January 24, 2024
File No. 27223215.24

Mr. Mick Leat
Iowa Department of Natural Resources
Land Quality Bureau
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319-0034

Subject: 2023 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report
Southeast Iowa Multi-County Sanitary Landfill
Permit No. 54-SDP-01-75P

Dear Mick:

SCS Engineers, on behalf of the Southeast Iowa Multi-County Solid Waste Agency (SEMCO), has completed the required groundwater monitoring and statistical evaluation for the SEMCO Sanitary Landfill (Landfill) for the year 2023. Services were performed in general accordance with Iowa Administrative Code (IAC) 567-113.10 and the current requirements for implementation of the Hydrologic Monitoring System Plan for the Landfill. Please find enclosed a copy of the 2023 Annual Water Quality Report.

Additionally, an evaluation of the leachate control system and gas monitoring results for the Landfill are included in accordance with IAC 113.7(5)"b"(14) and 113.9(2)"d", respectively. The 2023 Leachate Control System Performance Evaluation Report and 2023 Landfill Gas Annual Report for the Landfill are included as appendices to the Annual Water Quality Report.

Sincerely,

Nathan Ohrt
Senior Project Professional
SCS Engineers

Timothy C. Buelow, P.E.
Project Director
SCS Engineers

NPO/TCB

Copies: Mr. Bill Sloop, SEMCO Landfill

2023 ANNUAL WATER QUALITY REPORT, LEACHATE CONTROL SYSTEM PERFORMANCE EVALUATION REPORT, & LANDFILL GAS ANNUAL REPORT

FOR

SOUTHEAST IOWA MULTI-COUNTY SANITARY LANDFILL

RICHLAND, IOWA

SOLID WASTE PERMIT NO. 54-SDP-01-75P

SUBMITTAL DATE: JANUARY 2024

PREPARED FOR:

SOUTHEAST IOWA MULTI-COUNTY SOLID WASTE AGENCY

PREPARED BY:

SCS ENGINEERS

Certification

Prepared by: _____ Date: 1/24/2024

Typed: Nathan Ohrt

Reviewed by: _____ Date:1/24/2024

Typed: Timothy C. Buelow, P.E.

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

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

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Executive Summary

ES.1 Period of Report Coverage

The period of report coverage is from January – December 2023 and includes the sampling events summarized in Table 2.

ES.2 Report Priority

The following summarizes report priorities associated with groundwater compliance at the Southeast Iowa Multi-County Sanitary Landfill (Landfill):

- Department review urgency: The corrective action plan (CAP) was approved in Permit Revision #1, issued March 30, 2021 (Doc #100093). Six samples have been collected from attenuation zone point compliance (AZPOC) monitoring well MW-34, representing three years of sampling data. Confidence intervals calculated for monitoring well MW-34 for vinyl chloride, the parameter that was previously measured at a statistically significant level (SSL) above the groundwater protection standard (GWPS) in monitoring well MW-24, demonstrate that the upper confidence limit is below the corresponding GWPS as the data indicates the vinyl chloride upper confidence limit has been below the GWPS for three consecutive years. Therefore, the corrective action remedy has satisfied the remedy completion requirements of Iowa Administrative Code (IAC) 567-113.10(9)"e"(1) and (2).
- Department review impact on rules schedule: It is requested that the DNR communicate what actions may be required in accordance with IAC 567-113.10(9)"e"(3) to complete the remedy.
- Actions or activities on hold pending Department review or comment: None.
- Actions and/or permit amendments needed: None.

ES.3 Site Status and Applicable Rules

- Landfill Status: Open
- Types of waste accepted: MSW and C&D
- Applicable IAC rules: 2009 567-113.10

ES.4 Comments

Supplemental attenuation zone source monitoring well MW-24 is sampled for Appendix I and TSS semi-annually and trends are statistically evaluated annually and presented each year in the Annual Water Quality Report. Of the nine analyzed trends during this reporting period, no statistically significant trends were indicated. Previous SSL parameter vinyl chloride had a Mann-Kendall statistic of -12, indicating a decreasing trend. Attenuation zone point of compliance (AZPOC) monitoring well MW-34 has had no quantified detections of vinyl chloride since sampling began in 2017.

The replacement of monitoring well MW-24 with MW-34 as the point of compliance monitoring well in the HMSP monitoring network results in no current SSLs at the Landfill. MW-24 will continue to be sampled as a source characterization monitoring well and MW-34 will be placed into the detection monitoring program.

Monitoring wells MW-20 and MW-21 completed background sampling during this reporting period and were statistically evaluated using interwell prediction limits. An SSI for arsenic was indicated in monitoring well MW-20 and will be retested before the next routine semi-annual sampling event.

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Section 1.0
Acronyms/Abbreviations

ACM = Assessment of Corrective Measures
AZPOC = Attenuation Zone Point of Compliance
CAMP = Corrective Action Groundwater Monitoring Program
C&D = Construction and Demolition Waste
CL = Control Limit - Mean plus Two Standard Deviations
DNR = Iowa Department of Natural Resources
DO = Dissolved Oxygen
DQR = Double Quantification Rule
GWPS = Groundwater Protection Standard
LEL = Lower Explosive Limit
LCL = Lower Confidence Limit
LN = Lognormal
MCL = EPA Maximum Contaminant Level
MSW = Municipal Solid Waste
N = Normal
NC = No Change
NM = Not Measured
NP = Non-Parametric
ORP = Oxidation-Reduction Potential
P = Parametric
PL = Prediction Limit
RL = Reporting Limit
SWS = DNR Statewide Standard for a protected groundwater source
SSI = Statistically Significant Increase above background
SSL = Statistically Significant Level above groundwater protection standard
SSS = Site-Specific Standard (Site-Specific GWPS)
TSS = Total Suspended Solids
UCL = Upper Confidence Limit
VOC = Volatile Organic Compound

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Section 2.0
Site Background

2.1 Site Location

The Landfill property is depicted in Figure 1, Approved Monitoring Network. The Landfill is comprised of 141 acres located in the NE ¼ of the SE ¼, the SE ¼ of the SE ¼, Auditor's Parcel "B" of the SE ¼ of the NE ¼, the eastern 300 feet of the SW ¼ of the SE ¼, the eastern 300 feet of the S ½ of the NW ¼ of the SE ¼, and Lot 3 of Auditor's Parcel "B" of the N ½ of the NW ¼ of the SE ¼; all in Section 29; and the SW ¼ of the SW ¼, Lot 3 in the NW ¼ of the SW ¼ of the south half of the abandoned railroad right of way, Auditor's Parcel "A" in the NW ¼ of the SW ¼; all in Section 28; all in T74N, R10W, of the Fifth Principal Meridian, in Keokuk County, Iowa.

2.2 Geology and Hydrogeology of the Site

The *Hydrogeological Investigation Report* dated December 1990 (electronic version unavailable), with additional information dated October 4, 1993 (cover letter only, Doc #17424), both prepared by Montgomery Watson, described the geology of the Landfill. Excerpts from this report are included below.

> *Glacial till is present above the limestone (bedrock), described as sandy silty clay with gravel. The cross sections portray approximately 30 to 70 feet of till under and near the waste disposal area. Sand lenses are present within the glacial till. Loess (windblown silt) is present in the upland area. Alluvium is present in the Richland Creek valley north of the site. The boring for MW-4 penetrated 19 feet of alluvial silt over 3 feet of silty sand and gravel. The boring for MW-6 penetrated 18 feet of alluvial silt over 6 feet of silty sand and gravel. The boring for MW-14 penetrated 9.5 feet of fill material (disturbed soil) over 8.5 feet of alluvial silt, over a transitional silty sandy unit 4 feet in thickness, over 3 feet of sand. The bottom of the sand was not reached by the boring. The glacial till between the alluvium and the shale is 5 feet thick at MW-4 and 6.5 feet thick at MW-6. MW-4, MW-6, and MW-11 were screened in the Mississippian Limestone.*

The limestone and shale bedrock within the currently permitted area were described as the following, as referenced in the *Hydrogeological Investigation Report:*

> *The upper bedrock in the vicinity of the SEMCO Sanitary Landfill is the Pennsylvanian-aged Des Moines Series, Cherokee Group, which consists of shale with thin interbedded limestones. Cross sections portray the top of the Pennsylvanian shale at elevations of approximately 640 to 680 feet msl. Mississippian limestone underlies the Pennsylvanian rocks. The top of the limestone is portrayed at approximately 625 to 635 feet msl. However, the boring for MW-15 penetrated shale with thin limestones without encountering the thicker Mississippian limestone down to an elevation of 585 feet msl. The groundwater flow direction in the limestone is to the northeast. Water levels in these wells are higher than the top of the limestone, showing confined or artesian conditions which prevent downward percolation of shallow groundwater into the aquifer.*

Monitoring well MW-18 was drilled in 2004 and penetrated the limestone, which occurred about 160 feet below ground surface (bgs). The water level, however, rose to approximately 92 feet bgs once the lower aquifer was penetrated. Likewise, in 2005, MW-22 was drilled into limestone, which occurred at about 92 feet bgs. Upon penetrating into the limestone layer, the water level rose to approximately 28 feet bgs.

In summary, the Mississippian bedrock limestone is overlain by Pennsylvanian shale, which is overlain by dark gray (unoxidized) lean to fat sandy clay, the upper surface of which generally follows the surface terrain. The upper soil layer is brown (oxidized) to brown-gray sandy lean clay, which becomes thinner toward the southwest. The primary flow direction of the shallow water table is northward toward the Richland Creek valley. In the west part of the Landfill, the flow may be toward the intermittent drainageway situated west of the Landfill. Shallow groundwater contours appear to approximate the existing terrain of the ground surface. According to the contours, groundwater flows toward the north from a high ridge aligned along the southern boundary of the unlined waste footprint. Groundwater also flows toward the southwest from this high ridge in the vicinity of the Landfill.

The original topography shows a hilltop in the approximate east-central portion of the Landfill from which four primary ravines form and extend. One ravine slopes northwest then north toward Richland Creek between monitoring wells MW-14 and MW-5. Another ravine slopes northward toward Richland Creek along the eastern boundary of the Landfill; the mouth of the ravine is in the vicinity of monitoring well MW-7. A third ravine slopes southwest away from the southwest corner of the Landfill. A fourth ravine begins in the vicinity of monitoring well MW-20 and exits the Landfill to the southeast.

Section 3.0
Figures Discussion

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

3.1 Figure 1 - Approved Monitoring Network

The Landfill property, hydrologic monitoring system plan (HMSP) monitoring network, and impact delineation monitoring wells are depicted in Figure 1. Figure 1 indicates the respective monitoring programs of the HMSP monitoring wells as of the beginning of this reporting period.

3.2 Figure 2 - Groundwater Contours

Figure 2 indicates a predominantly northerly flow direction beneath a majority of the closed area at the time of the November 2023 sampling event, with a radial component near the border of the closed area and the Phase 1 abutment area based on a higher leachate head measurement. There is a southwesterly flow direction in the vicinity of the leachate storage lagoon located in the southwestern portion of the site. Leachate elevations are shown on Figure 2 and were included in the creation of the groundwater contours as required in DNR correspondence dated July 31, 2017 (Doc #90037). It is not known whether the leachate elevations measured in the leachate piezometers are the result of the intersection of perched leachate zones within the waste mass or a fully saturated waste mass in the vicinity of the monitoring point. It is also not known whether the leachate is in direct hydraulic communication with the water table or is perched above the water table within the waste mass.

3.3 Figure 3 - Reporting Period Detection Summary

Figure 3 shows the range of measured concentrations by monitoring point during this reporting period for the HMSP monitoring points. Further discussion of the detected constituents is included in Section 6.0 – Data Evaluation of this report.

3.4 Figure 4 - Vinyl Chloride Concentration Map

Figure 4 shows the measured vinyl chloride concentration in source characterization monitoring well MW-24, AZPOC monitoring well MW-34, and CAMP monitoring wells MW-35 and MW-36. Vinyl chloride concentrations in monitoring well MW-24 have been below the GWPS in three of the last four sampling events. Figure 4 illustrates that vinyl chloride was not detected in the previous four sampling events in monitoring well MW-34, MW-35, and MW-36; additionally, Appendix C-1 shows that there has not been a quantified detection of vinyl chloride in monitoring well MW-34 in the sampling record that dates to 2017 and Appendix C-2 shows that there have been no detections of vinyl chloride in monitoring wells MW-35 and MW-36 in the sampling record that dates to 2018.

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Section 4.0
Standards History Graphs

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

The prediction limits were below the GWPSs for the metals with the exception of cobalt. The site-specific GWPS for cobalt, 0.0867 mg/L, was updated prior to the 1st 2018 semi-annual statistical evaluation and was discussed in detail in the 2018 Spring Sampling Notification (Doc #92169).

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Section 5.0
QA/QC Summary

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

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Section 6.0
Data Evaluation

Detection monitoring and assessment monitoring statistical evaluations in accordance with the requirements of Iowa Administrative Code (IAC) 567-113.10(5) and (6) were conducted for the groundwater analytical data collected during the 2023 reporting period. The statistical evaluation for samples collected during this reporting period are located in Appendix D, Statistical Method and Output, of this report.

6.1 Data Evaluation

Groundwater monitoring for the Landfill consists of samples from monitoring wells encompassing the downgradient perimeters of the Landfill and two groundwater underdrain discharge points. Background monitoring well MW-19 is located near the southeast corner of the MSWLF unit. The range of measured concentrations for the detected constituents during this reporting period is shown in Figure 3, Reporting Period Detection Summary. Due to the unusually dry weather conditions during this reporting period, only one sample was able to be collected from monitoring wells MW-14 and MW-25.

During this reporting period, VOCs were detected in assessment monitoring wells MW-7, MW-9R, and MW-25, located northeast, east, and north, respectively, of the closed unlined area of the Landfill. Monitoring wells MW-7 and MW-9R each measured two site-wide maximum concentrations for organic parameters and monitoring well MW-25 measured one site-wide maximum concentration. No organic constituent concentrations measured in the HMSP monitoring network exceeded a GWPS.

Six site-wide maximum concentrations for inorganic parameters were measured in monitoring well MW-5, with five of the six (not including nickel) associated with an elevated total suspended solids (TSS) concentration of 35.5 mg/L during the November 2023 sampling event. Background monitoring well MW-19 and monitoring wells MW-5, MW-7 and MW-13 each had one site-wide maximum concentration for inorganic parameters during this reporting period. Inorganic concentrations exceeding the GWPS were arsenic in monitoring wells MW-5 and MW-7.

Groundwater elevation measurements were collected monthly at groundwater piezometers GWPZ-1 and GWPZ-2 by Landfill staff. The table below provides a summary of the measurements.

Water Column Thicknesses

Date	GWPZ-1	GWPZ-2
January 2023	Dry	0.1
February 2023	Dry	0.1
March 2023	Dry	Dry
April 2023	Dry	0.1 ft
May 2023	Dry	Dry
June 2023	Dry	Dry
July 2023	Dry	0.1 ft
August 2023	Dry	0.1 ft
September 2023	Dry	0.1 ft
October 2023	Dry	0.1 ft
November 2023	Dry	0.1 ft
December 2023	Dry	0.1 ft

Based on the groundwater underdrain measurements, it does not appear that groundwater is appreciably accumulating in the underdrain system beneath the Phase 0 and 2 Cells. It appears that

the Phase 3/4 Cell groundwater underdrain, installed deeper than originally designed, may be the primary influence on groundwater flow in the vicinity of the underdrains, potentially eliminating the need for the Phase 0 and Phase 2 Cell underdrains. As stated in correspondence dated June 21, 2013 (Doc #107024), Landfill staff will periodically open the valve and collect the accumulated fluid in the UD-1 underdrain system and transfer the fluid to the leachate lagoon. In order to ensure the engineered waste/groundwater separation is maintained in the absence of the flowing discharge at UD-1, the fluid depth and elevation needed in order to maintain the separation was calculated. If the monthly measurements exceed 1.3 feet at GWPZ-1 or 3.5 feet at GWPZ-2, it indicates that fluid is accumulating in the UD-1 underdrain system and that draining and disposing of the fluid from the system should be performed. If the draining does not result in lower fluid depths, further evaluation to identify the cause of the increased depths will be performed. Monthly water level measurements at GWPZ-1 and GWPZ-2 will continue and will be reported next in the 2024 Annual Water Quality Report.

Monitoring wells MW-20 and MW-21 completed background sampling during this reporting period and were statistically evaluated using interwell prediction limits. An SSI for arsenic was indicated in monitoring well MW-20 and will be retested before the next routine semi-annual sampling event.

6.2 Corrective Action

Monitoring well MW-34 replaced monitoring well MW-24 in the HMSP monitoring network as an AZPOC monitoring well and was sampled for Appendix I and TSS during this reporting period; the three detected parameters, which were metals, had concentrations below the GWPSs.

The corrective action plan (CAP) was approved in Permit Revision #1, issued March 30, 2021 (Doc #100093). Six Appendix I samples have been collected from AZPOC monitoring well MW-34, representing three years of sampling data. Confidence intervals calculated for monitoring well MW-34 for vinyl chloride, the parameter that was previously measured at an SSL above the GWPS in monitoring well MW-24, demonstrate that the upper confidence limit is below the corresponding GWPS. Therefore, the corrective action remedy has satisfied the remedy completion requirements of Iowa Administrative Code (IAC) 567-113.10(9)"e"(1) and (2) as the data indicates the vinyl chloride upper confidence limit has been below the GWPS for three consecutive years. It is requested that the DNR communicate what actions may be required in accordance with IAC 567-113.10(9)"e"(3) to complete the remedy. A confidence interval summary table and graph are included in Appendix H.

Previous corrective action monitoring well MW-24 was designated as a supplemental attenuation zone source monitoring well. Monitoring well MW-24 was sampled for Appendix I and TSS during this reporting period and the concentration trends were evaluated. Nine trends of Appendix I parameters were analyzed using Mann-Kendall trending analysis at 99% confidence (α=0.01). There were no statistically significant trends. Three of the nine trends had a zero or negative Mann-Kendall statistic. The former vinyl chloride SSL had a Mann-Kendall statistic of -12, indicating a decreasing trend. A summary table and graphs of the MW-24 trend analysis are included in Appendix I.

Monitoring wells MW-24, MW-34, MW-35, and MW-36 were sampled for natural attenuation parameters nitrate, manganese, iron, and sulfate during one of the 2023 sampling events. The concentrations were generally consistent with those presented in the Assessment of Corrective Measures (ACM) report for monitoring wells MW-24, MW-35, and MW-36. However, the concentrations measured in monitoring well MW-34 for nitrate, manganese, iron, and sulfate increased from the March 2021 sample to the May 2023 sample.

Monitoring wells MW-35 and MW-36 are sampled annually for vinyl chloride. Vinyl chloride has not been detected in these monitoring wells in the period of record dating back to 2018.

Section 7.0
Summary and Recommendations

7.1 Site Impact on Groundwater

The corrective action plan (CAP) was approved in Permit Revision #1, issued March 30, 2021 (Doc #100093). Six Appendix I samples have been collected from AZPOC monitoring well MW-34, representing three years of sampling data. Confidence intervals calculated for monitoring well MW-34 for vinyl chloride, the parameter that was previously measured at an SSL above the GWPS in monitoring well MW-24, demonstrate that the upper confidence limit is below the corresponding GWPS. Therefore, the corrective action remedy has satisfied the remedy completion requirements of Iowa Administrative Code (IAC) 567-113.10(9)"e"(1) and (2) as the data indicates the vinyl chloride upper confidence limit has been below the GWPS for three consecutive years. It is requested that the DNR communicate what actions may be required in accordance with IAC 567-113.10(9)"e"(3) to complete the remedy.

