/22/25 13:39	1
Toluene-d8 (Surr)	101		80 - 120					07/24/25 18:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-24

Lab Sample ID: 310-311460-4

Date Collected: 07/17/25 16:53

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.926		0.500	0.220	ug/L			07/22/25 18:33	1
cis-1,2-Dichloroethene	475		10.0	2.10	ug/L			07/24/25 19:35	10
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 18:33	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 18:33	1
Tetrachloroethene	0.664 J		1.00	0.480	ug/L			07/22/25 18:33	1
trans-1,2-Dichloroethene	5.24		1.00	0.270	ug/L			07/22/25 18:33	1
Trichloroethene	9.19		1.00	0.430	ug/L			07/22/25 18:33	1
Vinyl chloride	37.1		10.0	1.80	ug/L			07/24/25 19:35	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					07/22/25 18:33	1
4-Bromofluorobenzene (Surr)	102		80 - 120					07/24/25 19:35	10
Dibromofluoromethane (Surr)	119		76 - 130					07/22/25 18:33	1
Dibromofluoromethane (Surr)	104		76 - 130					07/24/25 19:35	10
Toluene-d8 (Surr)	94		80 - 120					07/22/25 18:33	1
Toluene-d8 (Surr)	94		80 - 120					07/24/25 19:35	10

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-27

Lab Sample ID: 310-311460-5

Date Collected: 07/17/25 17:26

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.433	J	0.500	0.220	ug/L			07/22/25 14:01	1
cis-1,2-Dichloroethene	458		1.00	0.210	ug/L			07/22/25 14:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 14:01	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 14:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 14:01	1
trans-1,2-Dichloroethene	1.37		1.00	0.270	ug/L			07/22/25 14:01	1
Trichloroethene	1.49		1.00	0.430	ug/L			07/22/25 14:01	1
Vinyl chloride	8.36		1.00	0.180	ug/L			07/24/25 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120					07/22/25 14:01	1
4-Bromofluorobenzene (Surr)	103		80 - 120					07/24/25 19:12	1
Dibromofluoromethane (Surr)	114		76 - 130					07/22/25 14:01	1
Dibromofluoromethane (Surr)	110		76 - 130					07/24/25 19:12	1
Toluene-d8 (Surr)	98		80 - 120					07/22/25 14:01	1
Toluene-d8 (Surr)	100		80 - 120					07/24/25 19:12	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-32

Lab Sample ID: 310-311460-6

Date Collected: 07/17/25 17:10

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			07/22/25 14:24	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/25 18:28	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 14:24	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 14:24	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 14:24	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 14:24	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/22/25 14:24	1
Vinyl chloride	51.5		1.00	0.180	ug/L			07/24/25 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		07/22/25 14:24	1
4-Bromofluorobenzene (Surr)	106		80 - 120		07/24/25 18:28	1
Dibromofluoromethane (Surr)	108		76 - 130		07/22/25 14:24	1
Dibromofluoromethane (Surr)	100		76 - 130		07/24/25 18:28	1
Toluene-d8 (Surr)	97		80 - 120		07/22/25 14:24	1
Toluene-d8 (Surr)	99		80 - 120		07/24/25 18:28	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-D

Lab Sample ID: 310-311460-7

Date Collected: 07/17/25 16:10

Matrix: Ground Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.220	ug/L			07/22/25 14:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/22/25 14:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 14:47	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 14:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 14:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 14:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/22/25 14:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/22/25 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					07/22/25 14:47	1
Dibromofluoromethane (Surr)	109		76 - 130					07/22/25 14:47	1
Toluene-d8 (Surr)	98		80 - 120					07/22/25 14:47	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-311460-8

Date Collected: 07/17/25 00:00

Matrix: Water

Date Received: 07/18/25 17:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/22/25 12:54	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/22/25 12:54	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/22/25 12:54	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/22/25 12:54	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/22/25 12:54	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 12:54	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/22/25 12:54	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			07/22/25 12:54	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			07/22/25 12:54	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/22/25 12:54	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/22/25 12:54	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/22/25 12:54	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/22/25 12:54	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/22/25 12:54	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/22/25 12:54	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/22/25 12:54	1
Acetone	<10.0		10.0	3.10	ug/L			07/22/25 12:54	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			07/22/25 12:54	1
Benzene	<0.500		0.500	0.220	ug/L			07/22/25 12:54	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/22/25 12:54	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/22/25 12:54	1
Bromoform	<5.00		5.00	0.780	ug/L			07/22/25 12:54	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/22/25 12:54	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/22/25 12:54	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/22/25 12:54	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/22/25 12:54	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/22/25 12:54	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/22/25 12:54	1
Chloroform	<3.00		3.00	1.30	ug/L			07/22/25 12:54	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/22/25 12:54	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/22/25 12:54	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/22/25 12:54	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/22/25 12:54	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/22/25 12:54	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/22/25 12:54	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 12:54	1
Styrene	<1.00		1.00	0.370	ug/L			07/22/25 12:54	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 12:54	1
Toluene	<1.00		1.00	0.430	ug/L			07/22/25 12:54	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 12:54	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/22/25 12:54	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/22/25 12:54	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/22/25 12:54	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/22/25 12:54	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/22/25 12:54	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/22/25 12:54	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/22/25 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		76 - 130		07/22/25 12:54	1

Eurofins Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

Client Sample ID: Trip Blank

Lab Sample ID: 310-311460-8

Date Collected: 07/17/25 00:00

Matrix: Water

Date Received: 07/18/25 17:30

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

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Toluene-d8 (Surr)	94		80 - 120		07/22/25 12:54	1
4-Bromofluorobenzene (Surr)	98		80 - 120		07/22/25 12:54	1

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Definitions/Glossary

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

Qualifiers

GC/MS VOA

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

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: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-311460-1	MW-6	111	97	101
310-311460-1 MS	MW-6	102	102	99
310-311460-1 MSD	MW-6	99	98	99
310-311460-2	MW-13	107	96	100
310-311460-3	MW-21	111	95	100
310-311460-3	MW-21	105	101	103
310-311460-4	MW-24	119	94	99
310-311460-4	MW-24	104	94	102
310-311460-5	MW-27	114	98	102
310-311460-5	MW-27	110	100	103
310-311460-6	MW-32	108	97	101
310-311460-6	MW-32	100	99	106
310-311460-7	MW-D	109	98	101

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (76-130)	TOL (80-120)	BFB (80-120)
310-311460-8	Trip Blank	110	94	98
LCS 310-461230/6	Lab Control Sample	98	101	101
LCS 310-461230/7	Lab Control Sample	106	96	102
LCS 310-461550/6	Lab Control Sample	99	103	95
LCS 310-461550/7	Lab Control Sample	100	96	104
MB 310-461230/5	Method Blank	104	97	103
MB 310-461550/5	Method Blank	103	101	99

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

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Lab Sample ID: MB 310-461230/5
Matrix: Water
Analysis Batch: 461230

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/22/25 11:23	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/22/25 11:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/22/25 11:23	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/22/25 11:23	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/22/25 11:23	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/22/25 11:23	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/22/25 11:23	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			07/22/25 11:23	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			07/22/25 11:23	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/22/25 11:23	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/22/25 11:23	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/22/25 11:23	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/22/25 11:23	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/22/25 11:23	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/22/25 11:23	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/22/25 11:23	1
Acetone	<10.0		10.0	3.10	ug/L			07/22/25 11:23	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			07/22/25 11:23	1
Benzene	<0.500		0.500	0.220	ug/L			07/22/25 11:23	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/22/25 11:23	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/22/25 11:23	1
Bromoform	<5.00		5.00	0.780	ug/L			07/22/25 11:23	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/22/25 11:23	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/22/25 11:23	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/22/25 11:23	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/22/25 11:23	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/22/25 11:23	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/22/25 11:23	1
Chloroform	<3.00		3.00	1.30	ug/L			07/22/25 11:23	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/22/25 11:23	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/22/25 11:23	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/22/25 11:23	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/22/25 11:23	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/22/25 11:23	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/22/25 11:23	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/22/25 11:23	1
Styrene	<1.00		1.00	0.370	ug/L			07/22/25 11:23	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/22/25 11:23	1
Toluene	<1.00		1.00	0.430	ug/L			07/22/25 11:23	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/22/25 11:23	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/22/25 11:23	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/22/25 11:23	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/22/25 11:23	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/22/25 11:23	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/22/25 11:23	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/22/25 11:23	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/22/25 11:23	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Lab Sample ID: MB 310-461230/5
Matrix: Water
Analysis Batch: 461230

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	104		76 - 130		07/22/25 11:23	1
Toluene-d8 (Surr)	97		80 - 120		07/22/25 11:23	1
4-Bromofluorobenzene (Surr)	103		80 - 120		07/22/25 11:23	1

Lab Sample ID: LCS 310-461230/6
Matrix: Water
Analysis Batch: 461230

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,1-Trichloroethane	20.0	20.65		ug/L		103	69 - 130
1,1,1,2,2-Tetrachloroethane	20.0	18.90		ug/L		95	70 - 122
1,1,2-Trichloroethane	20.0	17.80		ug/L		89	75 - 121
1,1-Dichloroethane	20.0	19.52		ug/L		98	69 - 127
1,1-Dichloroethane	20.0	19.72		ug/L		99	64 - 134
1,2,3-Trichloropropane	20.0	19.73		ug/L		99	70 - 122
1,2-Dibromo-3-Chloropropane	20.0	19.45		ug/L		97	62 - 132
1,2-Dibromoethane (EDB)	20.0	18.22		ug/L		91	74 - 122
1,2-Dichlorobenzene	20.0	18.92		ug/L		95	74 - 120
1,2-Dichloroethane	20.0	20.83		ug/L		104	68 - 125
1,2-Dichloropropane	20.0	19.37		ug/L		97	72 - 128
1,4-Dichlorobenzene	20.0	18.92		ug/L		95	72 - 120
2-Butanone (MEK)	40.0	38.14		ug/L		95	60 - 134
2-Hexanone	40.0	43.10		ug/L		108	62 - 139
4-Methyl-2-pentanone (MIBK)	40.0	37.94		ug/L		95	62 - 136
Acetone	40.0	46.07		ug/L		115	59 - 136
Acrylonitrile	200	200.2		ug/L		100	50 - 150
Benzene	20.0	18.84		ug/L		94	71 - 125
Bromochloromethane	20.0	20.50		ug/L		102	69 - 131
Bromodichloromethane	20.0	18.01		ug/L		90	70 - 122
Bromoform	20.0	16.29		ug/L		81	62 - 122
Carbon disulfide	20.0	18.90		ug/L		95	58 - 137
Carbon tetrachloride	20.0	20.58		ug/L		103	63 - 136
Chlorobenzene	20.0	17.40		ug/L		87	74 - 120
Chlorodibromomethane	20.0	16.53		ug/L		83	69 - 121
Chloroform	20.0	20.28		ug/L		101	72 - 122
cis-1,2-Dichloroethene	20.0	19.01		ug/L		95	72 - 123
cis-1,3-Dichloropropene	20.0	17.53		ug/L		88	72 - 123
Dibromomethane	20.0	20.39		ug/L		102	72 - 122
Ethylbenzene	20.0	18.70		ug/L		93	75 - 120
Iodomethane	20.0	9.186	J	ug/L		46	18 - 150
Methylene Chloride	20.0	19.63		ug/L		98	72 - 128
Styrene	20.0	18.18		ug/L		91	74 - 122
Tetrachloroethene	20.0	18.33		ug/L		92	70 - 128
Toluene	20.0	18.10		ug/L		90	74 - 120
trans-1,2-Dichloroethene	20.0	19.69		ug/L		98	67 - 127
trans-1,3-Dichloropropene	20.0	17.31		ug/L		87	67 - 123
trans-1,4-Dichloro-2-butene	20.0	18.11		ug/L		91	50 - 150

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Lab Sample ID: LCS 310-461230/6

Matrix: Water

Analysis Batch: 461230

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Trichloroethene	20.0	18.01		ug/L		90	70 - 128
Vinyl acetate	40.0	39.09		ug/L		98	50 - 150
Xylenes, Total	40.0	36.28		ug/L		91	74 - 121

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

Lab Sample ID: LCS 310-461230/7

Matrix: Water

Analysis Batch: 461230

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Bromomethane	20.0	16.63		ug/L		83	33 - 138
Chloroethane	20.0	23.77		ug/L		119	59 - 139
Chloromethane	20.0	25.73		ug/L		129	52 - 146
Trichlorofluoromethane	20.0	24.59		ug/L		123	55 - 150
Vinyl chloride	20.0	24.81		ug/L		124	60 - 142

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	106		76 - 130
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120

Lab Sample ID: 310-311460-1 MS

Matrix: Ground Water

Analysis Batch: 461230

Client Sample ID: MW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1,1,1,2-Tetrachloroethane	<1.00		25.0	23.87		ug/L		95	55 - 121
1,1,1-Trichloroethane	<1.00		25.0	22.75		ug/L		91	53 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	26.41		ug/L		106	55 - 123
1,1,2-Trichloroethane	<1.00		25.0	23.97		ug/L		96	60 - 121
1,1-Dichloroethane	1.66		25.0	27.36		ug/L		103	53 - 127
1,1-Dichloroethene	<2.00		25.0	22.84		ug/L		91	51 - 134
1,2,3-Trichloropropane	<1.00		25.0	26.42		ug/L		106	56 - 122
1,2-Dibromo-3-Chloropropane	<1.20		25.0	27.36		ug/L		109	44 - 138
1,2-Dibromoethane (EDB)	<0.340		25.0	23.63		ug/L		95	60 - 122
1,2-Dichlorobenzene	<1.00		25.0	23.97		ug/L		96	60 - 120
1,2-Dichloroethane	<1.00		25.0	28.73		ug/L		115	48 - 128
1,2-Dichloropropane	<1.00		25.0	25.42		ug/L		102	59 - 128
1,4-Dichlorobenzene	0.512	J	25.0	24.34		ug/L		95	58 - 120
2-Butanone (MEK)	<10.0		50.0	55.16		ug/L		110	46 - 134
2-Hexanone	<10.0		50.0	55.54		ug/L		111	46 - 141
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	49.89		ug/L		100	49 - 138
Acetone	<10.0		50.0	62.91		ug/L		126	39 - 141
Acrylonitrile	<10.0		250	270.8		ug/L		108	41 - 150

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QC Sample Results

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

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

Lab Sample ID: 310-311460-1 MS

Matrix: Ground Water

Analysis Batch: 461230

Client Sample ID: MW-6

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	0.243	J	25.0	24.87		ug/L		98	48 - 125
Bromochloromethane	<5.00		25.0	26.81		ug/L		107	55 - 131
Bromodichloromethane	<1.00		25.0	24.36		ug/L		97	53 - 122
Bromoform	<5.00		25.0	21.69		ug/L		87	47 - 122
Carbon disulfide	<1.00		25.0	24.20		ug/L		97	45 - 137
Carbon tetrachloride	<2.00		25.0	22.49		ug/L		90	45 - 136
Chlorobenzene	<1.00		25.0	22.90		ug/L		92	59 - 120
Chlorodibromomethane	<5.00		25.0	20.69		ug/L		83	53 - 121
Chloroform	<3.00		25.0	26.24		ug/L		105	52 - 122
cis-1,2-Dichloroethene	1.44		25.0	27.24		ug/L		103	51 - 123
cis-1,3-Dichloropropene	<5.00		25.0	21.58		ug/L		86	55 - 123
Dibromomethane	<1.00		25.0	26.98		ug/L		108	57 - 122
Ethylbenzene	<1.00		25.0	22.44		ug/L		90	53 - 120
Iodomethane	<10.0		25.0	15.07		ug/L		60	18 - 150
Methylene Chloride	<5.00		25.0	25.97		ug/L		104	59 - 128
Styrene	<1.00		25.0	23.28		ug/L		93	50 - 125
Tetrachloroethene	0.721	J	25.0	20.41		ug/L		79	51 - 128
Toluene	<1.00		25.0	22.37		ug/L		89	52 - 120
trans-1,2-Dichloroethene	<1.00		25.0	25.42		ug/L		102	53 - 127
trans-1,3-Dichloropropene	<5.00		25.0	20.58		ug/L		82	50 - 123
trans-1,4-Dichloro-2-butene	<10.0		25.0	23.86		ug/L		95	28 - 150
Trichloroethene	0.723	J	25.0	23.95		ug/L		93	50 - 128
Vinyl acetate	<10.0		50.0	32.47		ug/L		65	31 - 150
Xylenes, Total	<3.00		50.0	45.52		ug/L		91	50 - 122

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	102		76 - 130
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Lab Sample ID: 310-311460-1 MSD

Matrix: Ground Water

Analysis Batch: 461230

Client Sample ID: MW-6

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<1.00		25.0	22.24		ug/L		89	55 - 121	7	20
1,1,1-Trichloroethane	<1.00		25.0	22.23		ug/L		89	53 - 130	2	20
1,1,1,2,2-Tetrachloroethane	<1.00		25.0	24.41		ug/L		98	55 - 123	8	20
1,1,2-Trichloroethane	<1.00		25.0	22.13		ug/L		89	60 - 121	8	20
1,1-Dichloroethane	1.66		25.0	25.86		ug/L		97	53 - 127	6	20
1,1-Dichloroethene	<2.00		25.0	21.79		ug/L		87	51 - 134	5	20
1,2,3-Trichloropropane	<1.00		25.0	24.98		ug/L		100	56 - 122	6	21
1,2-Dibromo-3-Chloropropane	<1.20		25.0	27.75		ug/L		111	44 - 138	1	24
1,2-Dibromoethane (EDB)	<0.340		25.0	22.63		ug/L		91	60 - 122	4	20
1,2-Dichlorobenzene	<1.00		25.0	23.69		ug/L		95	60 - 120	1	20
1,2-Dichloroethane	<1.00		25.0	26.59		ug/L		106	48 - 128	8	20
1,2-Dichloropropane	<1.00		25.0	23.36		ug/L		93	59 - 128	8	20
1,4-Dichlorobenzene	0.512	J	25.0	23.85		ug/L		93	58 - 120	2	20

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QC Sample Results

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

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

Lab Sample ID: 310-311460-1 MSD
Matrix: Ground Water
Analysis Batch: 461230

Client Sample ID: MW-6
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
2-Butanone (MEK)	<10.0		50.0	53.38		ug/L		107	46 - 134	3	23
2-Hexanone	<10.0		50.0	55.29		ug/L		111	46 - 141	0	20
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	48.54		ug/L		97	49 - 138	3	20
Acetone	<10.0		50.0	63.92		ug/L		128	39 - 141	2	23
Acrylonitrile	<10.0		250	255.7		ug/L		102	41 - 150	6	20
Benzene	0.243	J	25.0	23.50		ug/L		93	48 - 125	6	20
Bromochloromethane	<5.00		25.0	25.32		ug/L		101	55 - 131	6	21
Bromodichloromethane	<1.00		25.0	22.75		ug/L		91	53 - 122	7	20
Bromoform	<5.00		25.0	20.98		ug/L		84	47 - 122	3	20
Carbon disulfide	<1.00		25.0	20.49		ug/L		82	45 - 137	17	24
Carbon tetrachloride	<2.00		25.0	22.02		ug/L		88	45 - 136	2	20
Chlorobenzene	<1.00		25.0	21.27		ug/L		85	59 - 120	7	20
Chlorodibromomethane	<5.00		25.0	20.59		ug/L		82	53 - 121	1	20
Chloroform	<3.00		25.0	24.69		ug/L		99	52 - 122	6	20
cis-1,2-Dichloroethene	1.44		25.0	25.64		ug/L		97	51 - 123	6	20
cis-1,3-Dichloropropene	<5.00		25.0	20.92		ug/L		84	55 - 123	3	20
Dibromomethane	<1.00		25.0	24.59		ug/L		98	57 - 122	9	20
Ethylbenzene	<1.00		25.0	21.55		ug/L		86	53 - 120	4	20
Iodomethane	<10.0		25.0	18.28		ug/L		73	18 - 150	19	32
Methylene Chloride	<5.00		25.0	23.95		ug/L		96	59 - 128	8	20
Styrene	<1.00		25.0	21.99		ug/L		88	50 - 125	6	20
Tetrachloroethene	0.721	J	25.0	19.96		ug/L		77	51 - 128	2	20
Toluene	<1.00		25.0	21.17		ug/L		85	52 - 120	6	20
trans-1,2-Dichloroethene	<1.00		25.0	22.36		ug/L		89	53 - 127	13	20
trans-1,3-Dichloropropene	<5.00		25.0	20.07		ug/L		80	50 - 123	3	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	24.04		ug/L		96	28 - 150	1	24
Trichloroethene	0.723	J	25.0	21.90		ug/L		85	50 - 128	9	20
Vinyl acetate	<10.0		50.0	28.89		ug/L		58	31 - 150	12	25
Xylenes, Total	<3.00		50.0	43.70		ug/L		87	50 - 122	4	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	99		76 - 130
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120

Lab Sample ID: MB 310-461550/5
Matrix: Water
Analysis Batch: 461550

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/24/25 12:32	1
Benzene	<0.500		0.500	0.220	ug/L			07/24/25 12:32	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/24/25 12:32	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			07/24/25 12:32	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/24/25 12:32	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/24/25 12:32	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/24/25 12:32	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/24/25 12:32	1

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QC Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Lab Sample ID: MB 310-461550/5
Matrix: Water
Analysis Batch: 461550

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	103		76 - 130		07/24/25 12:32	1
Toluene-d8 (Surr)	101		80 - 120		07/24/25 12:32	1
4-Bromofluorobenzene (Surr)	99		80 - 120		07/24/25 12:32	1

Lab Sample ID: LCS 310-461550/6
Matrix: Water
Analysis Batch: 461550

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	20.0	18.44		ug/L		92	64 - 134
Benzene	20.0	19.64		ug/L		98	71 - 125
cis-1,2-Dichloroethene	20.0	18.79		ug/L		94	72 - 123
Methylene Chloride	20.0	19.58		ug/L		98	72 - 128
Tetrachloroethene	20.0	20.65		ug/L		103	70 - 128
trans-1,2-Dichloroethene	20.0	18.27		ug/L		91	67 - 127
Trichloroethene	20.0	18.17		ug/L		91	70 - 128

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	99		76 - 130
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120

Lab Sample ID: LCS 310-461550/7
Matrix: Water
Analysis Batch: 461550

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Vinyl chloride	20.0	21.70		ug/L		108	60 - 142

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	100		76 - 130
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	104		80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-461153/1-A
Matrix: Water
Analysis Batch: 461357

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461153

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/22/25 08:40	07/22/25 17:52	1
Nickel	<0.00500		0.00500	0.00230	mg/L		07/22/25 08:40	07/22/25 17:52	1

QC Sample Results

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

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

Lab Sample ID: LCS 310-461153/2-A
 Matrix: Water
 Analysis Batch: 461357

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 461153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	0.100	0.09648		mg/L		96	80 - 120
Nickel	0.200	0.1979		mg/L		99	80 - 120

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

Lab Sample ID: MB 310-461176/1
 Matrix: Water
 Analysis Batch: 461176

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.50	mg/L			07/21/25 15:35	1

Lab Sample ID: LCS 310-461176/2
 Matrix: Water
 Analysis Batch: 461176

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	106.0		mg/L		106	82 - 117

QC Association Summary

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

GC/MS VOA

Analysis Batch: 461230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-311460-1	MW-6	Total/NA	Ground Water	8260D	
310-311460-2	MW-13	Total/NA	Ground Water	8260D	
310-311460-3	MW-21	Total/NA	Ground Water	8260D	
310-311460-4	MW-24	Total/NA	Ground Water	8260D	
310-311460-5	MW-27	Total/NA	Ground Water	8260D	
310-311460-6	MW-32	Total/NA	Ground Water	8260D	
310-311460-7	MW-D	Total/NA	Ground Water	8260D	
310-311460-8	Trip Blank	Total/NA	Water	8260D	
MB 310-461230/5	Method Blank	Total/NA	Water	8260D	
LCS 310-461230/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-461230/7	Lab Control Sample	Total/NA	Water	8260D	
310-311460-1 MS	MW-6	Total/NA	Ground Water	8260D	
310-311460-1 MSD	MW-6	Total/NA	Ground Water	8260D	

Analysis Batch: 461550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-311460-3	MW-21	Total/NA	Ground Water	8260D	
310-311460-4	MW-24	Total/NA	Ground Water	8260D	
310-311460-5	MW-27	Total/NA	Ground Water	8260D	
310-311460-6	MW-32	Total/NA	Ground Water	8260D	
MB 310-461550/5	Method Blank	Total/NA	Water	8260D	
LCS 310-461550/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-461550/7	Lab Control Sample	Total/NA	Water	8260D	

Metals

Prep Batch: 461153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-311460-1	MW-6	Total/NA	Ground Water	3005A	
MB 310-461153/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-461153/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 461357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-311460-1	MW-6	Total/NA	Ground Water	6020B	461153
MB 310-461153/1-A	Method Blank	Total/NA	Water	6020B	461153
LCS 310-461153/2-A	Lab Control Sample	Total/NA	Water	6020B	461153

General Chemistry

Analysis Batch: 461176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-311460-1	MW-6	Total/NA	Ground Water	I-3765-85	
MB 310-461176/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-461176/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Lab Chronicle

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-6
 Date Collected: 07/17/25 17:57
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-1
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 13:16
Total/NA	Prep	3005A			461153	WK2X	EET CF	07/22/25 08:40
Total/NA	Analysis	6020B		1	461357	NFT2	EET CF	07/22/25 18:49
Total/NA	Analysis	I-3765-85		1	461176	E6KR	EET CF	07/21/25 15:35

Client Sample ID: MW-13
 Date Collected: 07/17/25 16:02
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-2
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 18:10

Client Sample ID: MW-21
 Date Collected: 07/17/25 16:27
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-3
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 13:39
Total/NA	Analysis	8260D		1	461550	FE5V	EET CF	07/24/25 18:50

Client Sample ID: MW-24
 Date Collected: 07/17/25 16:53
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-4
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 18:33
Total/NA	Analysis	8260D		10	461550	FE5V	EET CF	07/24/25 19:35

Client Sample ID: MW-27
 Date Collected: 07/17/25 17:26
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-5
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 14:01
Total/NA	Analysis	8260D		1	461550	FE5V	EET CF	07/24/25 19:12

Client Sample ID: MW-32
 Date Collected: 07/17/25 17:10
 Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-6
 Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 14:24
Total/NA	Analysis	8260D		1	461550	FE5V	EET CF	07/24/25 18:28

Lab Chronicle

Client: SCS Engineers
 Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
 SDG: Henry County Sanitary Landfill

Client Sample ID: MW-D

Date Collected: 07/17/25 16:10

Date Received: 07/18/25 17:30

Lab Sample ID: 310-311460-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 14:47

Client Sample ID: Trip Blank

Date Collected: 07/17/25 00:00

Date Received: 07/18/25 17:30

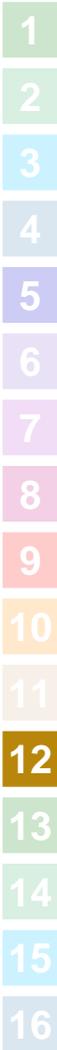
Lab Sample ID: 310-311460-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	461230	WSE8	EET CF	07/22/25 12:54

Laboratory References:

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



Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

Laboratory: Eurofins Cedar Falls

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

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

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

Method Summary

Client: SCS Engineers
Project/Site: Henry Co Landfill 2025 HMSP

Job ID: 310-311460-1
SDG: Henry County Sanitary Landfill

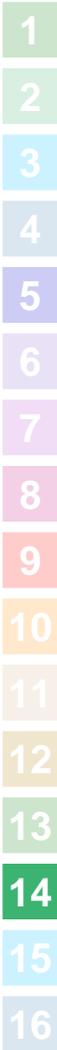
Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF

Protocol References:

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

Laboratory References:

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





Environment Testing
America



310-311460 Chain of Custody

Cooler/Sample Receipt and Temperature

Client Information			
Client: <i>SCS</i>			
City/State:	CITY <i>W. Des Moines</i>	STATE <i>IA</i>	Project
Receipt Information			
Date/Time Received:	DATE <i>5-18-25</i>	TIME <i>1730</i>	Received By: <i>PH</i>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes Cooler ID:	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____	
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<i>All</i>			
Temperature Record			
Coolant	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other _____ <input type="checkbox"/> NONE		
Thermometer ID:	<i>2</i>	Correction Factor (°C)	<i>0</i>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C)	<i>0.1</i>	Corrected Temp (°C):	<i>0.1</i>
• Sample Container Temperature			
Container(s) used	CONTAINER 1	CONTAINER 2	
Uncorrected Temp (°C):			
Corrected Temp (°C)			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) 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			



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-311460-1
SDG Number: Henry County Sanitary Landfill

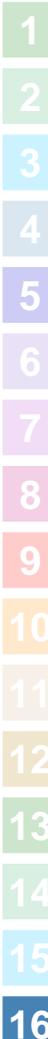
Login Number: 311460

List Number: 1

Creator: Homolar, Dana J

List Source: Eurofins Cedar Falls

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



Appendix B-2

Data Validation Documentation

Completed by: Nathan Ohrt
 Sample Date: 4/25/2024
 Lab Report Date: 5/8/2024
 Site Name: Henry County Sanitary Landfill
 Project Type: Annual Sampling
 Lab Report Number: 310-279849

OK NO N/A NOTES

Sample Collection and Sample Handling

Chain of Custody
 Temperature
 Preservation
 Condition
 Case Narrative
 Holding Times

X			
X			
X			
X			
X			
X			

Analytical Sensitivity and Blanks

Method Blank Detections
 Trip Blank Detections

X			No detections.
		X	

Accuracy

ICV/CCV
 LCS/LCSD
 MS/MSD
 Surrogates (organics only)

	X		The CCV recovered above the upper control limit for vinyl chloride; the associated samples were non-detect so the data was reported.
X			
X			
X			

Precision

QA/QC Sample RPDs
 Field Duplicates

X			
X			MW-22 and duplicate sample MW-D had <50% RPD for analyzed constituents.

Appendix C

2024-2025 Analytical Data

SCS ENGINEERS

Summary of Groundwater Chemistry
Henry County Sanitary Landfill - 44-SDP-01-75

Total Metals Constituents	Sample Date	MW-6 DNG	MW-20 DNG	MW-21 DNG	MW-22 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-29 DNG	MW-30 DNG	MW-32 DNG	MW-36 DNG	MW-37 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	7/17/2025	0.0084	N/A												
Nickel, mg/L (CAS NO - 7440-02-0)	7/17/2025	0.02	N/A												
Total Suspended Solids, mg/L (CAS NO - TSS)	7/17/2025	73	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

Henry County Sanitary Landfill - 44-SDP-01-75

Appendix I VOC Constituents	Sample Date	MW-6 DNG	MW-20 DNG	MW-21 DNG	MW-22 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-29 DNG	MW-30 DNG	MW-32 DNG	MW-36 DNG	MW-37 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	7/17/2025	< 1	N/A												
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	7/17/2025	< 1	N/A												
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	7/17/2025	< 1	N/A												
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	7/17/2025	< 1	N/A												
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	7/17/2025	1.66	N/A												
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	4/25/2024	N/A	< 2	N/A	< 2	< 2									
	4/25/2024	N/A	N/A	N/A	< 2	N/A									
	7/17/2025	< 2	N/A	< 2	N/A	N/A									
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	7/17/2025	< 1	N/A												
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	7/17/2025	< 1.2	N/A												
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	7/17/2025	< 0.34	N/A												
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	7/17/2025	< 1	N/A												
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	7/17/2025	< 1	N/A												
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	7/17/2025	< 1	N/A												
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	7/17/2025	0.512*	N/A												
2-Butanone, ug/L (CAS NO - 78-93-3)	7/17/2025	< 10	N/A												
2-Hexanone, ug/L (CAS NO - 591-78-6)	7/17/2025	< 10	N/A												
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	7/17/2025	< 10	N/A												
Acetone, ug/L (CAS NO - 67-64-1)	7/17/2025	< 10	N/A												
Acrylonitrile, ug/L (CAS NO - 107-13-1)	7/17/2025	< 10	N/A												
Benzene, ug/L (CAS NO - 71-43-2)	4/25/2024	N/A	< 0.5	N/A	< 0.5	0.59	N/A	< 0.5	< 0.5	N/A	< 0.5	0.516	N/A	< 0.5	< 0.5
	4/25/2024	N/A	N/A	N/A	< 0.5	N/A									
	7/17/2025	0.243*	N/A	0.69	N/A	N/A	0.926	N/A	N/A	0.433*	N/A	N/A	< 0.5	N/A	N/A
Bromochloromethane, ug/L (CAS NO - 74-97-5)	7/17/2025	< 5	N/A												
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	7/17/2025	< 1	N/A												
Bromoform, ug/L (CAS NO - 75-25-2)	7/17/2025	< 5	N/A												
Bromomethane, ug/L (CAS NO - 74-83-9)	7/17/2025	< 4	N/A												
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	7/17/2025	< 1	N/A												
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	7/17/2025	< 2	N/A												
Chlorobenzene, ug/L (CAS NO - 108-90-7)	7/17/2025	< 1	N/A												
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	7/17/2025	< 5	N/A												
Chloroethane, ug/L (CAS NO - 75-00-3)	7/17/2025	< 4	N/A												
Chloroform, ug/L (CAS NO - 67-66-3)	7/17/2025	< 3	N/A												
Chloromethane, ug/L (CAS NO - 74-87-3)	7/17/2025	< 3	N/A												
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	4/25/2024	N/A	< 1	N/A	< 1	45.9	N/A	7.81	0.324*	N/A	39.2	36.2	N/A	< 1	0.303*
	4/25/2024	N/A	N/A	N/A	< 1	N/A									
	7/17/2025	1.44	N/A	366	N/A	N/A	475	N/A	N/A	458	N/A	N/A	< 1	N/A	N/A
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	7/17/2025	< 5	N/A												
Ethylbenzene, ug/L (CAS NO - 100-41-4)	7/17/2025	< 1	N/A												
Iodomethane, ug/L (CAS NO - 74-88-4)	7/17/2025	< 10	N/A												
Methylene Bromide, ug/L (CAS NO - 74-95-3)	7/17/2025	< 1	N/A												
Methylene Chloride, ug/L (CAS NO - 75-09-2)	4/25/2024	N/A	< 5	N/A	< 5	< 5									
	4/25/2024	N/A	N/A	N/A	< 5	N/A									
	7/17/2025	< 5	N/A	< 5	N/A	N/A									
Styrene, ug/L (CAS NO - 100-42-5)	7/17/2025	< 1	N/A												
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	4/25/2024	N/A	< 1	N/A	< 1	< 1									
	4/25/2024	N/A	N/A	N/A	< 1	N/A									
	7/17/2025	0.721*	N/A	< 1	N/A	N/A	0.664*	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A
Toluene, ug/L (CAS NO - 108-88-3)	7/17/2025	< 1	N/A												
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	4/25/2024	N/A	< 1	N/A	< 1	0.426*	N/A	0.429*	< 1	N/A	1.93	0.427*	N/A	< 1	< 1
	4/25/2024	N/A	N/A	N/A	< 1	N/A									
	7/17/2025	< 1	N/A	1.72	N/A	N/A	5.24	N/A	N/A	1.37	N/A	N/A	< 1	N/A	N/A
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	7/17/2025	< 5	N/A												
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	7/17/2025	< 10	N/A												
Trichloroethene, ug/L (CAS NO - 79-01-6)	4/25/2024	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	N/A	6.75	< 1	N/A	< 1	< 1
	4/25/2024	N/A	N/A	N/A	< 1	N/A									
	7/17/2025	0.723*	N/A	2.26	N/A	N/A	9.19	N/A	N/A	1.49	N/A	N/A	< 1	N/A	N/A
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	7/17/2025	< 4	N/A												
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	7/17/2025	< 10	N/A												
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	4/25/2024	N/A	< 1	N/A	< 1	5.11	N/A	< 1	1.58	N/A	< 1	4.28	N/A	< 1	0.352*
	4/25/2024	N/A	N/A	N/A	< 1	N/A									
	7/17/2025	< 1	N/A	94.1	N/A	N/A	37.1	N/A	N/A	8.36	N/A	N/A	51.5	N/A	N/A
Xylenes, total, ug/L (CAS NO - 1330-20-7)	7/17/2025	< 3	N/A												

Note: * indicates 'J flag'. Detection is below the reporting limit, but greater than the MDL (Method Detection Limit). The concentration is estimated.

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

Sampling performed over multiple dates is recorded on the first date sampled. Refer to field forms for exact sample date.

Appendix D

Leachate Levels

**Appendix D
Leachate Levels**

Date	LP-1			LP-2			LP-3		
	Leachate Level	Leachate Elevation	Leachate Thickness	Leachate Level	Leachate Elevation	Leachate Thickness	Leachate Level	Leachate Elevation	Leachate Thickness
4/1994	10.58	688.40	7.52	10.36	687.45	7.34	28.78	670.87	20.32
10/1994	10.80	688.18	7.30	10.65	687.16	7.05	28.12	671.53	20.98
5/2001	9.71	689.27	8.39	9.20	688.61	8.50	22.94	676.71	26.16
6/2001	9.69	689.29	8.41	9.19	688.62	8.51	22.86	676.79	26.24
7/2001	9.88	689.10	8.22	9.48	688.33	8.22	23.13	676.52	25.97
8/2001	9.93	689.05	8.17	9.52	688.29	8.18	23.16	676.49	25.94
10/2001	9.96	689.02	8.14	9.60	688.21	8.10	23.18	676.47	25.92
11/2001	9.99	688.99	8.11	9.69	688.12	8.01	23.15	676.50	25.95
12/2001	10.07	688.91	8.03	9.68	688.13	8.02	23.92	675.73	25.18
2/2002	10.62	688.36	7.48	10.24	687.57	7.46	23.51	676.14	25.59
3/2002	9.92	689.06	8.18	9.36	688.45	8.34	23.10	676.55	26.00
4/2002	10.33	688.65	7.77	9.88	687.93	7.82	23.42	676.23	25.68
10/2002	10.86	688.12	7.24	10.35	687.46	7.35	23.12	676.53	25.98
4/2003	10.74	688.24	7.36	10.33	687.49	7.38	23.13	676.52	25.97
10/2003	10.65	688.33	7.45	10.43	687.38	7.27	23.27	676.38	25.83
4/2004	10.02	688.96	8.08	9.64	688.17	8.06	22.56	677.09	26.54
10/2004	10.40	688.58	7.70	10.20	687.61	7.50	22.93	676.72	26.17
4/2005	9.73	689.25	8.37	9.37	688.44	8.33	22.70	676.95	26.40
10/2005	10.25	688.73	7.85	10.00	687.81	7.70	23.25	676.40	25.85
4/2006	10.04	688.94	8.06	9.43	688.38	8.27	23.23	676.42	25.87
10/2006	10.32	688.66	7.78	9.96	687.85	7.74	22.78	676.87	26.32
4/2007	10.33	688.65	7.77	9.58	688.23	8.12	23.20	676.45	25.90
10/2007	10.39	688.59	7.71	9.62	688.19	8.08	22.79	676.86	26.31
4/2008	10.22	688.76	7.88	9.05	688.76	8.65	22.14	677.51	26.96
10/2008	9.99	688.99	8.11	9.68	688.13	8.02	22.25	677.40	26.85
<i>Leachate levels from 11/2008 - 9/2012 unavailable.</i>									
10/2012	9.81	689.17	8.29	8.93	688.88	8.77	20.30	679.25	28.80
4/2013	8.73	690.25	9.37	7.20	690.61	10.50	21.60	677.95	27.50
10/2013	9.26	689.72	8.84	7.80	690.01	9.90	19.76	679.79	29.34
4/2014	9.90	689.08	8.20	8.83	688.98	8.87	22.07	677.48	27.03
10/2014	9.28	689.70	8.82	8.03	689.78	9.67	20.90	678.65	28.20
5/2015	10.01	688.97	8.09	8.57	689.24	9.13	19.85	679.70	29.25
10/2015	9.27	689.71	8.83	7.95	689.86	9.75	19.03	680.52	30.07
6/2016	9.46	689.52	8.64	8.03	689.78	9.67	20.71	678.84	28.39
10/2016	9.39	689.59	8.71	8.29	689.52	9.41	19.11	680.44	29.99
8/2017	9.48	689.50	8.62	9.00	688.81	8.70	19.82	679.73	29.28
11/2017	9.80	689.18	8.30	9.00	688.81	8.70	21.90	677.65	27.20
3/2018	9.16	689.82	8.94	9.40	688.41	8.30	21.88	677.67	27.22
8/2018	10.49	688.49	7.61	9.47	688.34	8.23	22.64	676.91	26.46
2/2019	9.60	689.38	8.50	8.10	689.71	9.60	19.66	679.89	29.44
7/2019	8.30	690.68	9.80	6.40	691.41	11.30	17.75	681.80	31.35
4/2020	8.71	690.27	9.39	7.79	690.02	9.91	18.97	680.58	30.13
8/2020	9.15	689.83	8.95	7.89	689.92	9.81	19.27	680.28	29.83
3/2021	9.51	689.47	8.59	8.55	689.26	9.15	21.61	677.94	27.49
7/2021	7.32	691.66	10.78	5.43	692.38	12.27	17.30	682.25	31.80
4/2022	9.83	689.15	8.27	8.20	689.61	9.50	23.09	676.46	26.01
7/2022	Damaged	NA	NA	8.00	689.81	9.70	21.94	677.61	27.16
3/2023	8.70	690.28	9.40	8.75	689.06	8.95	22.88	676.67	26.22
9/2023	8.90	690.08	9.20	9.15	688.66	8.55	22.56	676.99	26.54
4/2024	8.76	690.22	9.34	8.55	689.26	9.15	23.59	675.96	25.51
7/2025	9.60	689.38	8.50	9.36	688.45	8.34	23.66	675.89	25.44

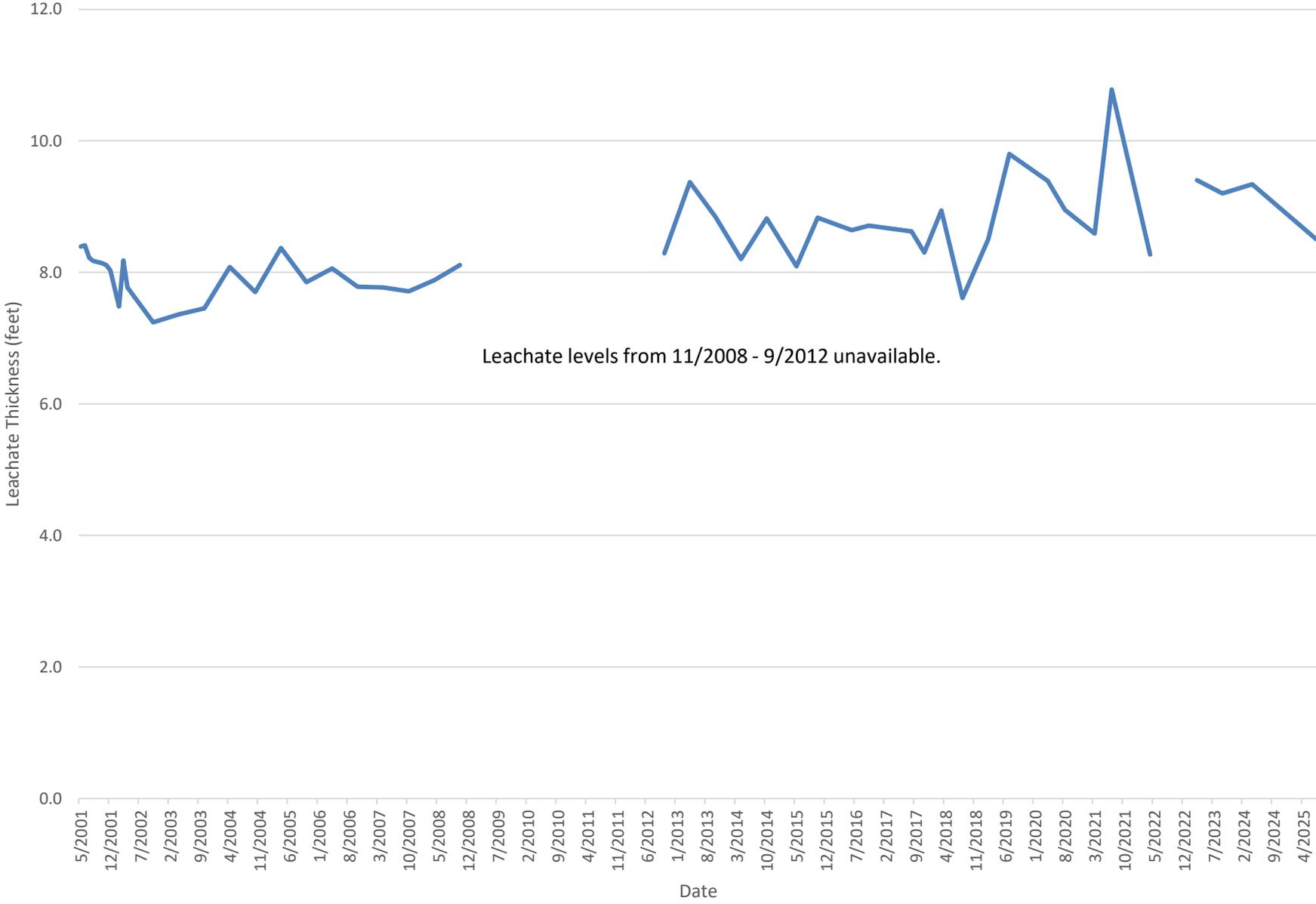
Notes:

Leachate Level - depth to leachate surface measured in feet below top of casing.

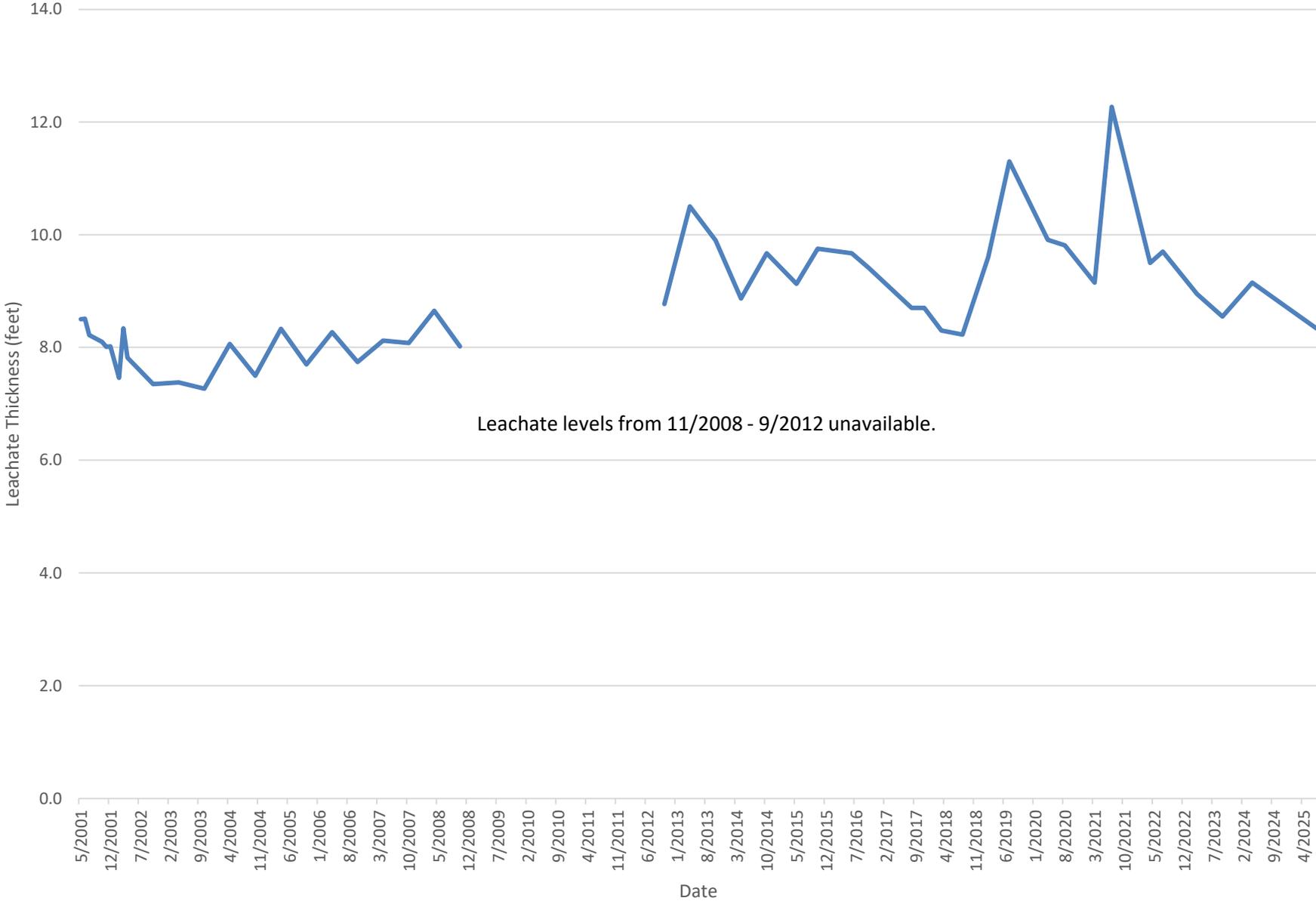
Leachate Elevation - elevation of leachate surface in feet above mean sea level (MSL).

Leachate Thickness - depth of liquid in waste disposal areas (thickness = piezometer depth - leachate level).

LP-1

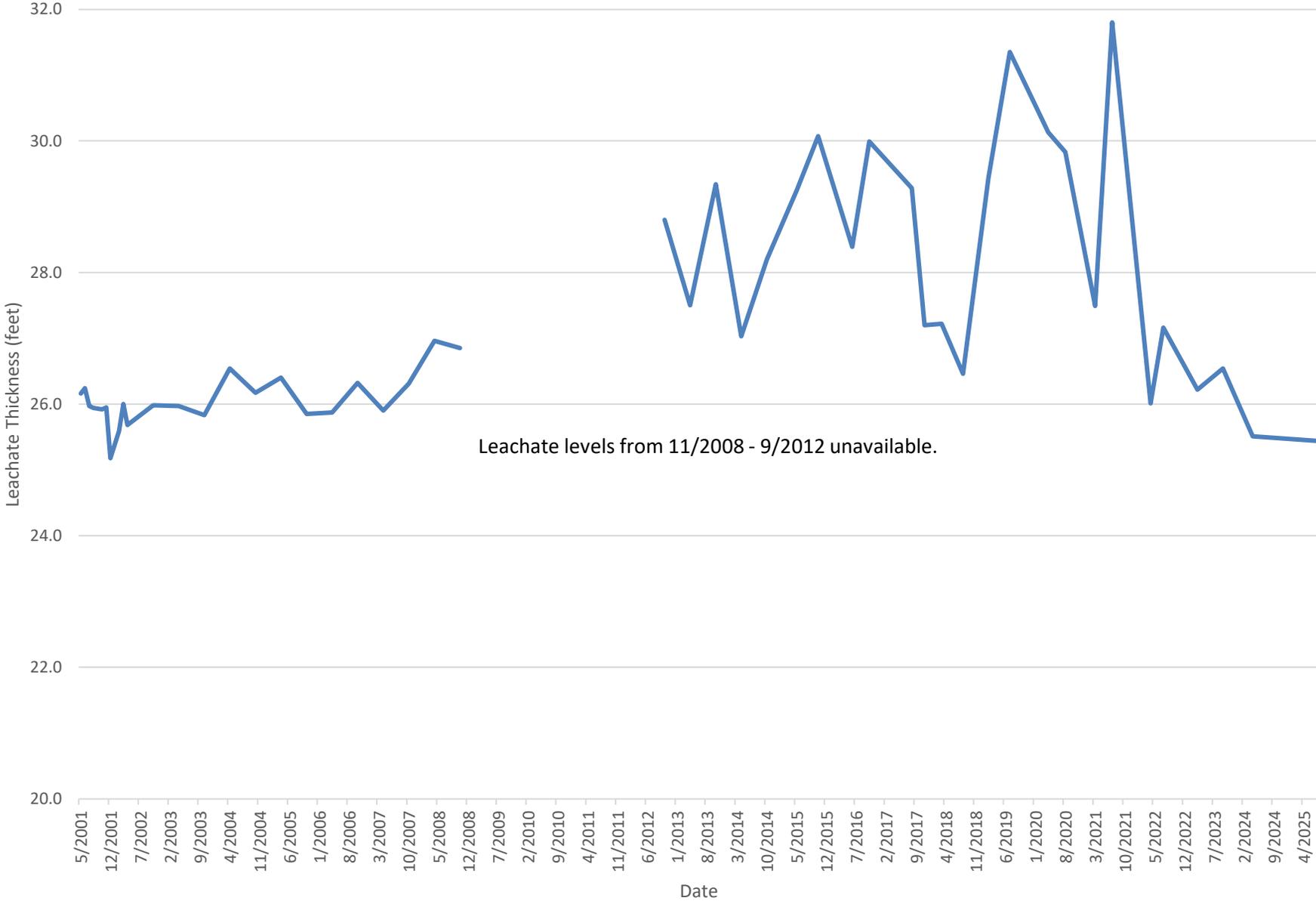


LP-2



Leachate levels from 11/2008 - 9/2012 unavailable.

LP-3

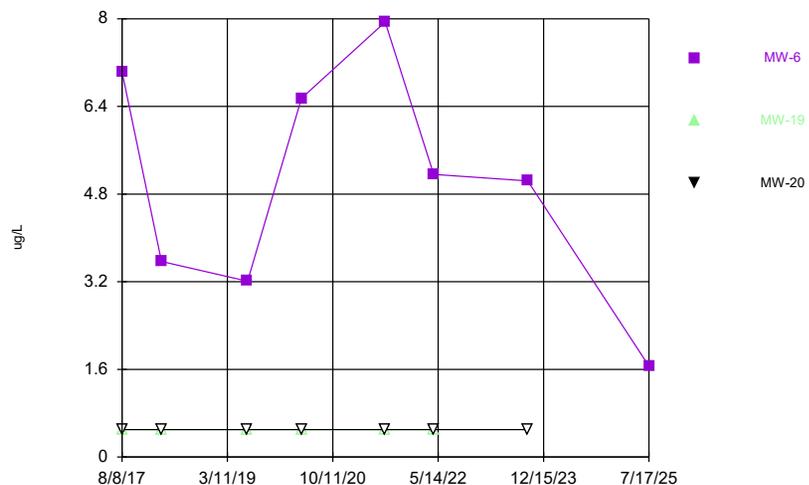


Leachate levels from 11/2008 - 9/2012 unavailable.

Appendix E

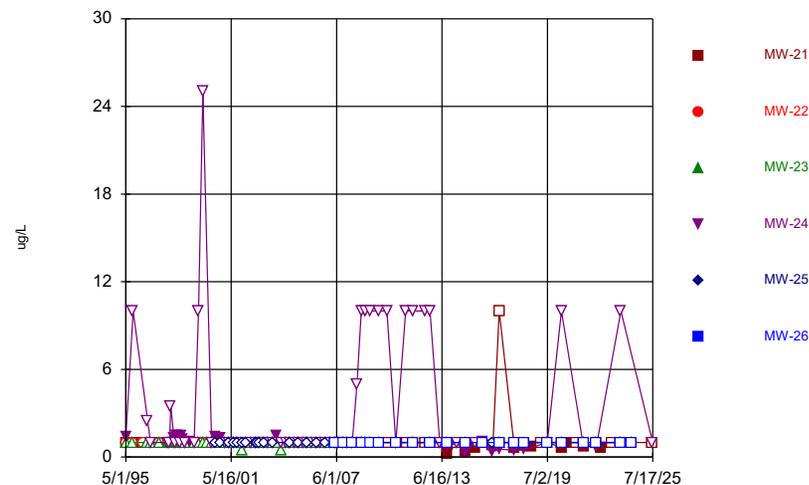
Time Series Graphs

Time Series



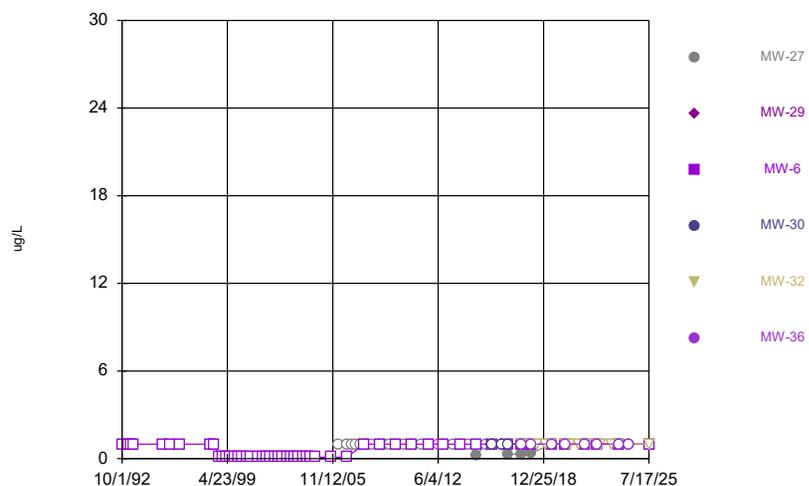
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



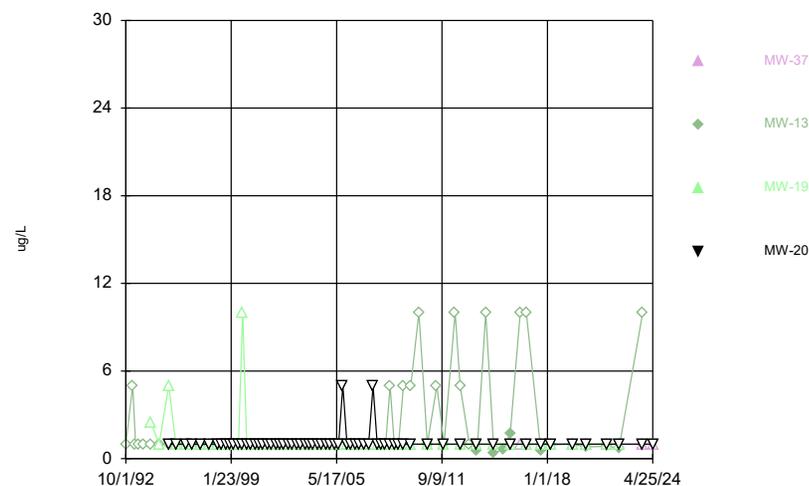
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



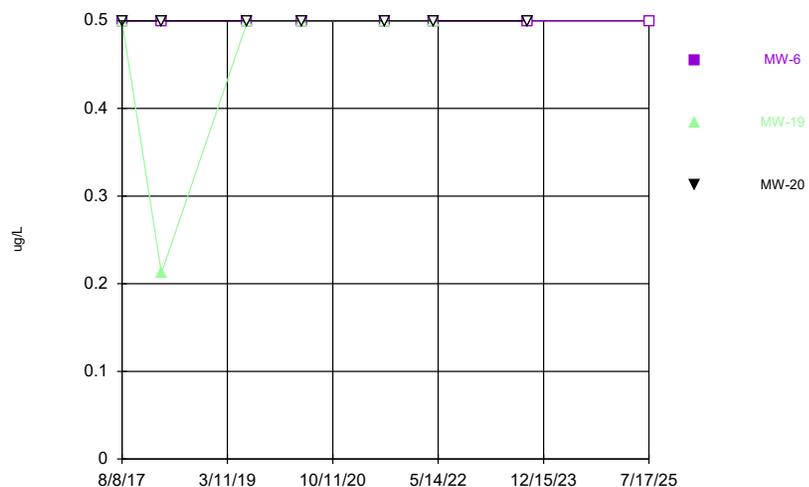
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



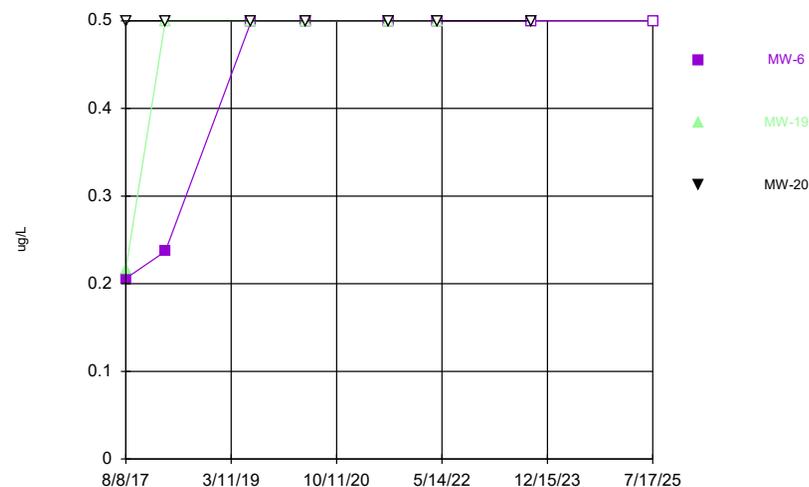
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



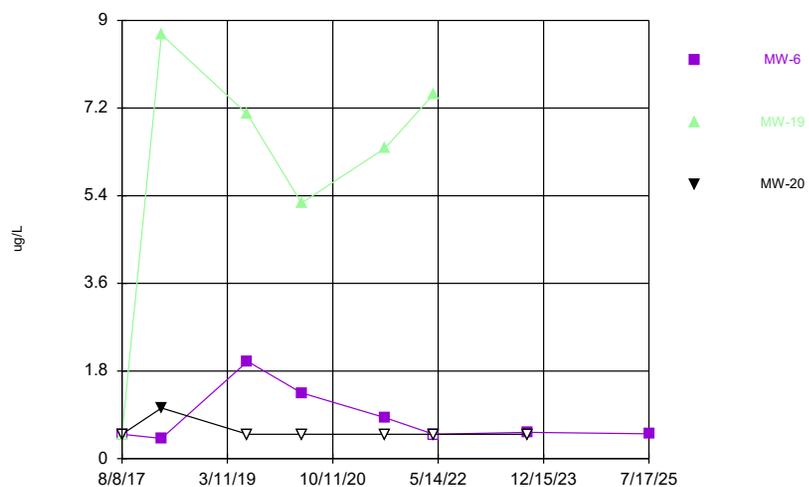
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



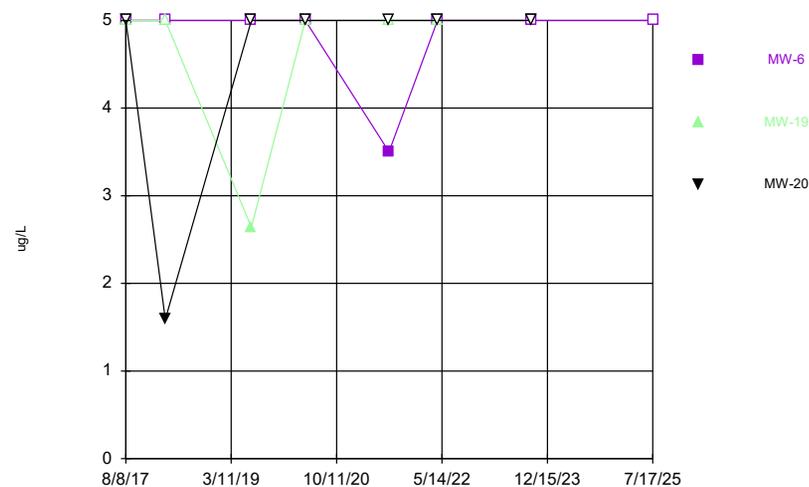
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



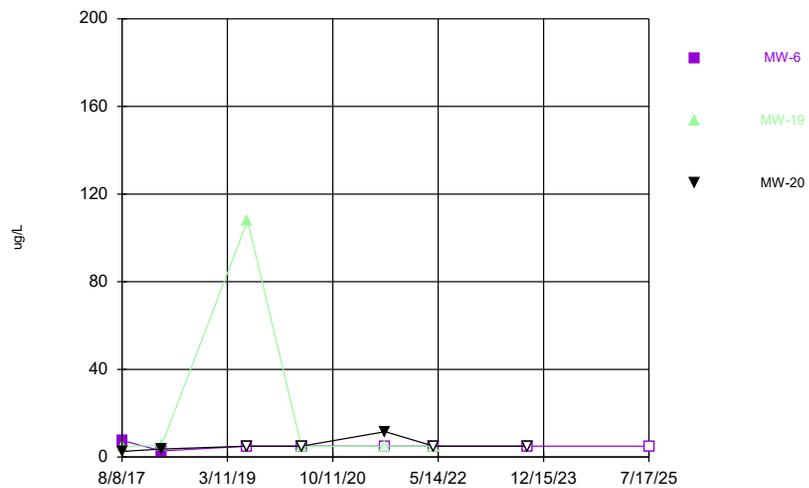
Constituent: 1,4-Dichlorobenzene Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



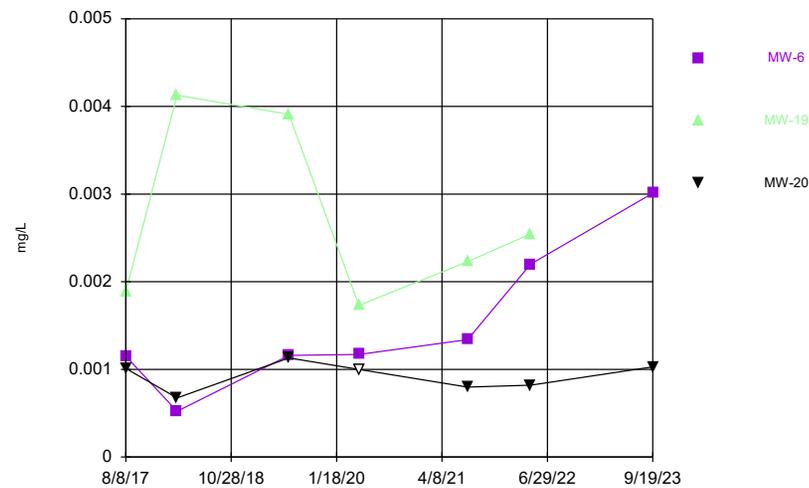
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



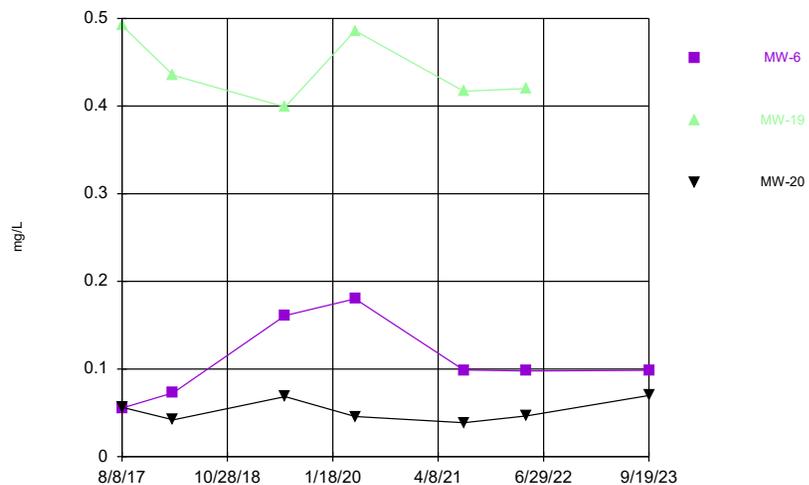
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



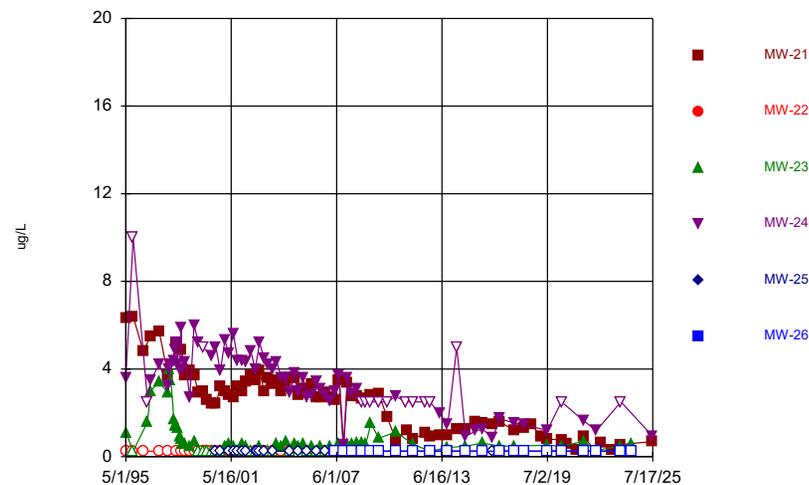
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



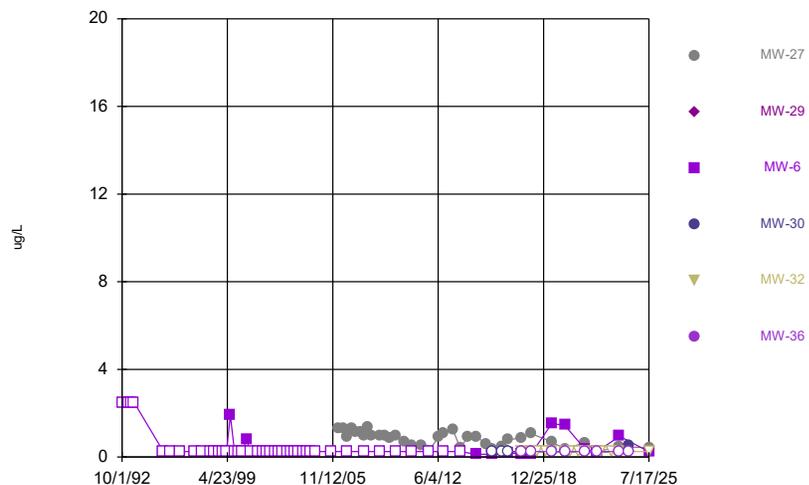
Constituent: Barium Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



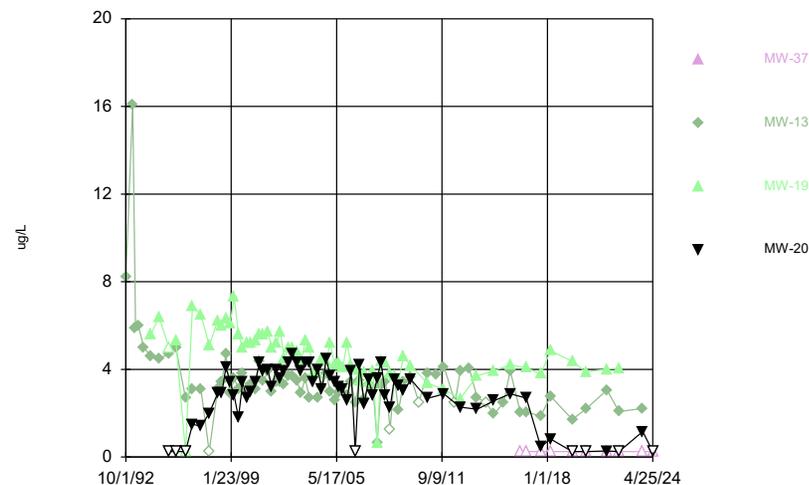
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



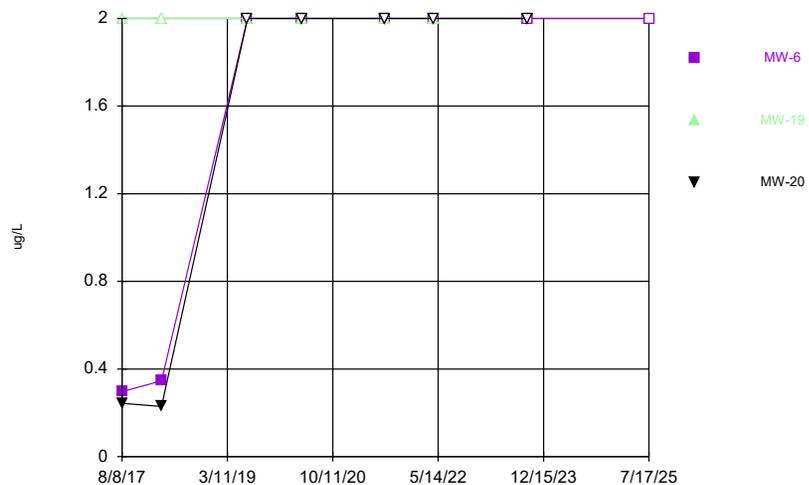
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



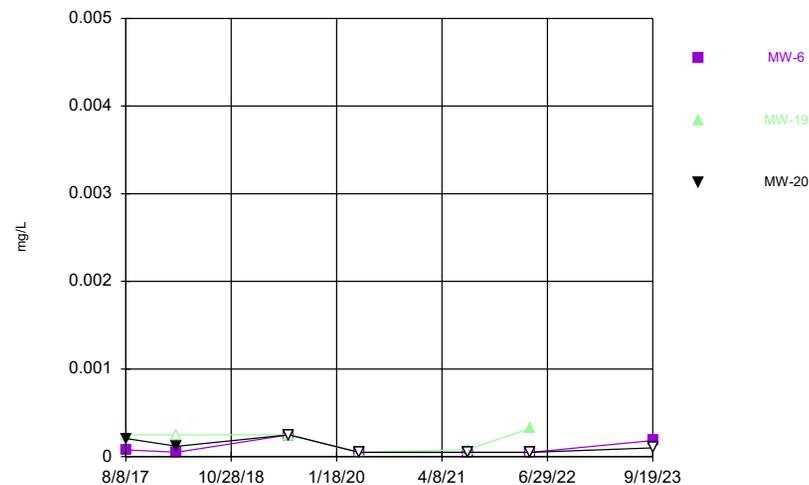
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



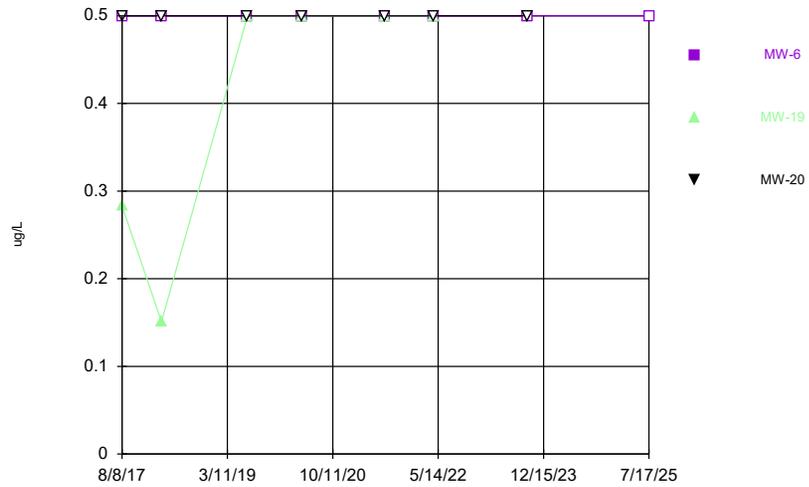
Constituent: Bromomethane Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



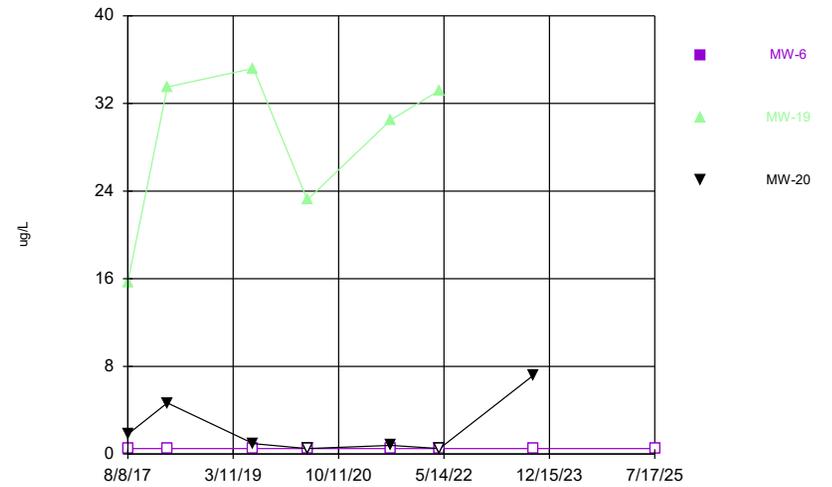
Constituent: Cadmium Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



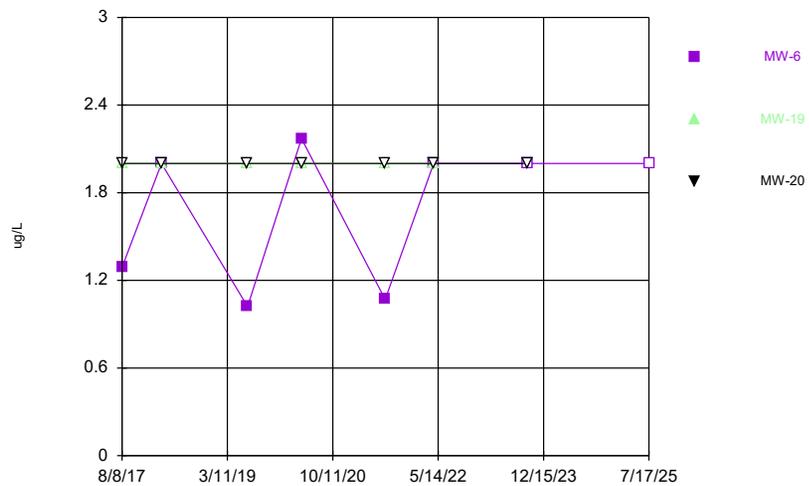
Constituent: Carbon Disulfide Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



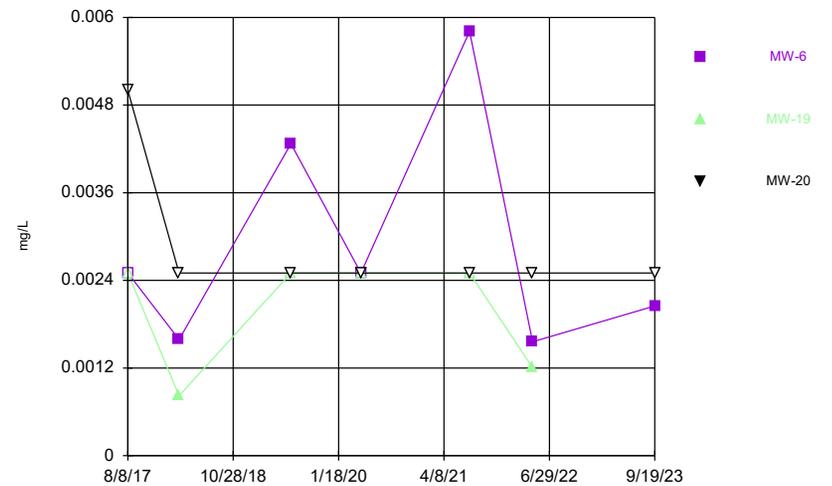
Constituent: Chlorobenzene Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