The replacement of monitoring well MW-24 with MW-34 as the point of compliance monitoring well in the HMSP monitoring network results in no current SSLs at the Landfill. MW-24 will continue to be sampled as a source characterization monitoring well and MW-34 will be placed into the detection monitoring program.

The limited detections of VOCs, the generally low metals concentrations, and the largely steady or declining constituent concentrations indicate the Landfill is not having a significant adverse effect on the groundwater, particularly the monitoring points associated with the lined areas of the Landfill.

7.2 Proposed Monitoring

Anticipated groundwater sampling for the 2024 reporting period is shown in Table 2.

7.3 Proposed Monitoring Well Changes

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

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Tables

Table 1
Monitoring Program Summary Table
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Monitoring Well	Formation[1]	Current Monitoring Program (Fall 2023)	Change for next sampling event	Constituents with SSIs in the 2023 Reporting Period	Constituents with SSLs	Total # of Samples in each monitoring program		
						Detection inorganic #/organic #	Assessment inorganic #/organic #	Corrective Action inorganic #/organic #
MW-19	Silt/Clay	Background	No change	Not applicable	Not applicable	18/34		
MW-5	Unknown	Assessment	No change	Antimony, Arsenic, Nickel	None		18/41	
MW-7	Unknown	Assessment	No change	Arsenic, Acetone, Toluene	None		17/37	
MW-9R	Till	Assessment	No change	Arsenic, Nickel, cis-1,2-dichloroethene, Trichloroethene	None		17/36	
MW-13	Silty clay with Sand	Detection	No change	None	Not applicable	17/35		
MW-14	Silty/Sandy Clay/Sand	Assessment	No change	None	None		16/36	
MW-20	Till	Detection	No change	Arsenic[2]	Not applicable	5/5		
MW-21	Till	Detection	No change	None	Not applicable	5/5		
MW-23	Silt/Clay	Detection	No change	None	Not applicable	17/31		
MW-25	Clay/Sand	Assessment	No change	Arsenic, Benzene, cis-1,2-dichloroethene	None		16/28	
MW-26	Silt/Clay	Assessment	No change	None	None		17/31	
MW-27	Sand/Clay/Gravel	Detection	No change	None	Not applicable	17/31		
MW-28	Sand/Silt	Detection	No change	None	Not applicable	18/28		
MW-29	Sand/Clay/Gravel	Assessment	No change	None	None		17/32	
MW-34	Till	AZPOC	No change	Not applicable	None	6/6		
UD-2	Not Applicable	Detection	No change	None	Not applicable	14/14		
UD-3	Not Applicable	Background Collection	No change	Insufficient data for statistical evaluation	Not applicable	4/4		
MW-24	Clay/Sand	Source Characterization	No change	Not applicable	Not applicable			17/35
Other monitoring points								
MW-31	Silt/Sand/Clay	Water Level						
MW-32	Silt/Sand/Clay	Water Level						
MW-33	Silt/Sand/Clay	Water Level						
MW-35	Silt/Clay	CAMP						
MW-36	Clay/Sand	CAMP						

SSI = Statistically Significant Increase above background.

SSL = Statistically Significant Level above groundwater protection standard.

CAMP = Corrective Action Groundwater Monitoring Program.

Notes:

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

2) *- An SSI was indicated during the 2nd 2023 statistical evaluation. Retesting will occur before the 1st 2024 semi-annual sampling event.

Table 2
Monitoring Program Implementation Schedule
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Monitoring Well	Recent Sampling Events and Constituents		Upcoming Sampling Events and Constituents		Full Appendix II Sample Dates	
	May 2023 (1st 2023 Semi-Annual)	November 2023 (2nd 2023 Semi-Annual)	1st 2024 Semi-Annual	2nd 2024 Semi-Annual	Previously Collected	Next Event
MW-19	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Not applicable	Not applicable
MW-5	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	7/11/2019, 5/12/2020	2025
MW-7	Appendix II, TSS	Appendix I, TSS, Sulfide, beta-BHC	Appendix I, TSS, Sulfide, beta-BHC	Appendix I, TSS, Sulfide, beta-BHC	2/26/2018, 5/9/2023	2028
MW-9R	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	2/6/2017, 4/19/2022	2027
MW-13	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-14	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	2/6/2017, 4/19/2022	2027
MW-20	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-21	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-23	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-25	Appendix I, TSS	No sample (dry)	Appendix I, TSS	Appendix I, TSS	5/20/2015, 5/12/2020	2025
MW-26	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	Appendix I, TSS, Sulfide	5/20/2015, 5/12/2020	2025
MW-27	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-28	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-29	Appendix II, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	2/26/2018, 5/10/2023	2028
MW-34	Appendix I, TSS, Natural Attenuation*	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
UD-2	No sample (dry)	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
UD-3	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-24	Appendix I, TSS, Natural Attenuation*	Appendix I, TSS	Appendix I, TSS	Appendix I, TSS	2/6/2017	Not applicable
MW-35	Vinyl Chloride, Natural Attenuation*	Sampled annually	Vinyl Chloride	Sampled annually	Not applicable	Not applicable
MW-36	No sample (dry)	Vinyl Chloride, Natural Attenuation*	Vinyl Chloride	Sampled annually	Not applicable	Not applicable

Notes:

TSS: Total Suspended Solids

* - Natural Attenuation includes nitrate, manganese, iron, and sulfate.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Compliance with:	2021	2022	2023	2024	2025
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(3) well depths	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		Completed		Scheduled	
Waste separation from ground water 113.6(2)i	Completed	Completed	Included	Scheduled	Scheduled

Table 4
Monitoring Well Performance and Maintenance Summary
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)
					5/2023	11/2023	
MW-19	765.69	732.8	51.9	Groundwater Level (ft)	26.32	26.89	NA
				Groundwater Elevation (Ft MSL)	739.37	738.80	
				Measured Well Depth (ft)	NM	NM	
				Submerged screen	Y	Y	
MW-5	684.36	668.7	25.6	Groundwater Level (ft)	15.56	19.60	-0.4
				Groundwater Elevation (Ft MSL)	668.80	664.76	
				Measured Well Depth (ft)	26.0	26.0	
				Submerged screen	Y	N	
MW-7	695.21	678.0	27.5	Groundwater Level (ft)	15.29	20.89	-0.5
				Groundwater Elevation (Ft MSL)	679.92	674.32	
				Measured Well Depth (ft)	27.7	28.0	
				Submerged screen	Y	N	
MW-9R	733.43	714.5	24.0	Groundwater Level (ft)	11.45	14.57	0.1
				Groundwater Elevation (Ft MSL)	721.98	718.86	
				Measured Well Depth (ft)	24.0	23.9	
				Submerged screen	Y	Y	
MW-13	723.84	695.2	43.7	Groundwater Level (ft)	29.30	29.98	NA
				Groundwater Elevation (Ft MSL)	694.54	693.86	
				Measured Well Depth (ft)	NM	NM	
				Submerged screen	N	N	
MW-14	687.24	670.7	27.5	Groundwater Level (ft)	18.05	25.79	1.0
				Groundwater Elevation (Ft MSL)	669.19	661.45	
				Measured Well Depth (ft)	26.5	27.2	
				Submerged screen	N	N	
MW-20	749.99	704.6	55.5	Groundwater Level (ft)	18.48	20.56	3.5
				Groundwater Elevation (Ft MSL)	731.51	729.43	
				Measured Well Depth (ft)	52.2	52.0	
				Submerged screen	Y	Y	
MW-21	747.05	723.3	33.7	Groundwater Level (ft)	21.54	23.00	6.5
				Groundwater Elevation (Ft MSL)	725.51	724.05	
				Measured Well Depth (ft)	27.2	27.9	
				Submerged screen	Y	Y	
MW-23	708.90	678.2	40.7	Groundwater Level (ft)	22.98	23.69	NA
				Groundwater Elevation (Ft MSL)	685.92	685.21	
				Measured Well Depth (ft)	NM	NM	
				Submerged screen	Y	Y	
MW-24	743.02	720.1	32.5	Groundwater Level (ft)	21.00	22.12	3.6
				Groundwater Elevation (Ft MSL)	722.02	720.90	
				Measured Well Depth (ft)	29.0	28.9	
				Submerged screen	Y	Y	

Table 4
Monitoring Well Performance and Maintenance Summary
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)
					5/2023	11/2023	
MW-25	694.61	677.6	32.0	Groundwater Level (ft)	23.27	Dry	NA
				Groundwater Elevation (Ft MSL)	671.34	NA	
				Measured Well Depth (ft)	NM	NM	
				Submerged screen	N	N	
MW-26	689.52	681.5	23.0	Groundwater Level (ft)	11.78	17.31	-0.2
				Groundwater Elevation (Ft MSL)	677.74	672.21	
				Measured Well Depth (ft)	23.2	23.1	
				Submerged screen	N	N	
MW-27	705.25	684.4	35.8	Groundwater Level (ft)	13.98	17.11	-1.9
				Groundwater Elevation (Ft MSL)	691.27	688.14	
				Measured Well Depth (ft)	35.7	37.7	
				Submerged screen	Y	Y	
MW-28	726.68	716.2	22.8	Groundwater Level (ft)	13.80	14.16	-1.1
				Groundwater Elevation (Ft MSL)	712.88	712.52	
				Measured Well Depth (ft)	23.9	22.7	
				Submerged screen	N	N	
MW-29	721.03	713.0	18.1	Groundwater Level (ft)	12.45	13.73	0.0
				Groundwater Elevation (Ft MSL)	708.58	707.30	
				Measured Well Depth (ft)	18.1	18.1	
				Submerged screen	N	N	
MW-34	738.02	720.3	27.8	Groundwater Level (ft)	20.77	21.25	0.1
				Groundwater Elevation (Ft MSL)	717.25	716.77	
				Measured Well Depth (ft)	27.7	27.7	
				Submerged screen	N	N	

Notes:

NM: Not measured. Wells with dedicated sampling pumps are measured once every 5 years. Total depths for monitoring wells MW-19, MW-13, MW-23, and MW-25 will be measured next in 2025.

Most wells had measured depths within 2 feet of the installed depths. Although monitoring wells MW-20, MW-21, and MW-24 had measured depths significantly different from the installed depths, as the measured depths were consistent with previous years and the wells produced samples during this reporting period, it appears unlikely that siltation is negatively impacting the integrity of the wells.

Well		Date of Measurements	
		5/2023	11/2023
GWPZ-1	Bottom of waste (feet BGS)	13.6	
	Groundwater Level (feet BGS)	Dry	Dry
	Separation distance compliant?	Yes	Yes
GWPZ-2	Bottom of waste (feet BGS)	9.6	
	Groundwater Level (feet BGS)	Dry	Dry
	Separation distance compliant?	Yes	Yes
GWPZ-3	Bottom of waste (feet BGS)	NA	
	Groundwater Level (feet BGS)	Dry	Dry
	Separation distance compliant?	Yes	Yes

Table 5
Background and GWPS Summary Tables
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Interwell Background/GWPS (MW-19 and MW-28BGR)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	32	4	0.000332*	0.00231	0.00073	0.00231	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	33	11	0.000755*	0.00274	0.00123	0.00274	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	35	35	0.00748	0.423	0.17375	0.423	PL (NP)	2	MCL
Beryllium (Be)	mg/L	32	4	0.00009*	0.000669*	0.00049	0.000669	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	32	24	0.000047*	0.00209	0.00024	0.00209	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	32	8	0.000534*	0.00504	0.00243	0.00504	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	35	34	0.000059*	0.0867	0.01724	0.0867	PL (NP)	0.0867	SSS
Copper (Cu)	mg/L	32	10	0.000777*	0.0147	0.00311	0.0147	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	32	15	0.00025 (1/2 RL)	0.0082	0.00072	0.0082	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	32	22	0.00109*	0.0207	0.00746	0.0207	PL (NP)	0.1	SWS
Selenium (Se)	mg/L	33	13	0.000935*	0.005	0.00215	0.005	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	32	5	0.000122*	0.00147	0.00052	0.00147	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	32	14	0.000036*	0.0016	0.00050	0.0016	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	32	10	0.00029*	0.0082	0.00238	0.0082	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	32	6	0.005 (1/2 RL)	0.0339	0.01050	0.0339	PL (NP)	2	SWS

Intrawell Background/GWPS (UD-2)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	8	0	0.0005 (1/2 RL)	0.003 (1/2 RL)	0.00194	<0.006	DQR	0.006	MCL
Arsenic (As)	mg/L	10	2	0.001 (1/2 RL)	0.0101	0.00221	0.0101	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	8	7	0.00381	0.136	0.03039	0.1673	PL (P)	2	MCL
Beryllium (Be)	mg/L	8	1	4.20E-05	0.0005 (1/2 RL)	0.00044	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	8	2	0.00005 (1/2 RL)	0.00025 (1/2 RL)	0.00020	0.00025	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	8	2	0.0025 (1/2 RL)	0.01 (1/2 RL)	0.00543	0.01	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	8	3	8.70E-05	0.01 (1/2 RL)	0.00175	0.01	PL (NP)	0.01	SSS
Copper (Cu)	mg/L	8	3	0.00216	0.01 (1/2 RL)	0.00628	0.01	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	8	1	0.00025 (1/2 RL)	0.002 (1/2 RL)	0.00113	0.002	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	8	5	0.00279	0.025 (1/2 RL)	0.01280	0.01365	PL (P)	0.1	SWS
Selenium (Se)	mg/L	8	2	0.00125 (1/2 RL)	0.00323	0.00241	0.00323	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	8	0	0.00025 (1/2 RL)	0.01 (1/2 RL)	0.00522	<0.02	DQR	0.1	SWS
Thallium (Tl)	mg/L	8	1	7.60E-05	0.001 (1/2 RL)	0.00076	0.001	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	8	1	0.0025 (1/2 RL)	0.025 (1/2 RL)	0.01375	0.025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	8	4	0.00824	0.198	0.03845	0.198	PL (NP)	2	SWS

Notes:

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

Acronyms/Abbreviations:

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

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

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

3) Re-sampling strategy: Retesting is performed on a 1-of-3 scheme.

4) Justification for data exclusion: Inorganic data in the background wells collected prior to the implementation of low-flow sampling in 2015 was excluded from statistical consideration as directed by the DNR (Doc #92099).

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Constituent	Units	Most recent result	Interwell Background Standard
MW-5	Antimony	mg/L	0.0029	0.00231
MW-7	Acetone	µg/L	13.2	<10
	Toluene	µg/L	44.4	<1
MW-9R	Arsenic	mg/L	0.00394	0.00274
MW-20	Arsenic*	mg/L	0.00526	0.00274

Notes:

1) This table represents well/constituent pairs with indicated SSIs during the 2023 reporting period that did not have indicated SSIs during the 2022 reporting period.

2) *- An SSI was indicated during the 2nd 2023 statistical evaluation. Retesting will occur prior to the 1st 2024 semi-annual sampling event.

Comments:

1) Problems with the current detection network: None.

2) Schedule to implement remedies: Not applicable.

3) Alternative constituent or sample frequency changes: None.

4) Significant changes to calculated prediction limits: Inorganic data collected prior to the implementation of low-flow sampling in 2015 was removed from statistical consideration for background monitoring wells prior to the 2nd 2018 semi-annual statistcial evaluation.

5) Retesting scheme: Retesting is performed on a 1-of-3 retesting scheme.

Table 7
Summary Table of Ongoing and Newly Identified SSIs
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Constituent	Units	Most recent result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
MW-5	Antimony	mg/L	0.0029	0.00231	0.000500	0.006	11/1/2023	NA	12/4/2008
	Arsenic	mg/L	0.0107	0.00274	0.00289	0.01	5/9/2023	NA	12/4/2008
	Nickel	mg/L	0.0198	0.0207	0.00972	0.1	11/1/2023	NA	12/4/2008
MW-7	Arsenic	mg/L	0.00926	0.00274	0.003060	0.01	5/9/2023	NA	12/4/2008
	Acetone	µg/L	13.2	<10	5	6300	5/9/2023	NA	12/4/2008
	Toluene	µg/L	44.4	<1	0.5	1000	5/9/2023	NA	12/4/2008
MW-9R	Arsenic	mg/L	0.00394	0.00274	0.0013	0.01	5/9/2023	NA	12/4/2008
	Nickel	mg/L	0.0339	0.0207	0.002490	0.1	5/9/2023	NA	12/4/2008
	cis-1,2-Dichloroethene	µg/L	4.72	<1	2.384	70	1/28/2008	NA	12/4/2008
	Trichloroethene	µg/L	1.32	<1	1.1	5	1/28/2008	NA	12/4/2008
MW-13	None								
MW-14	None								
MW-20	Arsenic*	mg/L	0.00526	0.00274	Detection	0.01	11/1/2023	Scheduled in 2024	11/1/2023
MW-21	None								
MW-23	None								
MW-25	Arsenic	mg/L	0.0076	0.00274	0.004011	0.01	5/9/2023	NA	3/22/2011
	Benzene	µg/L	0.973	<0.5	1.113	5	12/18/2009	NA	3/22/2011
	cis-1,2-Dichloroethene	µg/L	1.93	<1	1.952	70	12/28/2009	NA	3/22/2011
MW-26	None								
MW-27	None								
MW-28	None								
MW-29	None								
UD-2	None								

1) Shaded rows denote constituent/well pairs with SSIs indicated in 2023 that were not indicated in 2022. Unshaded rows denote constituent/well pairs with SSIs indicated during both the 2022 and 2023 reporting periods.

2) NA: Not Applicable; statistical exceedance analysis was not required for monitoring point based on monitoring program.

3) TS - Theil Sen - As the constituent/well pair has a statistically significant trend, a lower confidence limit is not calculated.

4) "Detection" indicates the monitoring well is in the detection monitoring program and therefore confidence limits were not calculated.

5) *- An SSI was indicated during the 2nd 2023 statistical evaluation. Retesting will occur prior to the 1st 2024 semi-annual sampling event.

Comments:

1) Problems with the current assessment network: None.

2) Approved remedies: Subsurface landfill gas venting has been implemented in the area of MW-24.

3) Plume delineation strategies: Completed (MW-34, MW-35, and MW-36).

4) Property owner notifications: Not applicable.

Table 8
Summary Table of Ongoing and Newly Identified SSLs
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Constituent	Units	Most recent result	Upper Confidence Limit	GWPS	Initial Exceedance	Upper Confidence Limit Below GWPS					
							1st Year		2nd Year		3rd Year	
MW-34*	Vinyl Chloride	µg/L	<1	0.5	2	3/2014	3/2021	10/2021	4/2022	10/2022	5/2023	11/2023

Notes:

1) * - MW-34 is the AZPOC monitoring well for the previous vinyl chloride SSL at monitoring well MW-24.

2) Confidence interval summaries and tables for vinyl chloride in monitoring well MW-34 during this reporting period are included in Appendix H.

Table 9
Summary of Groundwater Chemistry
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

The Summary of Groundwater Chemistry - HMSP is located in Appendix C-1.
The Summary of Groundwater Chemistry - Natural Attenuation and Vinyl Chloride is located in Appendix C-2.