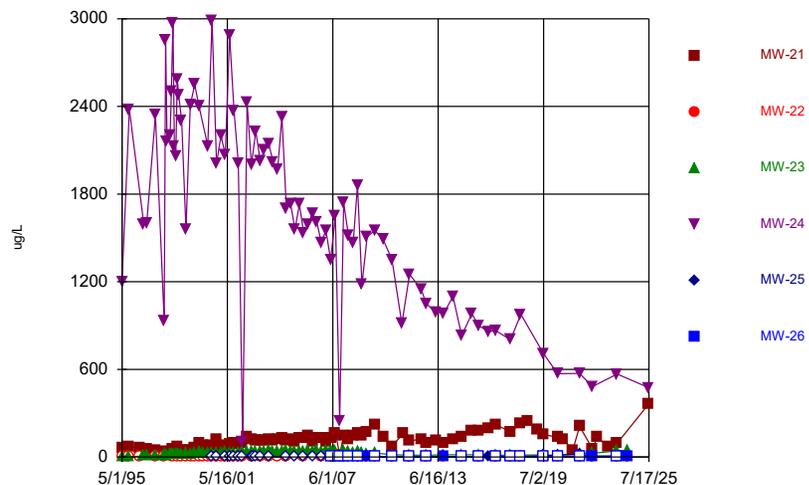
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



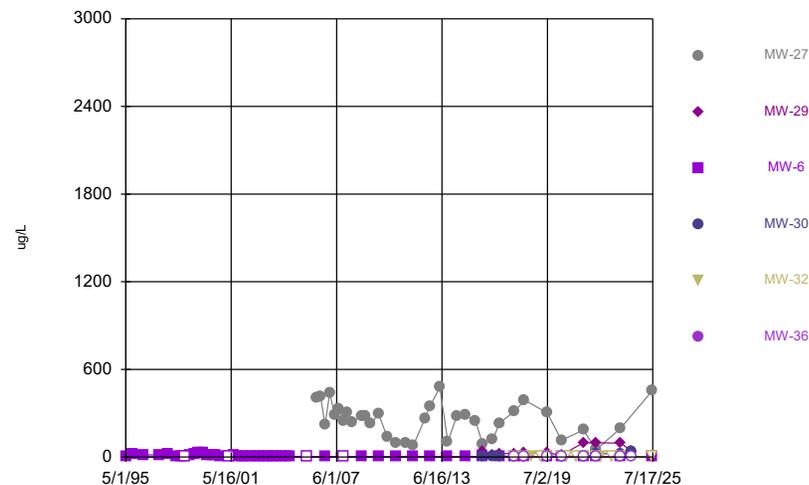
Constituent: Chromium Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



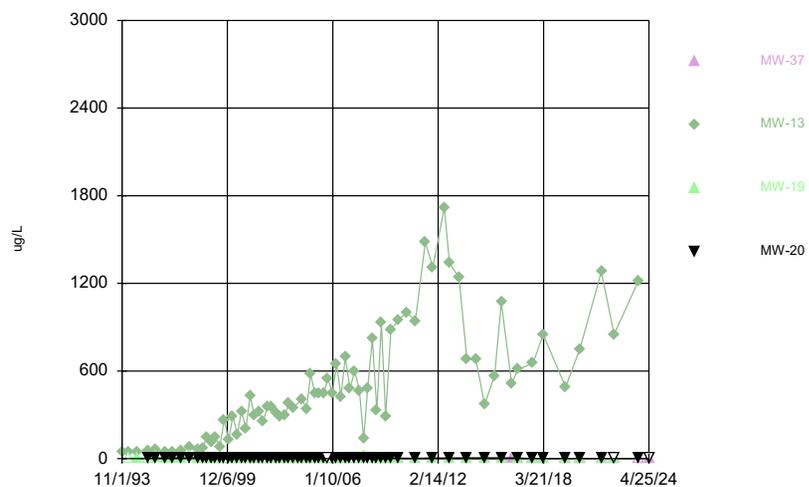
Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



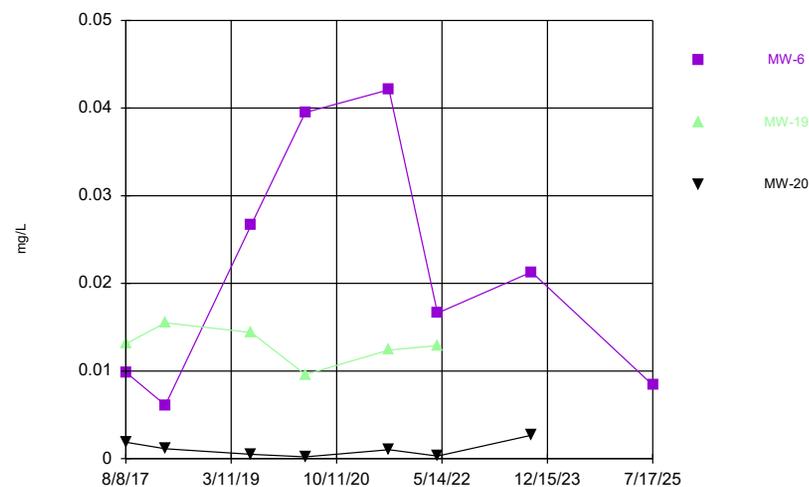
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



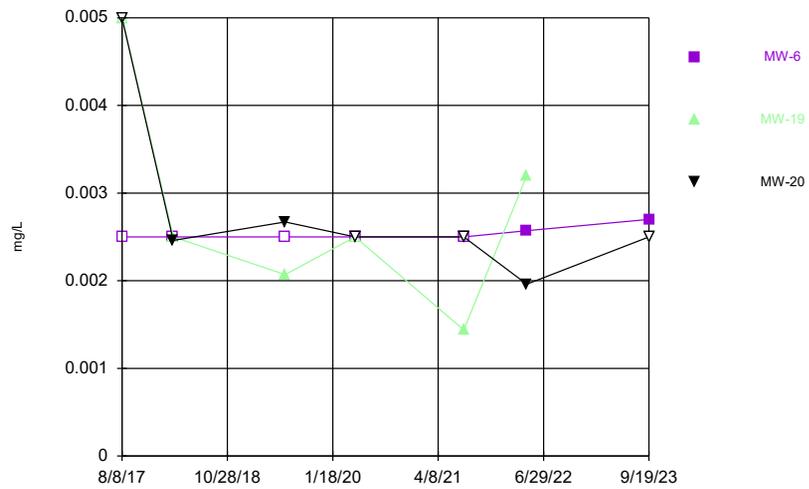
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



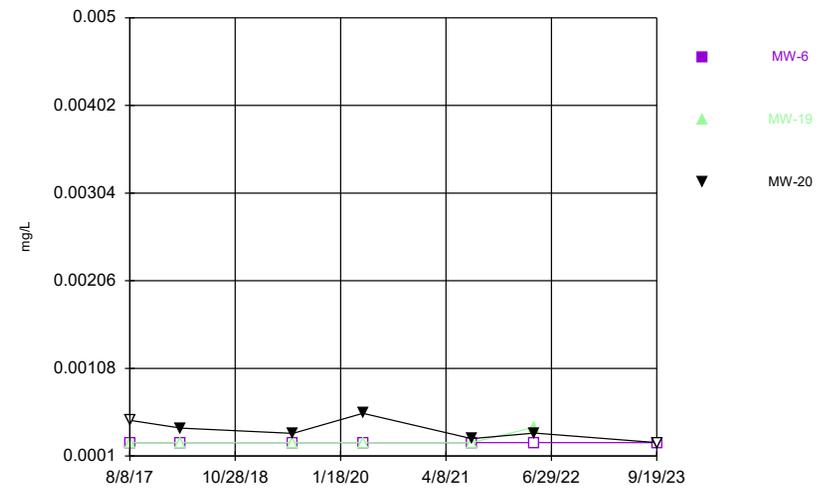
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



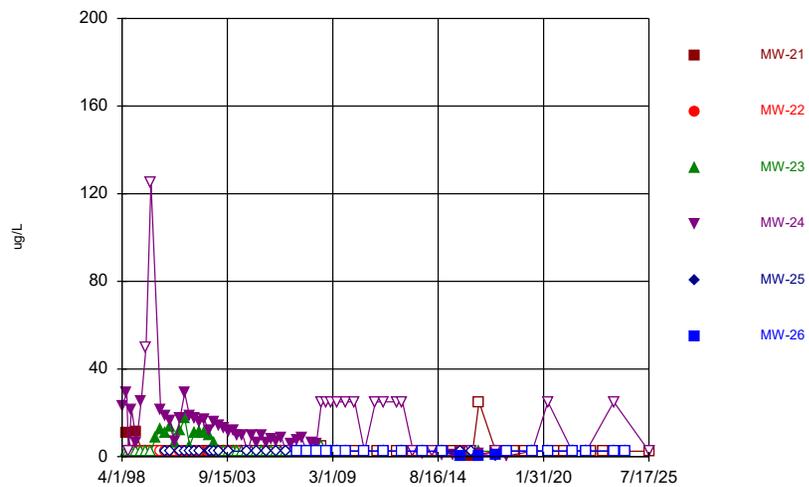
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



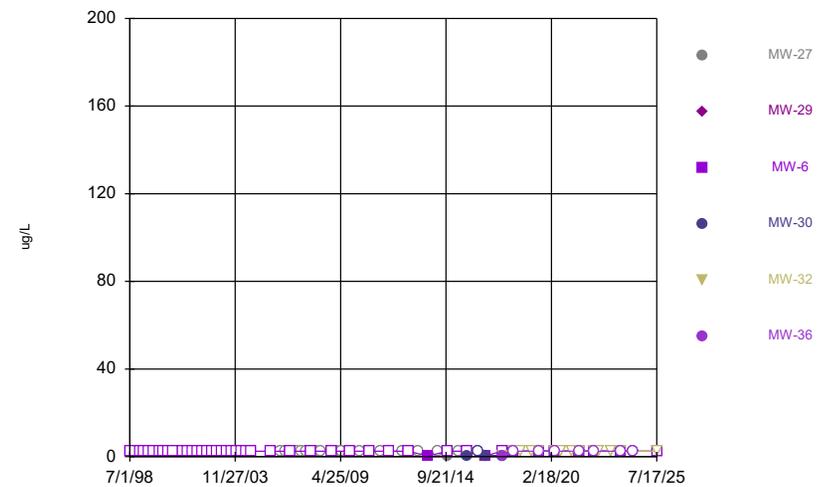
Constituent: Lead Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



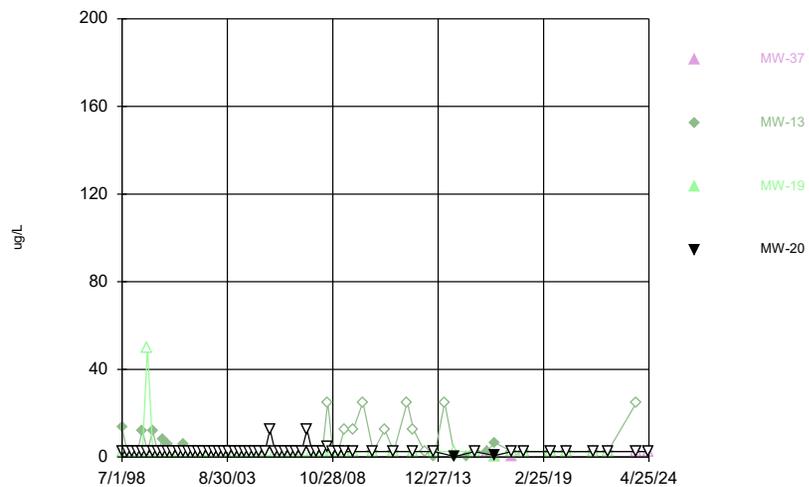
Constituent: Methylene Chloride Analysis Run 11/11/2025 11:40 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



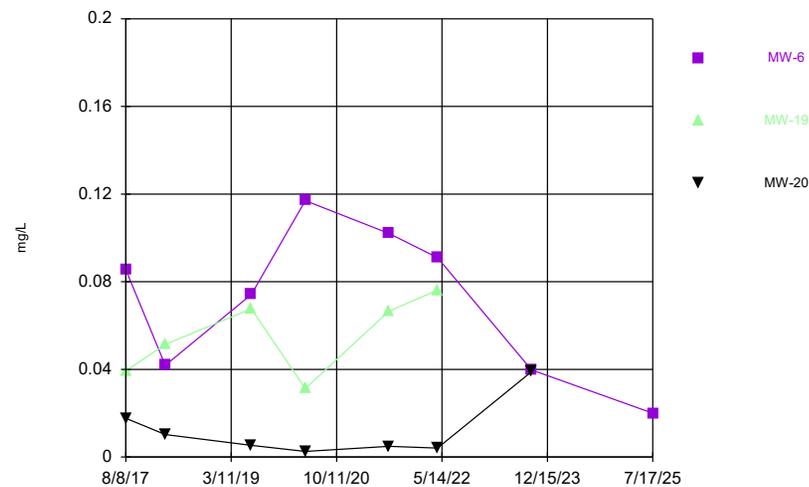
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



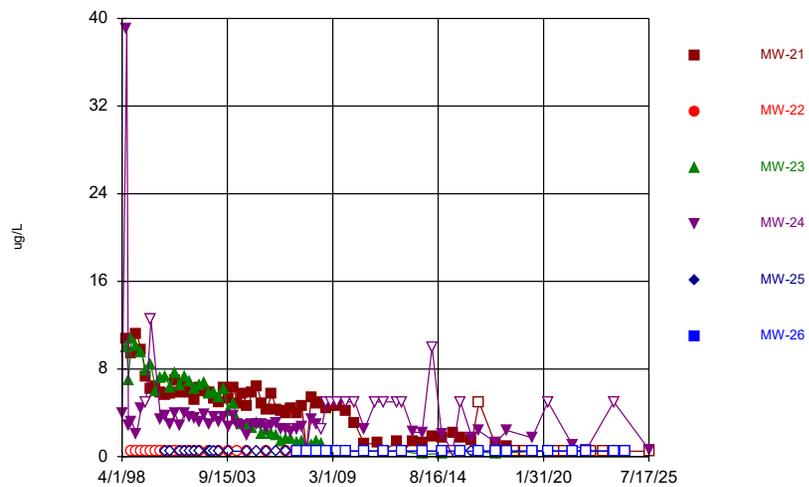
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 Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



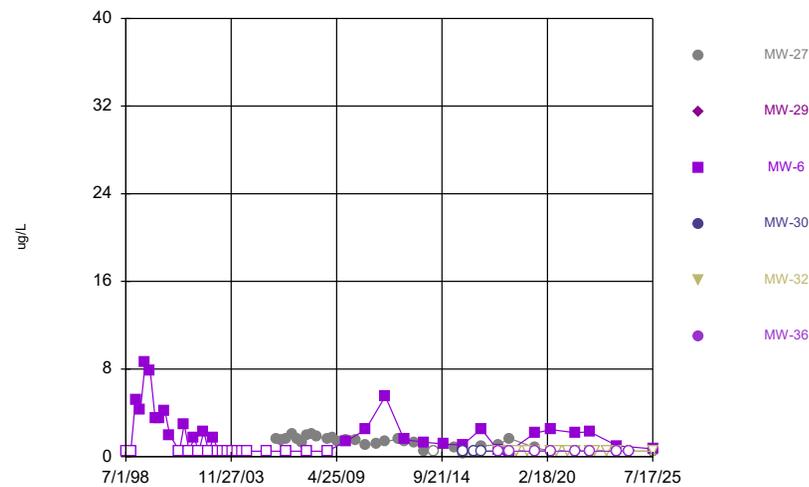
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 Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



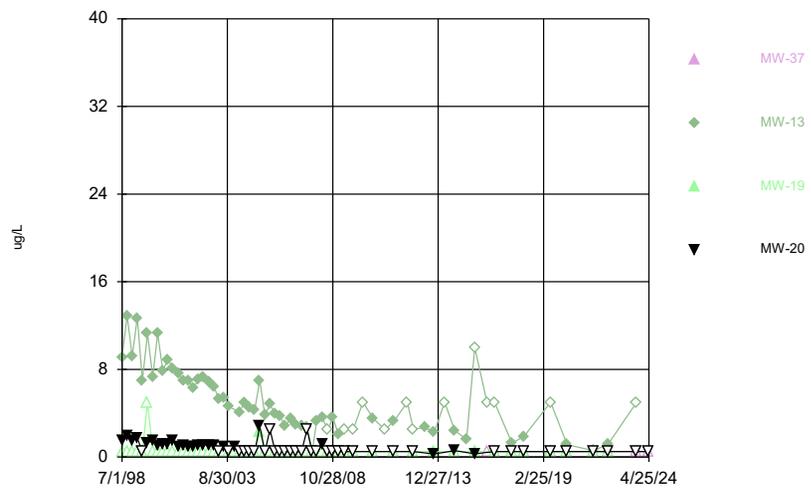
Constituent: Tetrachloroethene Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



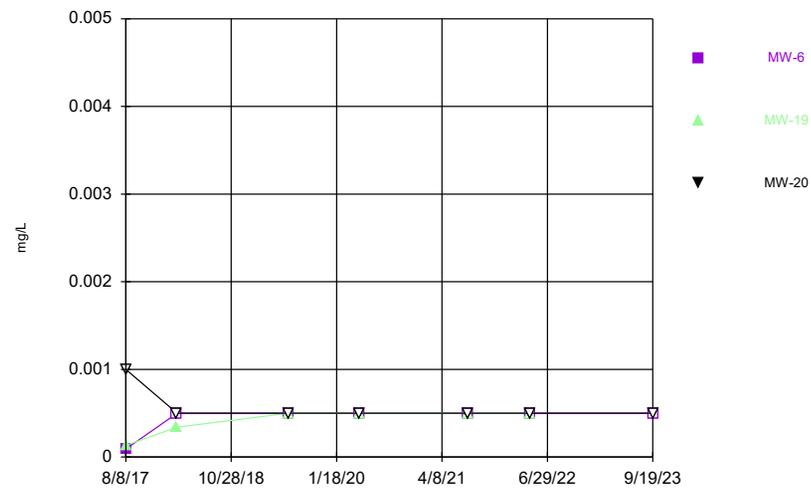
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 Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



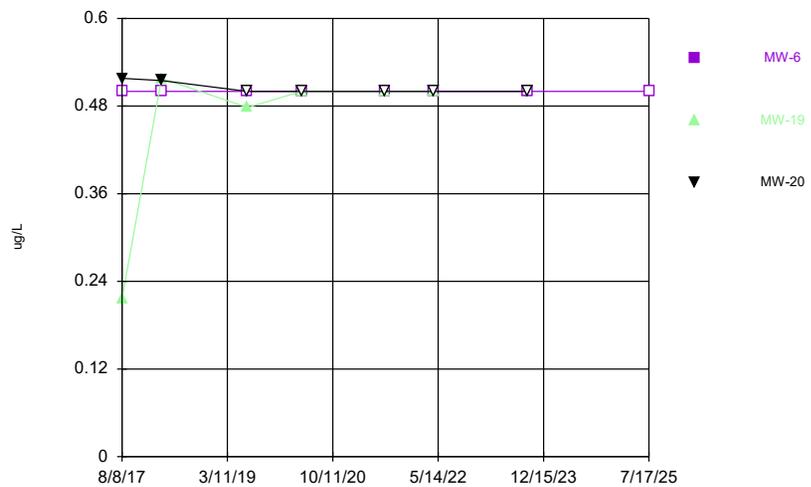
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



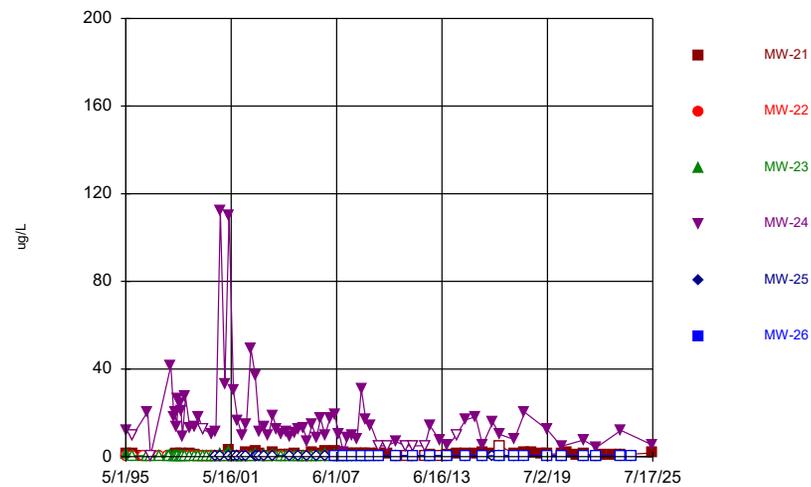
Constituent: Thallium Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



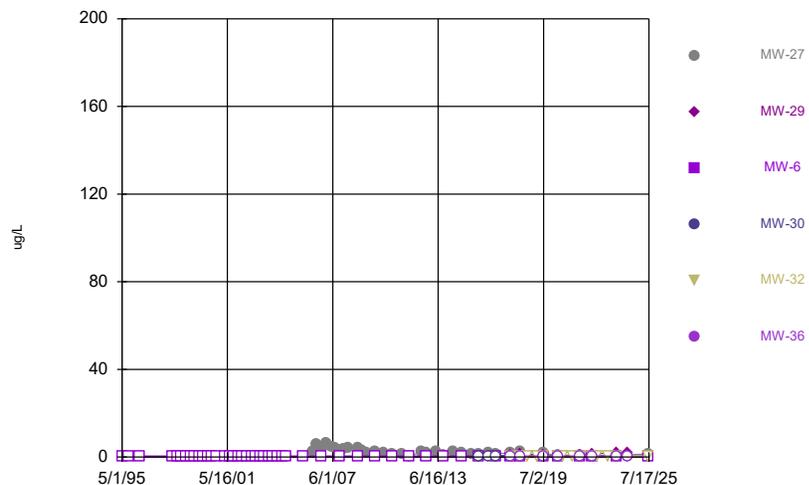
Constituent: Toluene Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



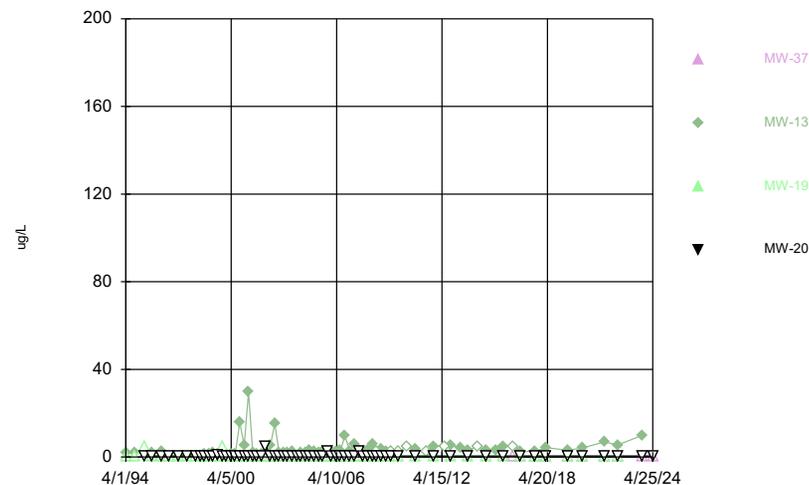
Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



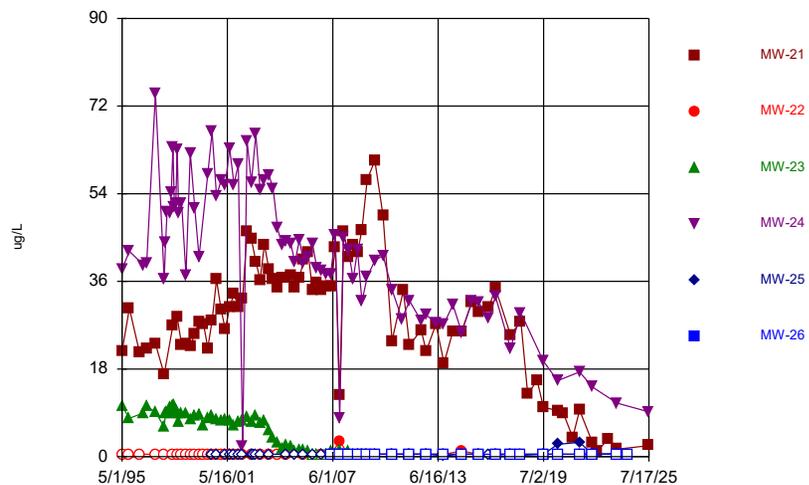
Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Serie
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



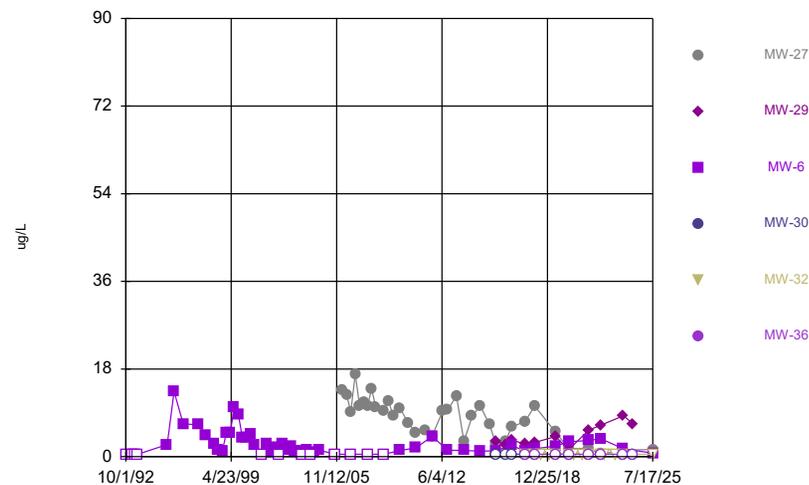
Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Serie
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



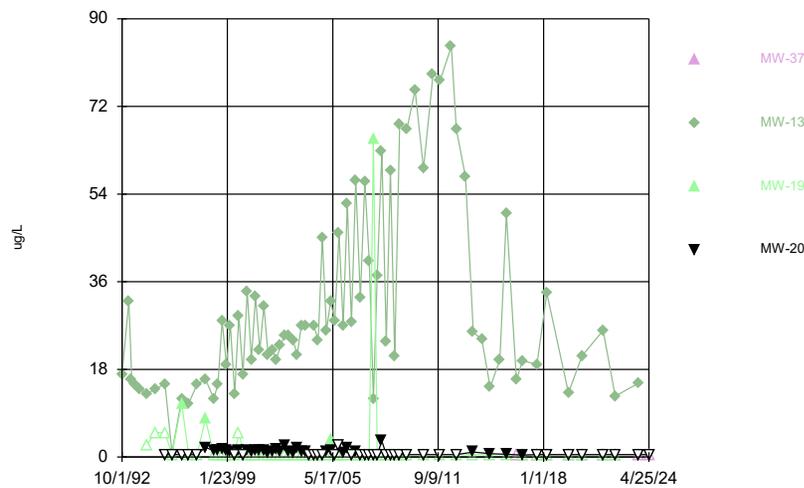
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



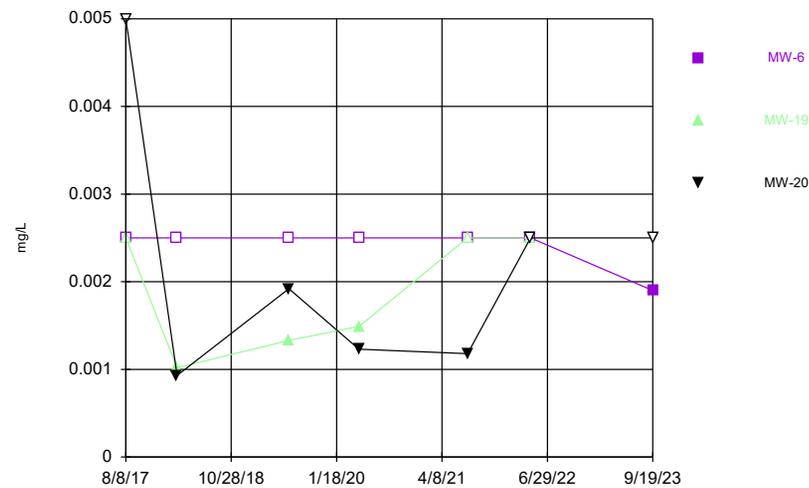
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



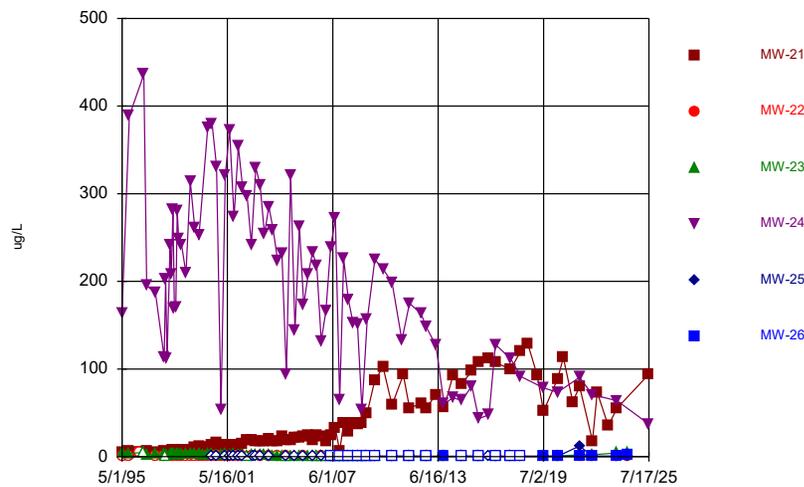
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



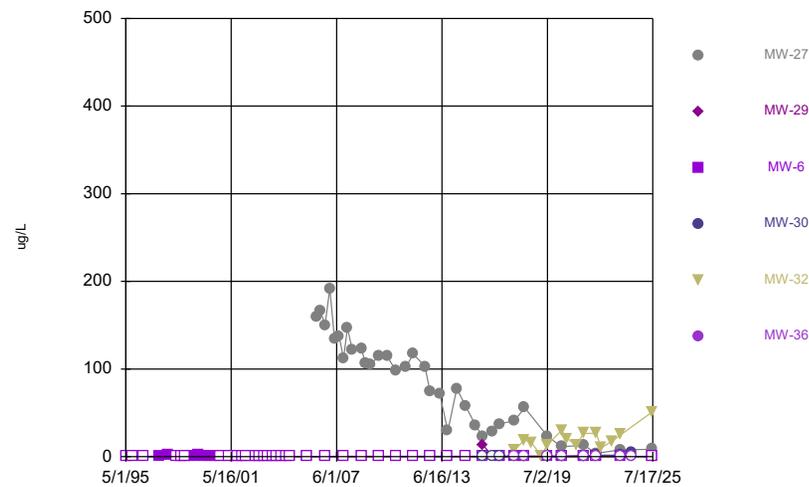
Constituent: Vanadium Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



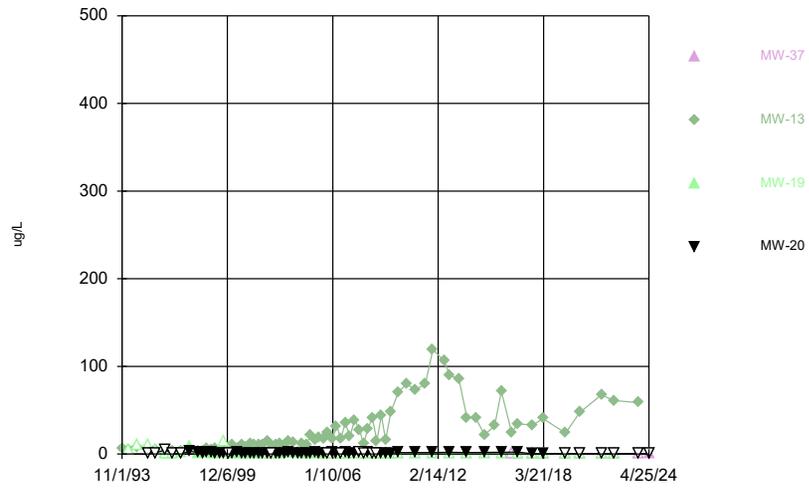
Constituent: Vinyl Chloride Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



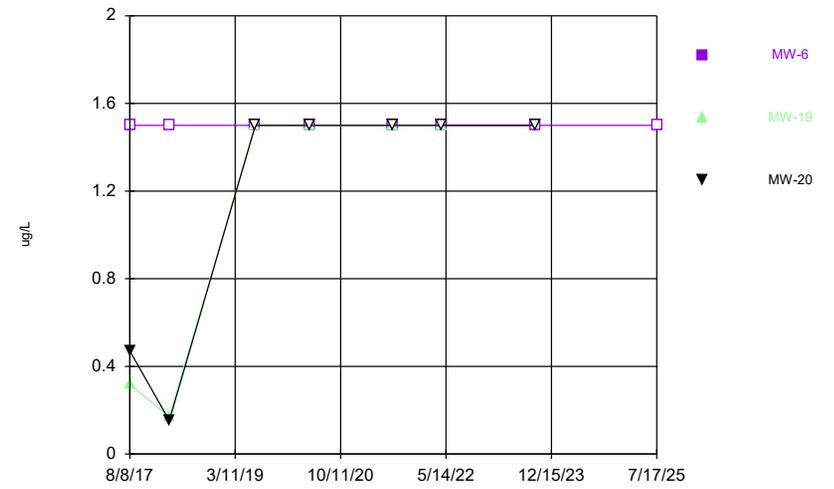
Constituent: Vinyl Chloride Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



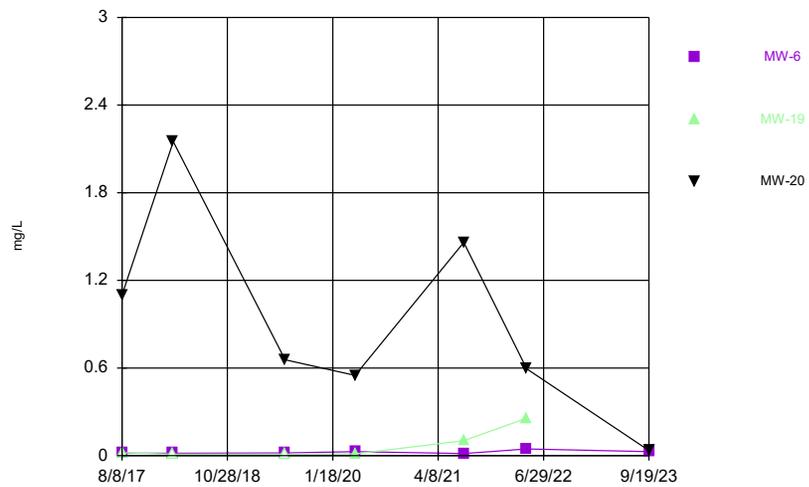
Constituent: Vinyl Chloride Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



Constituent: Xylenes, total Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Time Series



Constituent: Zinc Analysis Run 11/11/2025 11:41 AM View: 2025_AWQR-Time_Series
Henry County SLF Client: SCS Engineers Data: HCSWC History basis

Appendix F

Confidence Interval/Confidence Band Summary Tables and Graphs

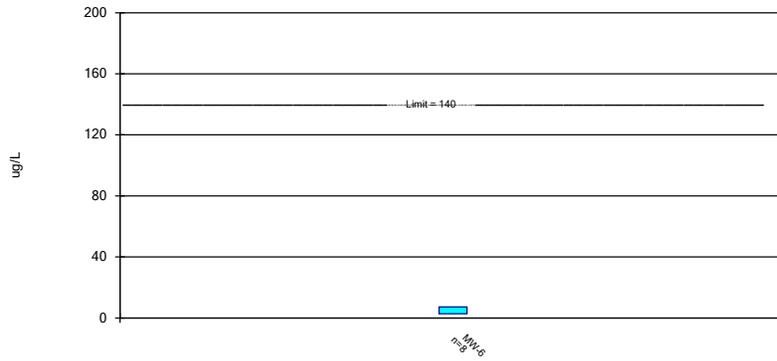
Confidence Interval

Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO Printed 10/30/2025, 4:35 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
1,1-Dichloroethane (ug/L)	MW-6	7.272	2.768	140	No	8	0	No	0.01	Param.
1,2-Dichlorobenzene (ug/L)	MW-19	0.5	0.212	600	No	6	83.33	No	0.0155	NP (NDs)
1,2-Dichloroethane (ug/L)	MW-6	0.5	0.206	5	No	8	75	No	0.004	NP (NDs)
1,2-Dichloroethane (ug/L)	MW-19	0.5	0.217	5	No	6	83.33	No	0.0155	NP (NDs)
1,4-Dichlorobenzene (ug/L)	MW-6	1.404	0.3004	75	No	8	25	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	MW-19	9.366	2.599	75	No	6	16.67	No	0.01	Param.
2-Butanone (ug/L)	MW-19	5	2.64	4000	No	6	83.33	No	0.0155	NP (NDs)
Acetone (ug/L)	MW-6	7.58	2.76	6300	No	8	75	No	0.004	NP (NDs)
Acetone (ug/L)	MW-19	108	4.82	6300	No	6	33.33	No	0.0155	NP (normality)
Arsenic (mg/L)	MW-19	0.004159	0.001319	0.01	No	6	0	No	0.01	Param.
Barium (mg/L)	MW-6	0.1629	0.05554	2	No	7	0	No	0.01	Param.
Barium (mg/L)	MW-19	0.4945	0.3885	2	No	6	0	No	0.01	Param.
Benzene (ug/L)	MW-6	1.257	0	5	No	8	12.5	No	0.01	Param.
Benzene (ug/L)	MW-19	4.507	3.801	5	No	8	0	No	0.01	Param.
Bromomethane (ug/L)	MW-6	2	0.297	10	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	MW-6	0.00025	0.00005	0.005	No	7	57.14	No	0.008	NP (NDs)
Cadmium (mg/L)	MW-19	0.0003245	0.00005	0.005	No	6	66.67	No	0.0155	NP (NDs)
Carbon Disulfide (ug/L)	MW-19	0.5	0.151	700	No	6	66.67	No	0.0155	NP (NDs)
Chlorobenzene (ug/L)	MW-19	38.97	18.13	100	No	6	0	No	0.01	Param.
Chloroethane (ug/L)	MW-6	1.878	0.8967	2800	No	8	50	No	0.01	Param.
Chromium (mg/L)	MW-6	0.004744	0.0009746	0.1	No	7	28.57	No	0.01	Param.
Chromium (mg/L)	MW-19	0.0025	0.00082	0.1	No	6	66.67	No	0.0155	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-6	5.979	2.444	70	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-6	0.036	0.006641	0.0021	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-19	0.01574	0.01023	0.0021	Yes	6	0	No	0.01	Param.
Copper (mg/L)	MW-19	0.003237	0.001236	1.3	No	6	50	No	0.01	Param.
Methylene Chloride (ug/L)	MW-19	2.5	0.453	5	No	8	87.5	No	0.004	NP (NDs)
Nickel (mg/L)	MW-6	0.1075	0.03532	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-19	0.07972	0.03111	0.1	No	6	0	No	0.01	Param.
Tetrachloroethene (ug/L)	MW-6	2.389	0.5835	5	No	8	0	No	0.01	Param.
Thallium (mg/L)	MW-6	0.0005	0.000091	0.002	No	7	85.71	No	0.008	NP (NDs)
Thallium (mg/L)	MW-19	0.0005	0.000133	0.002	No	6	66.67	No	0.0155	NP (NDs)
Toluene (ug/L)	MW-19	0.518	0.216	1000	No	6	50	No	0.0155	NP (normality)
Trichloroethene (ug/L)	MW-6	3.331	1.03	5	No	8	0	No	0.01	Param.
Vanadium (mg/L)	MW-19	0.001548	0.001012	0.035	No	6	50	No	0.01	Param.
Vinyl Chloride (ug/L)	MW-6	0.5	0.227	2	No	8	62.5	No	0.004	NP (NDs)
Xylenes, total (ug/L)	MW-19	1.5	0.17	10000	No	6	66.67	No	0.0155	NP (NDs)
Zinc (mg/L)	MW-6	0.03734	0.01066	2	No	7	0	No	0.01	Param.
Zinc (mg/L)	MW-19	0.257	0.01	2	No	6	50	No	0.0155	NP (normality)