Table 10
Historical SSI and SSL
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Key

SSI - Statistically Significant Increase above background

SSL - Statistically Significant Increase above groundwater protection standard.

Well	Constituent	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023
MW-5	Acetone												
MW-7	Acetone												
	beta-BHC												
	Toluene												
	Sulfide												
MW-9R	cis-1,2-Dichloroethene												
	Trichloroethene												
	Sulfide												
MW-13	None												
MW-14	None												Dry
MW-20	None												
MW-21	None												
MW-23	None												
MW-24	Vinyl Chloride												
MW-25	Benzene												Dry
	Chlorobenzene												Dry
	Chloromethane												Dry
	cis-1,2-Dichloroethene												Dry
	Toluene												Dry
	Xylenes, total												Dry
MW-26	Chlorobenzene												
	cis-1,2-Dichloroethene												
	Sulfide												
MW-27	None												
MW-28	None												
MW-29	None												
MW-34	None												
UD-2	Acetone												
UD-3	Benzene												
	Ethylbenzene												
	Vinyl Chloride												

Notes:

1) SSIs for inorganic parameters that are not confirmed are not included in this table. See Table 7 for indicated, not confirmed SSIs that were measured during this reporting period.

2) Quantified detections of organic parameters and sulfide are considered SSIs for the purposes of this table.

Table 11
Corrective Action Trend Analysis
2023 Annual Water Quality Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Well	Current SSL	Trend	Calculated S	Critical S	Total N	Projected Date to Completion
MW-24	Vinyl Chloride	Decreasing	-12	-21	8	2023

Trends of Detected Appendix I Constituents in Source Well

	MW-24
Increasing (S = >0):	6
Decreasing (S = ≤0):	3

Notes:

N - Number of Samples

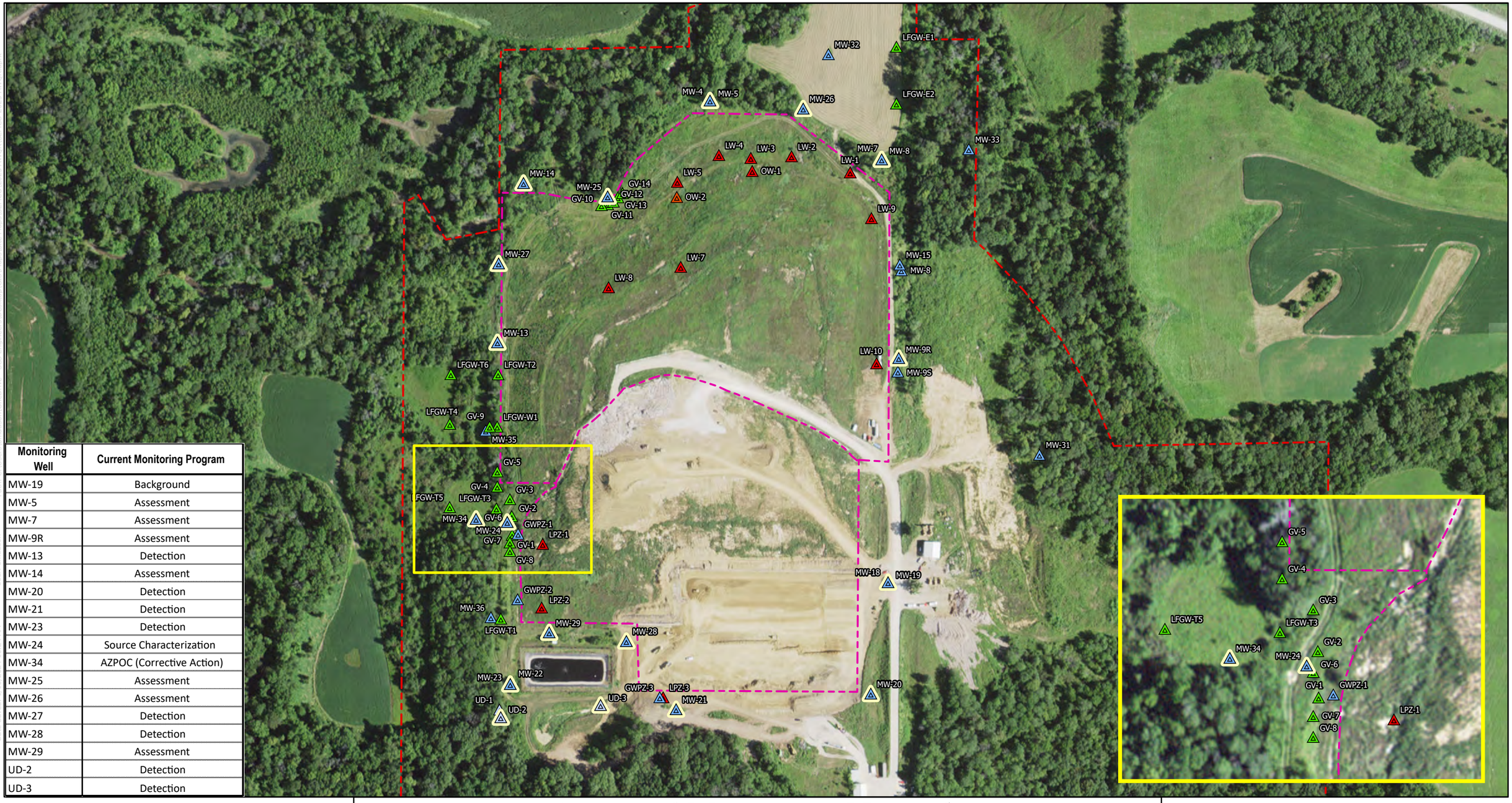
S - Mann-Kendall Statistic

1) The corrective action plan was approved in Permit Revision #1, issued March 30, 2021 (Doc #100093). Six samples have been collected from AZPOC monitoring well MW-34, representing three years of sampling data. Confidence intervals calculated for monitoring well MW-34 for vinyl chloride, the parameter that was previously measured at an SSL above the GWPS in monitoring well MW-24, shows that the upper confidence limit is below the corresponding GWPS and by extension indicates the vinyl chloride upper confidence limit has been below the GWPS for three consecutive years. Therefore, the corrective action remedy has satisfied the remedy completion requirements of IAC 567-113.10(9)”e”(1) and (2).

2) A Mann-Kendall trend test summary and tables for vinyl chloride in monitoring well MW-24 is included in Appendix I.

Figures

Monitoring Well	Current Monitoring Program
MW-19	Background
MW-5	Assessment
MW-7	Assessment
MW-9R	Assessment
MW-13	Detection
MW-14	Assessment
MW-20	Detection
MW-21	Detection
MW-23	Detection
MW-24	Source Characterization
MW-34	AZPOC (Corrective Action)
MW-25	Assessment
MW-26	Assessment
MW-27	Detection
MW-28	Detection
MW-29	Assessment
UD-2	Detection
UD-3	Detection



Approved Monitoring Network

Legend

- HMSP Monitoring Well
- HMSP Underdrain
- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

Southeast Multi-County
Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

N
W
E
S

0 237.5 475 950
Feet

Figure 1

SCS ENGINEERS
environmental consultants and contractors

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

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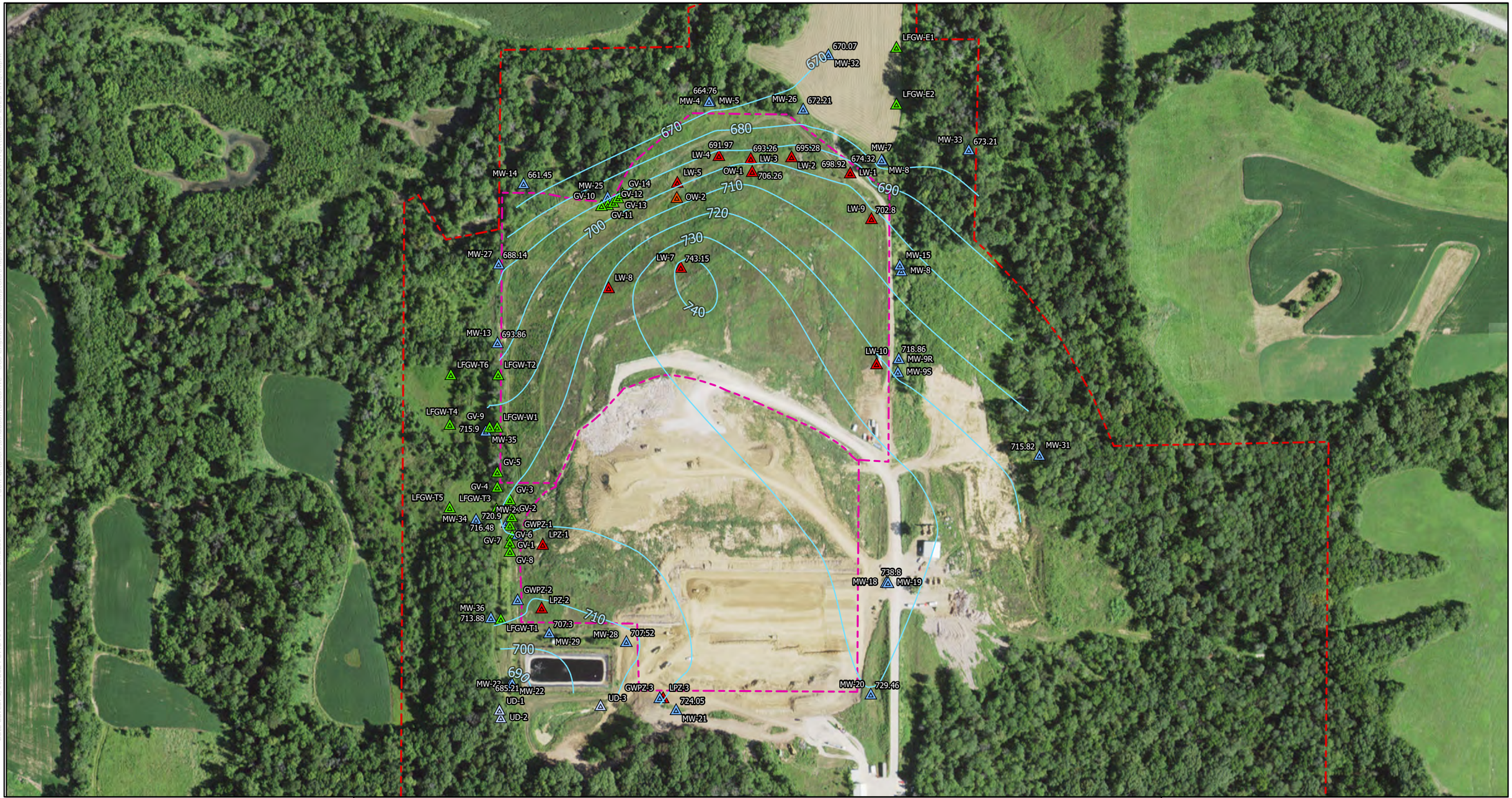

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SCS ENGINEERS
environmental consultants and contractors

Groundwater and Leachate Contours

Legend

- Approximate Groundwater Contours Based on Field Measurments Taken November 2, 2023
- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

Southeast Multi-County Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

N
W
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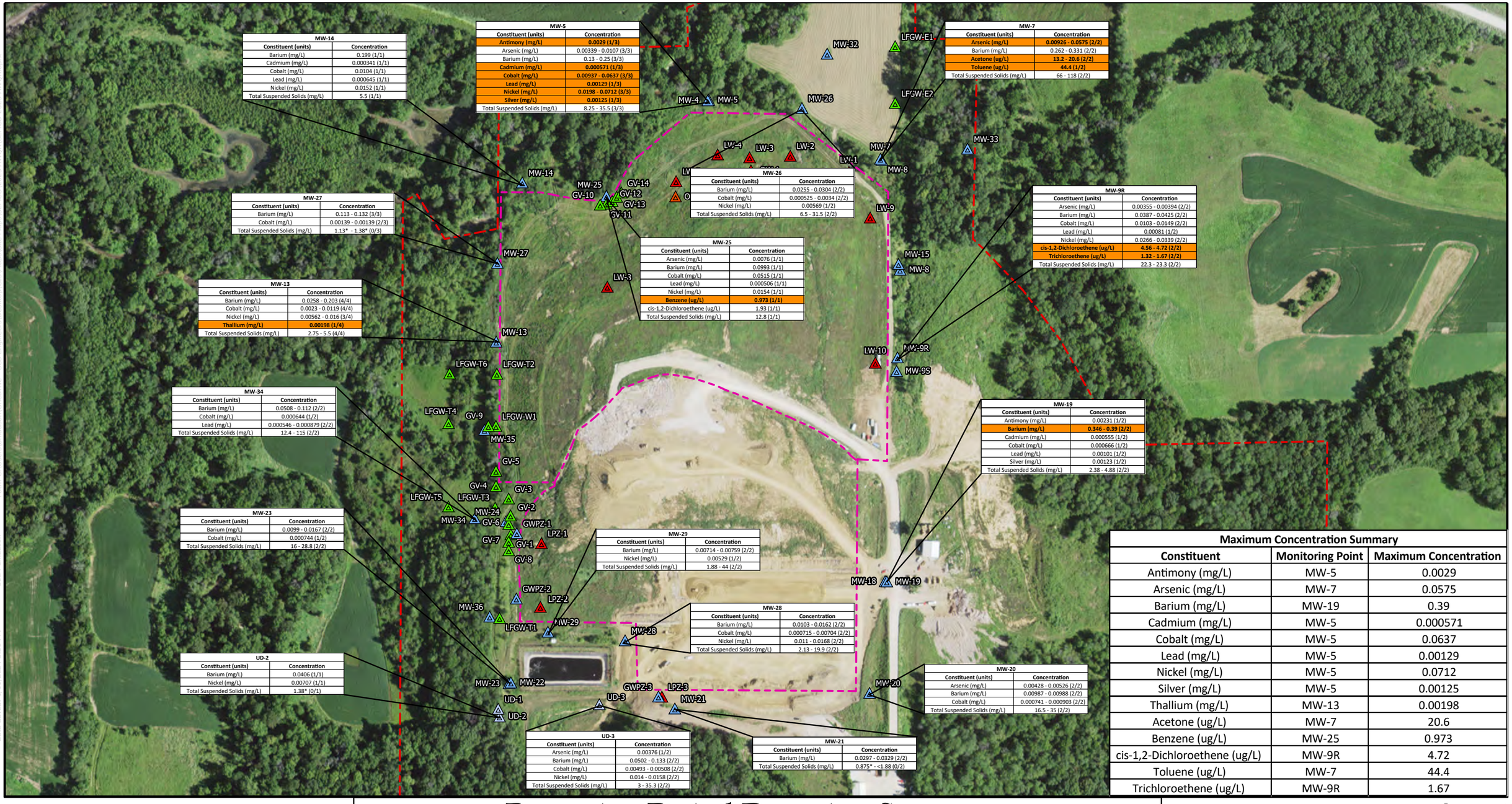
0 237.5 475 950 Feet

Figure 2



MW-14

Constituent (units)	Concentration
Barium (mg/L)	0.199 (1/1)
Cadmium (mg/L)	0.000341 (1/1)
Cobalt (mg/L)	0.0104 (1/1)
Lead (mg/L)	0.000645 (1/1)
Nickel (mg/L)	0.0152 (1/1)
Total Suspended Solids (mg/L)	5.5 (1/1)

MW-5

Constituent (units)	Concentration
Antimony (mg/L)	**0.0029 (1/3)**
Arsenic (mg/L)	0.00339 - 0.0107 (3/3)
Barium (mg/L)	0.13 - 0.25 (3/3)
Cadmium (mg/L)	**0.000571 (1/3)**
Cobalt (mg/L)	**0.00937 - 0.0637 (3/3)**
Lead (mg/L)	**0.00129 (1/3)**
Nickel (mg/L)	**0.0198 - 0.0712 (3/3)**
Silver (mg/L)	**0.00125 (1/3)**
Total Suspended Solids (mg/L)	8.25 - 35.5 (3/3)

MW-7

Constituent (units)	Concentration
Arsenic (mg/L)	**0.00926 - 0.0575 (2/2)**
Barium (mg/L)	0.262 - 0.331 (2/2)
Acetone (ug/L)	**13.2 - 20.6 (2/2)**
Toluene (ug/L)	**44.4 (1/2)**
Total Suspended Solids (mg/L)	66 - 118 (2/2)

MW-26

Constituent (units)	Concentration
Barium (mg/L)	0.0255 - 0.0304 (2/2)
Cobalt (mg/L)	0.000525 - 0.0034 (2/2)
Nickel (mg/L)	0.00569 (1/2)
Total Suspended Solids (mg/L)	6.5 - 31.5 (2/2)

MW-9R

Constituent (units)	Concentration
Arsenic (mg/L)	0.00355 - 0.00394 (2/2)
Barium (mg/L)	0.0387 - 0.0425 (2/2)
Cobalt (mg/L)	0.0103 - 0.0149 (2/2)
Lead (mg/L)	0.00081 (1/2)
Nickel (mg/L)	0.0266 - 0.0339 (2/2)
cis-1,2-Dichloroethene (ug/L)	**4.56 - 4.72 (2/2)**
Trichloroethene (ug/L)	**1.32 - 1.67 (2/2)**
Total Suspended Solids (mg/L)	22.3 - 23.3 (2/2)

MW-27

Constituent (units)	Concentration
Barium (mg/L)	0.113 - 0.132 (3/3)
Cobalt (mg/L)	0.00139 - 0.00139 (2/3)
Total Suspended Solids (mg/L)	1.13* - 1.38* (0/3)

MW-25

Constituent (units)	Concentration
Arsenic (mg/L)	0.0076 (1/1)
Barium (mg/L)	0.0993 (1/1)
Cobalt (mg/L)	0.0515 (1/1)
Lead (mg/L)	0.000506 (1/1)
Nickel (mg/L)	0.0154 (1/1)
Benzene (ug/L)	**0.973 (1/1)**
cis-1,2-Dichloroethene (ug/L)	1.93 (1/1)
Total Suspended Solids (mg/L)	12.8 (1/1)

MW-13

Constituent (units)	Concentration
Barium (mg/L)	0.0258 - 0.203 (4/4)
Cobalt (mg/L)	0.0023 - 0.0119 (4/4)
Nickel (mg/L)	0.00562 - 0.016 (3/4)
Thallium (mg/L)	**0.00198 (1/4)**
Total Suspended Solids (mg/L)	2.75 - 5.5 (4/4)

MW-34

Constituent (units)	Concentration
Barium (mg/L)	0.0508 - 0.112 (2/2)
Cobalt (mg/L)	0.000644 (1/2)
Lead (mg/L)	0.000546 - 0.000879 (2/2)
Total Suspended Solids (mg/L)	12.4 - 115 (2/2)

MW-19

Constituent (units)	Concentration
Antimony (mg/L)	0.00231 (1/2)
Barium (mg/L)	**0.346 - 0.39 (2/2)**
Cadmium (mg/L)	0.000555 (1/2)
Cobalt (mg/L)	0.000666 (1/2)
Lead (mg/L)	0.00101 (1/2)
Silver (mg/L)	0.00123 (1/2)
Total Suspended Solids (mg/L)	2.38 - 4.88 (2/2)

MW-23

Constituent (units)	Concentration
Barium (mg/L)	0.0099 - 0.0167 (2/2)
Cobalt (mg/L)	0.000744 (1/2)
Total Suspended Solids (mg/L)	16 - 28.8 (2/2)

MW-29

Constituent (units)	Concentration
Barium (mg/L)	0.00714 - 0.00759 (2/2)
Nickel (mg/L)	0.00529 (1/2)
Total Suspended Solids (mg/L)	1.88 - 44 (2/2)

MW-28

Constituent (units)	Concentration
Barium (mg/L)	0.0103 - 0.0162 (2/2)
Cobalt (mg/L)	0.000715 - 0.00704 (2/2)
Nickel (mg/L)	0.011 - 0.0168 (2/2)
Total Suspended Solids (mg/L)	2.13 - 19.9 (2/2)

UD-2

Constituent (units)	Concentration
Barium (mg/L)	0.0406 (1/1)
Nickel (mg/L)	0.00707 (1/1)
Total Suspended Solids (mg/L)	1.38* (0/1)

MW-20

Constituent (units)	Concentration
Arsenic (mg/L)	0.00428 - 0.00526 (2/2)
Barium (mg/L)	0.00987 - 0.00988 (2/2)
Cobalt (mg/L)	0.000741 - 0.000903 (2/2)
Total Suspended Solids (mg/L)	16.5 - 35 (2/2)

UD-3

Constituent (units)	Concentration
Arsenic (mg/L)	0.00376 (1/2)
Barium (mg/L)	0.0502 - 0.133 (2/2)
Cobalt (mg/L)	0.00493 - 0.00508 (2/2)
Nickel (mg/L)	0.014 - 0.0158 (2/2)
Total Suspended Solids (mg/L)	3 - 35.3 (2/2)

MW-21

Constituent (units)	Concentration
Barium (mg/L)	0.0297 - 0.0329 (2/2)
Total Suspended Solids (mg/L)	0.875* - <1.88 (0/2)

Maximum Concentration Summary

Constituent	Monitoring Point	Maximum Concentration
Antimony (mg/L)	MW-5	0.0029
Arsenic (mg/L)	MW-7	0.0575
Barium (mg/L)	MW-19	0.39
Cadmium (mg/L)	MW-5	0.000571
Cobalt (mg/L)	MW-5	0.0637
Lead (mg/L)	MW-5	0.00129
Nickel (mg/L)	MW-5	0.0712
Silver (mg/L)	MW-5	0.00125
Thallium (mg/L)	MW-13	0.00198
Acetone (ug/L)	MW-7	20.6
Benzene (ug/L)	MW-25	0.973
cis-1,2-Dichloroethene (ug/L)	MW-9R	4.72
Toluene (ug/L)	MW-7	44.4
Trichloroethene (ug/L)	MW-9R	1.67

Reporting Period Detection Summary

Legend

- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

* Indicates 'J Flag'. Detection is below the reporting limit, but above the method detection limit; the concentration is estimated.

Southeast Multi-County Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

Figure 3

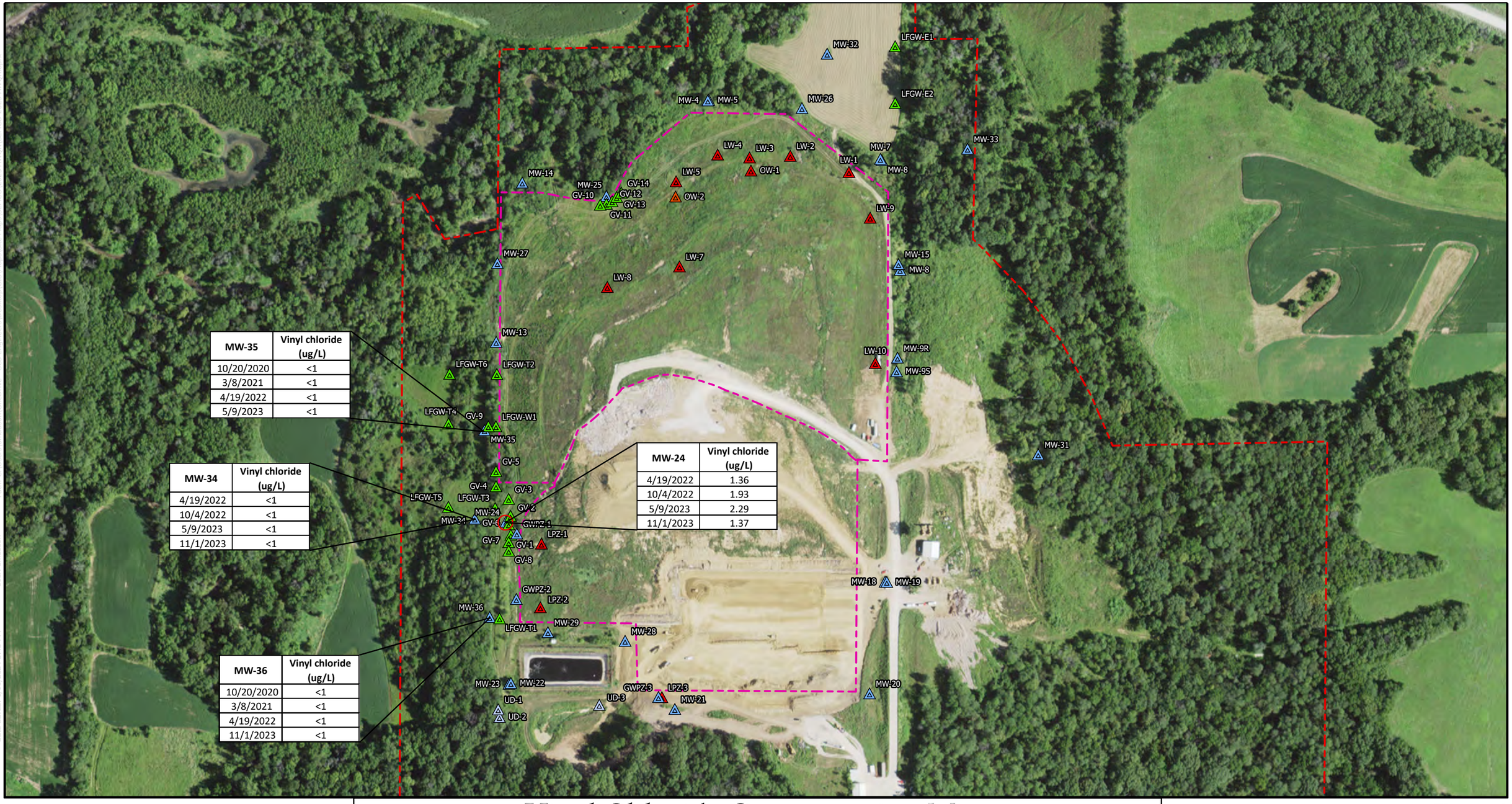
N W E S

0 237.5 475 950 Feet

SCS ENGINEERS
environmental consultants and contractors

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

Path: C:\Users\bmadson\OneDrive - SCS Engineers\Desktop\GIS\Maps\Site Maps\SEMCO\2023 AWOR\SEMCO-2023-AWOR.aprx
User: bmadson
Date Saved: 1/11/2024 5:31 PM



MW-35	Vinyl chloride (ug/L)
10/20/2020	<1
3/8/2021	<1
4/19/2022	<1
5/9/2023	<1

MW-34	Vinyl chloride (ug/L)
4/19/2022	<1
10/4/2022	<1
5/9/2023	<1
11/1/2023	<1

MW-24	Vinyl chloride (ug/L)
4/19/2022	1.36
10/4/2022	1.93
5/9/2023	2.29
11/1/2023	1.37

MW-36	Vinyl chloride (ug/L)
10/20/2020	<1
3/8/2021	<1
4/19/2022	<1
11/1/2023	<1

Vinyl Chloride Concentration Map

Figure 4

SCS ENGINEERS
environmental consultants and contractors

Legend

- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- SSL Well
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

Vinyl Chloride Prediction Limit = <1 ug/L

* Indicates 'J Flag'. Detection is below the reporting limit, but above the method detection limit; the concentration is estimated.

Southeast Multi-County Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

N W E S

0 237.5 475 950 Feet

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

Appendix A
Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-19**	Date:	**5/10/2023**
Gradient:	Up	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	NM
Initial Static Water Level (feet):	26.32
Initial Groundwater Elevation (ft-amsl):	739.37
Equipment Used:	Dedicated Submersible

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:20 AM	Purging start time.						
11:23 AM	14.7	0.6	907.6	6.75	-62.2	NM	
11:26 AM	14.7	0.3	904.8	6.74	-39.8	NM	
11:29 AM	15.4	0.2	894.8	6.74	-25.9	NM	
11:32 AM	15.4	0.2	877.9	6.77	-18.1	NM	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.7
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	225.00

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-5**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	26.0
Initial Static Water Level (feet):	15.56
Initial Groundwater Elevation (ft-amsl):	668.80
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
9:41 AM	Purging start time.						
9:44 AM	13.2	0.8	1293.6	6.25	80.0	NM	
9:47 AM	13.0	0.3	1291.1	6.28	74.3	NM	
9:50 AM	12.9	0.2	1288.7	6.31	21.8	NM	
9:53 AM	13.5	0.1	1287.4	6.31	-5.9	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-7**	Date:	**5/9/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	27.7
Initial Static Water Level (feet):	15.29
Initial Groundwater Elevation (ft-amsl):	679.92
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:06 PM	Purging start time.						
4:09 PM	13.7	0.8	1239.3	6.68	-181.8	23.6	
4:12 PM	13.4	0.4	1227.9	6.69	-181.8	22.5	
4:15 PM	13.5	0.3	1222.2	6.70	-181.5	21.7	
4:18 PM	13.3	0.2	1223.4	6.70	-182.0	20.3	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Black particles in purge and sample water.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-9R**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	24.0
Initial Static Water Level (feet):	11.45
Initial Groundwater Elevation (ft-amsl):	721.98
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
12:26 PM	Purging start time.						
12:29 PM	16.5	1.2	2011.4	6.31	-14.3	NM	
12:32 PM	15.9	0.7	2016.1	6.31	-12.9	NM	
12:35 PM	15.9	0.6	2020.6	6.31	-13.9	NM	
12:38 PM	15.6	0.5	2021.6	6.31	-15.4	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-13**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	NM
Initial Static Water Level (feet):	29.30
Initial Groundwater Elevation (ft-amsl):	694.54
Equipment Used:	Dedicated Submersible

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:25 PM	Purging start time.						
3:28 PM	14.9	0.5	1806.4	6.60	-41.5	NM	
3:31 PM	15.3	0.3	1805.1	6.60	-33.2	NM	
3:34 PM	15.9	0.2	1788.1	6.61	-36.8	NM	
3:37 PM	15.1	0.1	1774.7	6.62	-39.1	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-14**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	26.5
Initial Static Water Level (feet):	18.05
Initial Groundwater Elevation (ft-amsl):	669.19
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:26 AM	Purging start time.						
10:29 AM	15.6	0.6	774.3	5.85	138.4	NM	
10:32 AM	15.2	0.3	768.4	5.83	112.6	NM	
10:35 AM	15.3	0.2	771.3	5.82	73.5	NM	
10:38 AM	15.3	0.1	775.9	5.81	58.4	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-20**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	52.2
Initial Static Water Level (feet):	18.48
Initial Groundwater Elevation (ft-amsl):	731.51
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:48 AM	Purging start time.						
11:51 AM	15.1	0.4	2815.1	6.47	-82.8	NM	
11:54 AM	15.3	0.2	2815.6	6.47	-84.5	NM	
11:57 AM	15.3	0.1	2826.0	6.47	-85.4	NM	
12:00 PM	15.2	0.0	2829.8	6.47	-85.9	NM	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-21**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	27.2
Initial Static Water Level (feet):	21.54
Initial Groundwater Elevation (ft-amsl):	725.51
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
5:05 PM	Purging start time.						
5:08 PM	15.1	0.6	1186.4	6.59	34.8	NM	
5:11 PM	15.3	0.3	1175.8	6.58	37.8	NM	
5:14 PM	15.5	0.2	1184.6	6.57	39.0	NM	
5:17 PM	15.0	0.1	1191.6	6.57	39.8	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-23**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	NM
Initial Static Water Level (feet):	22.98
Initial Groundwater Elevation (ft-amsl):	685.92
Equipment Used:	Dedicated Submersible

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:00 PM	Purging start time.						
4:03 PM	13.7	0.6	2778.8	6.71	-103.7	NM	
4:06 PM	14.1	0.3	2763.2	6.72	-99.3	NM	
4:09 PM	14.5	0.3	2790.8	6.74	-97.3	NM	
4:12 PM	14.3	0.2	2758.6	6.75	-94.0	NM	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-25**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	NM
Initial Static Water Level (feet):	23.27
Initial Groundwater Elevation (ft-amsl):	671.34
Equipment Used:	Dedicated Submersible

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
2:26 PM	Purging start time.						
2:29 PM	14.2	0.40	1642.5	5.97	-97.2	NM	
2:32 PM	12.5	0.09	1608.5	6.00	-97.2	NM	
2:35 PM	12.2	0.03	1570.4	6.01	-98.9	NM	
2:38 PM	12.3	<0.01	1582.3	6.02	-101.4	NM	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	3.8
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	12:00
Average Purge Rate (mL/min):	316.67

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-26**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.2
Initial Static Water Level (feet):	11.78
Initial Groundwater Elevation (ft-amsl):	677.74
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
1:07 PM	Purging start time.						
1:10 PM	12.6	0.75	1643.0	6.49	-102.6	NM	
1:13 PM	12.9	0.20	1637.4	6.49	-110.9	NM	
1:16 PM	12.8	0.07	1636.9	6.49	-117.2	NM	
1:19 PM	12.4	0.01	1640.7	6.49	-122.2	NM	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-27**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	35.7
Initial Static Water Level (feet):	13.98
Initial Groundwater Elevation (ft-amsl):	691.27
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
2:54 PM	Purging start time.						
2:57 PM	13.8	1.5	857.3	6.92	-66.3	NM	
3:00 PM	13.7	1.2	853.8	6.91	-37.6	NM	
3:03 PM	13.7	1.0	853.8	6.91	-23.0	NM	
3:06 PM	13.9	1.0	852.3	6.91	-12.7	NM	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-28**	Date:	**5/10/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.9
Initial Static Water Level (feet):	13.80
Initial Groundwater Elevation (ft-amsl):	713.08
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:32 PM	Purging start time.						
4:35 PM	14.8	0.8	2776.7	6.39	33.7	NM	
4:38 PM	14.8	0.5	2779.3	6.39	40.7	NM	
4:41 PM	14.5	0.4	2794.3	6.39	44.0	NM	
4:44 PM	14.9	0.3	2816.3	6.39	46.0	NM	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-29**	Date:	**5/9/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	18.1
Initial Static Water Level (feet):	12.45
Initial Groundwater Elevation (ft-amsl):	708.58
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:02 PM	Purging start time.						
3:05 PM	15.1	3.5	3241.9	6.37	206.5	3.3	
3:08 PM	14.9	3.4	3239.5	6.42	213.1	4.0	
3:11 PM	14.5	3.1	3244.1	6.44	216.5	5.2	
3:14 PM	14.8	2.9	3230.0	6.44	218.7	3.8	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-34**	Date:	**5/11/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	27.8
Initial Static Water Level (feet):	20.77
Initial Groundwater Elevation (ft-amsl):	716.96
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:45 AM	Purging start time.						
10:48 AM	14.0	0.8	1267.8	6.78	0.6	NM	
10:51 AM	13.6	0.4	1027.2	6.89	-2.6	NM	
10:54 AM	13.5	1.6	792.4	7.00	2.8	NM	
10:57 AM	13.5	4.2	579.7	7.11	25.9	NM	
11:00 AM	13.5	5.1	510.5	7.13	42.4	NM	
11:03 AM	13.2	5.4	500.8	7.14	51.3	NM	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	3.0
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	18:00
Average Purge Rate (mL/min):	166.67

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-35**	Date:	**5/11/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.4
Initial Static Water Level (feet):	13.31
Initial Groundwater Elevation (ft-amsl):	717.59
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:20 AM	Purging start time.						
10:23 AM	13.0	0.6	3397.5	6.22	-30.8	NM	
10:26 AM	12.9	0.3	3396.1	6.28	-31.8	NM	
10:29 AM	12.8	0.2	3395.2	6.30	-30.6	NM	
10:32 AM	12.9	0.1	3393.8	6.31	-29.0	NM	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-36**	Date:	**5/11/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

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

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

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

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

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

Additional Comments:	Water level below pump, not enough water to sample. No sample collected.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-24**	Date:	**5/11/2023**
Gradient:	Down	Sampler:	Scott Stoller

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	29.0
Initial Static Water Level (feet):	21.00
Initial Groundwater Elevation (ft-amsl):	722.02
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:25 AM	Purging start time.						
11:28 AM	15.6	0.54	1704.0	6.22	-108.1	NM	
11:31 AM	17.8	0.41	1703.2	6.23	-112.3	NM	
11:34 AM	15.2	0.10	1701.3	6.23	-112.6	NM	
11:37 AM	14.9	0.04	1697.2	6.23	-113.8	NM	
11:40 AM	15.1	0.02	1697.1	6.23	-115.4	NM	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.2
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	143.33

D. WELL MAINTENANCE

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

Additional Comments:	Turbidity probe malfunction; no readings available.