Parametric Confidence Interval

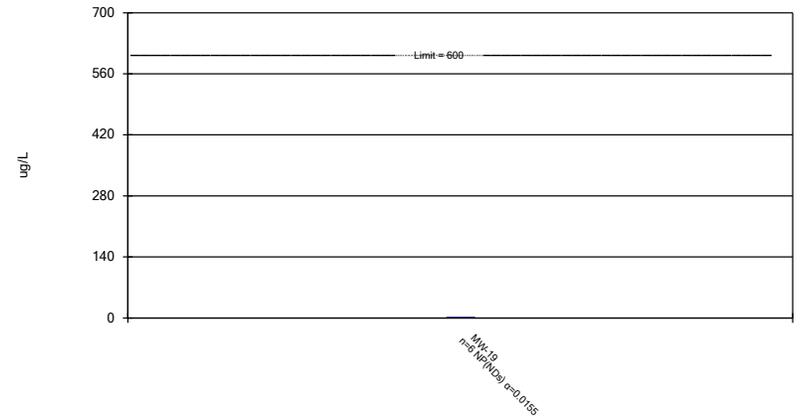
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Constituent: 1,1-Dichloroethane Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

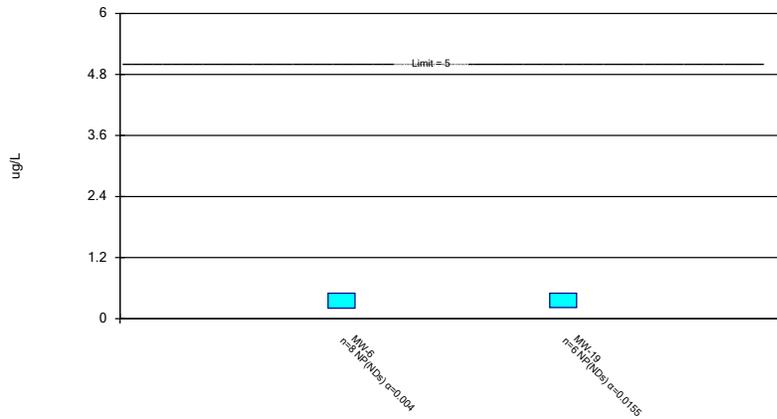
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Constituent: 1,2-Dichlorobenzene Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interv
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

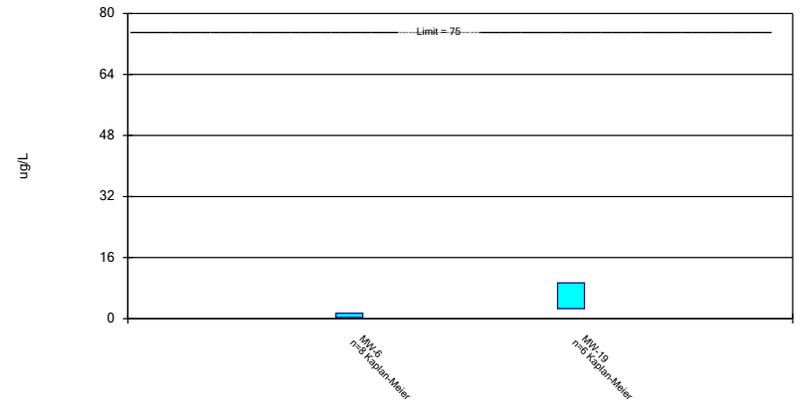
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Constituent: 1,2-Dichloroethane Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

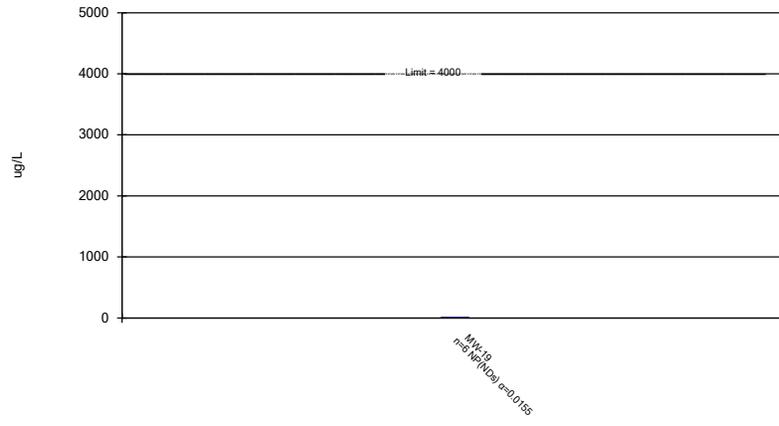
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Constituent: 1,4-Dichlorobenzene Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interv
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

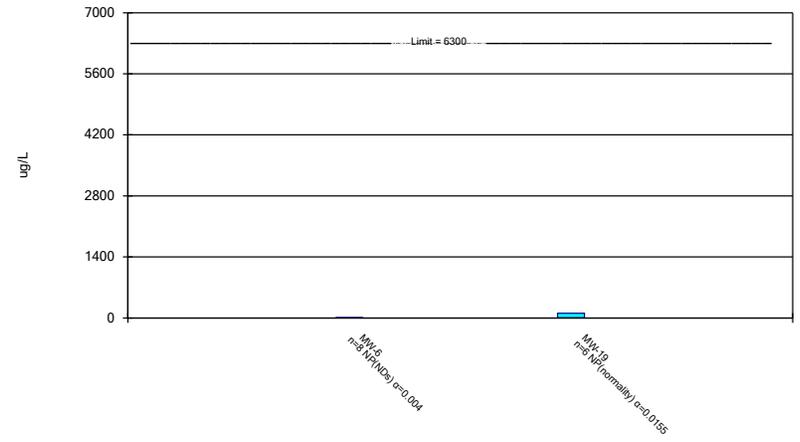
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Constituent: 2-Butanone Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

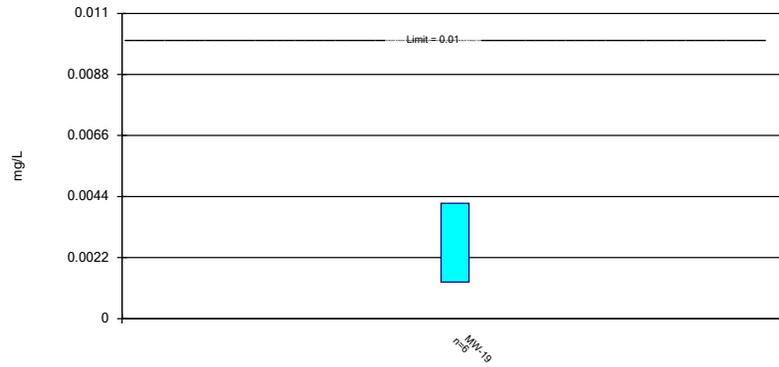
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Constituent: Acetone Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

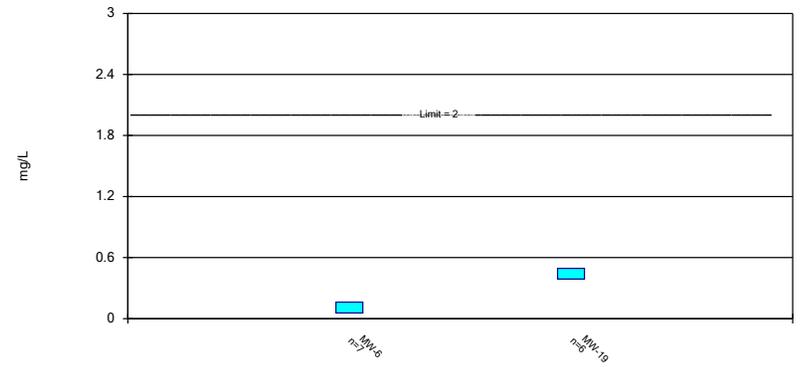
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Arsenic Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

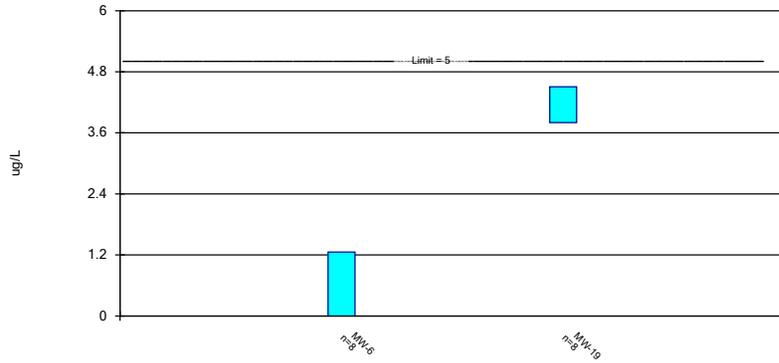
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Constituent: Barium Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

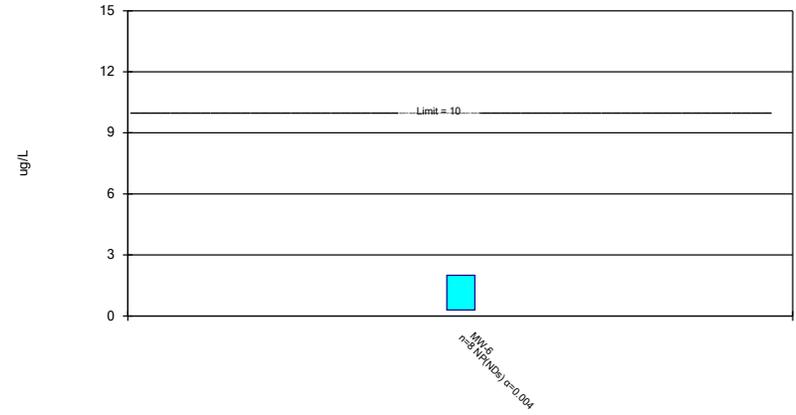
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Constituent: Benzene Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

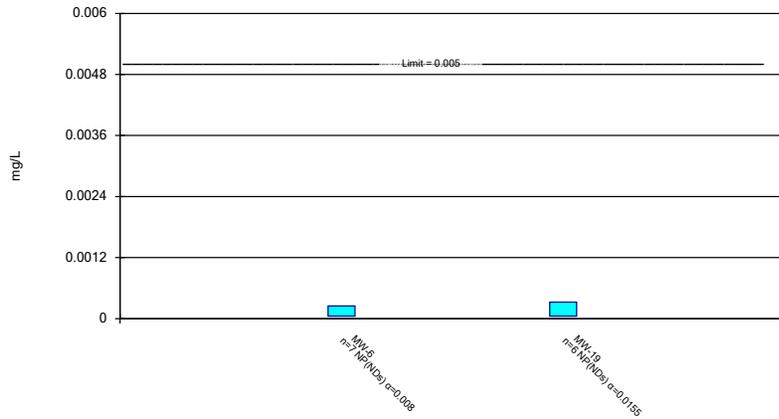
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Constituent: Bromomethane Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

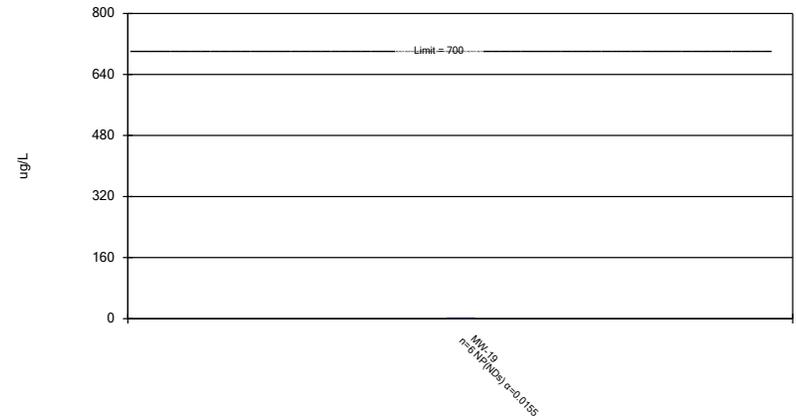
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Constituent: Cadmium Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

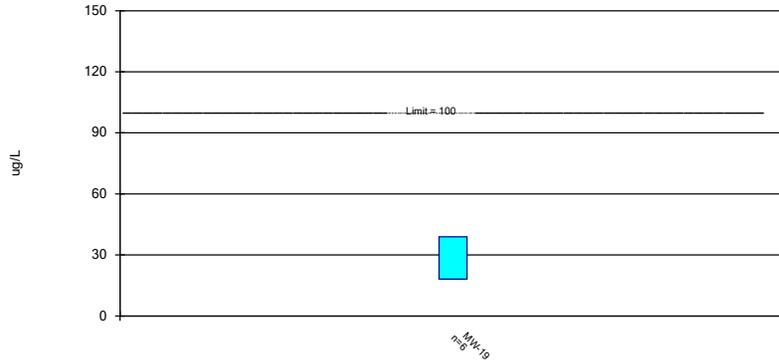
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Constituent: Carbon Disulfide Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

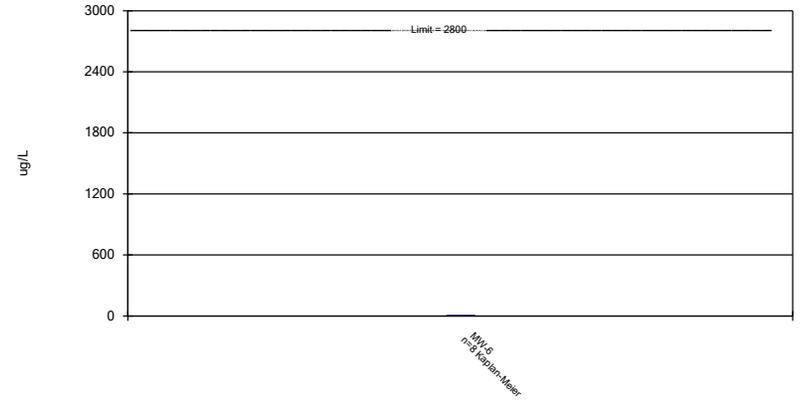
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Constituent: Chlorobenzene Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

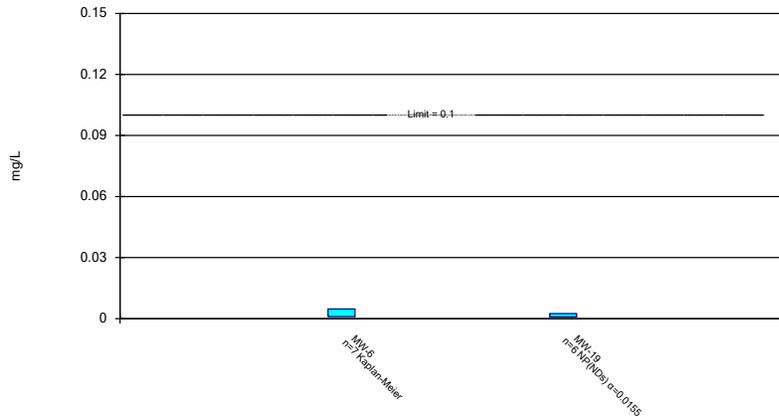
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Constituent: Chloroethane Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric and Non-Parametric (NP) Confidence Interval

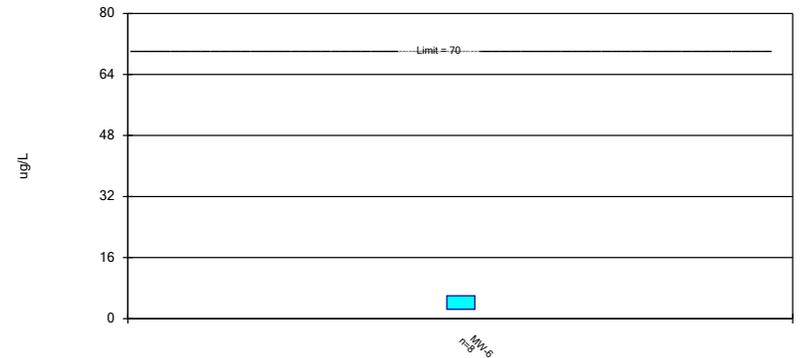
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Chromium Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

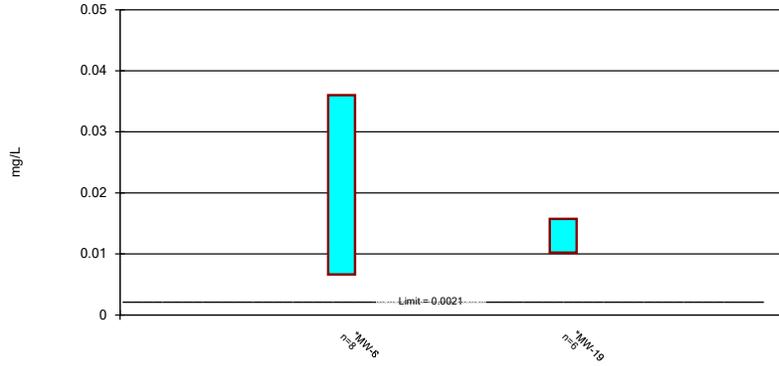
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Constituent: cis-1,2-Dichloroethene Analysis Run 10/30/2025 4:31 PM View: 2025_SSN-Confidence_Inter
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

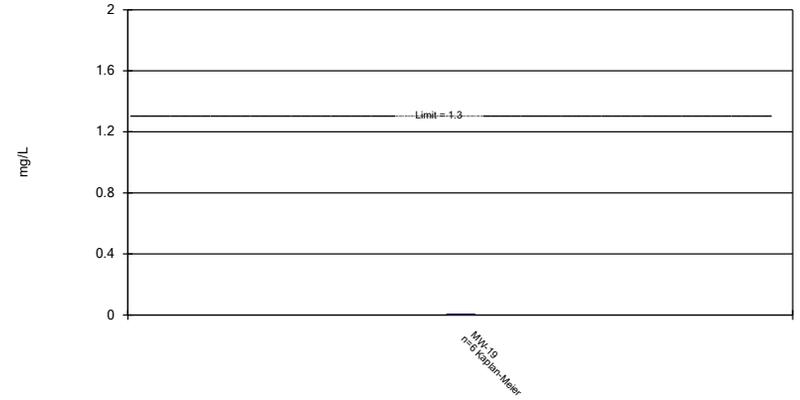
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Constituent: Cobalt Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

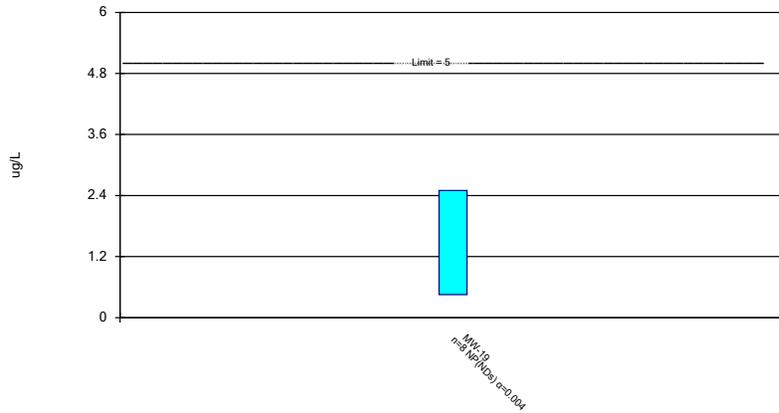
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Constituent: Copper Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

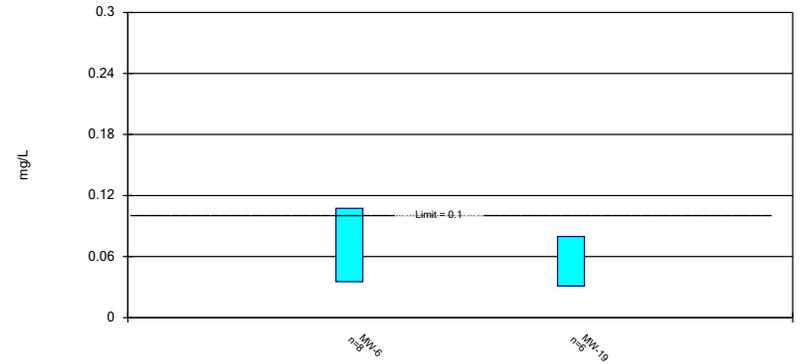
Compliance Limit is not exceeded.



Constituent: Methylene Chloride Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

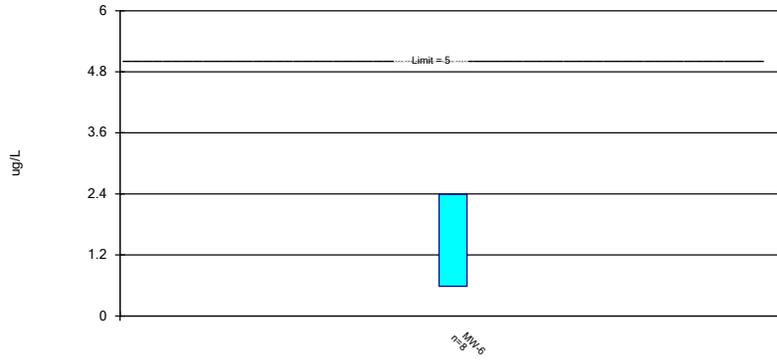
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Nickel Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

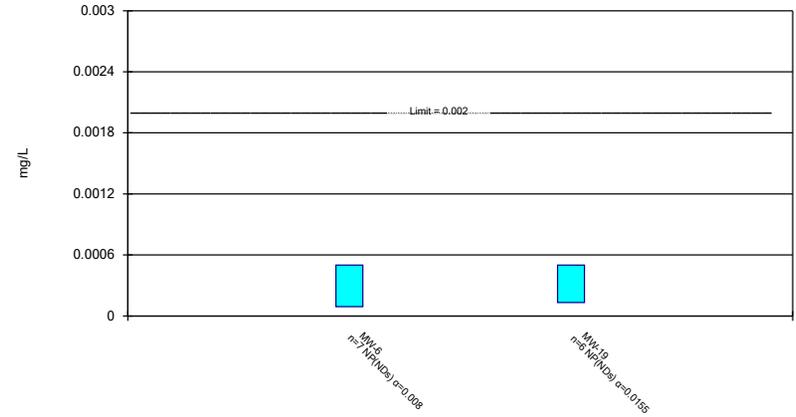
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Constituent: Tetrachloroethene Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

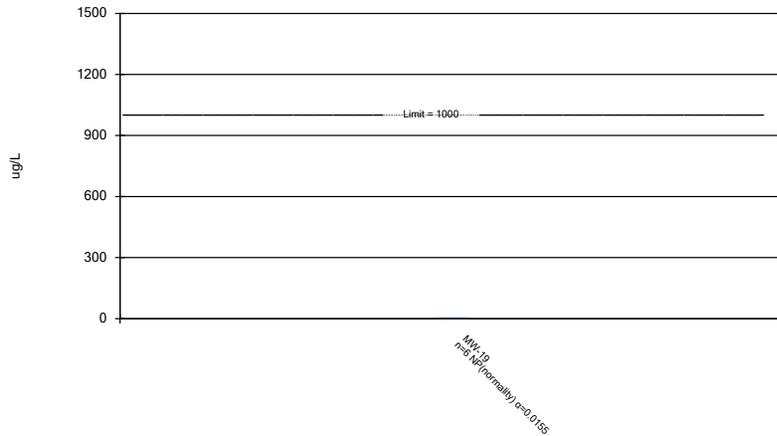
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Constituent: Thallium Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

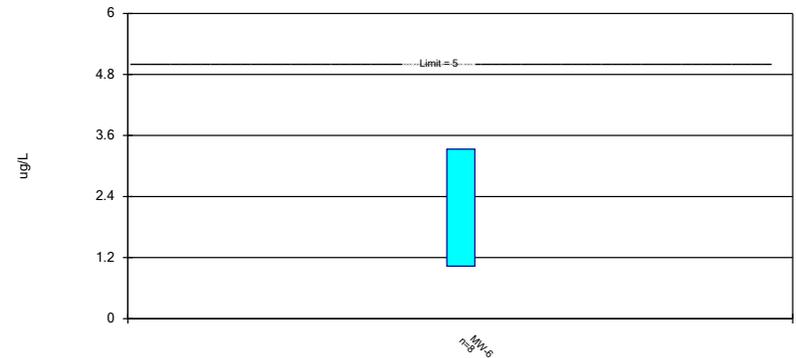
Compliance Limit is not exceeded.



Constituent: Toluene Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

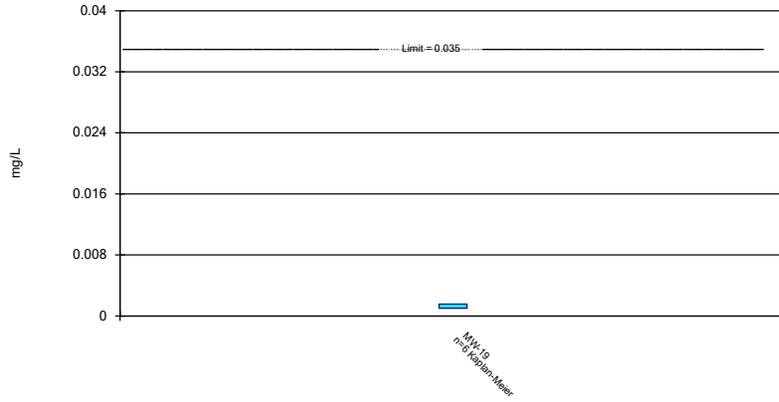
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Trichloroethene Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric Confidence Interval

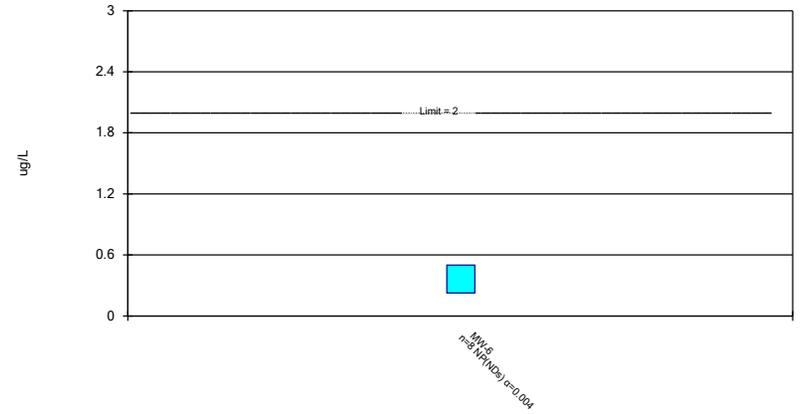
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Vanadium Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

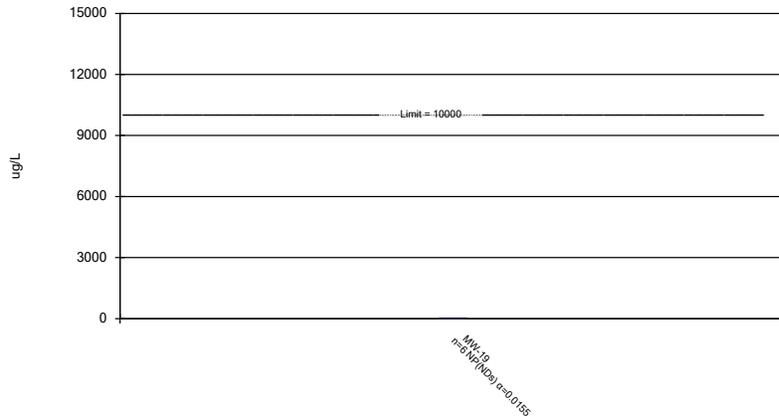
Compliance Limit is not exceeded.



Constituent: Vinyl Chloride Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Non-Parametric Confidence Interval

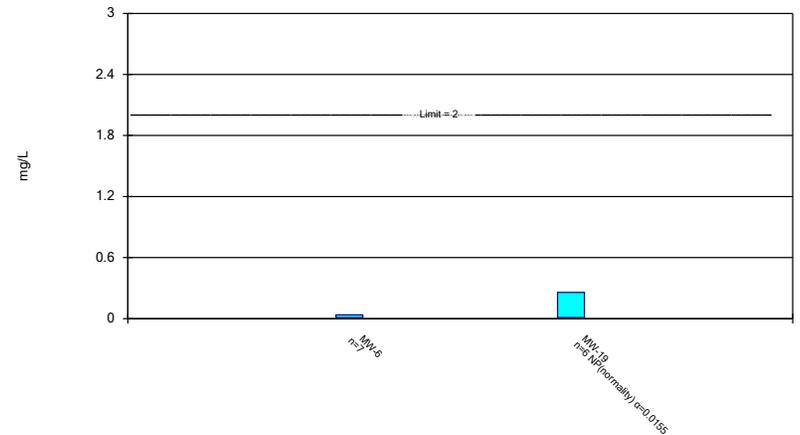
Compliance Limit is not exceeded.



Constituent: Xylenes, total Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Zinc Analysis Run 10/30/2025 4:32 PM View: 2025_SSN-Confidence_Interval
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

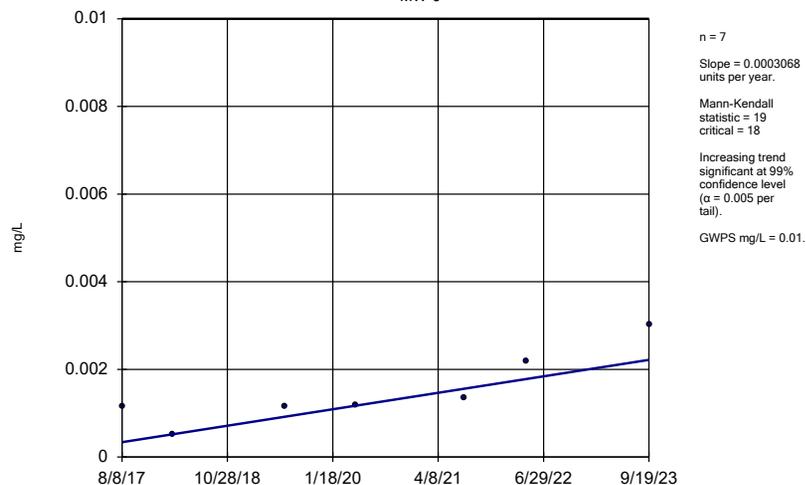
Theil Sen/Trend Test

Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO Printed 10/30/2025, 4:40 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	MW-6	0.0003068	19	18	Yes	7	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-19	-0.108	-22	-21	Yes	8	0	0.01	NP

Sen's Slope Estimator

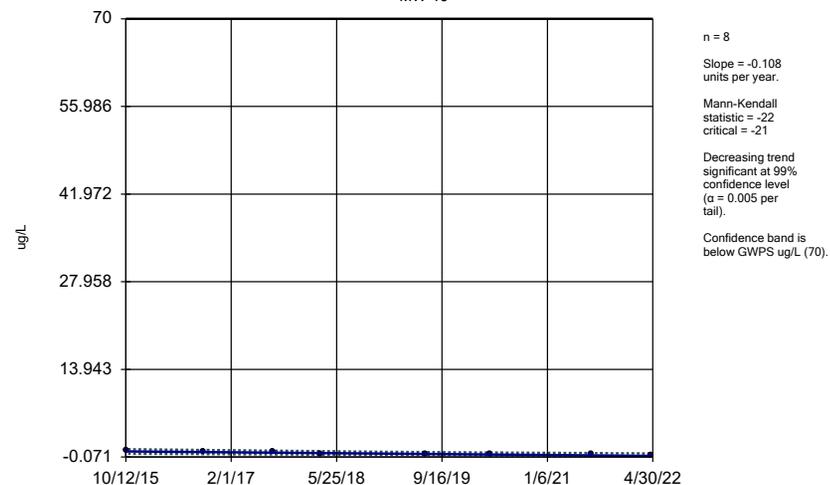
MW-6



Constituent: Arsenic Analysis Run 10/30/2025 4:37 PM View: 2025_SSN-Theil_Sen
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope and 99% Confidence Band

MW-19



Constituent: cis-1,2-Dichloroethene Analysis Run 10/30/2025 4:37 PM View: 2025_SSN-Theil_Sen
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Appendix G-1

CVOC

Mann-Kendall Trending Summary Table and Graphs

Trend Test

Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025 Printed 11/11/2025, 12:51 PM

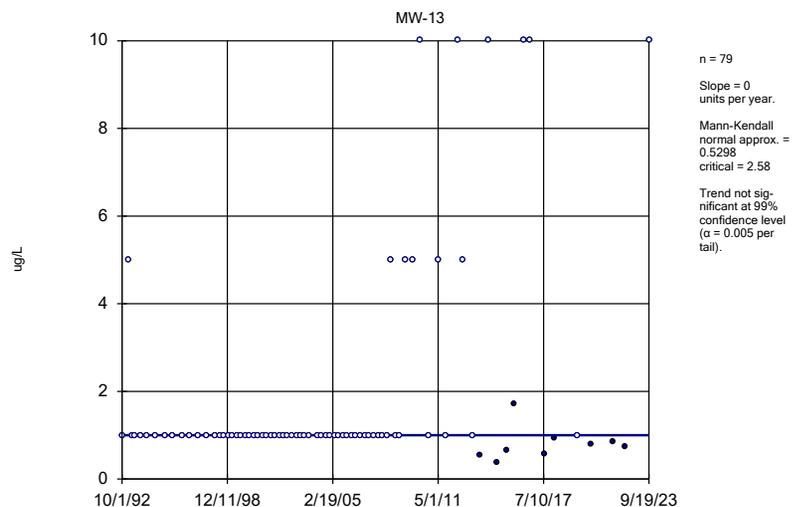
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
1,1-Dichloroethene (ug/L)	MW-13	0	0.5298	2.58	No	79	88.61	0.01	NP
1,1-Dichloroethene (ug/L)	MW-21	0	-3.601	-2.58	Yes	80	86.25	0.01	NP
1,1-Dichloroethene (ug/L)	MW-24	0	-2.01	-2.58	No	79	75.95	0.01	NP
1,1-Dichloroethene (ug/L)	MW-27	0	-60	-176	No	34	88.24	0.01	NP
Benzene (ug/L)	MW-13	-0.06889	-4.757	-2.58	Yes	79	6.329	0.01	NP
Benzene (ug/L)	MW-20	-0.05568	-2.152	-2.58	No	67	11.94	0.01	NP
Benzene (ug/L)	MW-21	-0.1488	-8.774	-2.58	Yes	80	2.5	0.01	NP
Benzene (ug/L)	MW-23	-0.005174	-2.287	-2.58	No	73	27.4	0.01	NP
Benzene (ug/L)	MW-24	-0.1541	-7.75	-2.58	Yes	80	18.75	0.01	NP
Benzene (ug/L)	MW-27	-0.04247	-303	-184	Yes	35	5.714	0.01	NP
Benzene (ug/L)	MW-29	0	-10	-34	No	11	90.91	0.01	NP
Benzene (ug/L)	MW-30	0	11	34	No	11	72.73	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-13	39.95	9.094	2.58	Yes	75	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-20	-0.1782	-5.386	-2.58	Yes	67	4.478	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-21	5.309	6.465	2.58	Yes	80	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-22	0	0.5288	2.58	No	49	91.84	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-23	0.8616	2.915	2.58	Yes	73	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-24	-76.32	-8.41	-2.58	Yes	80	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-25	0.2699	468	214	Yes	39	56.41	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-26	0	-42	-87	No	21	80.95	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-27	-6.655	-108	-184	No	35	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-29	4.193	20	34	No	11	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-30	0.2203	45	34	Yes	11	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-32	0	15	48	No	14	85.71	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-37	0	1	30	No	10	80	0.01	NP
Methylene Chloride (ug/L)	MW-13	0	-0.4932	-2.58	No	65	83.08	0.01	NP
Methylene Chloride (ug/L)	MW-20	0	-0.5743	-2.58	No	60	96.67	0.01	NP
Methylene Chloride (ug/L)	MW-21	0	-1.364	-2.58	No	73	95.89	0.01	NP
Methylene Chloride (ug/L)	MW-22	0	-1.073	-2.58	No	42	97.62	0.01	NP
Methylene Chloride (ug/L)	MW-23	0	-3.55	-2.58	Yes	60	75	0.01	NP
Methylene Chloride (ug/L)	MW-24	-0.7323	-4.344	-2.58	Yes	68	39.71	0.01	NP
Methylene Chloride (ug/L)	MW-25	0	-45	-214	No	39	94.87	0.01	NP
Methylene Chloride (ug/L)	MW-26	0	-11	-87	No	21	85.71	0.01	NP
Methylene Chloride (ug/L)	MW-27	0	-48	-184	No	35	88.57	0.01	NP
Methylene Chloride (ug/L)	MW-29	0	21	34	No	11	72.73	0.01	NP
Methylene Chloride (ug/L)	MW-30	0	21	34	No	11	72.73	0.01	NP
Methylene Chloride (ug/L)	MW-32	0	13	48	No	14	92.86	0.01	NP
Methylene Chloride (ug/L)	MW-36	0	7	21	No	8	87.5	0.01	NP
Methylene Chloride (ug/L)	MW-37	0	13	30	No	10	80	0.01	NP
Tetrachloroethene (ug/L)	MW-13	-0.3616	-7.258	-2.58	Yes	65	21.54	0.01	NP
Tetrachloroethene (ug/L)	MW-20	-0.0332	-5.634	-2.58	Yes	60	58.33	0.01	NP
Tetrachloroethene (ug/L)	MW-21	-0.2995	-9.304	-2.58	Yes	73	21.92	0.01	NP
Tetrachloroethene (ug/L)	MW-23	-0.5486	-9.53	-2.58	Yes	60	26.67	0.01	NP
Tetrachloroethene (ug/L)	MW-24	-0.07375	-2.839	-2.58	Yes	68	26.47	0.01	NP
Tetrachloroethene (ug/L)	MW-27	-0.07906	-341	-184	Yes	35	17.14	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-13	0.1362	5.751	2.58	Yes	72	16.67	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-21	0.006844	2.255	2.58	No	77	36.36	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-23	0	-3.124	-2.58	Yes	73	79.45	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-24	-0.4279	-4.126	-2.58	Yes	77	11.69	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-25	0	-30	-214	No	39	87.18	0.01	NP

Trend Test

Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025 Printed 11/11/2025, 12:51 PM