FORM FOR SURFACE WATER SAMPLING

Site Name: Southeast Multi-County Landfill (SEMCO)
Permit No.: 54-SDP-01-75P
Surface Monitoring Point No.: UD-2

Name of Person Sampling: Scott Stiller

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream	feet	Downstream	X
Within Landfill	feet	Other	

C. MONITORING POINT CONDITIONS

General description/condition of monitoring point
Groundwater underdrain outlet for the Leachate Lagoon

Was monitoring point dry?	yes	Too little water to sample?	yes
Was water flowing?	No	If yes, estimate quantity	
		If yes, estimate depth	
Was water discolored?	N		
Does water have odor?	N		
Was ground discolored?	N		
Litter present?	N		

Comments:

D. FIELD MEASUREMENTS

Weather Conditions

Field Measurements (after stabilization):

Temperature		Units	Celsius
Equipment Used			
pH		Units	Standard Units
Equipment Used			
Spec.Conductance		Units	uS/cm
Equipment Used			

COMMENTS: underdrain is dry, no sample collected

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Southeast Multi-County Landfill (SEMCO)
Permit No.: 54-SDP-01-75P
Surface Monitoring Point No.: UD-3
5/11/23 (12:00)

Name of Person Sampling: Scott Stoller

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream	feet	Downstream	X
Within Landfill	feet	Other	

C. MONITORING POINT CONDITIONS

General description/condition of monitoring point
Groundwater underdrain outlet for the groundwater diversion trench

Was monitoring point dry?	No	Too little water to sample?	No
Was water flowing?	Yes	If yes, estimate quantity	1L/3 min → 0.3L/min
		If yes, estimate depth	<1 inch

Was water discolored?	No
Does water have odor?	No
Was ground discolored?	yes
Litter present?	yes

Comments: some blown Litter, ground is rust colored

D. FIELD MEASUREMENTS

Weather Conditions:

Field Measurements (after stabilization):

Temperature	15.8	Units	Celsius
Equipment Used	H-5111CR		
pH	6.77	Units	Standard Units
Equipment Used	H-5111CR		
Spec Conductance	1670	Units	uS/cm
Equipment Used	H-5111CR		

COMMENTS

IDNR Form 542-1324

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-5**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	26.0
Initial Static Water Level (feet):	19.60
Initial Groundwater Elevation (ft-amsl):	664.76
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:36 PM	Purging start time.						
3:39 PM	11.2	2.4	1141.6	6.25	-30.3	12.3	
3:42 PM	11.5	0.6	1124.3	6.23	-38.4	6.8	
3:45 PM	11.5	0.3	1139.4	6.22	-42.2	4.9	
3:48 PM	11.4	0.1	1166.8	6.21	-43.3	4.1	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-7**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	28.0
Initial Static Water Level (feet):	20.89
Initial Groundwater Elevation (ft-amsl):	674.32
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
12:11 PM	Purging start time.						
12:14 PM	12.5	1.4	963.6	6.54	-98.9	9.1	
12:17 PM	12.6	0.4	972.6	6.53	-102.5	8.8	
12:20 PM	12.5	0.2	997.6	6.52	-104.8	8.7	
12:23 PM	12.6	0.1	1068.7	6.49	-103.1	8.1	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-9R**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	23.9
Initial Static Water Level (feet):	14.57
Initial Groundwater Elevation (ft-amsl):	718.86
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
1:10 PM	Purging start time.						
1:13 PM	11.1	1.8	1898.9	6.35	-18.2	16.4	
1:16 PM	11.0	0.7	1869.7	6.30	0.3	11.7	
1:19 PM	10.9	0.4	1856.4	6.29	2.7	10.9	
1:22 PM	11.2	0.2	1847.2	6.29	2.0	12.6	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-13**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	45.6
Initial Static Water Level (feet):	29.98
Initial Groundwater Elevation (ft-amsl):	693.86
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
2:34 PM	Purging start time.						
2:37 PM	16.4	NA	NA	NA	NA	NA	
2:40 PM	15.2	4.4	1552.5	6.73	-19.9	56.5	
2:43 PM	14.3	0.4	1582.2	6.57	12.7	12.0	
2:46 PM	14.2	0.1	1536.4	6.61	12.6	6.2	
NA - Not available. The initial reading from the flow-through cell did not record properly.							
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-14**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	27.2
Initial Static Water Level (feet):	25.79
Initial Groundwater Elevation (ft-amsl):	661.45
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

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

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

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

Additional Comments:	Pumped dry before stabilization. No sample collected.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-19**	Date:	**11/2/2023**
Gradient:	Up	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	53.0
Initial Static Water Level (feet):	26.89
Initial Groundwater Elevation (ft-amsl):	738.80
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
11:29 AM	Purging start time.						
11:32 AM	13.4	2.0	1000.4	6.81	-37.1	45.4	
11:35 AM	13.3	0.3	810.3	6.77	-3.4	14.2	
11:38 AM	13.4	0.1	779.4	6.78	10.5	8.3	
11:41 AM	13.5	0.1	767.8	6.78	16.3	7.7	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-20**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	52.0
Initial Static Water Level (feet):	20.56
Initial Groundwater Elevation (ft-amsl):	729.43
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
12:21 PM	Purging start time.						
12:24 PM	11.7	1.6	2379.8	6.08	-4.7	11.3	
12:27 PM	12.0	0.6	2397.6	6.25	-24.7	11.2	
12:30 PM	12.1	0.3	2408.5	6.38	-33.8	13.0	
12:33 PM	12.2	0.2	2414.5	6.41	-36.7	13.8	
12:36 PM	12.1	0.1	2415.2	6.43	-38.2	10.1	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.2
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	15:00
Average Purge Rate (mL/min):	146.67

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-21**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	27.9
Initial Static Water Level (feet):	23.00
Initial Groundwater Elevation (ft-amsl):	724.05
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:16 PM	Purging start time.						
4:19 PM	13.1	1.3	1079.7	6.47	1.3	2.6	
4:22 PM	13.3	0.4	1079.1	6.46	34.1	1.8	
4:25 PM	13.2	0.2	1082.2	6.46	62.1	1.8	
4:28 PM	13.2	0.1	1086.2	6.45	76.8	1.7	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-23**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	37.5
Initial Static Water Level (feet):	23.69
Initial Groundwater Elevation (ft-amsl):	685.21
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:15 AM	Purging start time.						
10:18 AM	11.7	1.3	2437.6	6.77	-46.4	12.5	
10:21 AM	11.8	0.4	2448.8	6.71	-39.1	13.9	
10:24 AM	11.8	0.3	2453.0	6.71	-41.9	15.0	
10:27 AM	11.9	0.3	2455.8	6.71	-46.2	21.5	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-24**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	28.9
Initial Static Water Level (feet):	22.12
Initial Groundwater Elevation (ft-amsl):	720.90
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:16 PM	Purging start time.						
4:19 PM	13.9	0.9	1554.9	6.20	-28.3	3.4	
4:22 PM	13.9	0.4	1552.6	6.20	-28.5	3.8	
4:25 PM	13.9	0.2	1542.0	6.20	-28.7	3.5	
4:28 PM	14.0	0.1	1541.8	6.20	-28.4	3.2	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-25**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	37.8
Initial Static Water Level (feet):	Dry
Initial Groundwater Elevation (ft-amsl):	NA
Equipment Used:	NA

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

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

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

D. WELL MAINTENANCE		
Does the well require any future maintenance?	Yes	
If yes, explain:	The casing does not allow the lid to close, needs to be cut.	

Additional Comments:	The well was dry.

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-26**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	23.1
Initial Static Water Level (feet):	17.31
Initial Groundwater Elevation (ft-amsl):	672.21
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
1:54 PM	Purging start time.						
1:57 PM	12.4	1.3	1476.0	6.26	-32.9	12.6	
2:00 PM	12.6	0.4	1431.8	6.23	-34.0	9.8	
2:03 PM	12.7	0.2	1431.5	6.20	-35.0	6.1	
2:06 PM	12.5	0.1	1436.8	6.19	-36.6	4.3	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-27**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	37.7
Initial Static Water Level (feet):	17.11
Initial Groundwater Elevation (ft-amsl):	688.14
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
1:31 PM	Purging start time.						
1:34 PM	14.4	1.9	794.5	6.84	-69.9	4.6	
1:37 PM	14.2	0.6	764.8	6.82	-51.5	3.2	
1:40 PM	13.9	0.3	760.3	6.80	-42.4	4.0	
1:43 PM	14.1	0.2	758.7	6.79	-38.8	5.9	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-28**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	22.7
Initial Static Water Level (feet):	14.16
Initial Groundwater Elevation (ft-amsl):	712.72
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:51 PM	Purging start time.						
4:54 PM	14.1	1.1	2855.4	6.20	107.0	29.3	
4:57 PM	14.4	0.4	2889.5	6.22	124.0	26.6	
5:00 PM	14.2	0.2	2890.4	6.23	132.1	18.2	
5:03 PM	14.2	0.1	2894.2	6.24	137.2	15.8	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-29**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	18.1
Initial Static Water Level (feet):	13.73
Initial Groundwater Elevation (ft-amsl):	707.30
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:49 AM	Purging start time.						
10:52 AM	15.1	1.4	2909.9	6.36	37.4	9.7	
10:55 AM	15.5	0.7	2924.8	6.37	61.6	26.1	
10:58 AM	16.1	0.7	2917.3	6.39	73.9	21.3	
11:01 AM	16.0	0.5	2929.5	6.38	83.2	11.0	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-34**	Date:	**11/2/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	27.7
Initial Static Water Level (feet):	21.25
Initial Groundwater Elevation (ft-amsl):	716.48
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:15 PM	Purging start time.						
3:18 PM	13.0	1.62	2088.7	6.48	-14.2	6.0	
3:21 PM	13.0	0.41	1955.8	6.55	4.9	4.7	
3:24 PM	13.0	0.23	1823.1	6.60	17.4	5.1	
3:27 PM	13.0	0.15	1657.3	6.63	22.7	4.1	
3:30 PM	13.1	0.13	1444.2	6.66	20.5	3.5	
3:33 PM	13.0	0.06	1326.2	6.66	19.4	4.0	
3:36 PM	12.9	0.04	1269.4	6.66	19.8	4.0	
3:39 PM	12.9	0.02	1242.0	6.66	20.1	4.0	
	Parameters stabilized, sample collected.						

Quantity of Water Removed from Well (liters):	2.9
Was well pumped/bailed dry?	No
Total Amount of Time Purged (minutes:seconds):	24:00
Average Purge Rate (mL/min):	120.83

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR GROUNDWATER SAMPLING

Project:	**SEMCO Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-36**	Date:	**11/1/2023**
Gradient:	Down	Sampler:	Konner Roth

A. MW/PIEZOMETER CONDITIONS

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

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

Measured Well Total Depth (feet):	27.9
Initial Static Water Level (feet):	24.45
Initial Groundwater Elevation (ft-amsl):	713.88
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
5:26 PM	Purging start time.						
5:29 PM	12.3	1.0	3164.4	6.24	15.5	5.5	
5:32 PM	12.7	0.4	3131.1	6.26	17.9	3.3	
5:35 PM	12.9	0.2	3125.7	6.26	18.1	2.7	
5:38 PM	12.9	0.2	3132.6	6.26	17.9	2.2	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	

FORM FOR SURFACE WATER SAMPLING

Site Name: Southeast Multi-County Landfill (SEMCO)
Permit No: 54-SDP-01-75P
Surface Monitoring Point No: UD-2
Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream	feet	Downstream	X
Within Landfill	feet	Other	

C. MONITORING POINT CONDITIONS

General description/condition of monitoring point
Groundwater underdrain outlet for the Leachate Lagoon

Was monitoring point dry?	NO	Too little water to sample?	
Was water flowing?	YES	If yes, estimate quantity	
		If yes, estimate depth	

Was water discolored?	NO
Does water have odor?	NO
Was ground discolored?	NO
Litter present?	NO

Comments:

D. FIELD MEASUREMENTS

Weather Conditions: 48°F 5-10mph wind

Field Measurements (after stabilization):

Temperature	10.5	Units	Celsius
Equipment Used	YSI		
pH	8.05	Units	Standard Units
Equipment Used	YSI		
Spec Conductance	1611	Units	uS/cm
Equipment Used	YSI		

COMMENTS 9:49am 11-3-22

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Southeast Multi-County Landfill (SEMCO) Permit No. 54-SDP-01-75P
Surface Monitoring Point No. UD-3

Name of Person Sampling: Konner

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream	feet	Downstream	X
Within Landfill	X 100 feet	Other	

C. MONITORING POINT CONDITIONS

General description/condition of monitoring point
Groundwater underdrain outlet for the groundwater diversion trench

Was monitoring point dry?	NO	Too little water to sample?	
Was water flowing?	Yes	If yes, estimate quantity	
		If yes, estimate depth	
Was water discolored?	NO		
Does water have odor?	.		
Was ground discolored?	NO		
Litter present?	NO		

Comments:

D. FIELD MEASUREMENTS

Weather Conditions: 38°F, 5mph wind,

Field Measurements (after stabilization):

Temperature	7.7	Units	Celsius
Equipment Used	451		
pH	7.87	Units	Standard Units
Equipment Used	451		
Spec Conductance	1513	Units	uS/cm
Equipment Used	451		

COMMENTS

Appendix B-1
Laboratory Analytical Data Sheets

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

SEMCO (1st 2023 Semi-Annual)

JOB NUMBER

310-255788-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

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Authorization



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Authorized for release by
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Job ID: 310-255788-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-255788-1

REVISION

The report being provided is a revision of the original report sent on 5/31/2023. The report (revision 1) is being revised due to In the EDD and report Appendix I metals was delivered for MW-35 however the COC did not request Appendix I metals for MW-35.

Receipt
The samples were received on 5/12/2023 3:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.1°C, 0.6°C, 0.6°C and 6.7°C

Receipt Exceptions
The following sample(s) was received at the laboratory outside the required temperature criteria: MW-7, MW-29. This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387643 recovered above the upper control limit for 1,1,1,2-Tetrachloroethane (23.4%D). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-387643/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387643 recovered outside of the control limits for Carbon disulfide (-24.5%D), Chlorobromomethane (-21.0%D), and 1,1,-Dichloroethene (-24.5%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-387643/3).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-387643 recovered outside control limits for the following analytes: 1,1,1,2-Tetrachloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-387643 recovered outside control limits for the following analytes: 2-Hexanone and 4-Methyl-2-pentanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387646 recovered above the upper control limit for 1,1,1,2-Tetrachloroethane (43.8%D), 1,2,3-Trichloropropane (28.9%D), 2-Hexanone (37.6%D), 1,1,2,2-Tetrachloroethane (27.6%D), and 4-Methyl-2-pentanone (41.5%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 310-387646/3).

Method 8260D: The laboratory control sample (LCS) for analytical batch 310-387646 recovered outside control limits for the following analytes: 1,2,3-Trichloropropane, 2-Hexanone, and 4-Methyl-2-pentanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The method blank for analytical batch 310-387530 contained Chloromethane above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The method blank for analytical batch 310-387658 contained Chloromethane above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387658 recovered above the upper control limit for

Job ID: 310-255788-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

2-Hexanone (20.9%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 310-387658/3).

Method 8260D: The method blank for analytical batch 310-387785 contained Vinyl chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387785 recovered above the upper control limit for 2-Hexanone (20.5%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 310-387785/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-387941 recovered outside of the control limits for Chloroform (-22.9%D), trans-1,2-Dichloroethene (-27.4%D), and 1,1-Dichloroethane (-25.6%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-387941/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-388038 recovered outside of the control limits for 1,1-Dichloroethene (-28.5%D) and 1,1,1,2-Tetrachloroethane (20.9%D). The LCS associated with this CCV passed CCV criteria for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 310-388038/3).

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

GC/MS Semi VOA

Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-387448.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: The initial calibration verification (ICV) result for batch 310-387890 was above the upper control limit for Benzoic acid (59.7%D) and Famfur (59.3%D). Sample results were non-detects, and have been reported as qualified data.

Method 8270E: The continuing calibration verification (ICV was used as CCV) associated with batch 310-387890 recovered above the upper control limit for N-Nitrosopyrrolidine (21.7%D), Benzoic acid (59.7%D), 2,4-Dinitrotoluene (20.3%D), Sulfotepp (20.1%D), Dimethoate (26.7%D), Methyl parathion (25.3%D), Benzidine 24.8%D), Famfur (59.3%D), Kepone (44.3%D), 2-Acetylaminofluorene (20.9%D). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The method blank for preparation batch 310-387448 and analytical batch 310-387890 contained 3-Methylcholanthrene, 7,12-Dimethylbenz(a)anthracene and Methapyrilene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-387448 and analytical batch 310-387890 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 310-387448 and analytical batch 310-387890: 3,3'-p-Phenylene diamine, Dimethylbenzidine and Methapyrilene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 310-387448 and analytical batch 310-387890 recovered outside control limits for the following analytes: Famphur, Dimethoate and Kepone. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-387448 and analytical batch 310-387890 recovered outside control limits for the following analytes: 3,3'-Dimethylbenzidine,

Job ID: 310-255788-1 (Continued)

Laboratory: Eurofins Cedar Falls (Continued)

Methapyrilene and p-Phenylene diamine.

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

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

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with batch 500-713975 recovered above the upper control limit for 2,4,5-T. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 500-713975/14) and (CCVRT 500-713975/3).

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

PCBs
Method 8082A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-387447.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

Pesticides
Method 8081B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-387447.The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

HPLC/IC
Method 9056A_ORGFM_48H: Reanalysis of the following sample was performed outside of the analytical holding time due nitrate interference: MW-24 (310-255788-19).

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

Metals
Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of >2: MW-7 (310-255788-3) and UD-3 (310-255788-17). The sample(s) was preserved to the appropriate pH in the laboratory.

Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-24 (310-255788-19). The sample(s) was preserved to the appropriate pH in the laboratory.

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

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

Sample Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-255788-1	MW-19	Water	05/10/23 11:32	05/12/23 15:45
310-255788-2	MW-5	Water	05/10/23 09:53	05/12/23 15:45
310-255788-3	MW-7	Water	05/09/23 16:18	05/12/23 15:45
310-255788-4	MW-9R	Water	05/10/23 12:38	05/12/23 15:45
310-255788-5	MW-13	Water	05/10/23 15:37	05/12/23 15:45
310-255788-6	MW-14	Water	05/10/23 10:38	05/12/23 15:45
310-255788-7	MW-20	Water	05/10/23 12:00	05/12/23 15:45
310-255788-8	MW-21	Water	05/10/23 17:17	05/12/23 15:45
310-255788-9	MW-23	Water	05/10/23 16:12	05/12/23 15:45
310-255788-10	MW-25	Water	05/10/23 14:38	05/12/23 15:45
310-255788-11	MW-26	Water	05/10/23 13:19	05/12/23 15:45
310-255788-12	MW-27	Water	05/10/23 15:06	05/12/23 15:45
310-255788-13	MW-28	Water	05/10/23 16:44	05/12/23 15:45
310-255788-14	MW-29	Water	05/09/23 15:14	05/12/23 15:45
310-255788-15	MW-34	Water	05/11/23 11:03	05/12/23 15:45
310-255788-16	MW-D1	Water	05/10/23 09:53	05/12/23 15:45
310-255788-17	UD-3	Water	05/11/23 12:00	05/12/23 15:45
310-255788-18	MW-D2	Water	05/10/23 10:38	05/12/23 15:45
310-255788-19	MW-24	Water	05/11/23 11:40	05/12/23 15:45
310-255788-20	MW-35	Water	05/11/23 10:32	05/12/23 15:45
310-255788-21	Trip blank	Water	05/11/23 00:00	05/12/23 15:45

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-19 — Lab Sample ID: 310-255788-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	0.790	J	3.00	0.400	ug/L	1		8260D	Total/NA
Barium	0.346		0.00200	0.000640	mg/L	1		6020B	Total/NA
Copper	0.00229	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.38		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 310-255788-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.18	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.00339		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.130		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000104	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.0637		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0712		0.00500	0.00190	mg/L	1		6020B	Total/NA
Zinc	0.00905	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.25		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 310-255788-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20.6		10.0	3.10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	7.65	J	10.0	2.10	ug/L	1		8260D	Total/NA
Toluene	44.4		1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.0575		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.331		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000353	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00226	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000446	J	0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.00217	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Zinc	0.0114	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	118		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 310-255788-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.288	J	0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.56		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.601	J	1.00	0.220	ug/L	1		8260D	Total/NA
Trichloroethene	1.67		1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.00355		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0387		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0103		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000810		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0266		0.00500	0.00190	mg/L	1		6020B	Total/NA
Zinc	0.00996	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	23.3		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 310-255788-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0264		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00306		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00580		0.00500	0.00190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-13 (Continued) — Lab Sample ID: 310-255788-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.00120	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.38		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-14 — Lab Sample ID: 310-255788-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00149	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.199		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000341		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.0104		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00303	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000645		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0152		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000489	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.0109	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.50		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 310-255788-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00428		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.00987		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000903		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	16.5		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 310-255788-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0297		0.00200	0.000640	mg/L	1		6020B	Total/NA
Vanadium	0.00123	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	0.875	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 310-255788-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00115	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0167		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000744		0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	16.0		2.50	0.850	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-25 — Lab Sample ID: 310-255788-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.973		0.500	0.220	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.93		1.00	0.210	ug/L	1		8260D	Total/NA
Vinyl chloride	0.484	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00760	F1 F2	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0993	F1 F2	0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0515	F1 F2	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00198	J F1 F2	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000506	F1 F2	0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0154	F1 F2	0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.8		3.75	1.28	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-26 — Lab Sample ID: 310-255788-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00154	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0255		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000525		0.000500	0.000170	mg/L	1		6020B	Total/NA
Vanadium	0.00216	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Sulfide	0.920	J	1.00	0.231	mg/L	1		9034	Total/NA
Total Suspended Solids	6.50		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-27 — Lab Sample ID: 310-255788-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.132		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000113	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Vanadium	0.00137	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.38	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 310-255788-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0162		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000118	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000715		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00410	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0110		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00135	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.00673	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.13		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-29 — Lab Sample ID: 310-255788-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000563	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.00714		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000405	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00378	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00116	J	0.00500	0.00110	mg/L	1		6020B	Total/NA

Client Sample ID: MW-34 — Lab Sample ID: 310-255788-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.179	J	0.200	0.0780	mg/L	1		9056A	Total/NA
Sulfate	72.5		1.00	0.420	mg/L	1		9056A	Total/NA
Arsenic	0.000751	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0508		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000196	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000546		0.000500	0.000240	mg/L	1		6020B	Total/NA
Iron	0.338		0.100	0.0360	mg/L	1		6020B	Total/NA
Vanadium	0.00260	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Manganese	0.0737		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	12.4		1.88	0.638	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-D1 — Lab Sample ID: 310-255788-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00348		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.137		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0588		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00281	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0693		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00166	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.00657	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	14.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: UD-3 — Lab Sample ID: 310-255788-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.388	J	0.500	0.220	ug/L	1		8260D	Total/NA
Arsenic	0.00376		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.133		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00493		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0158		0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00124	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	35.3		5.00	1.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D2 — Lab Sample ID: 310-255788-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00139	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.203		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000150	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.0119		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00258	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.0160		0.00500	0.00190	mg/L	1		6020B	Total/NA
Silver	0.000664	J F2 F1	0.00100	0.000500	mg/L	1		6020B	Total/NA
Thallium	0.00198		0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.00796	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	2.75		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-24 — Lab Sample ID: 310-255788-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.02		0.500	0.220	ug/L	1		8260D	Total/NA
Chloroethane	3.31	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	13.4		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.03		1.00	0.220	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.580	J	1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	0.538	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	2.29	B	1.00	0.180	ug/L	1		8260D	Total/NA
Nitrate as N	1.08	H	1.00	0.390	mg/L	5		9056A	Total/NA
Sulfate	135		5.00	2.10	mg/L	5		9056A	Total/NA
Arsenic	0.0124		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.109		0.00200	0.000640	mg/L	1		6020B	Total/NA
Beryllium	0.000436	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000103	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.0103		0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0153		0.00500	0.00190	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-24 (Continued) — Lab Sample ID: 310-255788-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.00147	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Iron	47.7		0.100	0.0360	mg/L	1		6020B	Total/NA
Silver	0.000789	J	0.00100	0.000500	mg/L	1		6020B	Total/NA
Thallium	0.00257		0.00100	0.000260	mg/L	1		6020B	Total/NA
Manganese	3.92		0.0100	0.00360	mg/L	1		6020B	Total/NA
Total Suspended Solids	34.0		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-35 — Lab Sample ID: 310-255788-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	1820		20.0	8.40	mg/L	20		9056A	Total/NA
Iron	6.95		0.100	0.0360	mg/L	1		6020B	Total/NA
Manganese	6.68		0.0400	0.0144	mg/L	4		6020B	Total/NA

Client Sample ID: Trip blank — Lab Sample ID: 310-255788-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.184	J B	1.00	0.180	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Quantitation Limit Exceptions Summary

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

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	Water	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-19
Date Collected: 05/10/23 11:32
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 01:31	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 01:31	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 01:31	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 01:31	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 01:31	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 01:31	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 01:31	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 01:31	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 01:31	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 01:31	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 01:31	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 01:31	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 01:31	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 01:31	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 01:31	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 01:31	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 01:31	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 01:31	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 01:31	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 01:31	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 01:31	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 01:31	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 01:31	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 01:31	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 01:31	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 01:31	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 01:31	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 01:31	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 01:31	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 01:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 01:31	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 01:31	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 01:31	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 01:31	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 01:31	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 01:31	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 01:31	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 01:31	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 01:31	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 01:31	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 01:31	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 01:31	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 01:31	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 01:31	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 01:31	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 01:31	1
Xylenes, Total	**0.790**	**J**	3.00	0.400	ug/L			05/16/23 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*05/16/23 01:31*	*1*

Eurofins Cedar Falls

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-19
Date Collected: 05/10/23 11:32
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-1
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*05/16/23 01:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/16/23 01:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:21	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:21	1
Barium	**0.346**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:21	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:21	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:21	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:21	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:21	1
Copper	**0.00229**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:21	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:21	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:21	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:21	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:21	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:21	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:21	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		05/15/23 18:05	05/16/23 20:22	1
Total Suspended Solids (USGS I-3765-85)	**2.38**		1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-5
Date Collected: 05/10/23 09:53
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.18**	**J**	10.0	3.10	ug/L			05/16/23 01:56	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 01:56	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 01:56	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 01:56	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 01:56	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 01:56	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 01:56	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 01:56	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 01:56	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 01:56	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 01:56	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 01:56	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 01:56	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 01:56	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 01:56	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 01:56	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 01:56	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 01:56	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 01:56	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 01:56	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 01:56	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 01:56	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 01:56	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 01:56	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 01:56	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 01:56	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 01:56	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 01:56	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 01:56	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 01:56	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 01:56	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 01:56	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 01:56	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 01:56	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 01:56	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 01:56	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 01:56	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 01:56	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 01:56	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 01:56	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 01:56	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 01:56	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 01:56	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 01:56	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 01:56	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 01:56	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 01:56*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-5
Date Collected: 05/10/23 09:53
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-2
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*05/16/23 01:56*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/16/23 01:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:24	1
Arsenic	**0.00339**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:24	1
Barium	**0.130**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:24	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:24	1
Cadmium	**0.000104**	**J**	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:24	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:24	1
Cobalt	**0.0637**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:24	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:24	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:24	1
Nickel	**0.0712**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:24	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:24	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:24	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:24	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:24	1
Zinc	**0.00905**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.25**		3.75	1.28	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-7
Date Collected: 05/09/23 16:18
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**20.6**		10.0	3.10	ug/L			05/16/23 02:18	1
Acrolein	<10.0		10.0	3.60	ug/L			05/16/23 02:18	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 02:18	1
Allyl chloride	<2.00		2.00	0.700	ug/L			05/16/23 02:18	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 02:18	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 02:18	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 02:18	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 02:18	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 02:18	1
2-Butanone (MEK)	**7.65**	**J**	10.0	2.10	ug/L			05/16/23 02:18	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 02:18	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 02:18	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 02:18	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 02:18	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 02:18	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 02:18	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 02:18	1
Chloroprene	<1.00		1.00	0.230	ug/L			05/16/23 02:18	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 02:18	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 02:18	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 02:18	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 02:18	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 02:18	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 02:18	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			05/16/23 02:18	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 02:18	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			05/16/23 02:18	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 02:18	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 02:18	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 02:18	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 02:18	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			05/16/23 02:18	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			05/16/23 02:18	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			05/16/23 02:18	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 02:18	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			05/16/23 02:18	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 02:18	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 02:18	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			05/16/23 02:18	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 02:18	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			05/16/23 02:18	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 02:18	1
Naphthalene	<5.00		5.00	3.00	ug/L			05/16/23 02:18	1
Propionitrile	<10.0		10.0	3.40	ug/L			05/16/23 02:18	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 02:18	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 02:18	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 02:18	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 02:18	1
Toluene	**44.4**		1.00	0.430	ug/L			05/16/23 02:18	1

Client Sample ID: MW-7
Date Collected: 05/09/23 16:18
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 02:18	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 02:18	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 02:18	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			05/16/23 02:18	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 02:18	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 02:18	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 02:18	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 02:18	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 02:18	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 02:18	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 02:18	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 02:18*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 128*		*05/16/23 02:18*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/16/23 02:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 15:17	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
1,4-phenylenediamine	<10.0	*- *1	10.0	1.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 15:17	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Acetylaminofluorene	<10.0	*+	10.0	2.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
3,3'-Dimethylbenzidine	<10.0	*- *1	10.0	1.50	ug/L		05/15/23 07:26	05/18/23 15:17	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		05/15/23 07:26	05/18/23 15:17	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 15:17	1

Client Sample ID: MW-7
Lab Sample ID: 310-255788-3
Date Collected: 05/09/23 16:18
Matrix: Water
Date Received: 05/12/23 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 15:17	1
Methylphenol, 3 & 4	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Nitroaniline	<10.0	*+	10.0	1.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
Acenaphthene	<10.0		10.0	0.640	ug/L		05/15/23 07:26	05/18/23 15:17	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		05/15/23 07:26	05/18/23 15:17	1
Acetophenone	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 15:17	1
Anthracene	<10.0		10.0	0.870	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzo[b]fluoranthene	<10.0		10.0	4.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		05/15/23 07:26	05/18/23 15:17	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		05/15/23 07:26	05/18/23 15:17	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 15:17	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		05/15/23 07:26	05/18/23 15:17	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Chrysene	<10.0		10.0	0.870	ug/L		05/15/23 07:26	05/18/23 15:17	1
Diallate	<10.0		10.0	4.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
Dibenzo(a,h)anthracene	<10.0		10.0	3.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		05/15/23 07:26	05/18/23 15:17	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
Dimethoate	<10.0	*+	10.0	3.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
Dinoseb	<10.0		10.0	2.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
Diphenylamine	<10.0		10.0	6.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
Disulfoton	<10.0		10.0	2.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Ethyl Parathion	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
Famphur	<10.0	*+	10.0	3.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
Fluoranthene	<10.0		10.0	1.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
Fluorene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 15:17	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 15:17	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		05/15/23 07:26	05/18/23 15:17	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		05/15/23 07:26	05/18/23 15:17	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		05/15/23 07:26	05/18/23 15:17	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
Isodrin	<10.0		10.0	4.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
Isophorone	<10.0		10.0	0.930	ug/L		05/15/23 07:26	05/18/23 15:17	1

Client Sample ID: MW-7
Lab Sample ID: 310-255788-3
Date Collected: 05/09/23 16:18
Matrix: Water
Date Received: 05/12/23 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isosafrole	<10.0		10.0	2.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
Kepone	<10.0	*+	10.0	1.00	ug/L		05/15/23 07:26	05/18/23 15:17	1
Methapyrilene	<10.0	*- *1	10.0	0.760	ug/L		05/15/23 07:26	05/18/23 15:17	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
Methyl parathion	<10.0	*+	10.0	2.30	ug/L		05/15/23 07:26	05/18/23 15:17	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
N-Nitrosopyrrolidine	<10.0	*+	10.0	3.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
o,o',o''-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
o-Toluidine	<10.0		10.0	2.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		05/15/23 07:26	05/18/23 15:17	1
Phenacetin	<10.0	*+	10.0	1.90	ug/L		05/15/23 07:26	05/18/23 15:17	1
Phenanthrene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 15:17	1
Phenol	<10.0		10.0	1.10	ug/L		05/15/23 07:26	05/18/23 15:17	1
Phorate	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 15:17	1
Pronamide	<10.0	*+	10.0	2.70	ug/L		05/15/23 07:26	05/18/23 15:17	1
Pyrene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 15:17	1
Safrole	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 15:17	1
Thionazin	<10.0		10.0	3.50	ug/L		05/15/23 07:26	05/18/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*60*		*13 - 110*	*05/15/23 07:26*	*05/18/23 15:17*	*1*
Phenol-d5 (Surr)	*55*		*12 - 110*	*05/15/23 07:26*	*05/18/23 15:17*	*1*
Nitrobenzene-d5 (Surr)	*87*		*27 - 115*	*05/15/23 07:26*	*05/18/23 15:17*	*1*
2-Fluorobiphenyl (Surr)	*77*		*28 - 110*	*05/15/23 07:26*	*05/18/23 15:17*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*15 - 121*	*05/15/23 07:26*	*05/18/23 15:17*	*1*
Terphenyl-d14 (Surr)	*72*		*10 - 125*	*05/15/23 07:26*	*05/18/23 15:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	0.570	mg/L			05/20/23 14:07	1
Isobutanol	<10.0		10.0	0.550	mg/L			05/20/23 14:07	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0604		0.0604	0.0255	ug/L		05/15/23 07:19	05/22/23 18:41	1
4,4'-DDE	<0.0604		0.0604	0.0255	ug/L		05/15/23 07:19	05/22/23 18:41	1
4,4'-DDT	<0.0604		0.0604	0.0396	ug/L		05/15/23 07:19	05/22/23 18:41	1
Aldrin	<0.0604		0.0604	0.0302	ug/L		05/15/23 07:19	05/22/23 18:41	1
alpha-BHC	<0.0604		0.0604	0.0274	ug/L		05/15/23 07:19	05/22/23 18:41	1
beta-BHC	<0.0604		0.0604	0.0349	ug/L		05/15/23 07:19	05/22/23 18:41	1

Client Sample ID: MW-7
Date Collected: 05/09/23 16:18
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<1.89		1.89	0.764	ug/L		05/15/23 07:19	05/22/23 18:41	1
delta-BHC	<0.0604		0.0604	0.0255	ug/L		05/15/23 07:19	05/22/23 18:41	1
Dieldrin	<0.0604		0.0604	0.0245	ug/L		05/15/23 07:19	05/22/23 18:41	1
Endosulfan I	<0.0604		0.0604	0.0311	ug/L		05/15/23 07:19	05/22/23 18:41	1
Endosulfan II	<0.0604		0.0604	0.0274	ug/L		05/15/23 07:19	05/22/23 18:41	1
Endosulfan sulfate	<0.0604		0.0604	0.0283	ug/L		05/15/23 07:19	05/22/23 18:41	1
Endrin	<0.0604		0.0604	0.0245	ug/L		05/15/23 07:19	05/22/23 18:41	1
Endrin aldehyde	<0.0604		0.0604	0.0274	ug/L		05/15/23 07:19	05/22/23 18:41	1
gamma-BHC (Lindane)	<0.0604		0.0604	0.0340	ug/L		05/15/23 07:19	05/22/23 18:41	1
Heptachlor	<0.0604		0.0604	0.0311	ug/L		05/15/23 07:19	05/22/23 18:41	1
Heptachlor epoxide	<0.0604		0.0604	0.0274	ug/L		05/15/23 07:19	05/22/23 18:41	1
Methoxychlor	<0.0604		0.0604	0.0387	ug/L		05/15/23 07:19	05/22/23 18:41	1
Toxaphene	<1.89		1.89	0.651	ug/L		05/15/23 07:19	05/22/23 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*40*		*10 - 136*	*05/15/23 07:19*	*05/22/23 18:41*	*1*
Tetrachloro-m-xylene	*58*		*10 - 130*	*05/15/23 07:19*	*05/22/23 18:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.755		0.755	0.160	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1221	<0.755		0.755	0.160	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1232	<0.755		0.755	0.160	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1242	<0.755		0.755	0.160	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1248	<0.755		0.755	0.104	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1254	<0.755		0.755	0.104	ug/L		05/15/23 07:19	05/22/23 18:41	1
PCB-1260	<0.755		0.755	0.104	ug/L		05/15/23 07:19	05/22/23 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*40*		*10 - 136*	*05/15/23 07:19*	*05/22/23 18:41*	*1*
Tetrachloro-m-xylene	*58*		*10 - 130*	*05/15/23 07:19*	*05/22/23 18:41*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<1.07		1.07	0.328	ug/L		05/16/23 17:02	05/18/23 12:37	1
Silvex (2,4,5-TP)	<1.07		1.07	0.0890	ug/L		05/16/23 17:02	05/18/23 12:37	1
2,4,5-T	<1.07		1.07	0.154	ug/L		05/16/23 17:02	05/18/23 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*71*		*25 - 130*	*05/16/23 17:02*	*05/18/23 12:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:28	1
Arsenic	**0.0575**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:28	1
Barium	**0.331**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:28	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:28	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:28	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:28	1
Cobalt	**0.000353**	**J**	0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:28	1
Copper	**0.00226**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:28	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-7
Date Collected: 05/09/23 16:18
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.000446	J	0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:28	1
Nickel	0.00217	J	0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:28	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:28	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:28	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:28	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:28	1
Zinc	0.0114	J	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:28	1
Tin	<0.00500		0.00500	0.00230	mg/L		05/16/23 08:40	05/26/23 17:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000140	mg/L		05/22/23 10:51	05/23/23 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00430	mg/L		05/15/23 10:49	05/16/23 18:13	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		05/15/23 18:07	05/16/23 20:30	1
Total Suspended Solids (USGS I-3765-85)	118		15.0	5.10	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-9R
Date Collected: 05/10/23 12:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 02:41	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 02:41	1
Benzene	**0.288**	**J**	0.500	0.220	ug/L			05/16/23 02:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 02:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 02:41	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 02:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 02:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 02:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 02:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 02:41	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 02:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 02:41	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 02:41	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 02:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 02:41	1
cis-1,2-Dichloroethene	**4.56**		1.00	0.210	ug/L			05/16/23 02:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 02:41	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 02:41	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 02:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 02:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 02:41	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 02:41	1
1,1-Dichloroethane	**0.601**	**J**	1.00	0.220	ug/L			05/16/23 02:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 02:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 02:41	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 02:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 02:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 02:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 02:41	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 02:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 02:41	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 02:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 02:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 02:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 02:41	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 02:41	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 02:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 02:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 02:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 02:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 02:41	1
Trichloroethene	**1.67**		1.00	0.430	ug/L			05/16/23 02:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 02:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 02:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 02:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 02:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 02:41*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-9R
Date Collected: 05/10/23 12:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*05/16/23 02:41*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/16/23 02:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:31	1
Arsenic	**0.00355**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:31	1
Barium	**0.0387**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:31	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:31	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:31	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:31	1
Cobalt	**0.0103**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:31	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:31	1
Lead	**0.000810**		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:31	1
Nickel	**0.0266**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:31	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:31	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:31	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:31	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:31	1
Zinc	**0.00996**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		05/15/23 18:10	05/16/23 20:38	1
Total Suspended Solids (USGS I-3765-85)	**23.3**		3.75	1.28	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-13
Date Collected: 05/10/23 15:37
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 07:16	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 07:16	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 07:16	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 07:16	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 07:16	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 07:16	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 07:16	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 07:16	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 07:16	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 07:16	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 07:16	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 07:16	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 07:16	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 07:16	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 07:16	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 07:16	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 07:16	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 07:16	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 07:16	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 07:16	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 07:16	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 07:16	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 07:16	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 07:16	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 07:16	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 07:16	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 07:16	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 07:16	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 07:16	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 07:16	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 07:16	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 07:16	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 07:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 07:16	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 07:16	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 07:16	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 07:16	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 07:16	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 07:16	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 07:16	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 07:16	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 07:16	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 07:16	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 07:16	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 07:16	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 07:16	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 07:16*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-13
Date Collected: 05/10/23 15:37
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*05/16/23 07:16*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/16/23 07:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:35	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:35	1
Barium	**0.0264**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:35	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:35	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:35	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:35	1
Cobalt	**0.00306**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:35	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:35	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:35	1
Nickel	**0.00580**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:35	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:35	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:35	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:35	1
Vanadium	**0.00120**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:35	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.38**		1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-14
Date Collected: 05/10/23 10:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 07:39	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 07:39	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 07:39	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 07:39	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 07:39	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 07:39	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 07:39	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 07:39	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 07:39	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 07:39	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 07:39	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 07:39	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 07:39	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 07:39	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 07:39	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 07:39	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 07:39	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 07:39	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 07:39	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 07:39	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 07:39	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 07:39	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 07:39	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 07:39	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 07:39	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 07:39	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 07:39	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 07:39	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 07:39	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 07:39	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 07:39	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 07:39	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 07:39	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 07:39	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 07:39	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 07:39	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 07:39	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 07:39	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 07:39	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 07:39	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 07:39	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 07:39	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 07:39	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 07:39	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 07:39	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 07:39	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 07:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 07:39*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-14
Date Collected: 05/10/23 10:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*05/16/23 07:39*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/16/23 07:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:38	1
Arsenic	**0.00149**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:38	1
Barium	**0.199**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:38	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:38	1
Cadmium	**0.000341**		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:38	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:38	1
Cobalt	**0.0104**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:38	1
Copper	**0.00303**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:38	1
Lead	**0.000645**		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:38	1
Nickel	**0.0152**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:38	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:38	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:38	1
Thallium	**0.000489**	**J**	0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:38	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:38	1
Zinc	**0.0109**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.50**		1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-20
Date Collected: 05/10/23 12:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 08:01	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 08:01	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 08:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 08:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 08:01	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 08:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 08:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 08:01	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 08:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 08:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 08:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 08:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 08:01	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 08:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 08:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 08:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 08:01	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 08:01	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 08:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 08:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 08:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 08:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 08:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 08:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 08:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 08:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 08:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 08:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 08:01	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 08:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 08:01	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 08:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 08:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 08:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 08:01	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 08:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 08:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 08:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 08:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 08:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 08:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 08:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 08:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 08:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 08:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 08:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 08:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 08:01*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-20