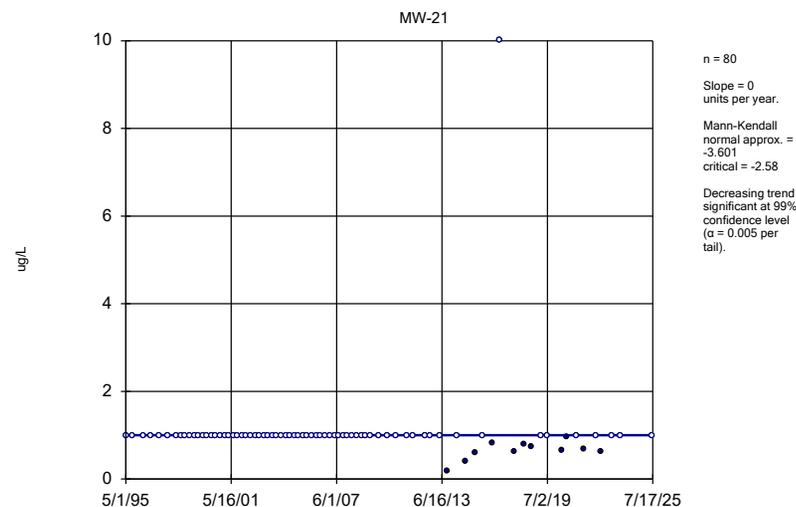
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
trans-1,2-Dichloroethene (ug/L)	MW-27	-0.1849	-345	-184	Yes	35	5.714	0.01	NP
trans-1,2-Dichloroethene (ug/L)	MW-29	0.1865	40	34	Yes	11	9.091	0.01	NP
Trichloroethene (ug/L)	MW-13	1.04	4.027	2.58	Yes	79	0	0.01	NP
Trichloroethene (ug/L)	MW-20	-0.01032	-3.706	-2.58	Yes	67	52.24	0.01	NP
Trichloroethene (ug/L)	MW-21	-0.3999	-1.6	-2.58	No	80	0	0.01	NP
Trichloroethene (ug/L)	MW-22	0	1.01	2.58	No	49	95.92	0.01	NP
Trichloroethene (ug/L)	MW-23	-0.516	-9.566	-2.58	Yes	73	34.25	0.01	NP
Trichloroethene (ug/L)	MW-24	-1.556	-7.038	-2.58	Yes	80	0	0.01	NP
Trichloroethene (ug/L)	MW-25	0	57	214	No	39	82.05	0.01	NP
Trichloroethene (ug/L)	MW-27	-0.6201	-349	-184	Yes	35	0	0.01	NP
Trichloroethene (ug/L)	MW-29	0.5397	31	34	No	11	0	0.01	NP
Vinyl Chloride (ug/L)	MW-13	1.999	9.209	2.58	Yes	75	1.333	0.01	NP
Vinyl Chloride (ug/L)	MW-20	0	-0.1144	-2.58	No	67	28.36	0.01	NP
Vinyl Chloride (ug/L)	MW-21	3.175	10.08	2.58	Yes	80	1.25	0.01	NP
Vinyl Chloride (ug/L)	MW-23	-0.1604	-6.026	-2.58	Yes	73	32.88	0.01	NP
Vinyl Chloride (ug/L)	MW-24	-8.933	-5.983	-2.58	Yes	80	0	0.01	NP
Vinyl Chloride (ug/L)	MW-25	0	17	206	No	38	94.74	0.01	NP
Vinyl Chloride (ug/L)	MW-26	0	37	87	No	21	66.67	0.01	NP
Vinyl Chloride (ug/L)	MW-27	-9.507	-488	-184	Yes	35	0	0.01	NP
Vinyl Chloride (ug/L)	MW-29	0	1	34	No	11	72.73	0.01	NP
Vinyl Chloride (ug/L)	MW-30	0	27	34	No	11	72.73	0.01	NP
Vinyl Chloride (ug/L)	MW-32	2.793	30	48	No	14	0	0.01	NP

Sen's Slope Estimator



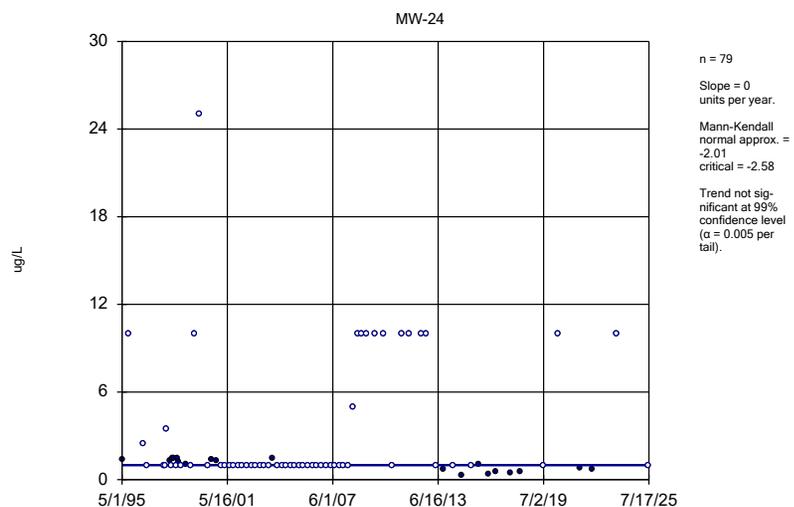
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator



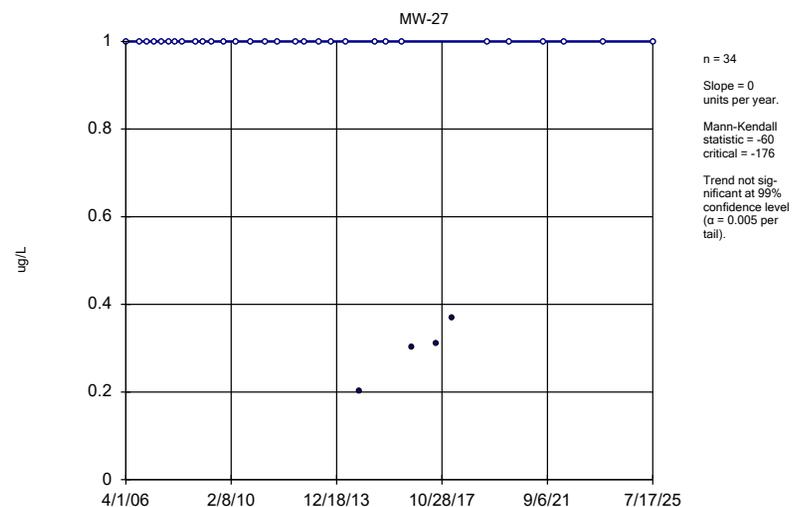
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Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator



Constituent: 1,1-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

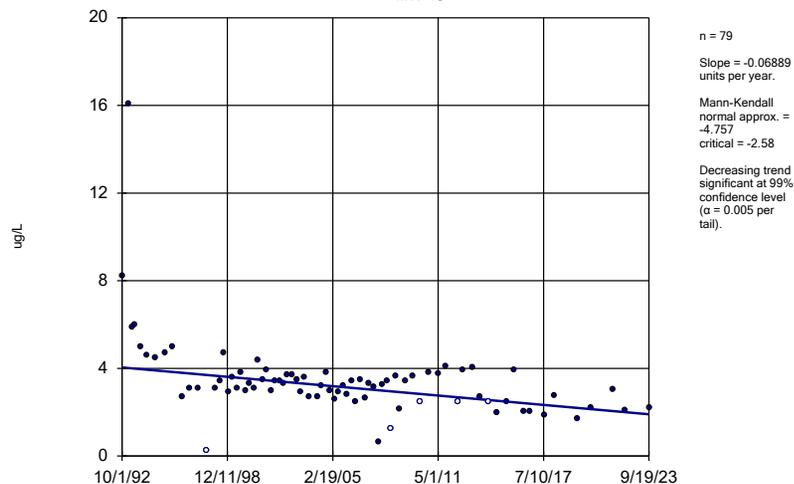
Sen's Slope Estimator



Constituent: 1,1-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

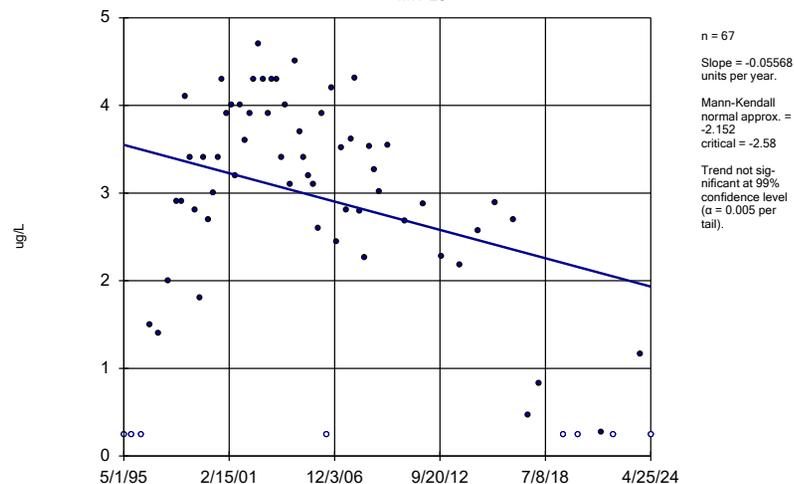
MW-13



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Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

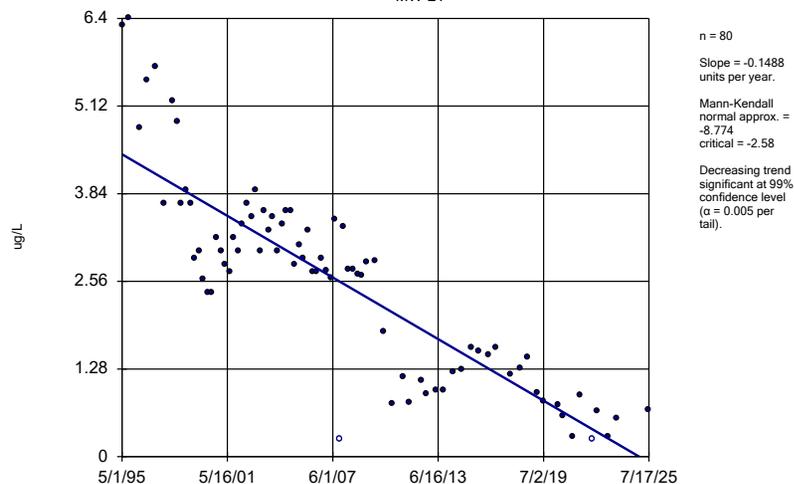
MW-20



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

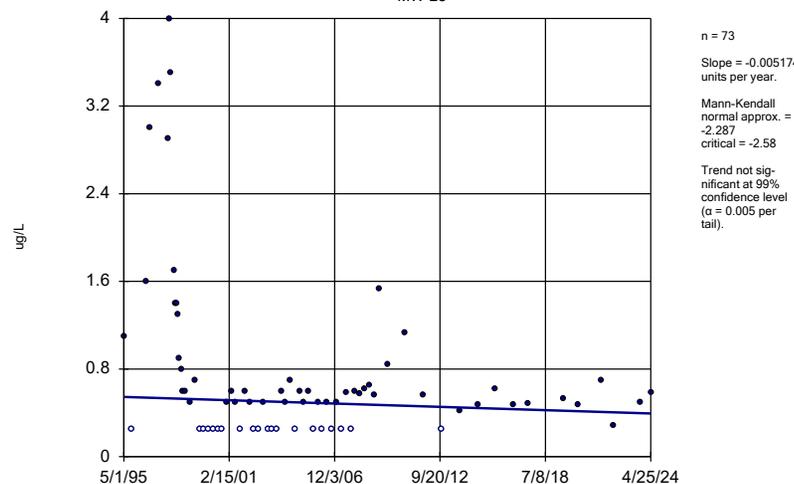
MW-21



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

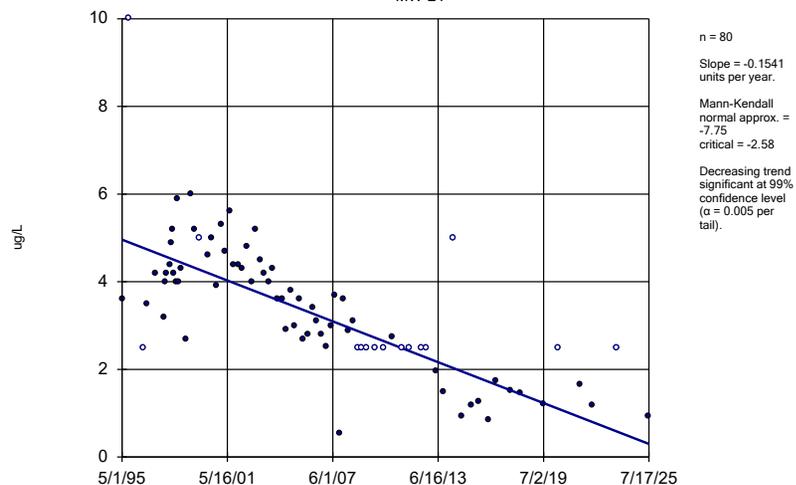
MW-23



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

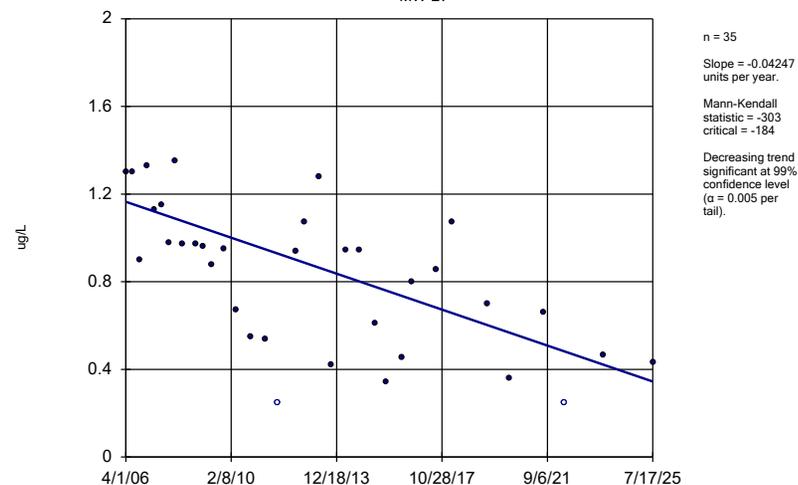
MW-24



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

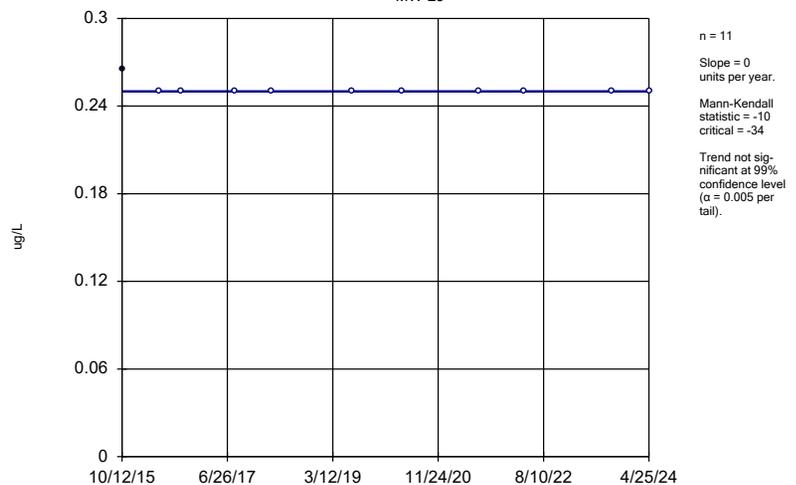
MW-27



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

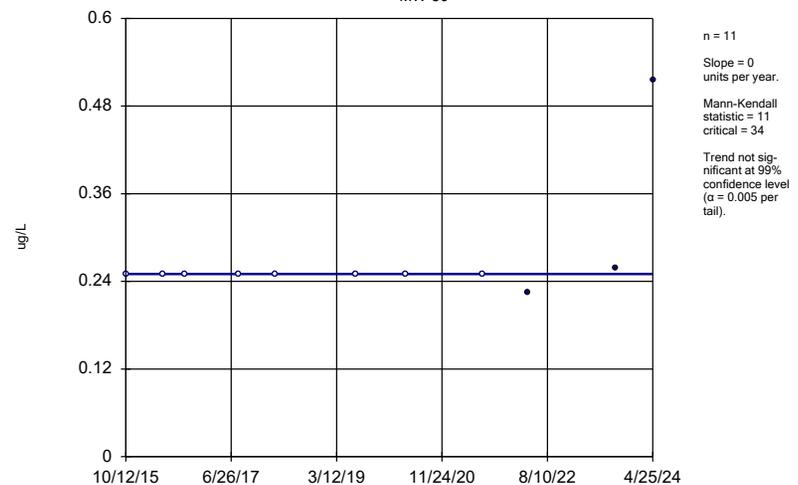
MW-29



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

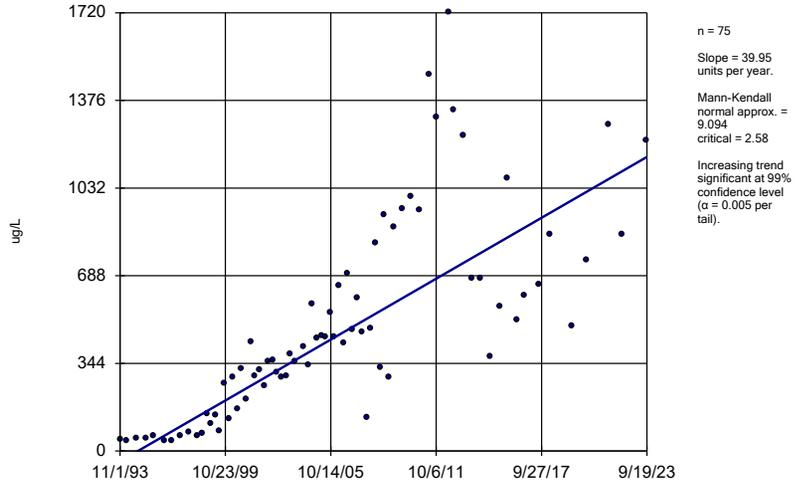
MW-30



Constituent: Benzene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_SelWellsHist
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

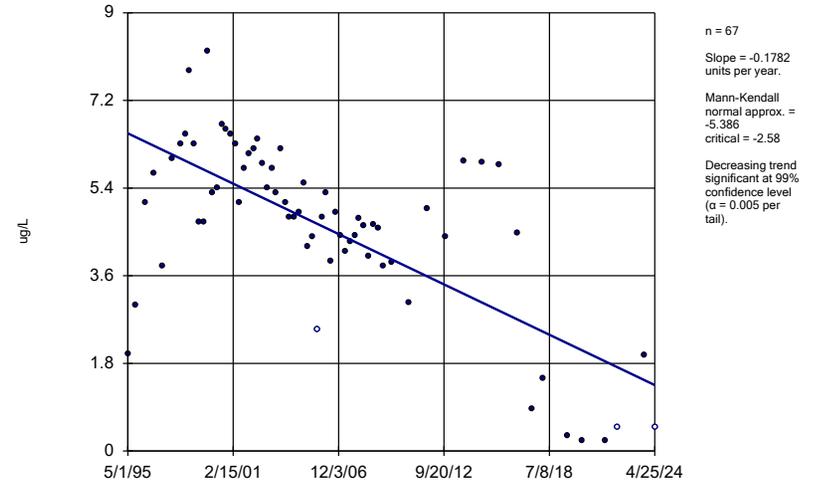
MW-13



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

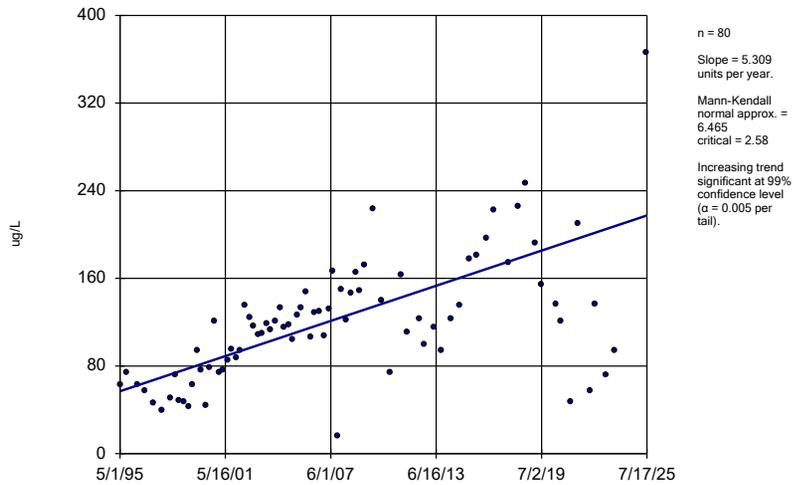
MW-20



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

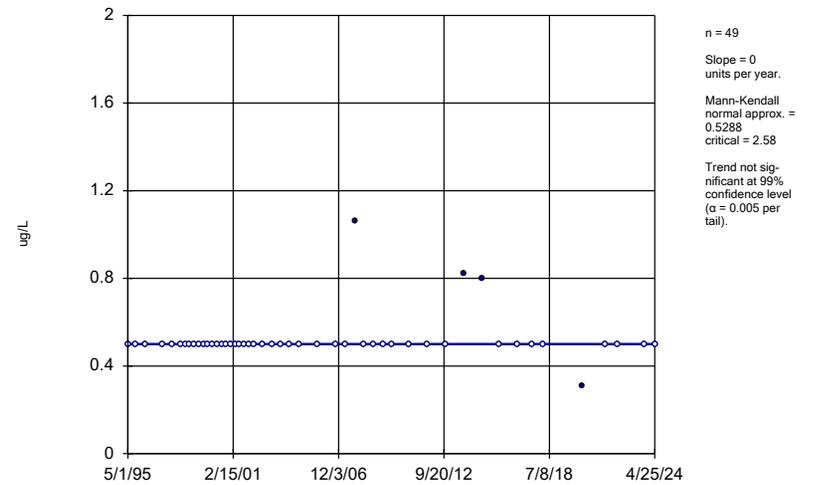
MW-21



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

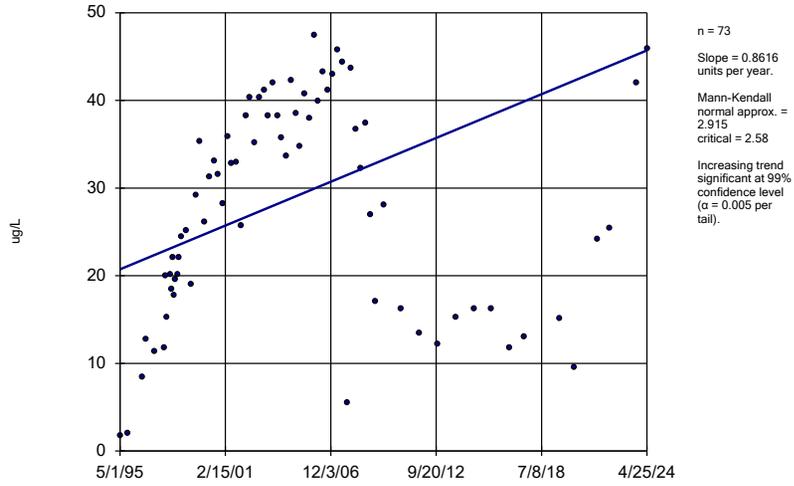
MW-22



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

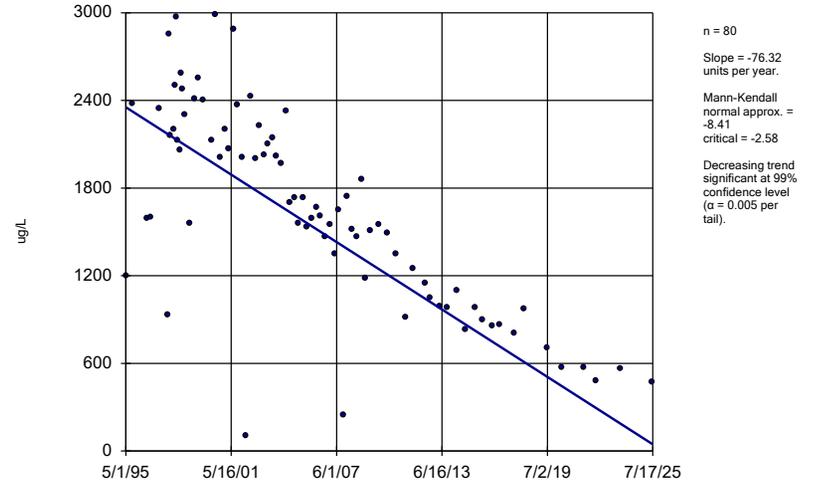
MW-23



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

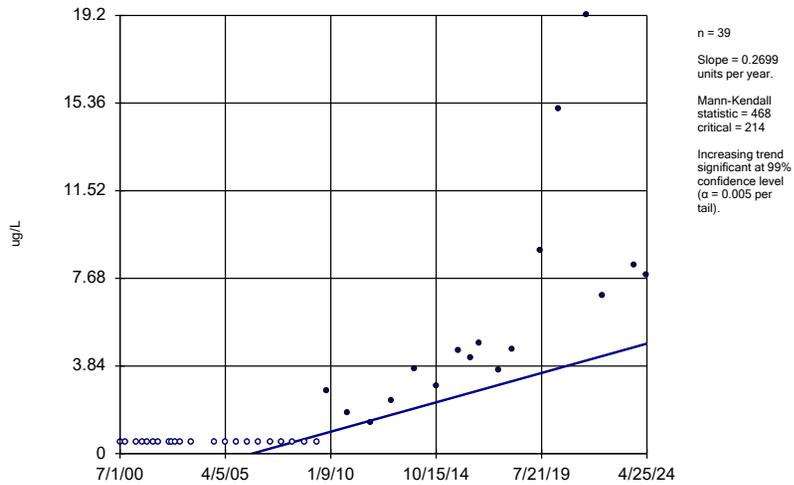
MW-24



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

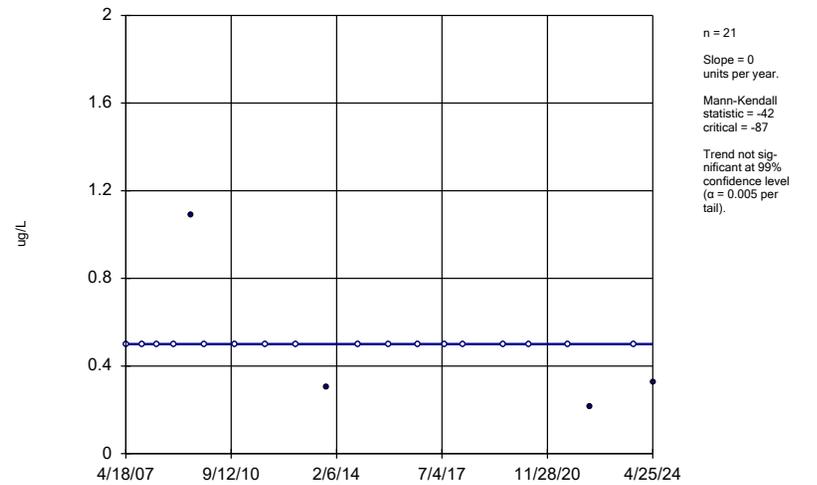
MW-25



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

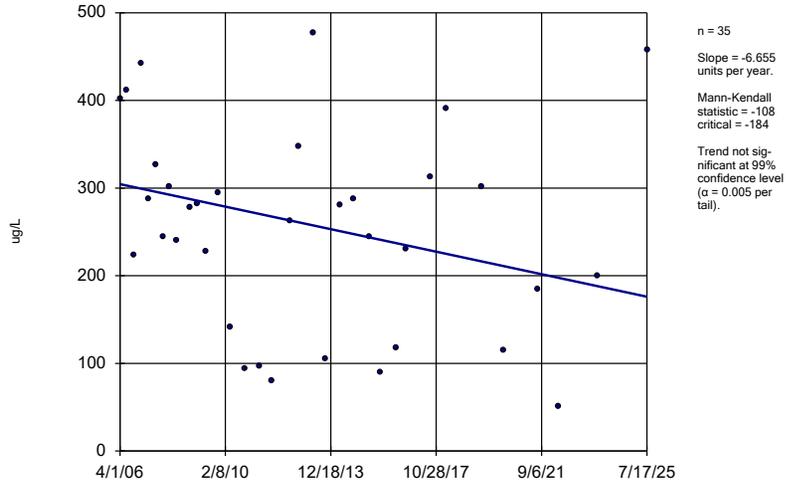
MW-26



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

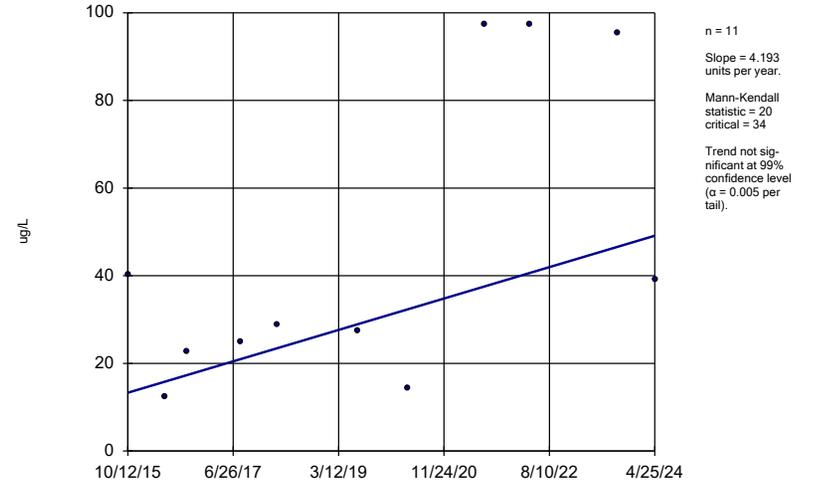
MW-27



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

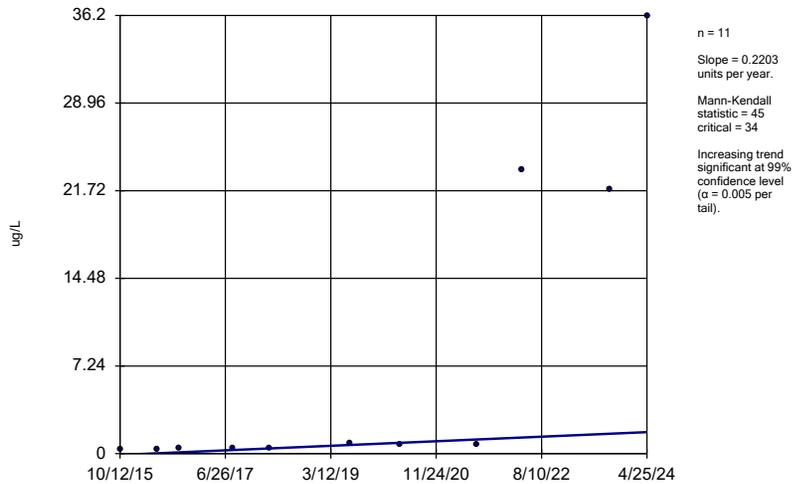
MW-29



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

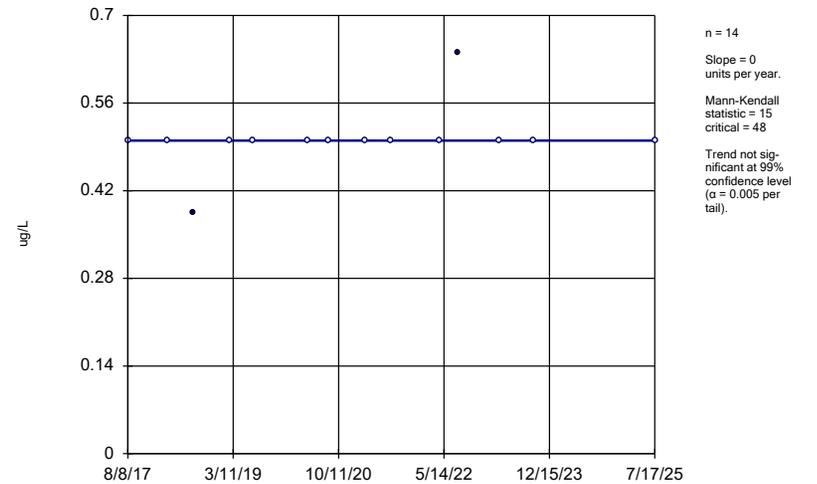
MW-30



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

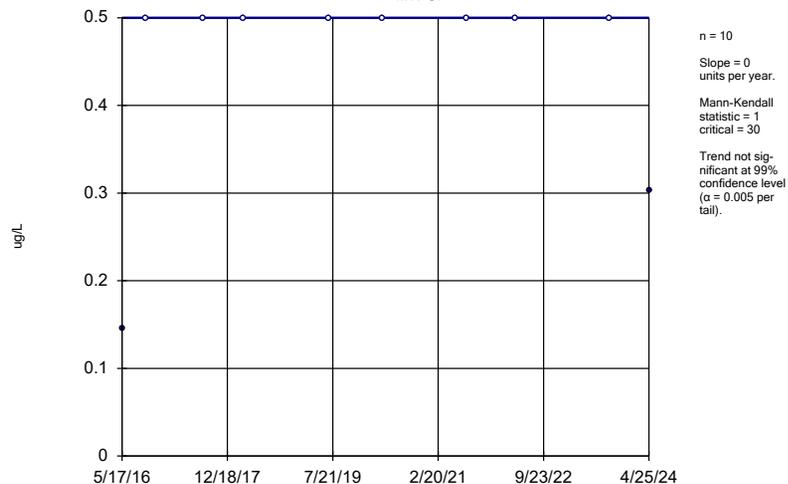
MW-32



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:46 PM View: 2025_SSN-Mann_Kendall_Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

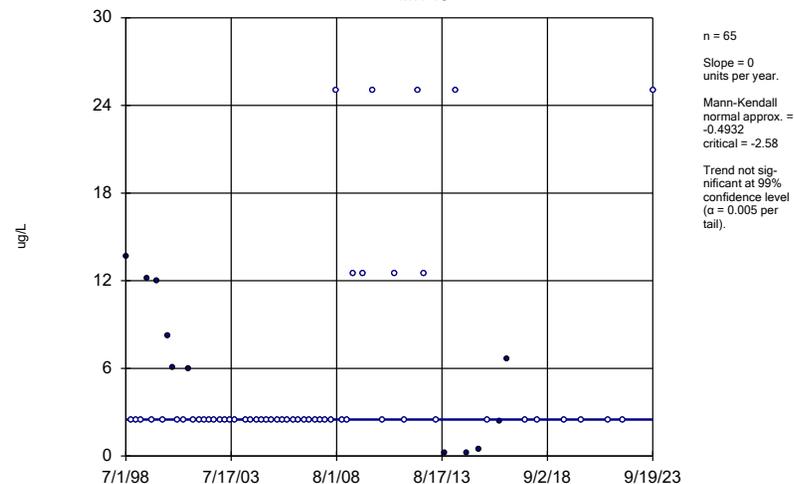
MW-37



Constituent: cis-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

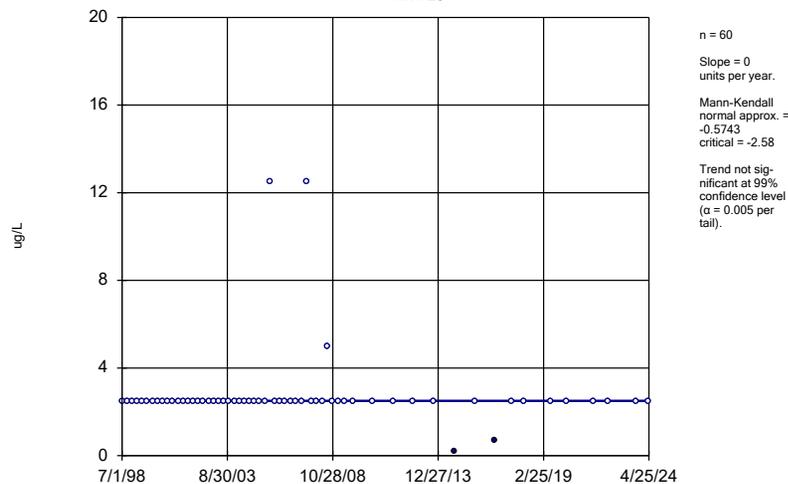
MW-13



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

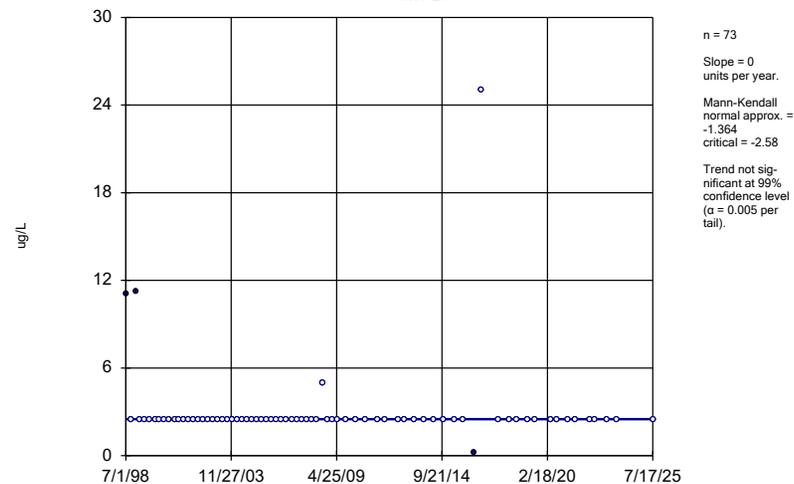
MW-20



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

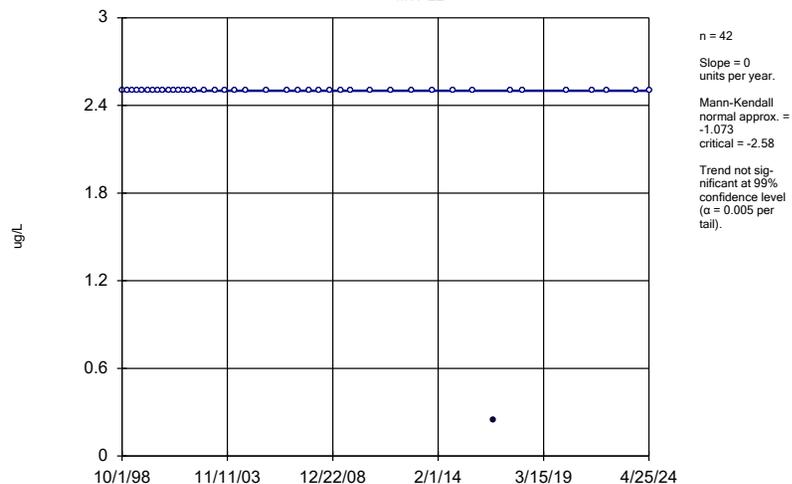
MW-21



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

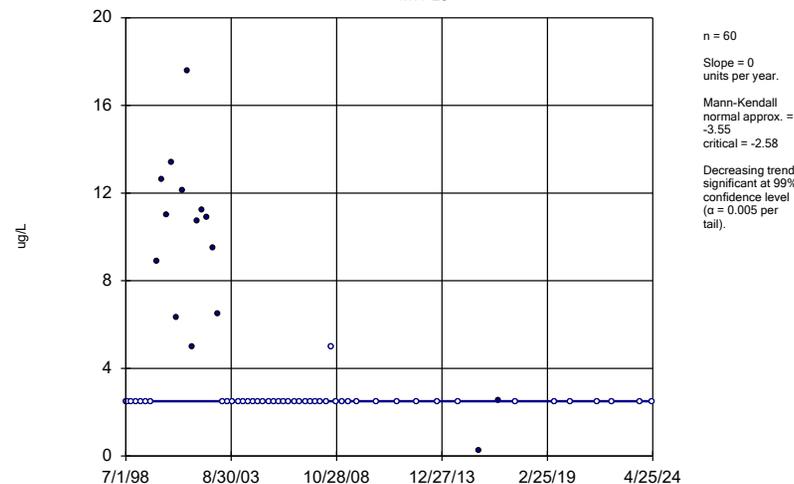
MW-22



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

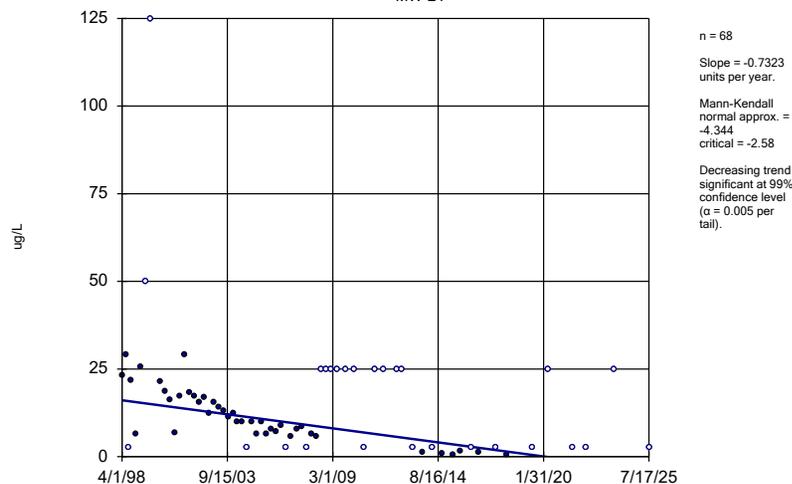
MW-23



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

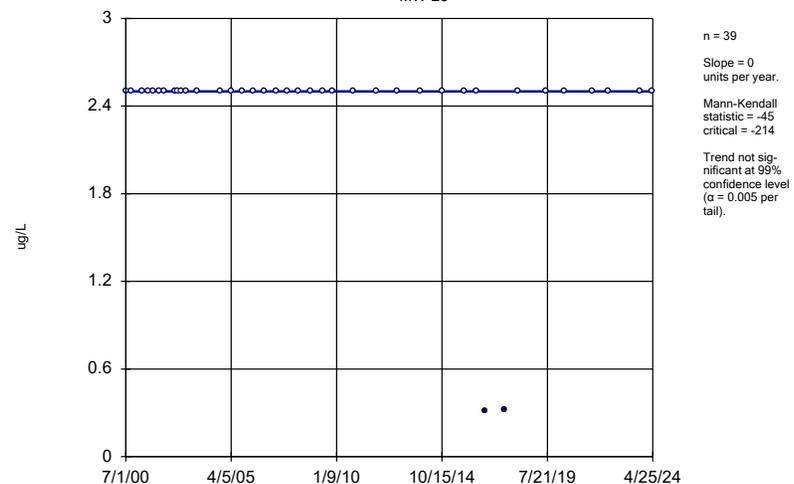
MW-24



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

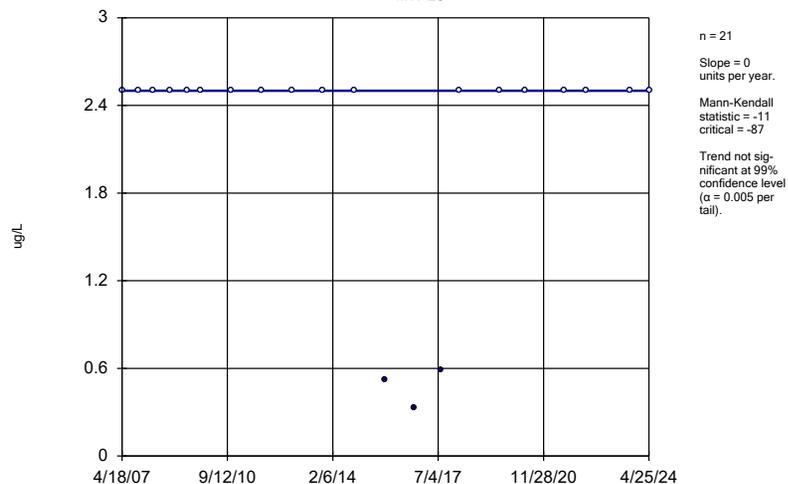
MW-25



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

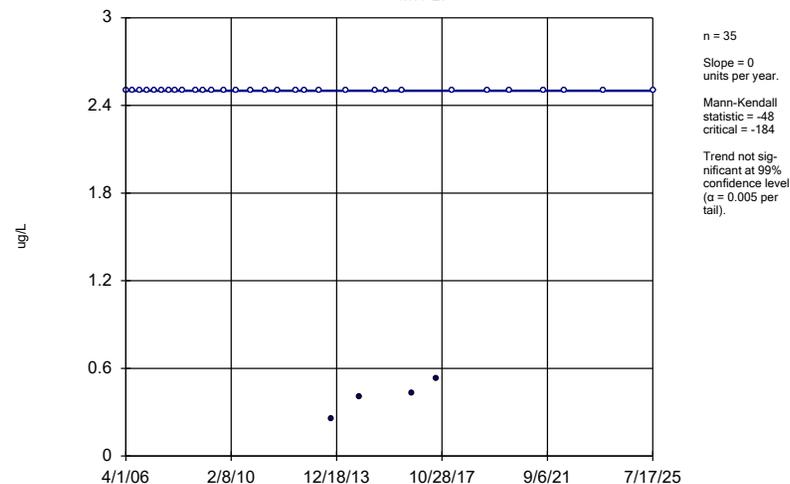
MW-26



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

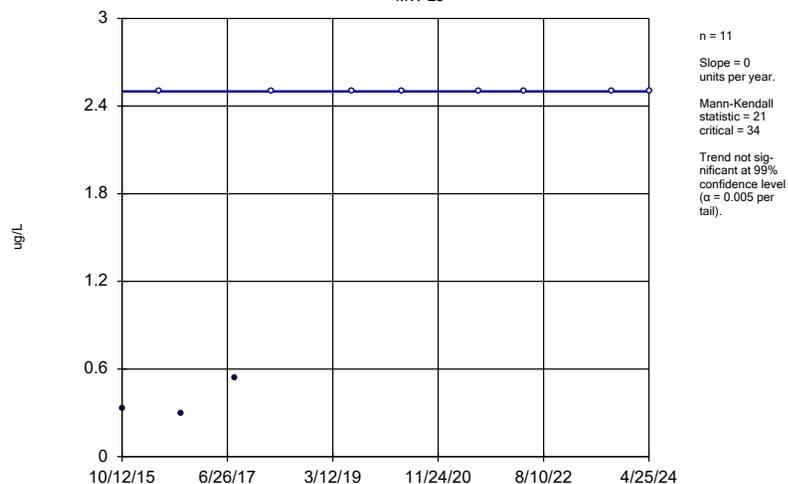
MW-27



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

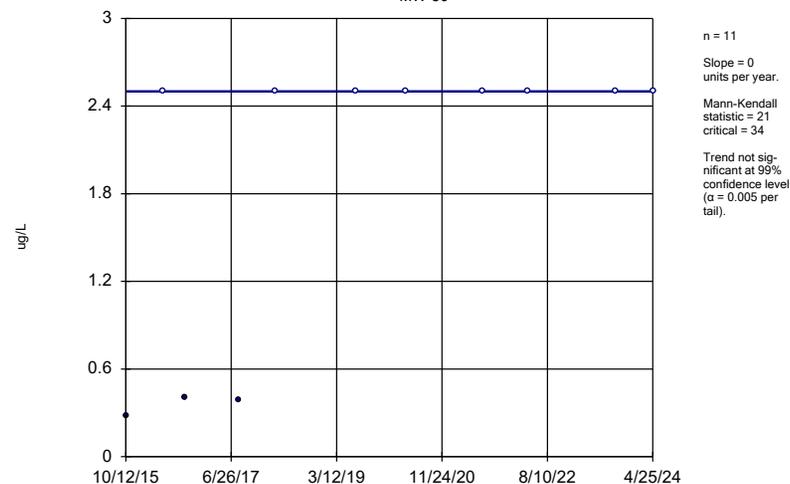
MW-29



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

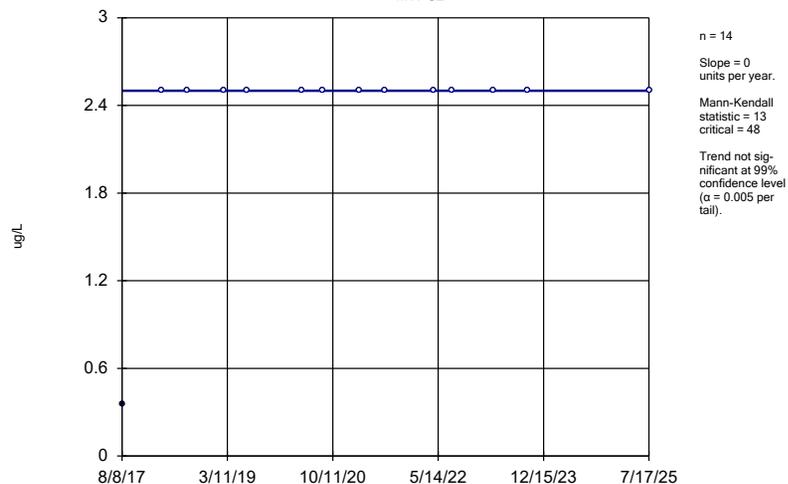
MW-30



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

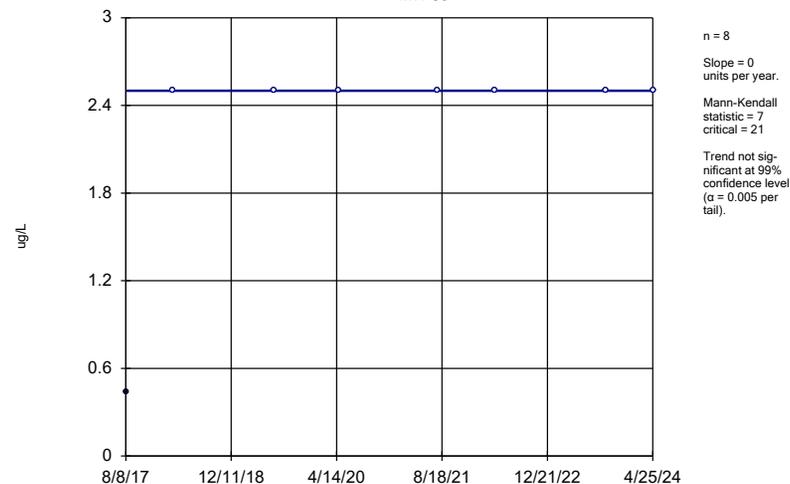
MW-32



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

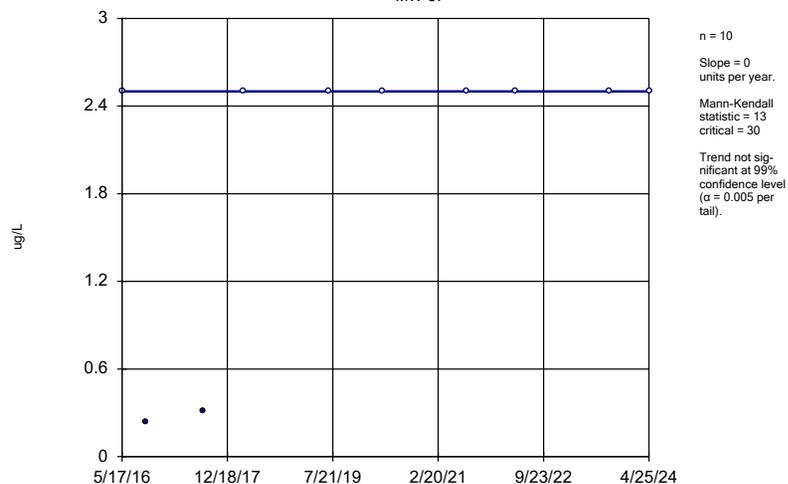
MW-36



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

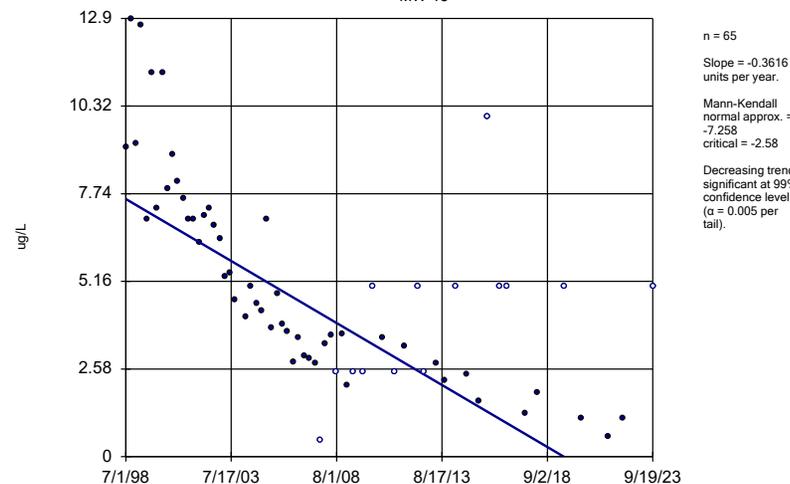
MW-37



Constituent: Methylene Chloride Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

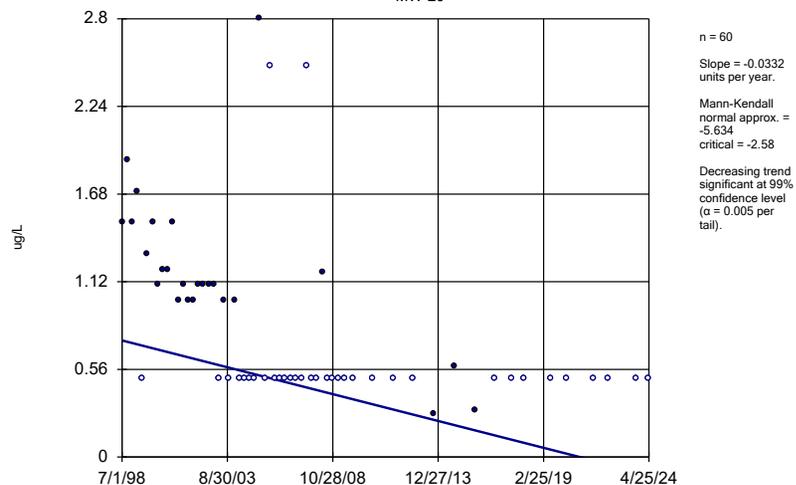
MW-13



Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

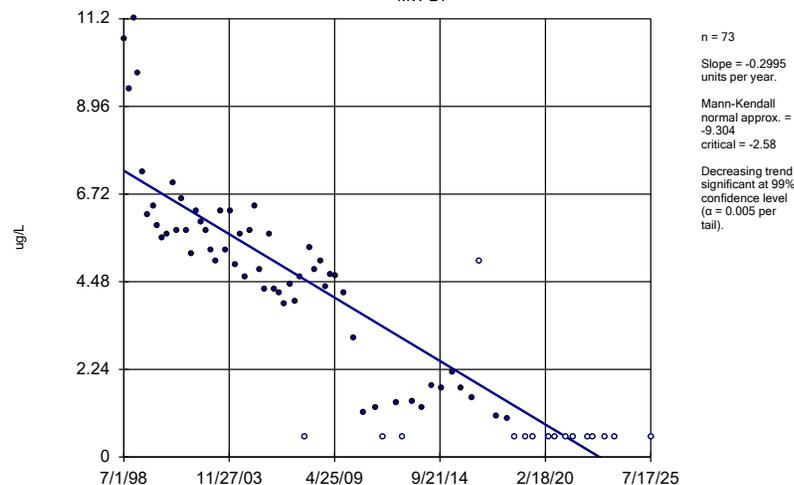
MW-20



Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

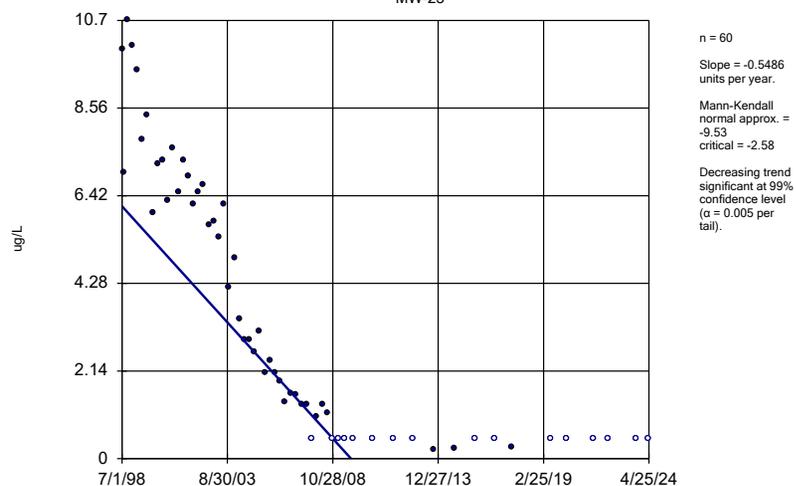
MW-21



Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

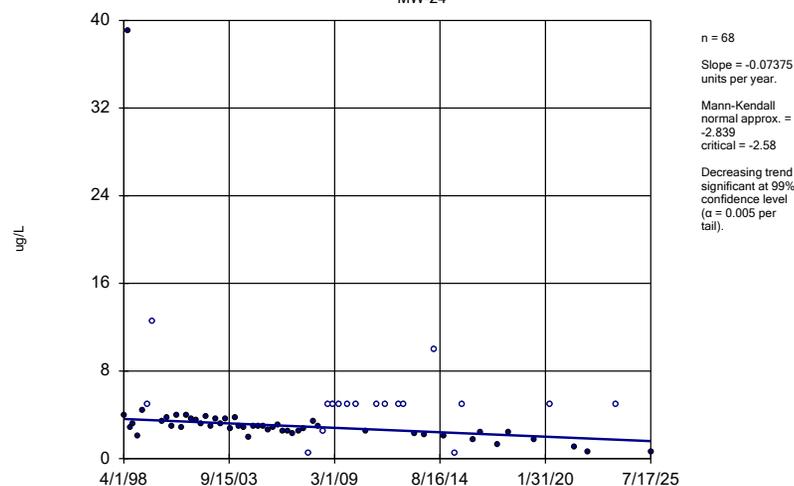
MW-23



Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

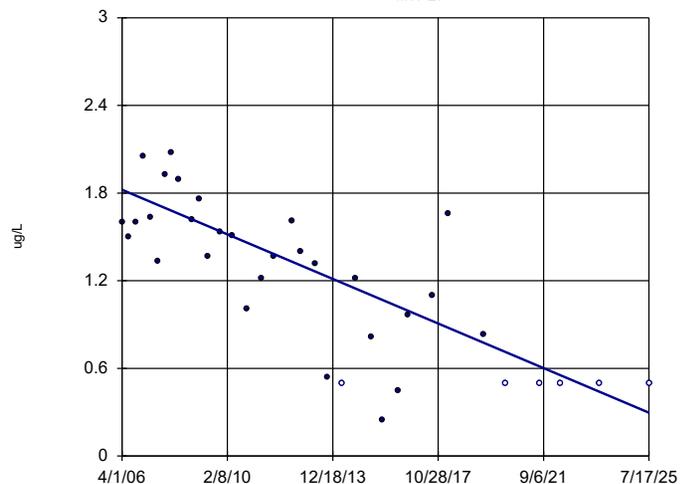
MW-24



Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-27

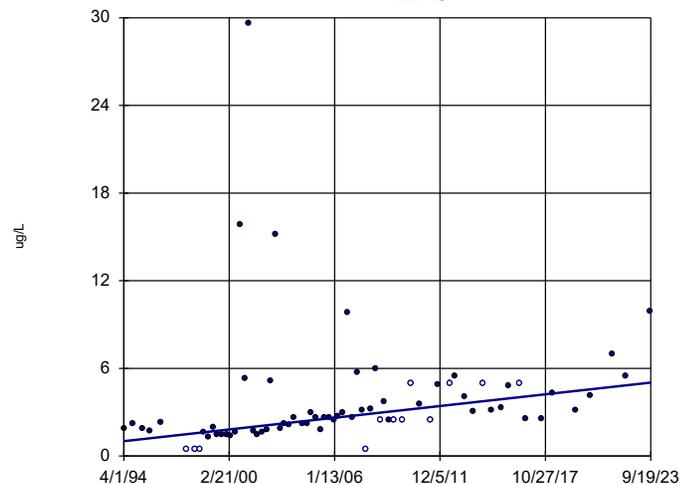


n = 35
Slope = -0.07906
units per year.
Mann-Kendall
statistic = -341
critical = -184
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Tetrachloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_Sel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-13

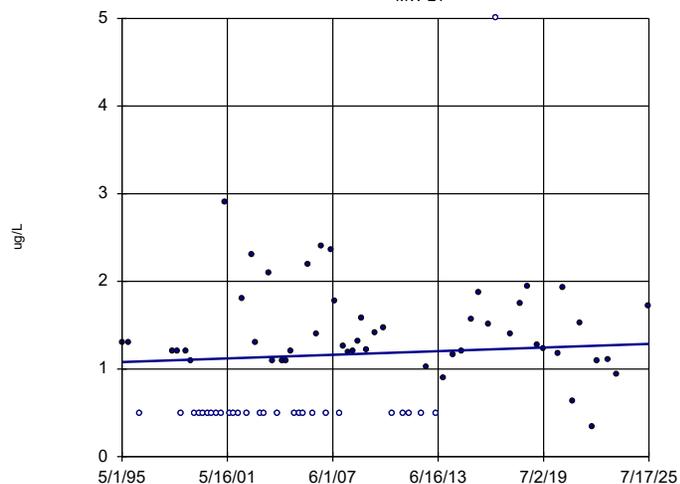


n = 72
Slope = 0.1362
units per year.
Mann-Kendall
normal approx. =
5.751
critical = 2.58
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-21

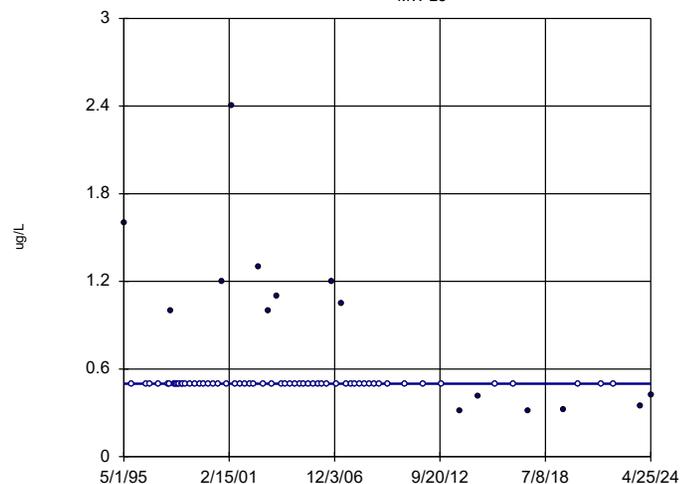


n = 77
Slope = 0.006844
units per year.
Mann-Kendall
normal approx. =
2.255
critical = 2.58
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-23

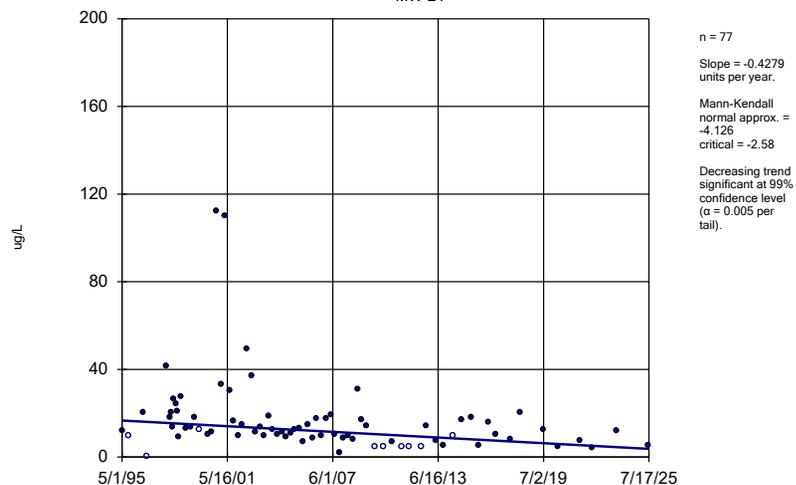


n = 73
Slope = 0
units per year.
Mann-Kendall
normal approx. =
-3.124
critical = -2.58
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

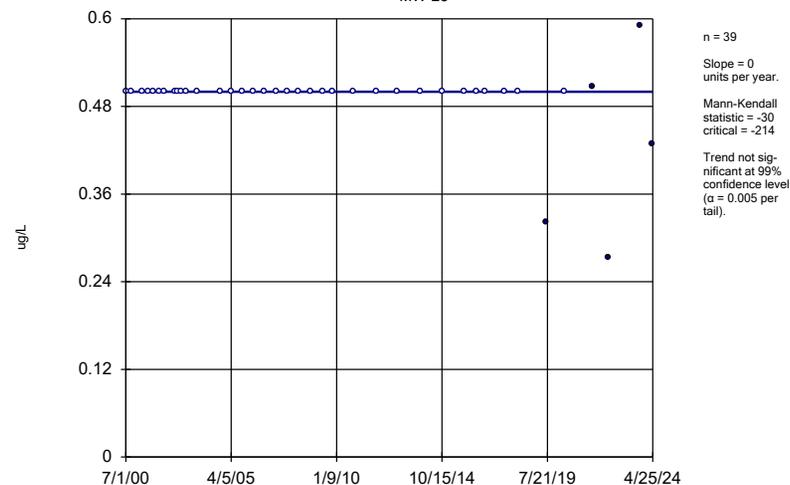
MW-24



Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

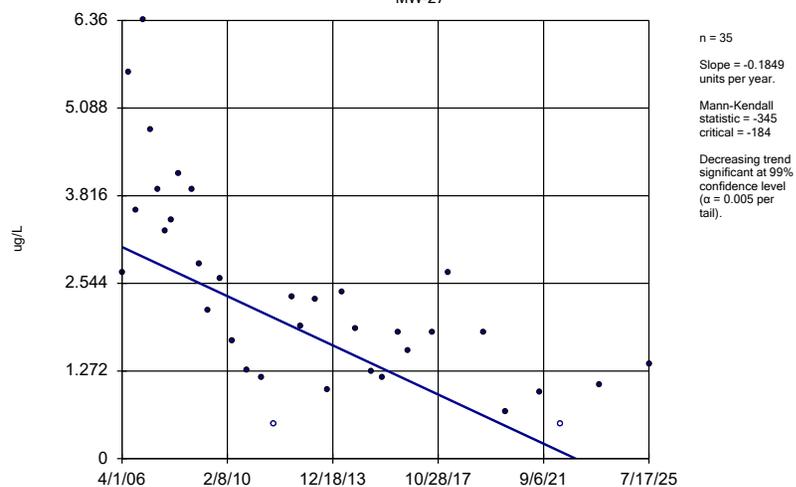
MW-25



Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

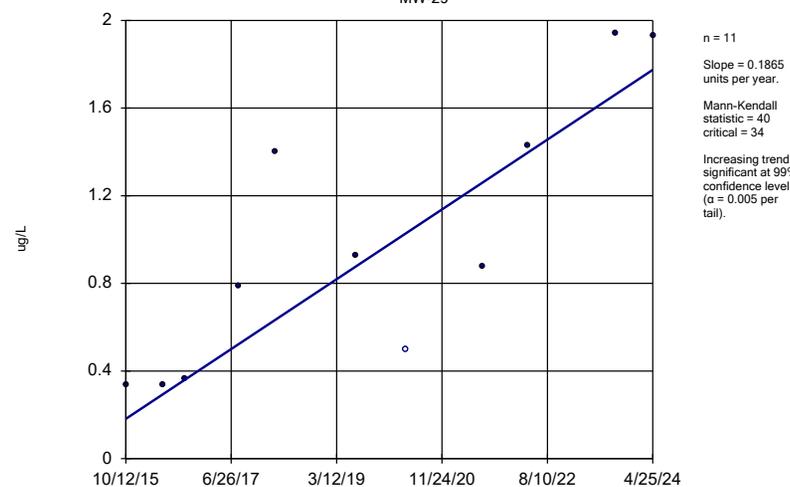
MW-27



Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

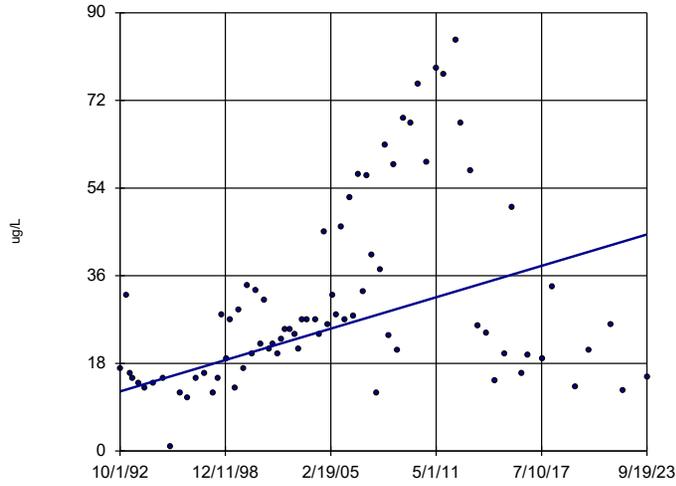
MW-29



Constituent: trans-1,2-Dichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendal
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

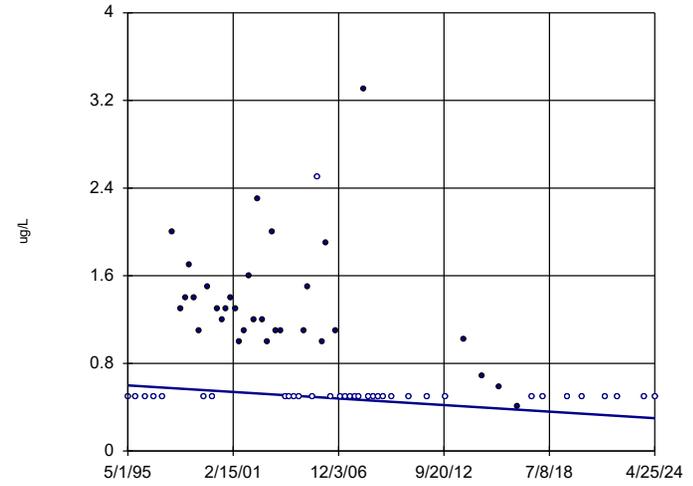
MW-13



n = 79
 Slope = 1.04 units per year.
 Mann-Kendall normal approx. = 4.027
 critical = 2.58
 Increasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Sen's Slope Estimator

MW-20



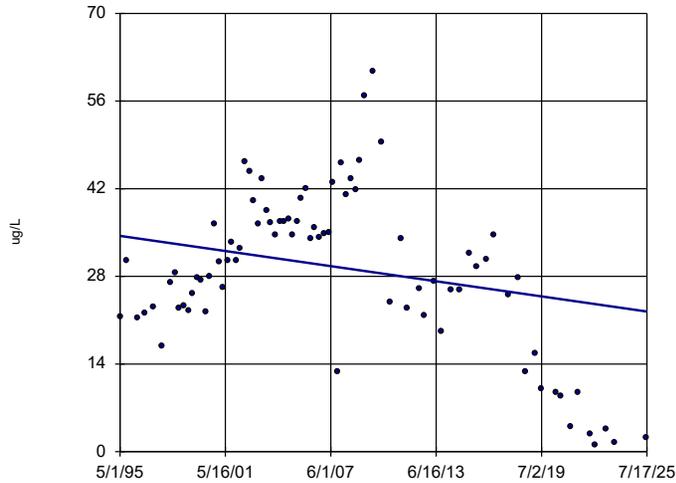
n = 67
 Slope = -0.01032 units per year.
 Mann-Kendall normal approx. = -3.706
 critical = -2.58
 Decreasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

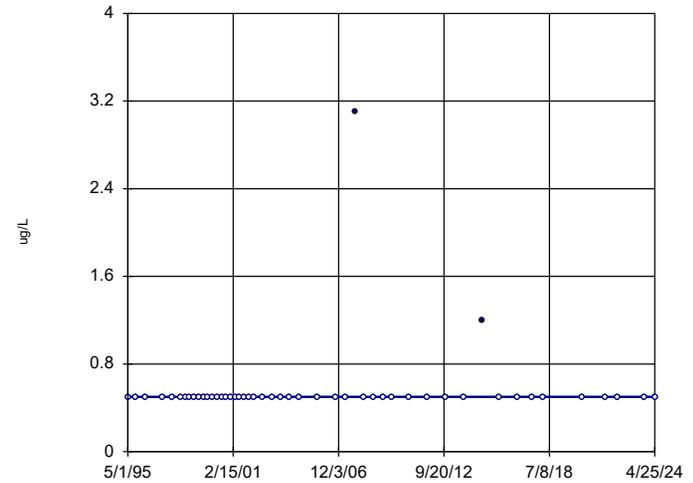
MW-21



n = 80
 Slope = -0.3999 units per year.
 Mann-Kendall normal approx. = -1.6
 critical = -2.58
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Sen's Slope Estimator

MW-22



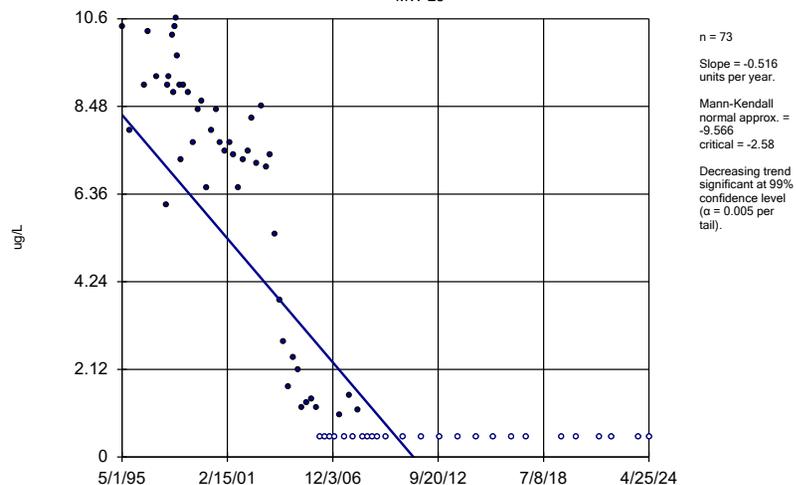
n = 49
 Slope = 0 units per year.
 Mann-Kendall normal approx. = 1.01
 critical = 2.58
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

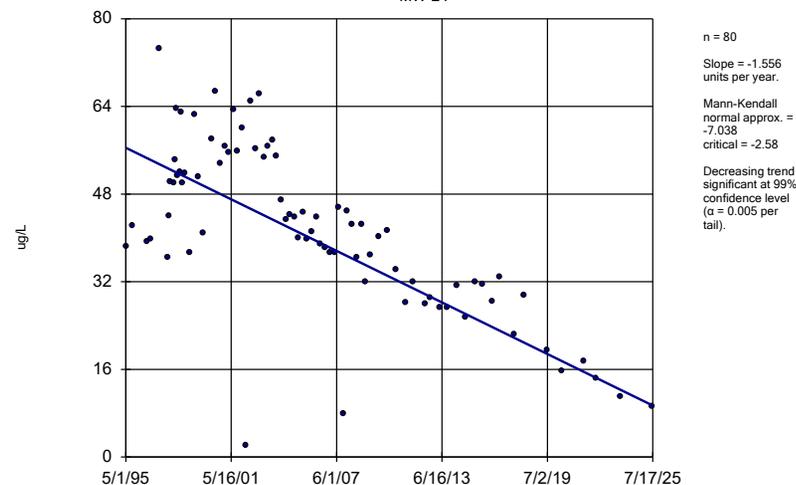
MW-23



Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

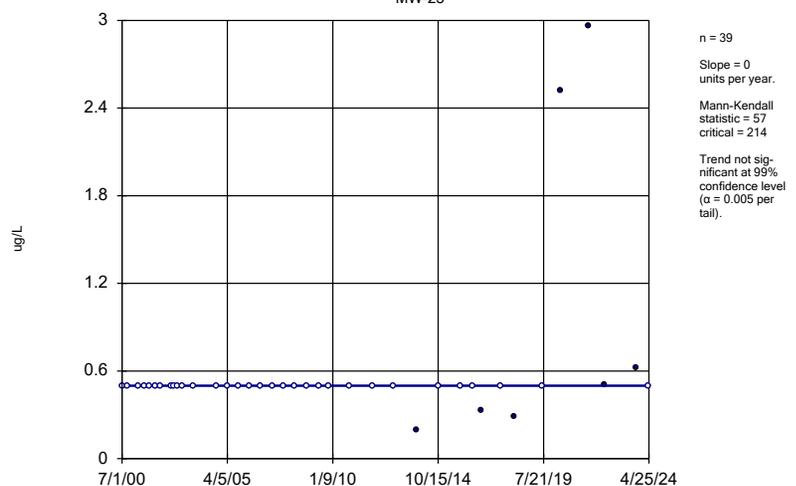
MW-24



Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

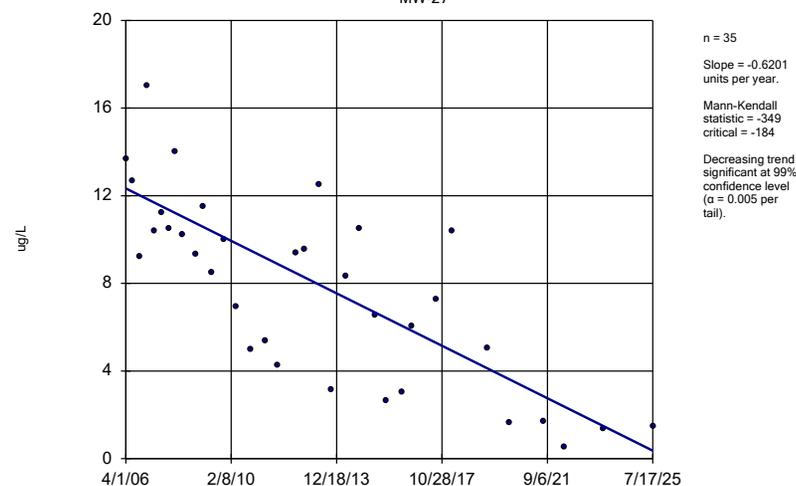
MW-25



Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

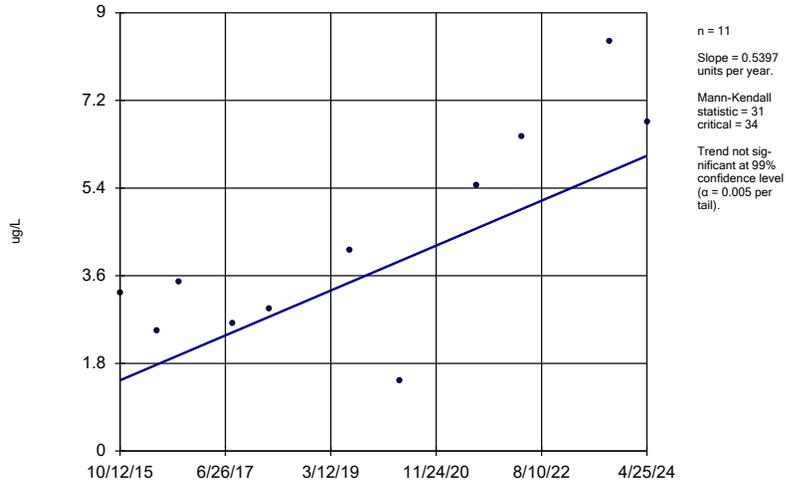
MW-27



Constituent: Trichloroethene Analysis Run 11/11/2025 12:47 PM View: 2025_SSN-Mann_Kendall_SelWel
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