Date Collected: 05/10/23 12:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-7

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*05/16/23 08:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/16/23 08:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:42	1
Arsenic	**0.00428**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:42	1
Barium	**0.00987**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:42	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:42	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:42	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:42	1
Cobalt	**0.000903**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:42	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:42	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:42	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:42	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:42	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:42	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:42	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:42	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**16.5**		3.75	1.28	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-21
Date Collected: 05/10/23 17:17
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 14:34	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 14:34	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 14:34	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 14:34	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 14:34	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 14:34	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 14:34	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 14:34	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 14:34	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 14:34	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 14:34	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 14:34	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 14:34	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 14:34	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 14:34	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 14:34	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 14:34	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 14:34	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 14:34	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 14:34	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 14:34	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 14:34	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 14:34	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 14:34	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 14:34	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 14:34	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 14:34	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 14:34	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 15:20	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 14:34	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 14:34	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 14:34	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 14:34	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 14:34	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 14:34	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 14:34	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 14:34	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 14:34	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 14:34	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 14:34	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 14:34	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 14:34	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 14:34	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 14:34	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 14:34	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 14:34	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/16/23 14:34*	*1*

Eurofins Cedar Falls

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-21
Date Collected: 05/10/23 17:17
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-8
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/18/23 15:20*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*05/16/23 14:34*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 128*		*05/18/23 15:20*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 14:34*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/18/23 15:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 17:45	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 17:45	1
Barium	**0.0297**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 17:45	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 17:45	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 17:45	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:45	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 17:45	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 17:45	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 17:45	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 17:45	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 17:45	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 17:45	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 17:45	1
Vanadium	**0.00123**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 17:45	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**0.875**	**J**	1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-23
Date Collected: 05/10/23 16:12
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 14:55	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 14:55	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 14:55	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 14:55	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 14:55	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 14:55	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 14:55	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 14:55	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 14:55	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 14:55	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 14:55	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 14:55	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 14:55	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 14:55	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 14:55	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 14:55	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 14:55	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 14:55	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 14:55	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 14:55	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 14:55	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 14:55	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 14:55	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 14:55	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 14:55	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 14:55	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 14:55	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 14:55	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 15:42	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 14:55	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 14:55	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 14:55	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 14:55	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 14:55	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 14:55	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 14:55	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 14:55	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 14:55	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 14:55	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 14:55	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 14:55	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 14:55	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 14:55	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 14:55	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 14:55	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 14:55	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/16/23 14:55*	*1*

Eurofins Cedar Falls

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-23
Date Collected: 05/10/23 16:12
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/18/23 15:42*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*05/16/23 14:55*	*1*
Dibromofluoromethane (Surr)	*116*		*80 - 128*		*05/18/23 15:42*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 14:55*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/18/23 15:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:10	1
Arsenic	**0.00115**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:10	1
Barium	**0.0167**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:10	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:10	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:10	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:10	1
Cobalt	**0.000744**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:10	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:10	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:10	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:10	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:10	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:10	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:10	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:10	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**16.0**		2.50	0.850	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-25
Date Collected: 05/10/23 14:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 15:17	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 15:17	1
Benzene	**0.973**		0.500	0.220	ug/L			05/16/23 15:17	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 15:17	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 15:17	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 15:17	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 15:17	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 15:17	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 15:17	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 15:17	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 15:17	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 15:17	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 15:17	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 15:17	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 15:17	1
cis-1,2-Dichloroethene	**1.93**		1.00	0.210	ug/L			05/16/23 15:17	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 15:17	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 15:17	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 15:17	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 15:17	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 15:17	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 15:17	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 15:17	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 15:17	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 15:17	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 15:17	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 15:17	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 15:17	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 16:03	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 15:17	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 15:17	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 15:17	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 15:17	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 15:17	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 15:17	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 15:17	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 15:17	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 15:17	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 15:17	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 15:17	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 15:17	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 15:17	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 15:17	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 15:17	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 15:17	1
Vinyl chloride	**0.484**	**J**	1.00	0.180	ug/L			05/16/23 15:17	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/16/23 15:17*	*1*

Client Sample ID: MW-25
Lab Sample ID: 310-255788-10
Date Collected: 05/10/23 14:38
Matrix: Water
Date Received: 05/12/23 15:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/18/23 16:03*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 128*		*05/16/23 15:17*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 128*		*05/18/23 16:03*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 15:17*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/18/23 16:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200	F1 F2	0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 16:26	1
Arsenic	**0.00760**	**F1 F2**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 16:26	1
Barium	**0.0993**	**F1 F2**	0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 16:26	1
Beryllium	<0.00100	F1 F2	0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 16:26	1
Cadmium	<0.000200	F1 F2	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 16:26	1
Chromium	<0.00500	F1 F2	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 16:26	1
Cobalt	**0.0515**	**F1 F2**	0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 16:26	1
Copper	**0.00198**	**J F1 F2**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 16:26	1
Lead	**0.000506**	**F1 F2**	0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 16:26	1
Nickel	**0.0154**	**F1 F2**	0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 16:26	1
Selenium	<0.00500	F1 F2	0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 16:26	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 16:26	1
Thallium	<0.00100	F1 F2	0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 16:26	1
Vanadium	<0.00500	F1 F2	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 16:26	1
Zinc	<0.0200	F1 F2	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 16:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**12.8**		3.75	1.28	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-26
Date Collected: 05/10/23 13:19
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 15:38	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 15:38	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 15:38	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 15:38	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 15:38	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 15:38	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 15:38	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 15:38	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 15:38	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 15:38	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 15:38	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 15:38	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 15:38	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 15:38	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 15:38	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 15:38	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 15:38	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 15:38	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 15:38	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 15:38	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 15:38	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 15:38	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 15:38	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 15:38	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 15:38	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 15:38	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 15:38	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 15:38	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 16:24	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 15:38	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 15:38	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 15:38	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 15:38	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 15:38	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 15:38	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 15:38	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 15:38	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 15:38	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 15:38	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 15:38	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 15:38	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 15:38	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 15:38	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 15:38	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 15:38	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 15:38	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/16/23 15:38*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-26
Date Collected: 05/10/23 13:19
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-11
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/18/23 16:24*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*05/16/23 15:38*	*1*
Dibromofluoromethane (Surr)	*117*		*80 - 128*		*05/18/23 16:24*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 15:38*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/18/23 16:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:13	1
Arsenic	**0.00154**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:13	1
Barium	**0.0255**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:13	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:13	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:13	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:13	1
Cobalt	**0.000525**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:13	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:13	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:13	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:13	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:13	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:13	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:13	1
Vanadium	**0.00216**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:13	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	**0.920**	**J**	1.00	0.231	mg/L		05/15/23 18:12	05/16/23 20:46	1
Total Suspended Solids (USGS I-3765-85)	**6.50**		1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-27
Date Collected: 05/10/23 15:06
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 15:59	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 15:59	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 15:59	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 15:59	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 15:59	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 15:59	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 15:59	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 15:59	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 15:59	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 15:59	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 15:59	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 15:59	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 15:59	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 15:59	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 15:59	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 15:59	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 15:59	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 15:59	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 15:59	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 15:59	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 15:59	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 15:59	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 15:59	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 15:59	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 15:59	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 15:59	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 15:59	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 15:59	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/19/23 10:30	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 15:59	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 15:59	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 15:59	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 15:59	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 15:59	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 15:59	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 15:59	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 15:59	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 15:59	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 15:59	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 15:59	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 15:59	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 15:59	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 15:59	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 15:59	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 15:59	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 15:59	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/16/23 15:59*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-27
Date Collected: 05/10/23 15:06
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-12
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*05/19/23 10:30*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*05/16/23 15:59*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 128*		*05/19/23 10:30*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/16/23 15:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/19/23 10:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:17	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:17	1
Barium	**0.132**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:17	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:17	1
Cadmium	**0.000113**	**J**	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:17	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:17	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:17	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:17	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:17	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:17	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:17	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:17	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:17	1
Vanadium	**0.00137**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:17	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.38**	**J**	1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-28
Date Collected: 05/10/23 16:44
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 16:21	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 16:21	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 16:21	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 16:21	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 16:21	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 16:21	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 16:21	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 16:21	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 16:21	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 16:21	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 16:21	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 16:21	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 16:21	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 16:21	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 16:21	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 16:21	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 16:21	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 16:21	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 16:21	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 16:21	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 16:21	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 16:21	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 16:21	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 16:21	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 16:21	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 16:21	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 16:21	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/16/23 16:21	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 17:06	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 16:21	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/16/23 16:21	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 16:21	1
1,1,1,2-Tetrachloroethane	<1.00	*+	1.00	0.380	ug/L			05/16/23 16:21	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 16:21	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 16:21	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 16:21	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 16:21	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 16:21	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 16:21	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 16:21	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 16:21	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 16:21	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 16:21	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 16:21	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 16:21	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 16:21	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/16/23 16:21*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-28
Date Collected: 05/10/23 16:44
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-13
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/18/23 17:06*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*05/16/23 16:21*	*1*
Dibromofluoromethane (Surr)	*118*		*80 - 128*		*05/18/23 17:06*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 16:21*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/18/23 17:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:20	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:20	1
Barium	**0.0162**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:20	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:20	1
Cadmium	**0.000118**	**J**	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:20	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:20	1
Cobalt	**0.000715**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:20	1
Copper	**0.00410**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:20	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:20	1
Nickel	**0.0110**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:20	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:20	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:20	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:20	1
Vanadium	**0.00135**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:20	1
Zinc	**0.00673**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.13**		1.88	0.638	mg/L			05/15/23 08:12	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-29
Date Collected: 05/09/23 15:14
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 03:04	1
Acrolein	<10.0		10.0	3.60	ug/L			05/16/23 03:04	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 03:04	1
Allyl chloride	<2.00		2.00	0.700	ug/L			05/16/23 03:04	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 03:04	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 03:04	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 03:04	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 03:04	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 03:04	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 03:04	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 03:04	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 03:04	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 03:04	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 03:04	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 03:04	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 03:04	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 03:04	1
Chloroprene	<1.00		1.00	0.230	ug/L			05/16/23 03:04	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 03:04	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 03:04	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 03:04	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 03:04	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 03:04	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 03:04	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			05/16/23 03:04	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 03:04	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			05/16/23 03:04	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 03:04	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 03:04	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 03:04	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 03:04	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			05/16/23 03:04	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			05/16/23 03:04	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			05/16/23 03:04	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 03:04	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			05/16/23 03:04	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 03:04	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 03:04	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			05/16/23 03:04	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 03:04	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			05/16/23 03:04	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 03:04	1
Naphthalene	<5.00		5.00	3.00	ug/L			05/16/23 03:04	1
Propionitrile	<10.0		10.0	3.40	ug/L			05/16/23 03:04	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 03:04	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 03:04	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 03:04	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 03:04	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 03:04	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-29

Date Collected: 05/09/23 15:14
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 03:04	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 03:04	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 03:04	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			05/16/23 03:04	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 03:04	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 03:04	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 03:04	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 03:04	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 03:04	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 03:04	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 03:04	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/16/23 03:04*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*05/16/23 03:04*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/16/23 03:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<9.43		9.43	0.509	ug/L		05/15/23 07:26	05/18/23 15:42	1
1,3,5-Trinitrobenzene	<9.43		9.43	2.17	ug/L		05/15/23 07:26	05/18/23 15:42	1
1,3-Dinitrobenzene	<9.43		9.43	3.02	ug/L		05/15/23 07:26	05/18/23 15:42	1
1,4-Naphthoquinone	<9.43		9.43	3.40	ug/L		05/15/23 07:26	05/18/23 15:42	1
1,4-phenylenediamine	<9.43	*- *1	9.43	1.79	ug/L		05/15/23 07:26	05/18/23 15:42	1
1-Naphthylamine	<9.43		9.43	2.36	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,3,4,6-Tetrachlorophenol	<9.43		9.43	5.00	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4,5-Trichlorophenol	<9.43		9.43	5.00	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4,6-Trichlorophenol	<9.43		9.43	4.72	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4-Dichlorophenol	<9.43		9.43	0.802	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4-Dimethylphenol	<9.43		9.43	0.547	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4-Dinitrophenol	<18.9		18.9	12.3	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,4-Dinitrotoluene	<9.43		9.43	6.04	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,6-Dichlorophenol	<9.43		9.43	0.651	ug/L		05/15/23 07:26	05/18/23 15:42	1
2,6-Dinitrotoluene	<9.43		9.43	0.491	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Acetylaminofluorene	<9.43	*+	9.43	2.55	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Chloronaphthalene	<9.43		9.43	0.604	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Chlorophenol	<9.43		9.43	0.509	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Methylnaphthalene	<9.43		9.43	0.557	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Methylphenol	<9.43		9.43	0.613	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Naphthylamine	<9.43		9.43	1.98	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Nitroaniline	<9.43		9.43	5.57	ug/L		05/15/23 07:26	05/18/23 15:42	1
2-Nitrophenol	<9.43		9.43	6.42	ug/L		05/15/23 07:26	05/18/23 15:42	1
3,3'-Dichlorobenzidine	<9.43		9.43	1.32	ug/L		05/15/23 07:26	05/18/23 15:42	1
3,3'-Dimethylbenzidine	<9.43	*- *1	9.43	1.42	ug/L		05/15/23 07:26	05/18/23 15:42	1
3-Methylcholanthrene	<9.43		9.43	0.302	ug/L		05/15/23 07:26	05/18/23 15:42	1
3-Nitroaniline	<9.43		9.43	2.55	ug/L		05/15/23 07:26	05/18/23 15:42	1
4,6-Dinitro-2-methylphenol	<9.43		9.43	6.51	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Aminobiphenyl	<9.43		9.43	2.08	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Bromophenyl phenyl ether	<9.43		9.43	0.660	ug/L		05/15/23 07:26	05/18/23 15:42	1

Client Sample ID: MW-29
Date Collected: 05/09/23 15:14
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	<9.43		9.43	0.792	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Chloroaniline	<9.43		9.43	0.585	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Chlorophenyl phenyl ether	<9.43		9.43	0.651	ug/L		05/15/23 07:26	05/18/23 15:42	1
Methylphenol, 3 & 4	<9.43		9.43	0.660	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Nitroaniline	<9.43	*+	9.43	1.23	ug/L		05/15/23 07:26	05/18/23 15:42	1
4-Nitrophenol	<9.43		9.43	7.17	ug/L		05/15/23 07:26	05/18/23 15:42	1
5-Nitro-o-toluidine	<9.43		9.43	2.64	ug/L		05/15/23 07:26	05/18/23 15:42	1
7,12-Dimethylbenz(a)anthracene	<9.43		9.43	1.79	ug/L		05/15/23 07:26	05/18/23 15:42	1
Acenaphthene	<9.43		9.43	0.604	ug/L		05/15/23 07:26	05/18/23 15:42	1
Acenaphthylene	<9.43		9.43	0.679	ug/L		05/15/23 07:26	05/18/23 15:42	1
Acetophenone	<9.43		9.43	0.651	ug/L		05/15/23 07:26	05/18/23 15:42	1
Anthracene	<9.43		9.43	0.821	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzo[a]anthracene	<9.43		9.43	0.802	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzo[a]pyrene	<9.43		9.43	7.64	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzo[b]fluoranthene	<9.43		9.43	4.62	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzo[g,h,i]perylene	<9.43		9.43	5.94	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzo[k]fluoranthene	<9.43		9.43	2.08	ug/L		05/15/23 07:26	05/18/23 15:42	1
Benzyl alcohol	<9.43		9.43	1.23	ug/L		05/15/23 07:26	05/18/23 15:42	1
Bis(2-chloroethoxy)methane	<9.43		9.43	0.717	ug/L		05/15/23 07:26	05/18/23 15:42	1
Bis(2-chloroethyl)ether	<9.43		9.43	0.774	ug/L		05/15/23 07:26	05/18/23 15:42	1
bis (2-chloroisopropyl) ether	<9.43		9.43	0.509	ug/L		05/15/23 07:26	05/18/23 15:42	1
Bis(2-ethylhexyl) phthalate	<9.43		9.43	5.19	ug/L		05/15/23 07:26	05/18/23 15:42	1
Butyl benzyl phthalate	<9.43		9.43	5.09	ug/L		05/15/23 07:26	05/18/23 15:42	1
Chlorobenzilate	<9.43		9.43	3.40	ug/L		05/15/23 07:26	05/18/23 15:42	1
Chrysene	<9.43		9.43	0.821	ug/L		05/15/23 07:26	05/18/23 15:42	1
Diallate	<9.43		9.43	3.77	ug/L		05/15/23 07:26	05/18/23 15:42	1
Dibenzo(a,h)anthracene	<9.43		9.43	3.68	ug/L		05/15/23 07:26	05/18/23 15:42	1
Dibenzofuran	<9.43		9.43	0.698	ug/L		05/15/23 07:26	05/18/23 15:42	1
Diethyl phthalate	<9.43		9.43	1.60	ug/L		05/15/23 07:26	05/18/23 15:42	1
Dimethoate	<9.43	*+	9.43	3.40	ug/L		05/15/23 07:26	05/18/23 15:42	1
Dimethyl phthalate	<9.43		9.43	0.943	ug/L		05/15/23 07:26	05/18/23 15:42	1
Di-n-butyl phthalate	<9.43		9.43	5.28	ug/L		05/15/23 07:26	05/18/23 15:42	1
Di-n-octyl phthalate	<18.9		18.9	6.60	ug/L		05/15/23 07:26	05/18/23 15:42	1
Dinoseb	<9.43		9.43	2.26	ug/L		05/15/23 07:26	05/18/23 15:42	1
Diphenylamine	<9.43		9.43	5.66	ug/L		05/15/23 07:26	05/18/23 15:42	1
Disulfoton	<9.43		9.43	2.26	ug/L		05/15/23 07:26	05/18/23 15:42	1
Ethyl methanesulfonate	<9.43		9.43	3.40	ug/L		05/15/23 07:26	05/18/23 15:42	1
Ethyl Parathion	<9.43		9.43	2.08	ug/L		05/15/23 07:26	05/18/23 15:42	1
Famphur	<9.43	*+	9.43	3.58	ug/L		05/15/23 07:26	05/18/23 15:42	1
Fluoranthene	<9.43		9.43	1.60	ug/L		05/15/23 07:26	05/18/23 15:42	1
Fluorene	<9.43		9.43	0.745	ug/L		05/15/23 07:26	05/18/23 15:42	1
Hexachlorobenzene	<9.43		9.43	0.660	ug/L		05/15/23 07:26	05/18/23 15:42	1
Hexachlorobutadiene	<9.43		9.43	0.811	ug/L		05/15/23 07:26	05/18/23 15:42	1
Hexachlorocyclopentadiene	<9.43		9.43	4.81	ug/L		05/15/23 07:26	05/18/23 15:42	1
Hexachloroethane	<9.43		9.43	0.915	ug/L		05/15/23 07:26	05/18/23 15:42	1
Hexachloropropene	<9.43		9.43	2.45	ug/L		05/15/23 07:26	05/18/23 15:42	1
Indeno[1,2,3-cd]pyrene	<9.43		9.43	3.96	ug/L		05/15/23 07:26	05/18/23 15:42	1
Isodrin	<9.43		9.43	4.43	ug/L		05/15/23 07:26	05/18/23 15:42	1
Isophorone	<9.43		9.43	0.877	ug/L		05/15/23 07:26	05/18/23 15:42	1