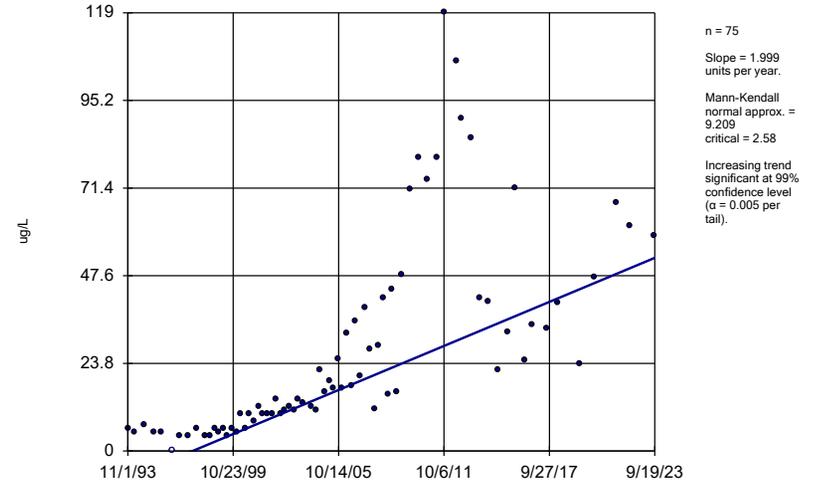
MW-29



Constituent: Trichloroethene Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

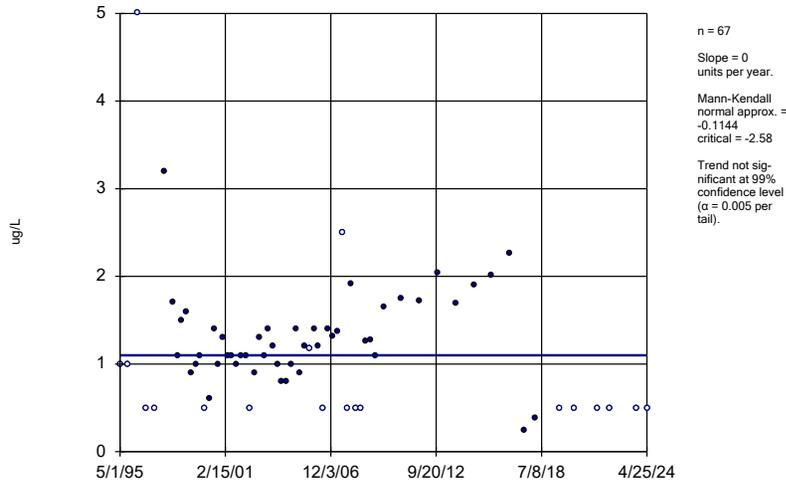
MW-13



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

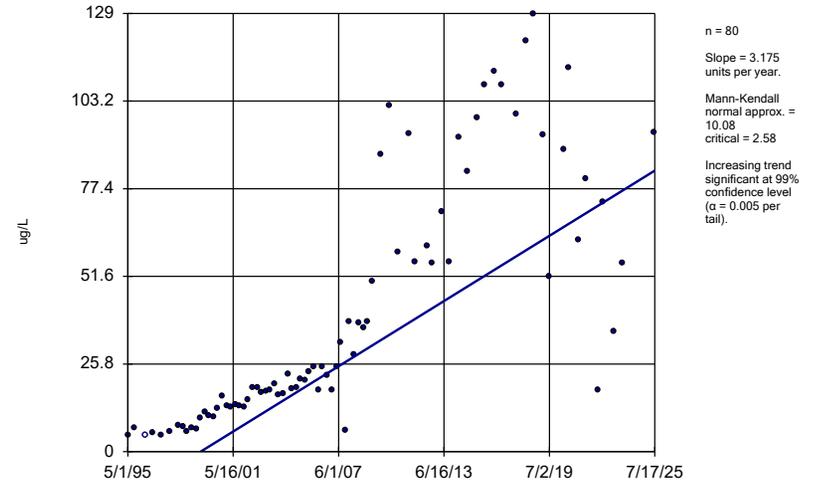
MW-20



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

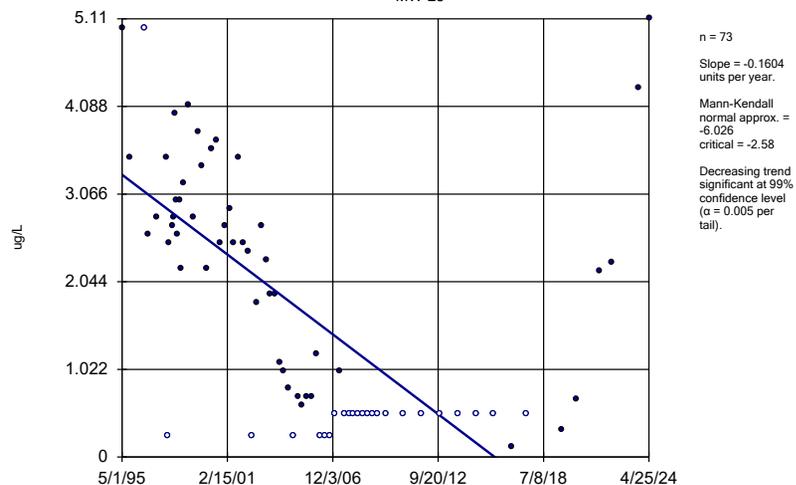
MW-21



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

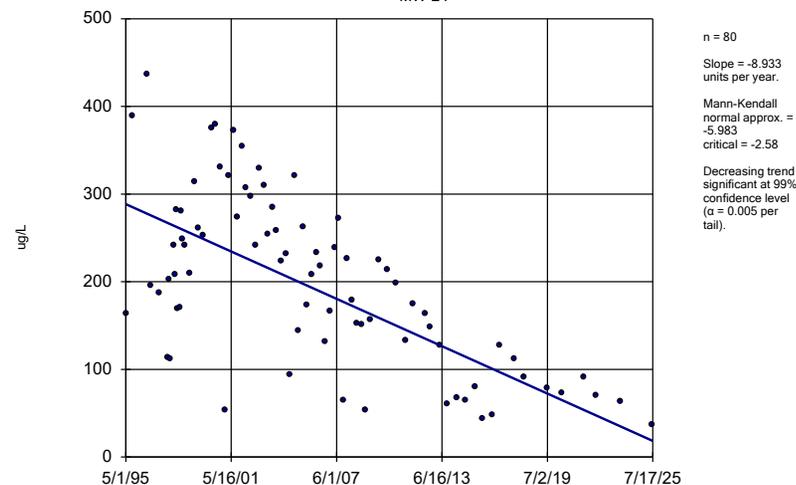
MW-23



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

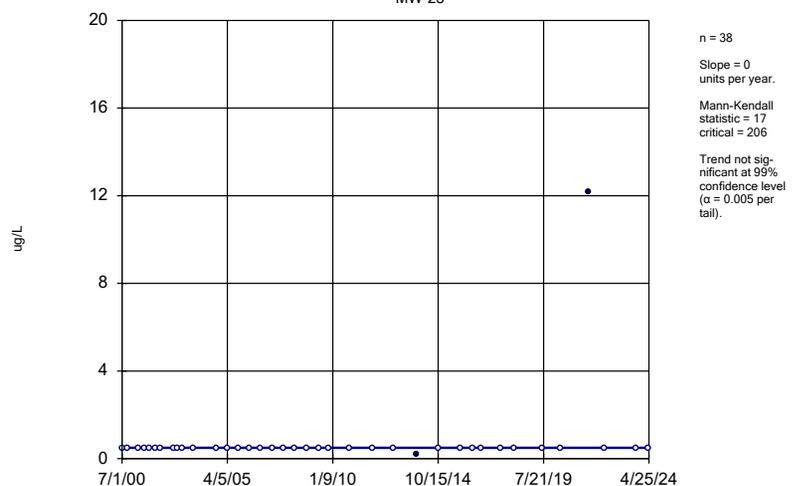
MW-24



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

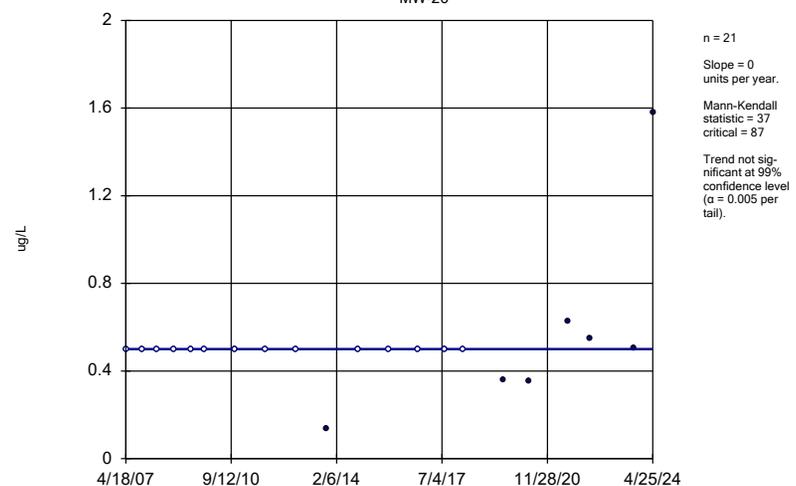
MW-25



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

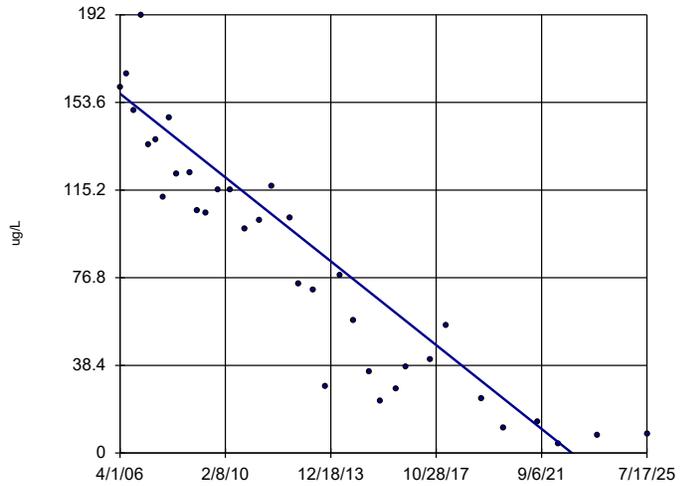
MW-26



Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-27

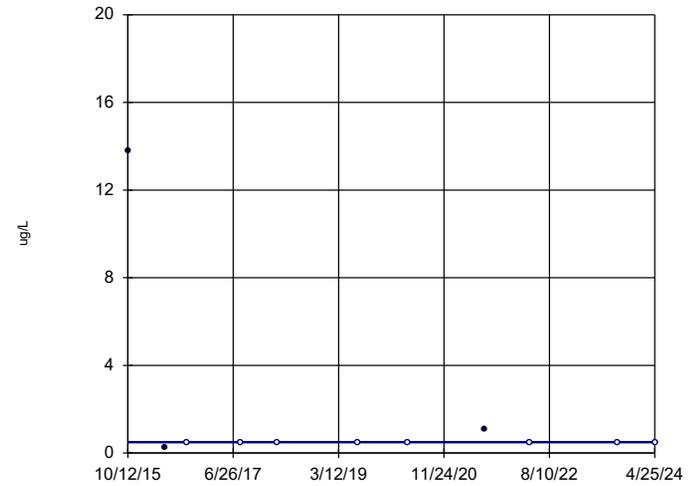


n = 35
 Slope = -9.507
 units per year.
 Mann-Kendall
 statistic = -488
 critical = -184
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-29

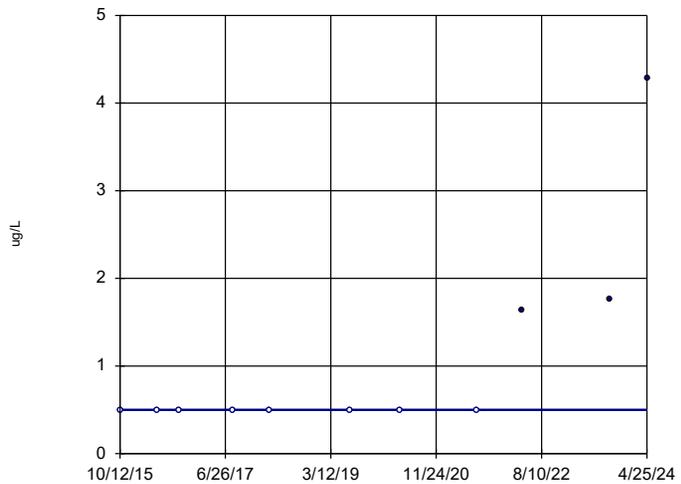


n = 11
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 1
 critical = 34
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-30

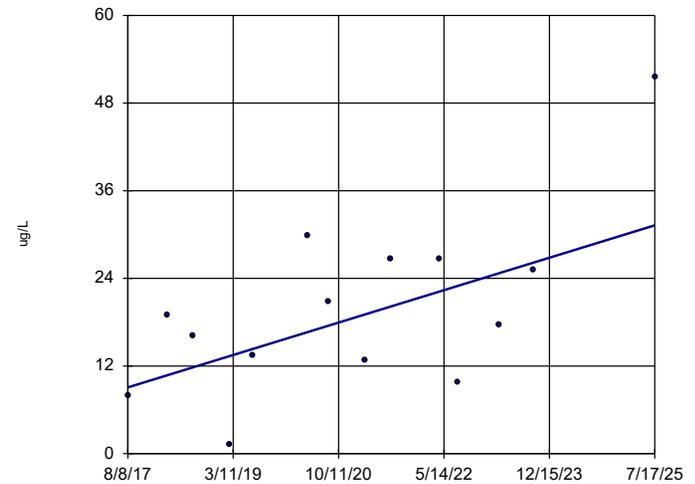


n = 11
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 27
 critical = 34
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Sen's Slope Estimator

MW-32



n = 14
 Slope = 2.793
 units per year.
 Mann-Kendall
 statistic = 30
 critical = 48
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Vinyl Chloride Analysis Run 11/11/2025 12:48 PM View: 2025_SSN-Mann_Kendall_SelWells
 Henry County SLF Client: SCS Engineers Data: HCSWC History basis flat WellsTested 2024-2025

Appendix G-2

Landfill Impact

Mann-Kendall Trending Summary Table and Graphs

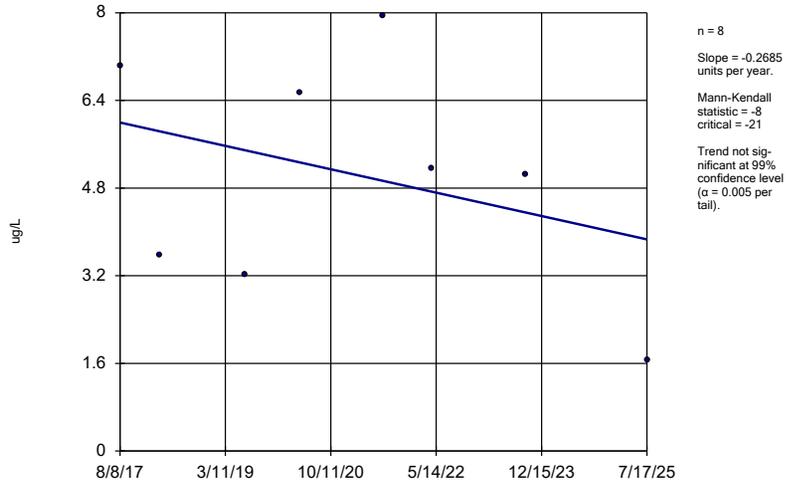
Trend Test

Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO Printed 10/30/2025, 4:24 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Alpha</u>	<u>Method</u>
1,1-Dichloroethane (ug/L)	MW-6	-0.2685	-8	-21	No	8	0	0.01	NP
1,2-Dichlorobenzene (ug/L)	MW-19	0	3	14	No	6	83.33	0.01	NP
1,2-Dichloroethane (ug/L)	MW-6	0	13	21	No	8	75	0.01	NP
1,2-Dichloroethane (ug/L)	MW-19	0	5	14	No	6	83.33	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW-6	-0.008208	-1	-21	No	8	25	0.01	NP
1,4-Dichlorobenzene (ug/L)	MW-19	0.8966	3	14	No	6	16.67	0.01	NP
2-Butanone (ug/L)	MW-19	0	1	14	No	6	83.33	0.01	NP
Acetone (ug/L)	MW-6	0	-1	-21	No	8	75	0.01	NP
Acetone (ug/L)	MW-19	0	0	14	No	6	33.33	0.01	NP
Arsenic (mg/L)	MW-6	0.0003068	19	18	Yes	7	0	0.01	NP
Arsenic (mg/L)	MW-19	-0.00005911	-1	-14	No	6	0	0.01	NP
Barium (mg/L)	MW-6	0.006067	5	18	No	7	0	0.01	NP
Barium (mg/L)	MW-19	-0.005337	-5	-14	No	6	0	0.01	NP
Benzene (ug/L)	MW-6	0.005907	0	21	No	8	12.5	0.01	NP
Benzene (ug/L)	MW-19	-0.01695	-4	-21	No	8	0	0.01	NP
Bromomethane (ug/L)	MW-6	0	13	21	No	8	75	0.01	NP
Cadmium (mg/L)	MW-6	-2.4e-7	-4	-18	No	7	57.14	0.01	NP
Cadmium (mg/L)	MW-19	0	0	14	No	6	66.67	0.01	NP
Carbon Disulfide (ug/L)	MW-19	0.04618	7	14	No	6	66.67	0.01	NP
Chlorobenzene (ug/L)	MW-19	2.771	3	14	No	6	0	0.01	NP
Chloroethane (ug/L)	MW-6	0.01205	6	21	No	8	50	0.01	NP
Chromium (mg/L)	MW-6	-0.00000731	-2	-18	No	7	28.57	0.01	NP
Chromium (mg/L)	MW-19	0	-1	-14	No	6	66.67	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-6	-0.3135	-8	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-19	-0.108	-22	-21	Yes	8	0	0.01	NP
Cobalt (mg/L)	MW-6	0.0008719	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-19	-0.0005347	-5	-14	No	6	0	0.01	NP
Copper (mg/L)	MW-19	-0.0003143	-4	-14	No	6	50	0.01	NP
Methylene Chloride (ug/L)	MW-19	0	5	21	No	8	87.5	0.01	NP
Nickel (mg/L)	MW-6	-0.007798	-8	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-19	0.006882	7	14	No	6	0	0.01	NP
Tetrachloroethene (ug/L)	MW-6	0.02477	4	21	No	8	0	0.01	NP
Thallium (mg/L)	MW-6	0	6	18	No	7	85.71	0.01	NP
Thallium (mg/L)	MW-19	0.00004744	9	14	No	6	66.67	0.01	NP
Toluene (ug/L)	MW-19	0.007842	4	14	No	6	50	0.01	NP
Trichloroethene (ug/L)	MW-6	0.2364	4	21	No	8	0	0.01	NP
Vanadium (mg/L)	MW-19	0.0002225	6	14	No	6	50	0.01	NP
Vinyl Chloride (ug/L)	MW-6	0	6	21	No	8	62.5	0.01	NP
Xylenes, total (ug/L)	MW-19	0.2516	7	14	No	6	66.67	0.01	NP
Zinc (mg/L)	MW-6	0.001901	8	18	No	7	0	0.01	NP
Zinc (mg/L)	MW-19	0.02758	8	14	No	6	50	0.01	NP

Sen's Slope Estimator

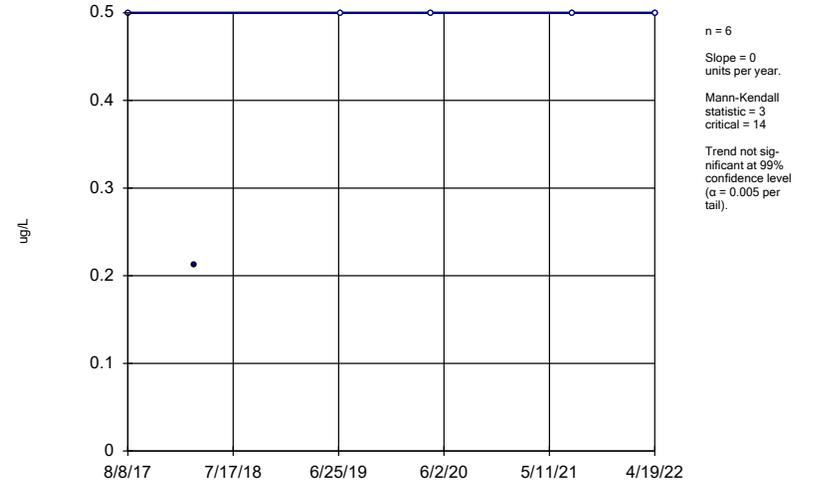
MW-6



Constituent: 1,1-Dichloroethane Analysis Run 10/30/2025 4:21 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

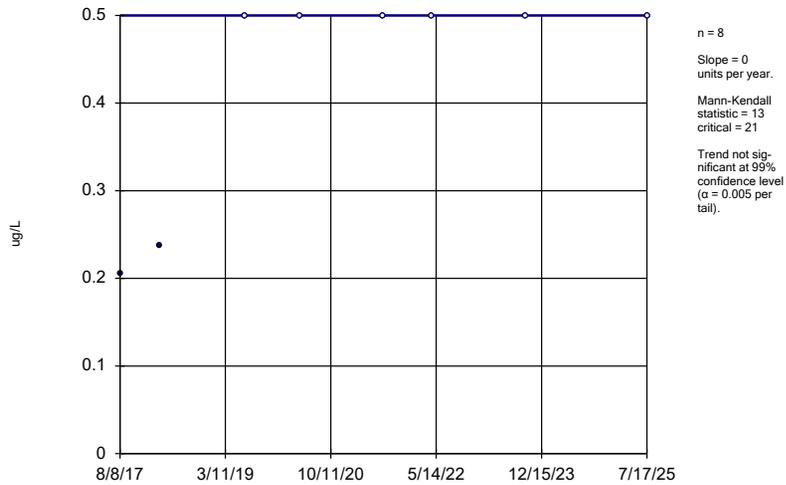
MW-19



Constituent: 1,2-Dichlorobenzene Analysis Run 10/30/2025 4:21 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

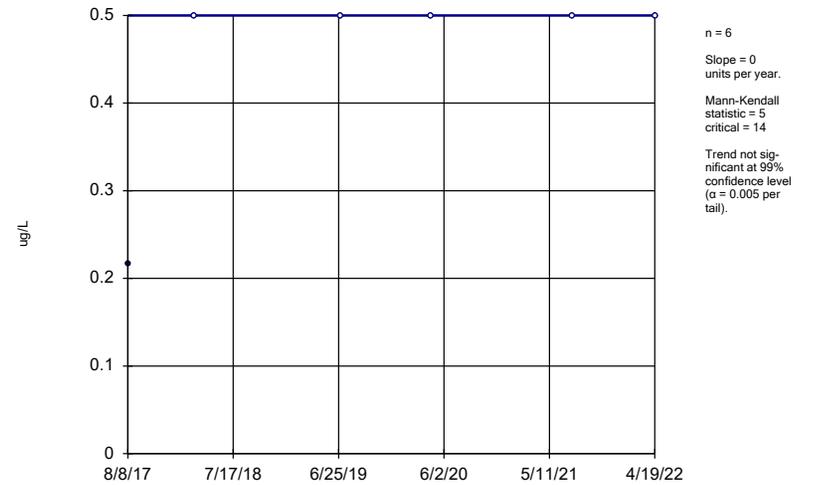
MW-6



Constituent: 1,2-Dichloroethane Analysis Run 10/30/2025 4:21 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

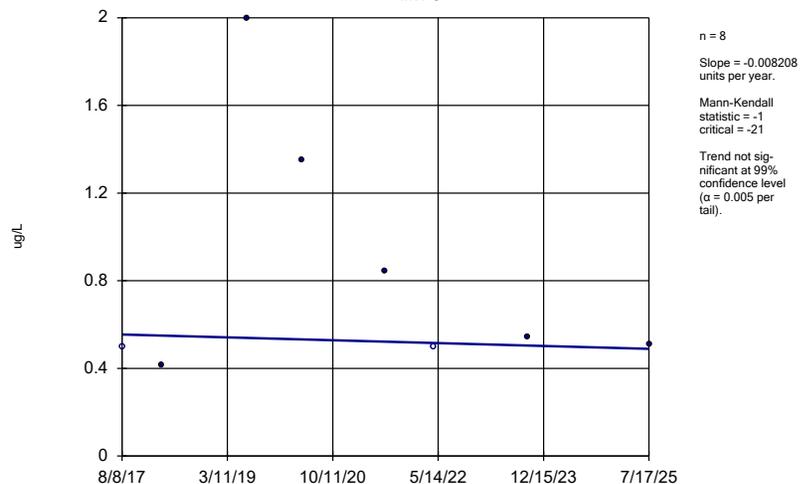
MW-19



Constituent: 1,2-Dichloroethane Analysis Run 10/30/2025 4:21 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

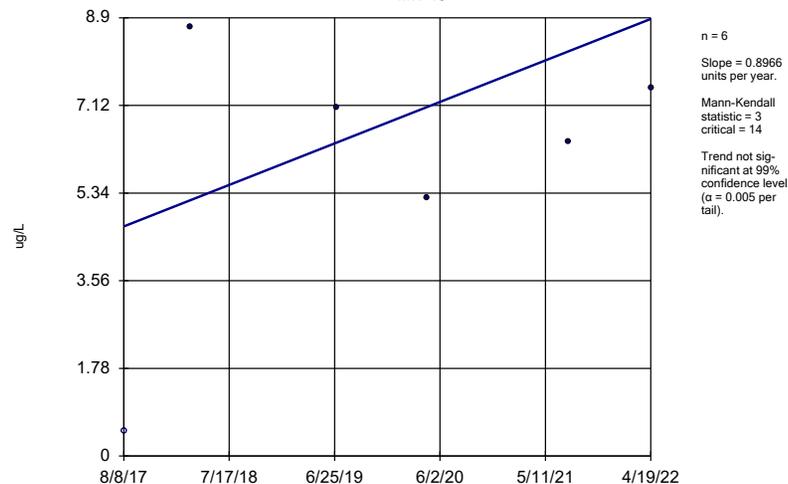
MW-6



Constituent: 1,4-Dichlorobenzene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

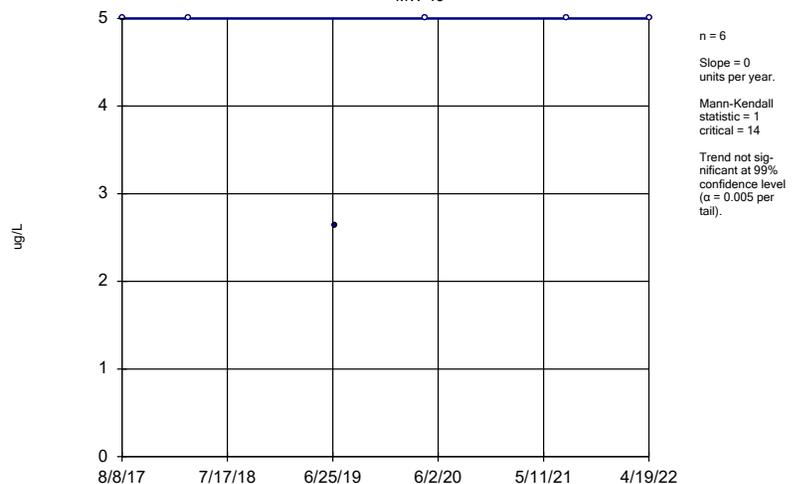
MW-19



Constituent: 1,4-Dichlorobenzene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

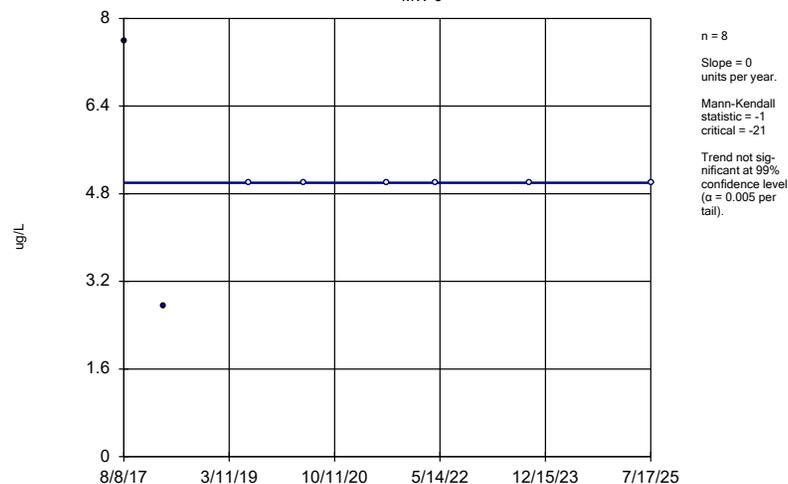
MW-19



Constituent: 2-Butanone Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

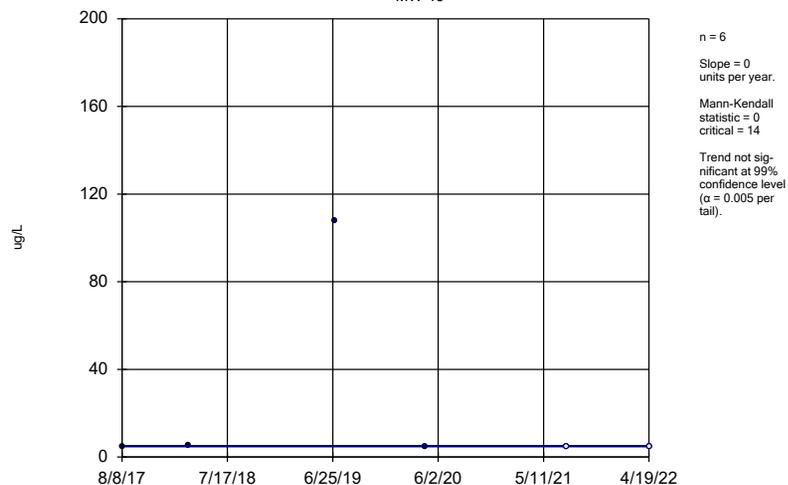
MW-6



Constituent: Acetone Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

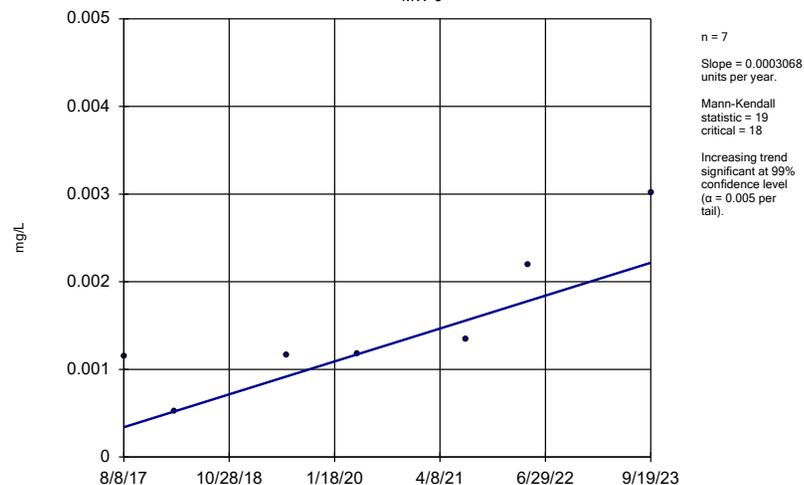
MW-19



Constituent: Acetone Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

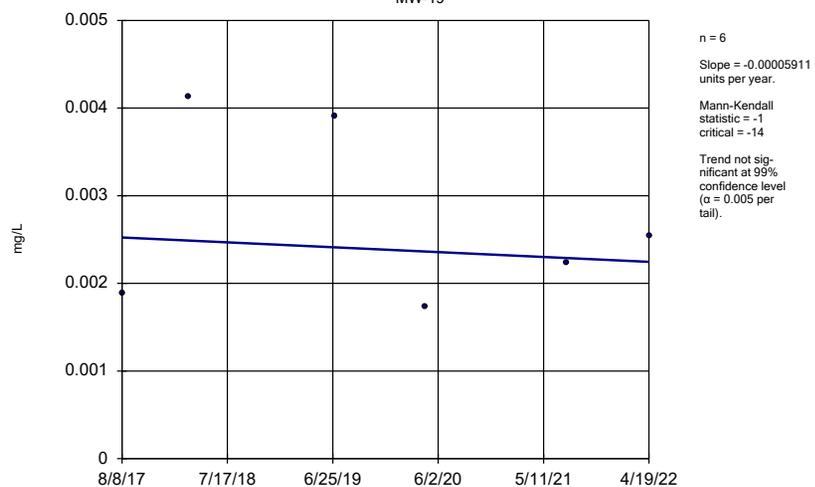
MW-6



Constituent: Arsenic Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

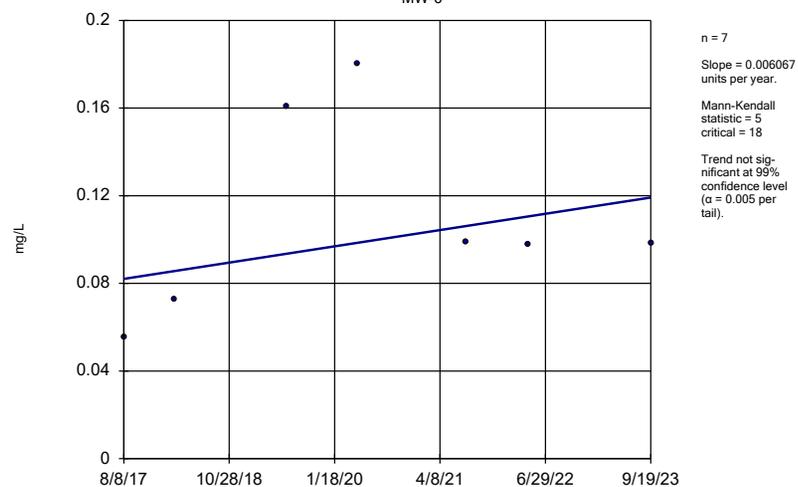
MW-19



Constituent: Arsenic Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

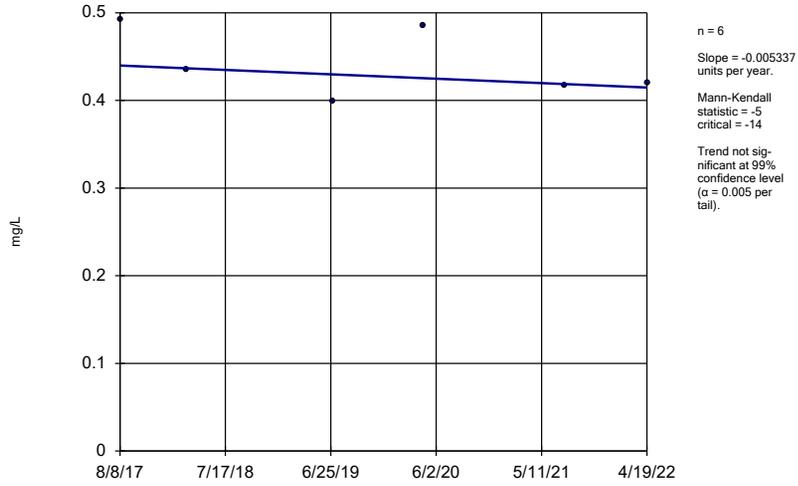
MW-6



Constituent: Barium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

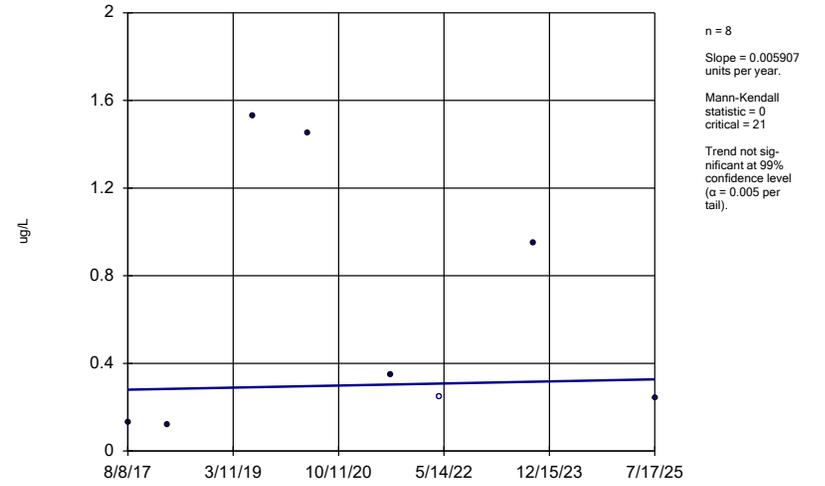
MW-19



Constituent: Barium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

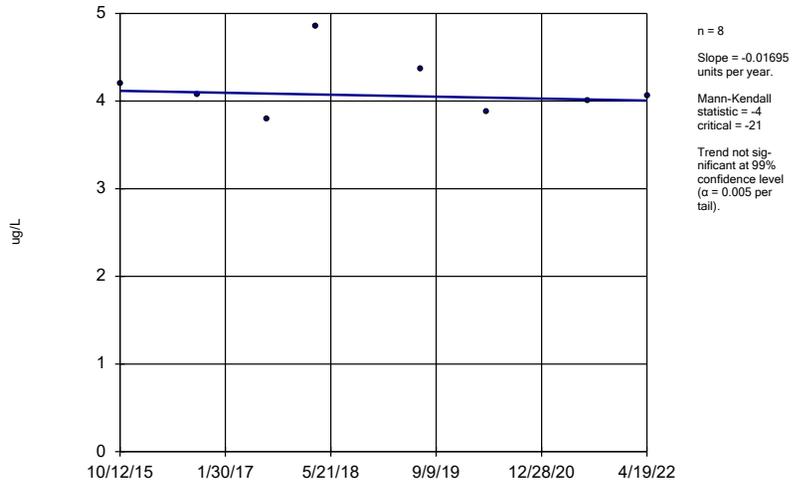
MW-6



Constituent: Benzene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

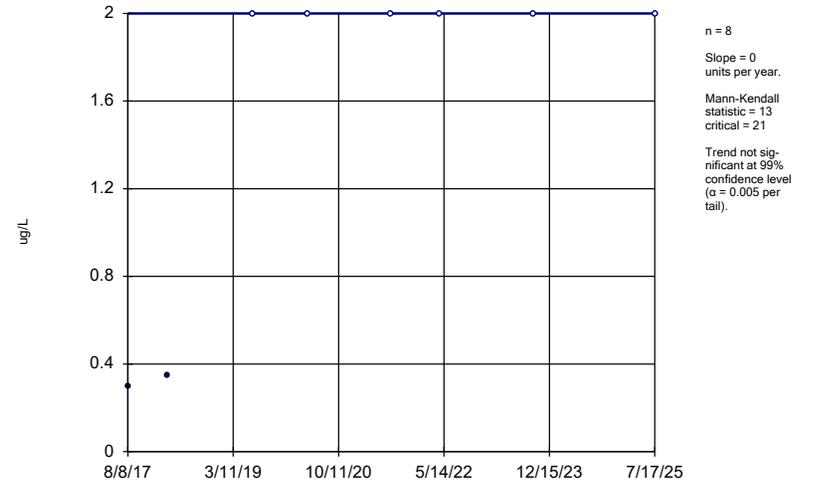
MW-19



Constituent: Benzene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

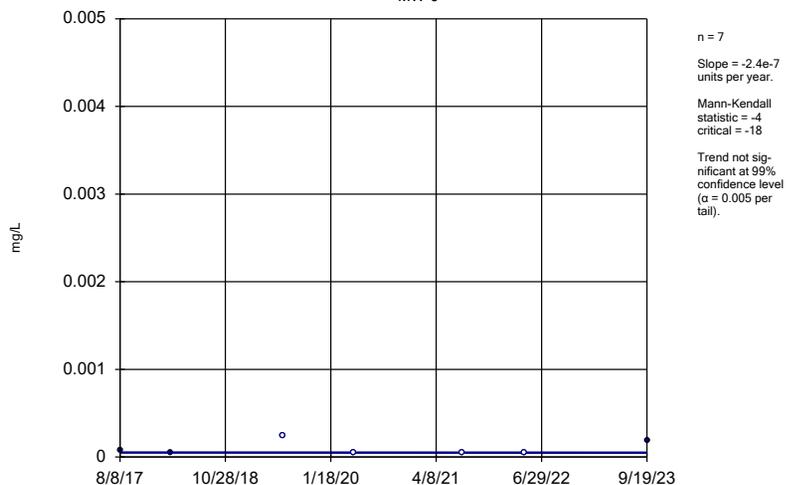
MW-6



Constituent: Bromomethane Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

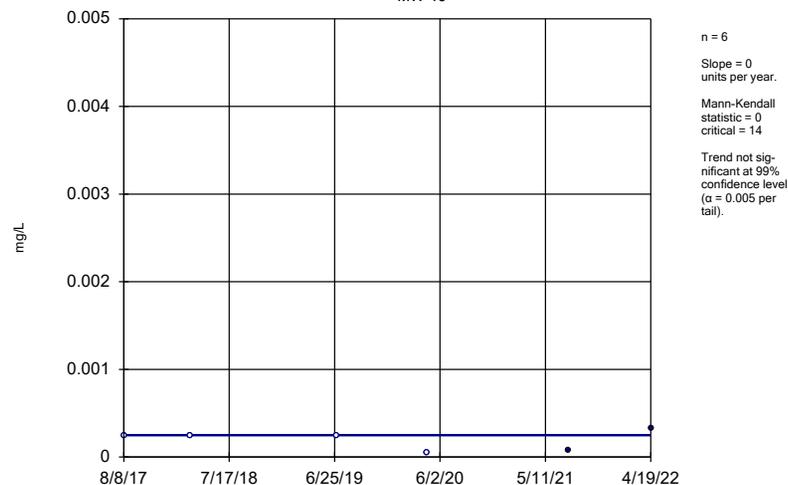
MW-6



Constituent: Cadmium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

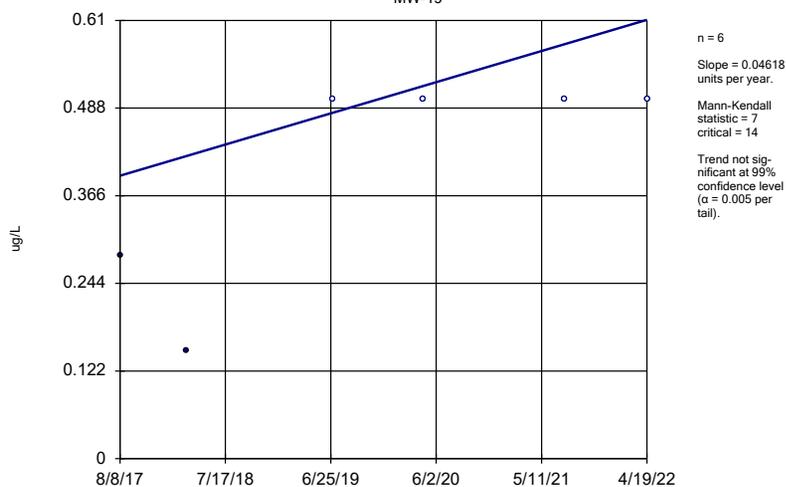
MW-19



Constituent: Cadmium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

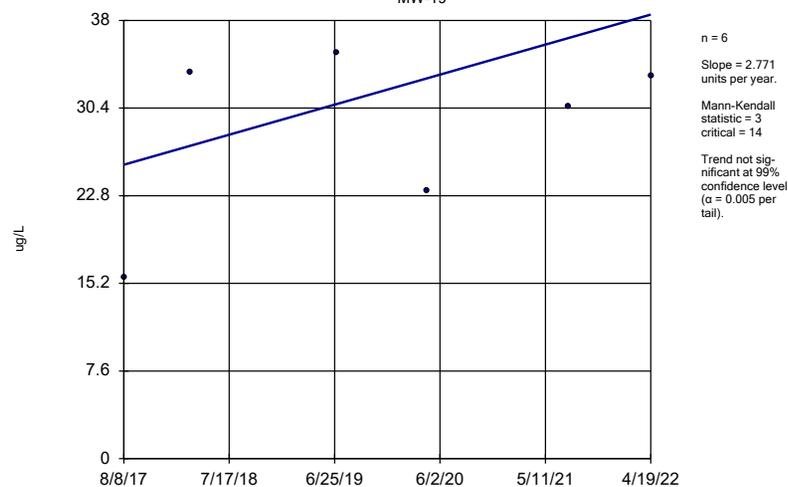
MW-19



Constituent: Carbon Disulfide Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

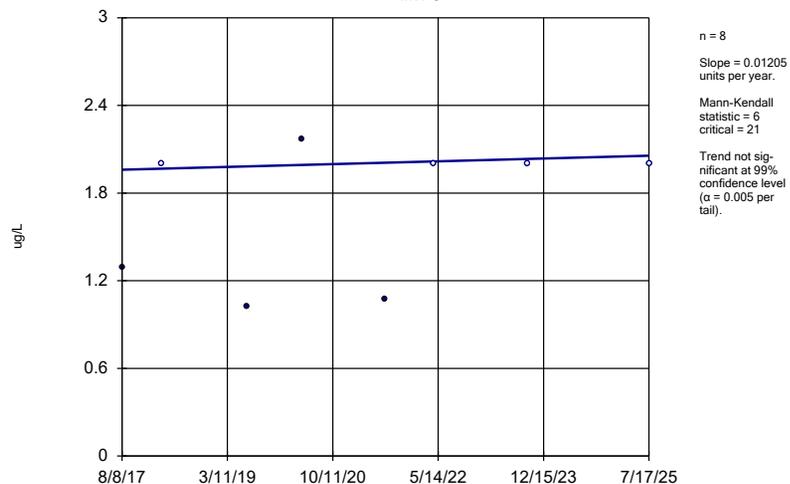
MW-19



Constituent: Chlorobenzene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

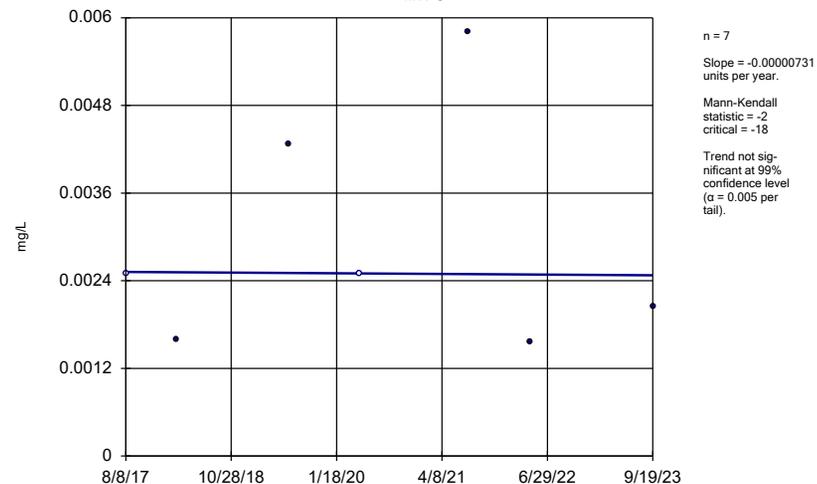
MW-6



Constituent: Chloroethane Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

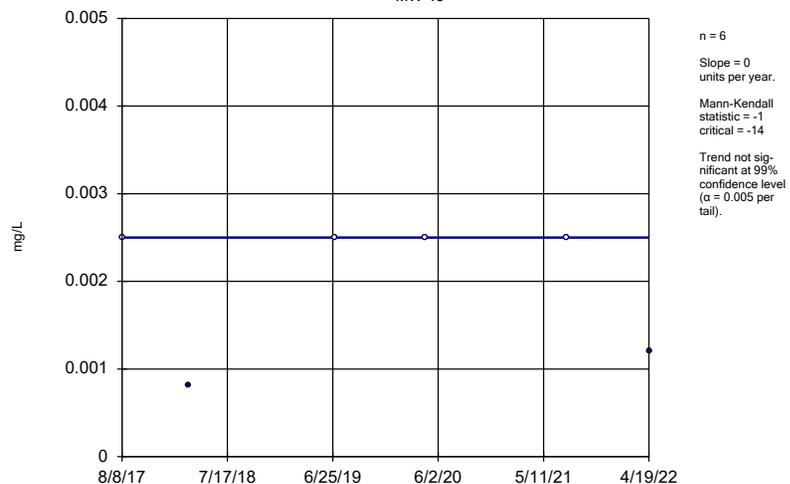
MW-6



Constituent: Chromium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

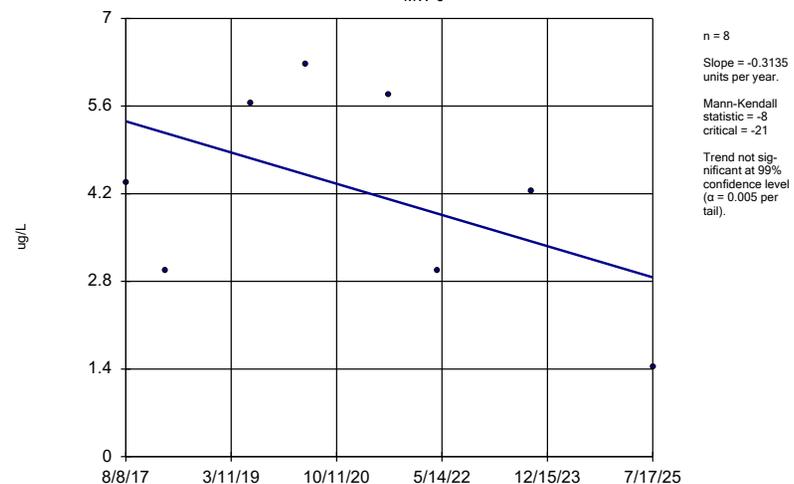
MW-19



Constituent: Chromium Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

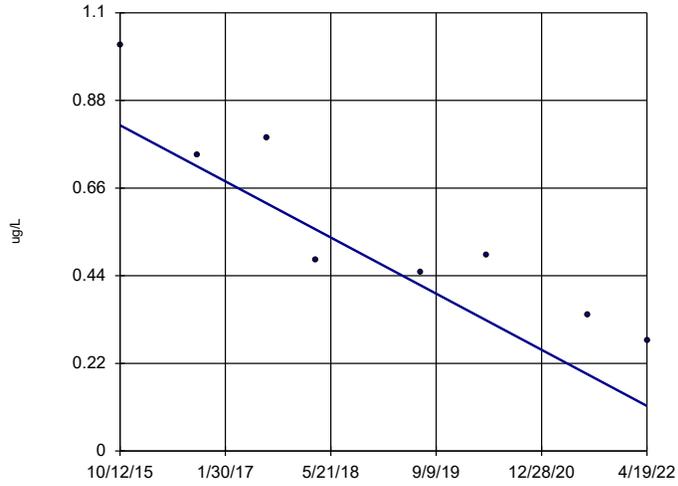
MW-6



Constituent: cis-1,2-Dichloroethene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

MW-19

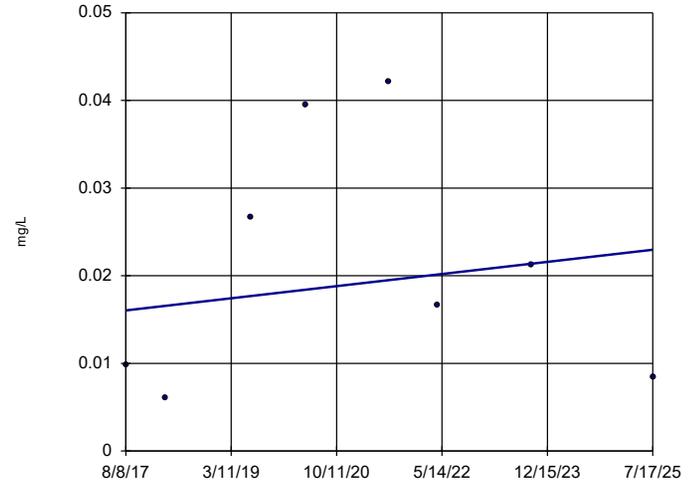


n = 8
 Slope = -0.108 units per year.
 Mann-Kendall statistic = -22
 critical = -21
 Decreasing trend significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
 Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

MW-6

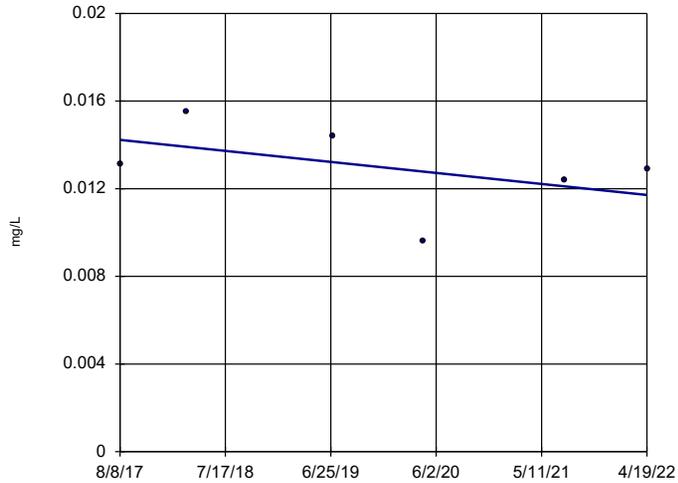


n = 8
 Slope = 0.0008719 units per year.
 Mann-Kendall statistic = 2
 critical = 21
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Cobalt Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
 Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

MW-19

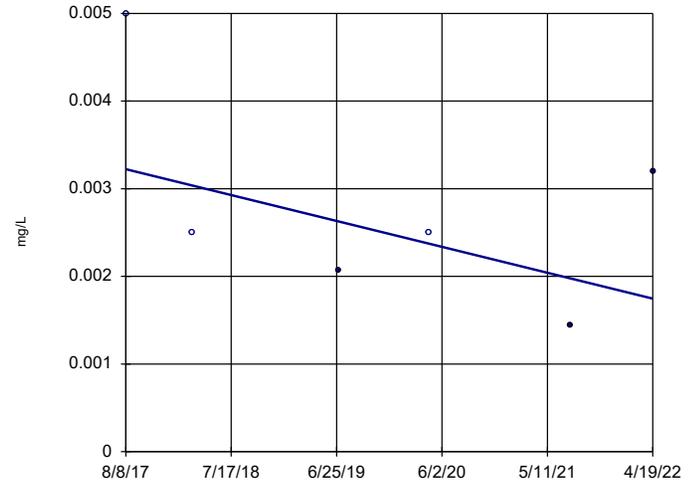


n = 6
 Slope = -0.0005347 units per year.
 Mann-Kendall statistic = -5
 critical = -14
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Cobalt Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
 Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

MW-19

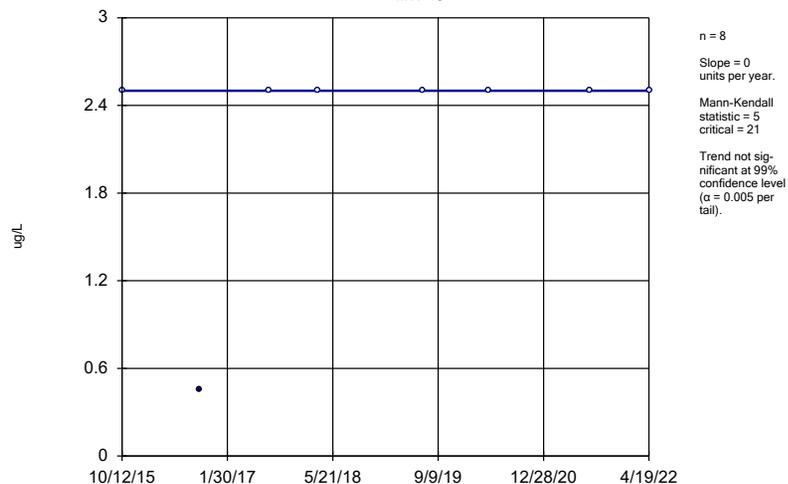


n = 6
 Slope = -0.0003143 units per year.
 Mann-Kendall statistic = -4
 critical = -14
 Trend not significant at 99% confidence level ($\alpha = 0.005$ per tail).

Constituent: Copper Analysis Run 10/30/2025 4:22 PM View: 2025_SSN-Mann_Kendall
 Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

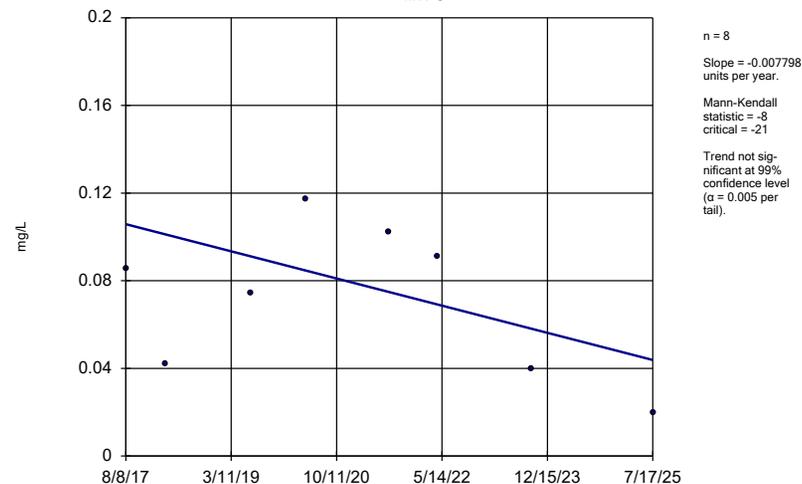
MW-19



Constituent: Methylene Chloride Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

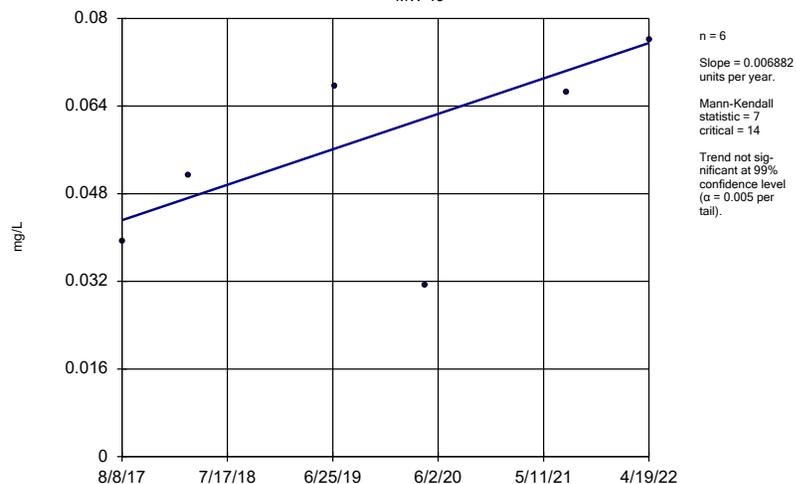
MW-6



Constituent: Nickel Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

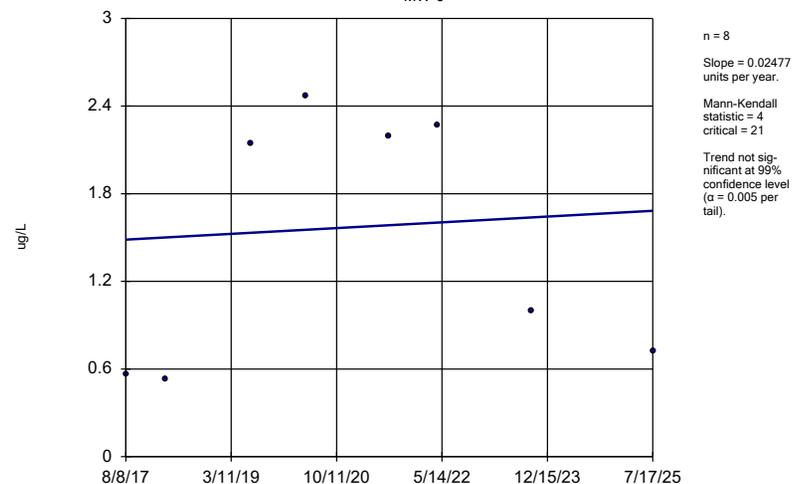
MW-19



Constituent: Nickel Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

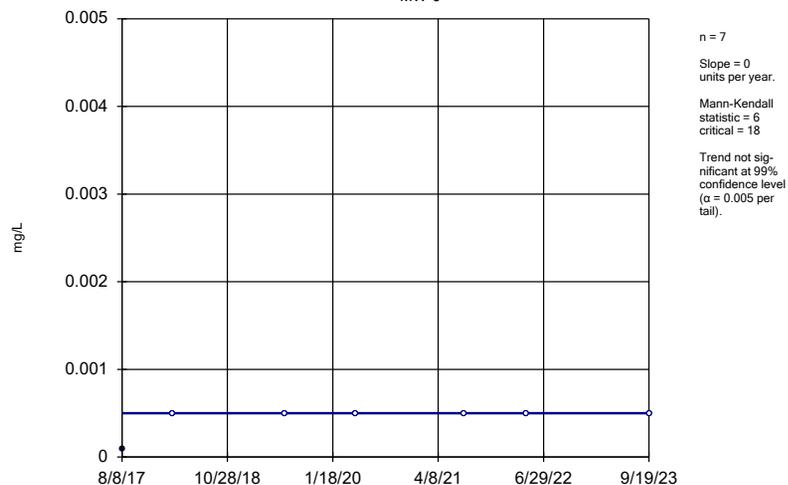
MW-6



Constituent: Tetrachloroethene Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

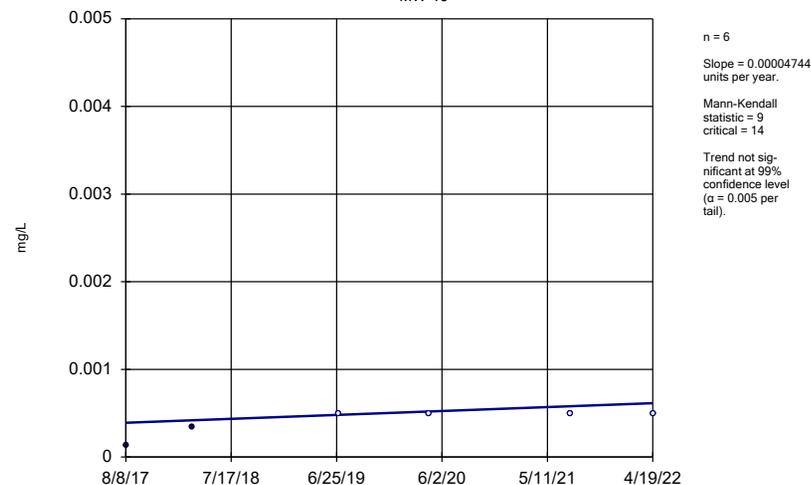
MW-6



Constituent: Thallium Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

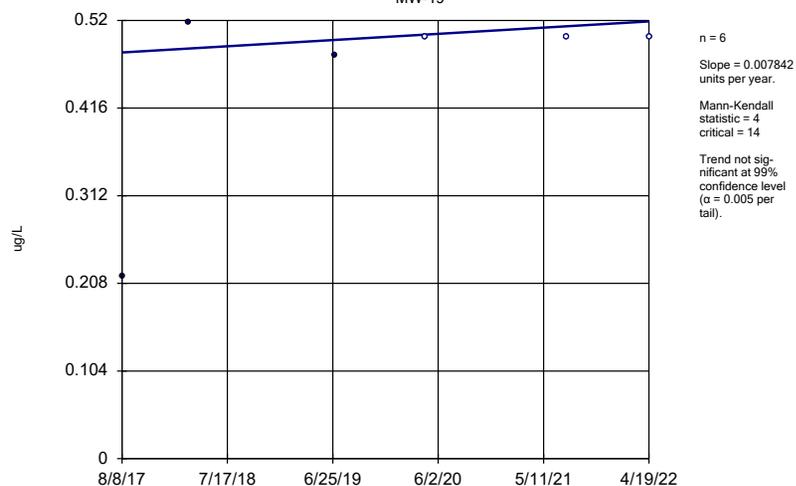
MW-19



Constituent: Thallium Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

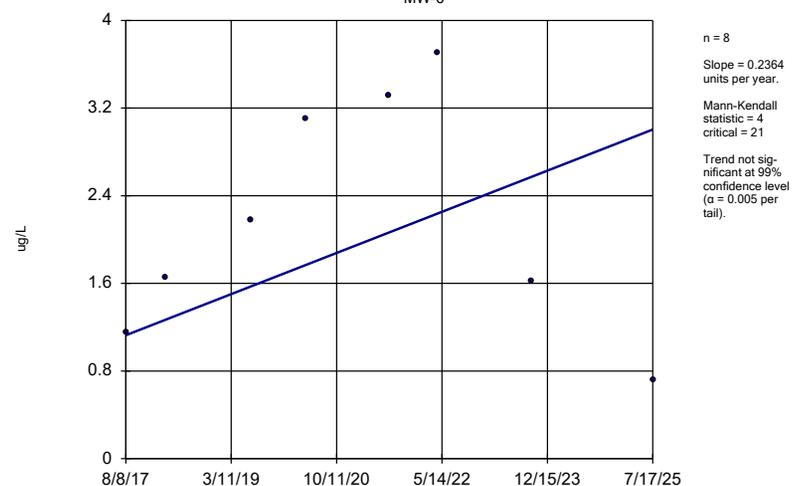
MW-19



Constituent: Toluene Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

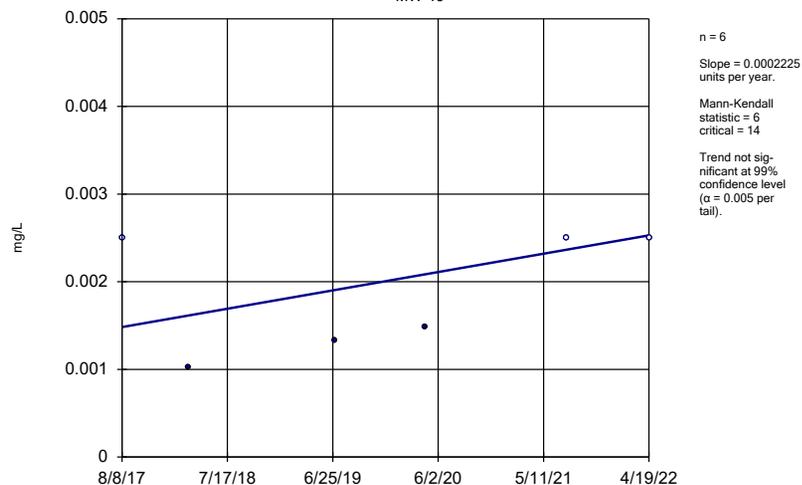
MW-6



Constituent: Trichloroethene Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

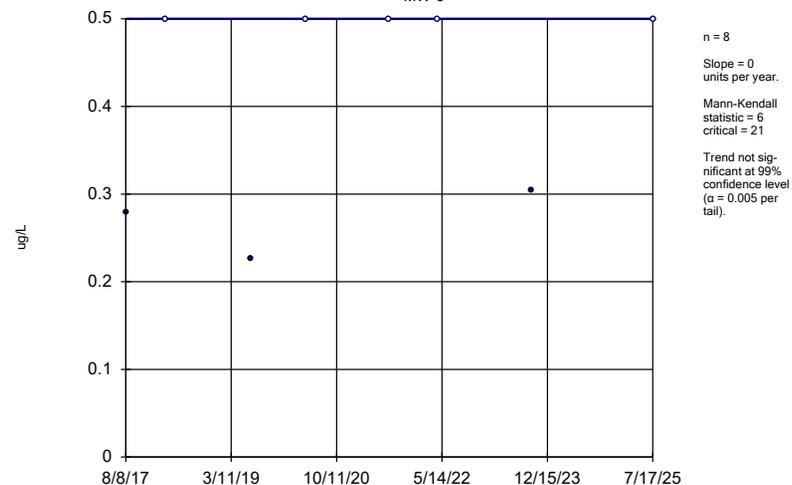
MW-19



Constituent: Vanadium Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

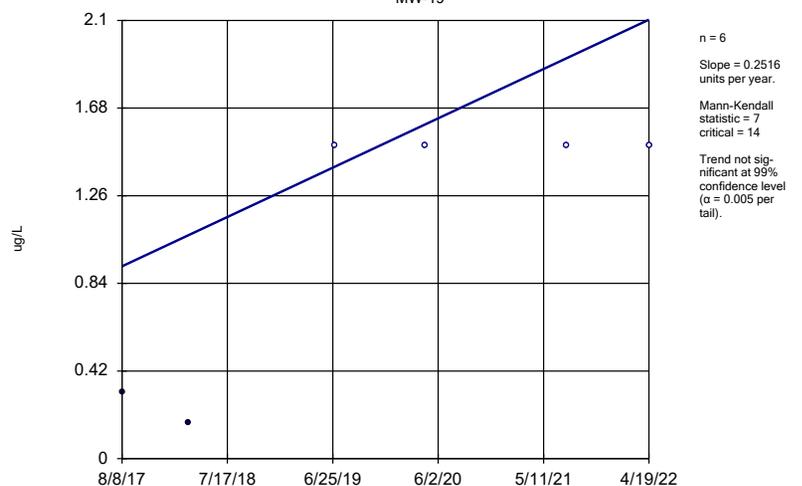
MW-6



Constituent: Vinyl Chloride Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

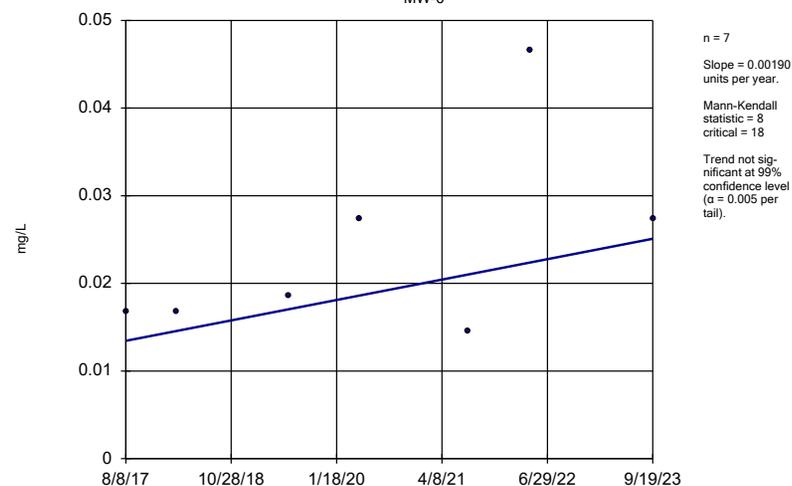
MW-19



Constituent: Xylenes, total Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

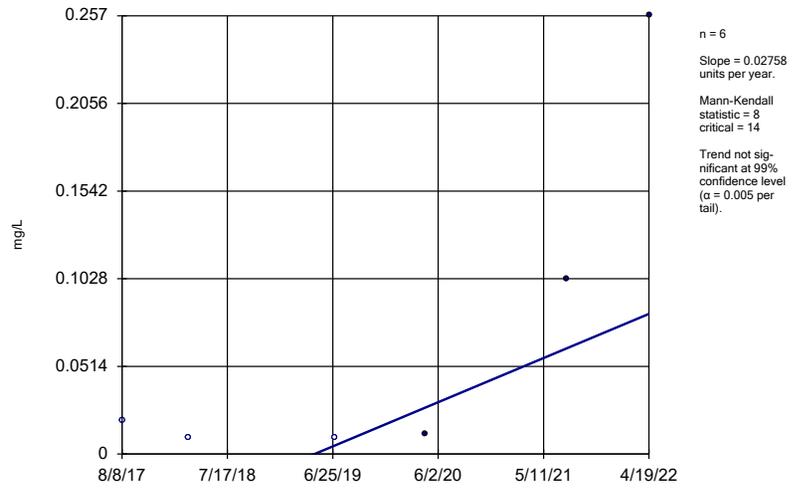
MW-6



Constituent: Zinc Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Sen's Slope Estimator

MW-19



Constituent: Zinc Analysis Run 10/30/2025 4:23 PM View: 2025_SSN-Mann_Kendall
Henry County SLF Client: SCS Engineers Data: Henry_AM_2025_SSN_RSTUDIO

Appendix H

2024-2025 Landfill Gas Annual Report

**Gas Monitoring Summary
2025 Gas Monitoring Report
Henry County Sanitary Landfill
Permit No. 44-SDP-01-75C**

Monitoring Points				Methane Results (% LEL)													
Point #	Name	Type	Description	2/27/2024	S	4/24/2024	S	9/5/2024	S	12/18/2024	S	3/11/2025	S	5/7/2025	S	7/16/2025	S
1	LFGW-1	Gas Probe	West of fill area	0	N	0	N	NM*		NM*		NM*		0	N	0	N
2	LFGW-2	Gas Probe	North of Blockbuster Garage	0**	N	0	Y	NM*		NM*		NM*		0	NA	Not located***	NA
3	LFGW-3	Gas Probe	South of fill area	0	N	0	N	NM*		NM*		NM*		0	N	0	N
4	LFGW-4	Gas Probe	East of fill area	0	N	32	N	NM*		NM*		NM*		0	N	29	N
5	Office	Indoor	Interior of office (closet)	1		1		43*		2		33		13		11	
	Void space	Indoor	Void space below closet next to office kitchen	NM		NM		NM		23		>99 (meter limit)		77		15	
6	Garage	Indoor	Interior of garage	0		0		0		0		0		0		0	

S - Was screen submerged, yes or no or blank is non-applicable

* - NM indicates not measured. Monitoring points #1 - #4 are measured semi-annually.

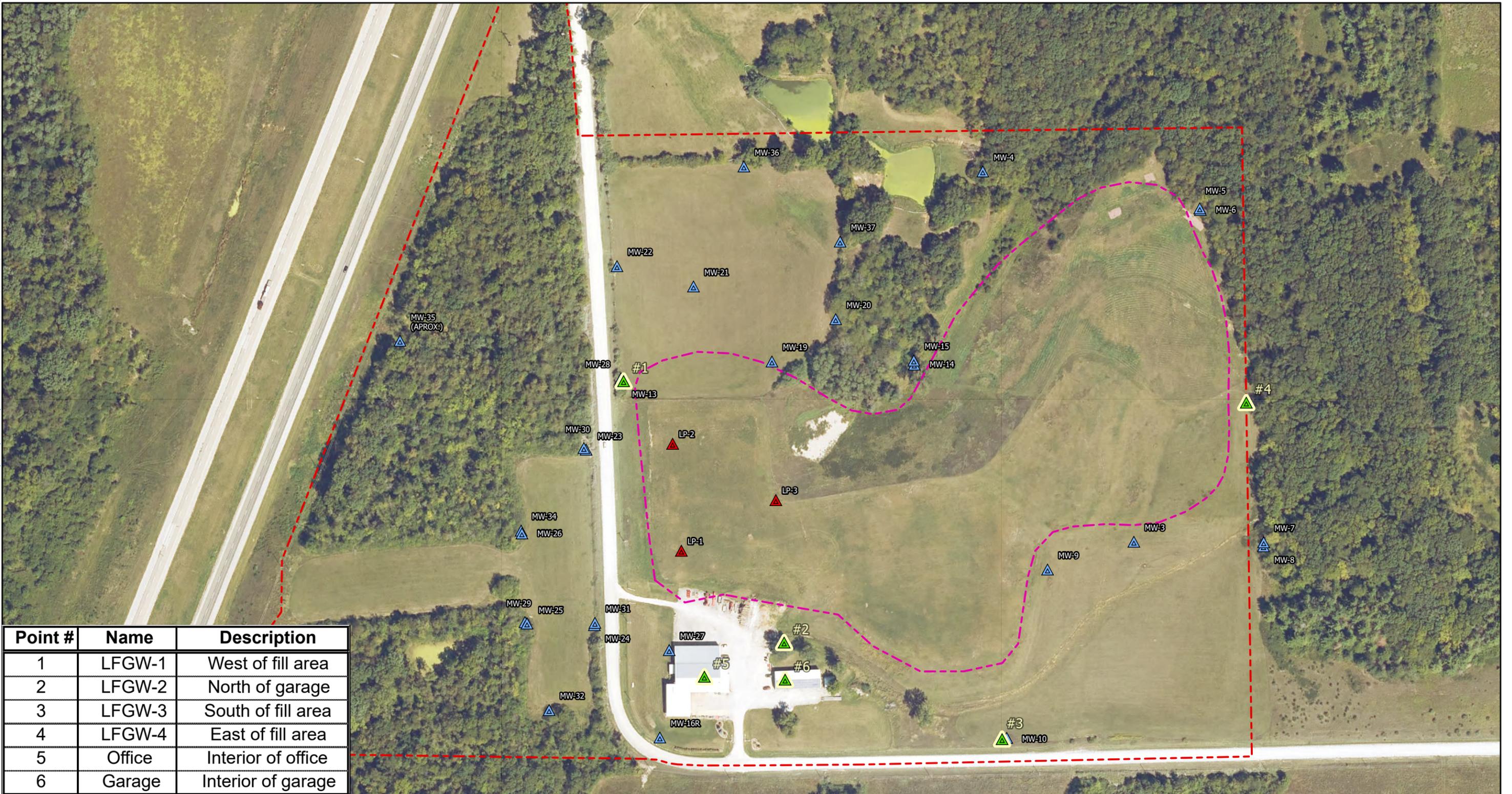
** - Monitoring point LFGW-2 could not be located during the February 2024 monitoring event. A measurement was recorded on March 29, 2024.

*** - Monitoring point LFGW-2 will be located, marked, and monitored during the 2025 fourth quarter methane monitoring event.

NA indicated not applicable. Fluid levels could not be measured.

The 2025 fourth quarter monitoring results will be reported under separate cover.

Date Saved: 11/10/2025 8:03 AM
 User: bmadson
 Path: C:\Users\bmadson\OneDrive - SCS Engineers\Desktop\GIS\Map\Henry County Sanitary Landfill\CSW\2025 AM\001HenryCounty_2025 AM\001_001.dwg



Point #	Name	Description
1	LFGW-1	West of fill area
2	LFGW-2	North of garage
3	LFGW-3	South of fill area
4	LFGW-4	East of fill area
5	Office	Interior of office
6	Garage	Interior of garage

Methane Monitoring Network

Legend

- ▲ Methane Monitoring Location
- ▲ Approximate Monitoring Well Location
- ▲ Approximate Gas Monitoring Point Location
- ▲ Approximate Leachate Monitoring Location
- Approximate Waste Boundary
- Approximate Property Boundary

Henry County Sanitary
 Landfill
 Mt. Pleasant, Iowa
 Project No: 27224515.26
 Drawing Date: September
 2025

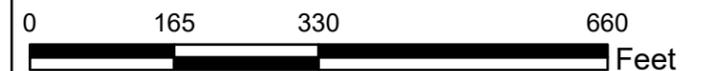
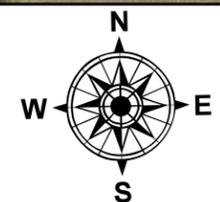


Figure 1