Client Sample ID: MW-29
Date Collected: 05/09/23 15:14
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isosafrole	<9.43		9.43	2.17	ug/L		05/15/23 07:26	05/18/23 15:42	1
Kepone	<9.43	*+	9.43	0.943	ug/L		05/15/23 07:26	05/18/23 15:42	1
Methapyrilene	<9.43	*- *1	9.43	0.717	ug/L		05/15/23 07:26	05/18/23 15:42	1
Methyl methanesulfonate	<9.43		9.43	3.11	ug/L		05/15/23 07:26	05/18/23 15:42	1
Methyl parathion	<9.43	*+	9.43	2.17	ug/L		05/15/23 07:26	05/18/23 15:42	1
Nitrobenzene	<9.43		9.43	0.755	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosodiethylamine	<9.43		9.43	3.21	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosodimethylamine	<9.43		9.43	0.679	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosodi-n-butylamine	<9.43		9.43	3.68	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosodi-n-propylamine	<9.43		9.43	0.868	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosodiphenylamine	<9.43		9.43	0.708	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosomethylethylamine	<9.43		9.43	4.62	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosopiperidine	<9.43		9.43	2.55	ug/L		05/15/23 07:26	05/18/23 15:42	1
N-Nitrosopyrrolidine	<9.43	*+	9.43	3.40	ug/L		05/15/23 07:26	05/18/23 15:42	1
o,o',o''-Triethylphosphorothioate	<9.43		9.43	3.02	ug/L		05/15/23 07:26	05/18/23 15:42	1
o-Toluidine	<9.43		9.43	2.74	ug/L		05/15/23 07:26	05/18/23 15:42	1
p-Dimethylamino azobenzene	<9.43		9.43	2.08	ug/L		05/15/23 07:26	05/18/23 15:42	1
Pentachlorobenzene	<9.43		9.43	2.64	ug/L		05/15/23 07:26	05/18/23 15:42	1
Pentachloronitrobenzene	<9.43		9.43	5.47	ug/L		05/15/23 07:26	05/18/23 15:42	1
Pentachlorophenol	<9.43		9.43	9.06	ug/L		05/15/23 07:26	05/18/23 15:42	1
Phenacetin	<9.43	*+	9.43	1.79	ug/L		05/15/23 07:26	05/18/23 15:42	1
Phenanthrene	<9.43		9.43	0.745	ug/L		05/15/23 07:26	05/18/23 15:42	1
Phenol	<9.43		9.43	1.04	ug/L		05/15/23 07:26	05/18/23 15:42	1
Phorate	<9.43		9.43	3.02	ug/L		05/15/23 07:26	05/18/23 15:42	1
Pronamide	<9.43	*+	9.43	2.55	ug/L		05/15/23 07:26	05/18/23 15:42	1
Pyrene	<9.43		9.43	0.745	ug/L		05/15/23 07:26	05/18/23 15:42	1
Safrole	<9.43		9.43	2.64	ug/L		05/15/23 07:26	05/18/23 15:42	1
Thionazin	<9.43		9.43	3.30	ug/L		05/15/23 07:26	05/18/23 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*62*		*13 - 110*	*05/15/23 07:26*	*05/18/23 15:42*	*1*
Phenol-d5 (Surr)	*54*		*12 - 110*	*05/15/23 07:26*	*05/18/23 15:42*	*1*
Nitrobenzene-d5 (Surr)	*85*		*27 - 115*	*05/15/23 07:26*	*05/18/23 15:42*	*1*
2-Fluorobiphenyl (Surr)	*75*		*28 - 110*	*05/15/23 07:26*	*05/18/23 15:42*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*15 - 121*	*05/15/23 07:26*	*05/18/23 15:42*	*1*
Terphenyl-d14 (Surr)	*86*		*10 - 125*	*05/15/23 07:26*	*05/18/23 15:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	0.570	mg/L			05/20/23 14:25	1
Isobutanol	<10.0		10.0	0.550	mg/L			05/20/23 14:25	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0593		0.0593	0.0250	ug/L		05/15/23 07:19	05/22/23 18:54	1
4,4'-DDE	<0.0593		0.0593	0.0250	ug/L		05/15/23 07:19	05/22/23 18:54	1
4,4'-DDT	<0.0593		0.0593	0.0389	ug/L		05/15/23 07:19	05/22/23 18:54	1
Aldrin	<0.0593		0.0593	0.0296	ug/L		05/15/23 07:19	05/22/23 18:54	1
alpha-BHC	<0.0593		0.0593	0.0269	ug/L		05/15/23 07:19	05/22/23 18:54	1
beta-BHC	<0.0593		0.0593	0.0343	ug/L		05/15/23 07:19	05/22/23 18:54	1

Client Sample ID: MW-29
Lab Sample ID: 310-255788-14
Date Collected: 05/09/23 15:14
Matrix: Water
Date Received: 05/12/23 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<1.85		1.85	0.750	ug/L		05/15/23 07:19	05/22/23 18:54	1
delta-BHC	<0.0593		0.0593	0.0250	ug/L		05/15/23 07:19	05/22/23 18:54	1
Dieldrin	<0.0593		0.0593	0.0241	ug/L		05/15/23 07:19	05/22/23 18:54	1
Endosulfan I	<0.0593		0.0593	0.0306	ug/L		05/15/23 07:19	05/22/23 18:54	1
Endosulfan II	<0.0593		0.0593	0.0269	ug/L		05/15/23 07:19	05/22/23 18:54	1
Endosulfan sulfate	<0.0593		0.0593	0.0278	ug/L		05/15/23 07:19	05/22/23 18:54	1
Endrin	<0.0593		0.0593	0.0241	ug/L		05/15/23 07:19	05/22/23 18:54	1
Endrin aldehyde	<0.0593		0.0593	0.0269	ug/L		05/15/23 07:19	05/22/23 18:54	1
gamma-BHC (Lindane)	<0.0593		0.0593	0.0333	ug/L		05/15/23 07:19	05/22/23 18:54	1
Heptachlor	<0.0593		0.0593	0.0306	ug/L		05/15/23 07:19	05/22/23 18:54	1
Heptachlor epoxide	<0.0593		0.0593	0.0269	ug/L		05/15/23 07:19	05/22/23 18:54	1
Methoxychlor	<0.0593		0.0593	0.0380	ug/L		05/15/23 07:19	05/22/23 18:54	1
Toxaphene	<1.85		1.85	0.639	ug/L		05/15/23 07:19	05/22/23 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 136*	*05/15/23 07:19*	*05/22/23 18:54*	*1*
Tetrachloro-m-xylene	*71*		*10 - 130*	*05/15/23 07:19*	*05/22/23 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.741		0.741	0.157	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1221	<0.741		0.741	0.157	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1232	<0.741		0.741	0.157	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1242	<0.741		0.741	0.157	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1248	<0.741		0.741	0.102	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1254	<0.741		0.741	0.102	ug/L		05/15/23 07:19	05/22/23 18:54	1
PCB-1260	<0.741		0.741	0.102	ug/L		05/15/23 07:19	05/22/23 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 136*	*05/15/23 07:19*	*05/22/23 18:54*	*1*
Tetrachloro-m-xylene	*71*		*10 - 130*	*05/15/23 07:19*	*05/22/23 18:54*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<1.02		1.02	0.313	ug/L		05/16/23 17:02	05/18/23 12:56	1
Silvex (2,4,5-TP)	<1.02		1.02	0.0849	ug/L		05/16/23 17:02	05/18/23 12:56	1
2,4,5-T	<1.02		1.02	0.147	ug/L		05/16/23 17:02	05/18/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*70*		*25 - 130*	*05/16/23 17:02*	*05/18/23 12:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:24	1
Arsenic	**0.000563**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:24	1
Barium	**0.00714**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:24	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:24	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:24	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:24	1
Cobalt	**0.000405**	**J**	0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:24	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:24	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-29

Date Collected: 05/09/23 15:14
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:24	1
Nickel	**0.00378**	**J**	0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:24	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:24	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:24	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:24	1
Vanadium	**0.00116**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:24	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:24	1
Tin	<0.00500		0.00500	0.00230	mg/L		05/16/23 08:40	05/26/23 18:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000140	mg/L		05/17/23 12:57	05/18/23 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00430	mg/L		05/15/23 10:49	05/16/23 18:15	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		05/15/23 18:15	05/16/23 20:54	1
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	0.638	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-34
Date Collected: 05/11/23 11:03
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 18:31	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 18:31	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 18:31	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 18:31	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 18:31	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 18:31	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 18:31	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 18:31	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 18:31	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 18:31	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 18:31	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 18:31	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 18:31	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 18:31	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 18:31	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 18:31	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 18:31	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 18:31	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 18:31	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 18:31	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 18:31	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 18:31	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 18:31	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 18:31	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 18:31	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 18:31	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 18:31	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 18:31	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 18:31	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 18:31	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 18:31	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 18:31	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 18:31	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 18:31	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 18:31	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 18:31	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 18:31	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 18:31	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 18:31	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 18:31	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 18:31	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 18:31	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 18:31	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 18:31	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 18:31	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 18:31	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/16/23 18:31*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-34

Date Collected: 05/11/23 11:03
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-15

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*05/16/23 18:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/16/23 18:31*	*1*

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.179**	**J**	0.200	0.0780	mg/L			05/12/23 22:35	1
Sulfate	**72.5**		1.00	0.420	mg/L			05/12/23 22:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:27	1
Arsenic	**0.000751**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:27	1
Barium	**0.0508**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:27	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:27	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:27	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:27	1
Cobalt	**0.000196**	**J**	0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:27	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:27	1
Lead	**0.000546**		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:27	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:27	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:27	1
Iron	**0.338**		0.100	0.0360	mg/L		05/16/23 08:40	05/26/23 18:27	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:27	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:27	1
Vanadium	**0.00260**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:27	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:27	1
Manganese	**0.0737**		0.0100	0.00360	mg/L		05/16/23 08:40	05/26/23 18:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**12.4**		1.88	0.638	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-D1
Date Collected: 05/10/23 09:53
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/17/23 01:14	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/17/23 01:14	1
Benzene	<0.500		0.500	0.220	ug/L			05/17/23 01:14	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/17/23 01:14	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/17/23 01:14	1
Bromoform	<5.00		5.00	0.780	ug/L			05/17/23 01:14	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/17/23 01:14	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/17/23 01:14	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/17/23 01:14	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/17/23 01:14	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/17/23 01:14	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/17/23 01:14	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/17/23 01:14	1
Chloroform	<3.00		3.00	1.30	ug/L			05/17/23 01:14	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/17/23 01:14	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/17/23 01:14	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/17/23 01:14	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/17/23 01:14	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/17/23 01:14	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/17/23 01:14	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/17/23 01:14	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/17/23 01:14	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/17/23 01:14	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/17/23 01:14	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/17/23 01:14	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/17/23 01:14	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/17/23 01:14	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/17/23 01:14	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 17:27	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/17/23 01:14	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/17/23 01:14	1
Styrene	<1.00		1.00	0.370	ug/L			05/17/23 01:14	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/17/23 01:14	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/17/23 01:14	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/17/23 01:14	1
Toluene	<1.00		1.00	0.430	ug/L			05/17/23 01:14	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/17/23 01:14	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/17/23 01:14	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/17/23 01:14	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/17/23 01:14	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/17/23 01:14	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/17/23 01:14	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/17/23 01:14	1
1,2,3-Trichloropropane	<1.00	*+	1.00	0.590	ug/L			05/17/23 01:14	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/17/23 01:14	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/17/23 01:14	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/17/23 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/17/23 01:14*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-D1
Date Collected: 05/10/23 09:53
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-16
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/18/23 17:27*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 128*		*05/17/23 01:14*	*1*
Dibromofluoromethane (Surr)	*114*		*80 - 128*		*05/18/23 17:27*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/17/23 01:14*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/18/23 17:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:31	1
Arsenic	**0.00348**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:31	1
Barium	**0.137**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:31	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:31	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:31	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:31	1
Cobalt	**0.0588**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:31	1
Copper	**0.00281**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:31	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:31	1
Nickel	**0.0693**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:31	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:31	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:31	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:31	1
Vanadium	**0.00166**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:31	1
Zinc	**0.00657**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**14.5**		7.50	2.55	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: UD-3
Date Collected: 05/11/23 12:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 18:54	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 18:54	1
Benzene	**0.388**	**J**	0.500	0.220	ug/L			05/16/23 18:54	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 18:54	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 18:54	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 18:54	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 18:54	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 18:54	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 18:54	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 18:54	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 18:54	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 18:54	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 18:54	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 18:54	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 18:54	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 18:54	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 18:54	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 18:54	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 18:54	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 18:54	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 18:54	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 18:54	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 18:54	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 18:54	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 18:54	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 18:54	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 18:54	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 18:54	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 18:54	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 18:54	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 18:54	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 18:54	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 18:54	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 18:54	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 18:54	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 18:54	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 18:54	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 18:54	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 18:54	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 18:54	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 18:54	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 18:54	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 18:54	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 18:54	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 18:54	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 18:54	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/16/23 18:54*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: UD-3

Date Collected: 05/11/23 12:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-17

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*05/16/23 18:54*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/16/23 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 18:34	1
Arsenic	**0.00376**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 18:34	1
Barium	**0.133**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 18:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 18:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 18:34	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:34	1
Cobalt	**0.00493**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 18:34	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 18:34	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 18:34	1
Nickel	**0.0158**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 18:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 18:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 18:34	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 18:34	1
Vanadium	**0.00124**	**J**	0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 18:34	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 18:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**35.3**		5.00	1.70	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-D2
Date Collected: 05/10/23 10:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/17/23 01:35	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/17/23 01:35	1
Benzene	<0.500		0.500	0.220	ug/L			05/17/23 01:35	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/17/23 01:35	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/17/23 01:35	1
Bromoform	<5.00		5.00	0.780	ug/L			05/17/23 01:35	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/17/23 01:35	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/17/23 01:35	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/17/23 01:35	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/17/23 01:35	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/17/23 01:35	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/17/23 01:35	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/17/23 01:35	1
Chloroform	<3.00		3.00	1.30	ug/L			05/17/23 01:35	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/17/23 01:35	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/17/23 01:35	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/17/23 01:35	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/17/23 01:35	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/17/23 01:35	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/17/23 01:35	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/17/23 01:35	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/17/23 01:35	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/17/23 01:35	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/17/23 01:35	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/17/23 01:35	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/17/23 01:35	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/17/23 01:35	1
2-Hexanone	<10.0	*+	10.0	2.00	ug/L			05/17/23 01:35	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 17:49	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/17/23 01:35	1
4-Methyl-2-pentanone (MIBK)	<10.0	*+	10.0	2.10	ug/L			05/17/23 01:35	1
Styrene	<1.00		1.00	0.370	ug/L			05/17/23 01:35	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/17/23 01:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/17/23 01:35	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/17/23 01:35	1
Toluene	<1.00		1.00	0.430	ug/L			05/17/23 01:35	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/17/23 01:35	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/17/23 01:35	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/17/23 01:35	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/17/23 01:35	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/17/23 01:35	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/17/23 01:35	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/17/23 01:35	1
1,2,3-Trichloropropane	<1.00	*+	1.00	0.590	ug/L			05/17/23 01:35	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/17/23 01:35	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/17/23 01:35	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/17/23 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/17/23 01:35*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-D2
Date Collected: 05/10/23 10:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-18
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*05/18/23 17:49*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 128*		*05/17/23 01:35*	*1*
Dibromofluoromethane (Surr)	*116*		*80 - 128*		*05/18/23 17:49*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/17/23 01:35*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/18/23 17:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 19:09	1
Arsenic	**0.00139**	**J**	0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 19:09	1
Barium	**0.203**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 19:09	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 19:09	1
Cadmium	**0.000150**	**J**	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 19:09	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:09	1
Cobalt	**0.0119**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 19:09	1
Copper	**0.00258**	**J**	0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 19:09	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 19:09	1
Nickel	**0.0160**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 19:09	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 19:09	1
Silver	**0.000664**	**J F2 F1**	0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 19:09	1
Thallium	**0.00198**		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 19:09	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:09	1
Zinc	**0.00796**	**J**	0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2.75**		1.88	0.638	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-24
Date Collected: 05/11/23 11:40
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/17/23 13:30	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/17/23 13:30	1
Benzene	**2.02**		0.500	0.220	ug/L			05/17/23 13:30	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/17/23 13:30	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/17/23 13:30	1
Bromoform	<5.00		5.00	0.780	ug/L			05/17/23 13:30	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/17/23 13:30	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/17/23 13:30	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/17/23 13:30	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/17/23 13:30	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/17/23 13:30	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/17/23 13:30	1
Chloroethane	**3.31**	**J**	4.00	0.790	ug/L			05/17/23 13:30	1
Chloroform	<3.00		3.00	1.30	ug/L			05/17/23 13:30	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/17/23 13:30	1
cis-1,2-Dichloroethene	**13.4**		1.00	0.210	ug/L			05/17/23 13:30	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/17/23 13:30	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/17/23 13:30	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/17/23 13:30	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/17/23 13:30	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/17/23 13:30	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/17/23 13:30	1
1,1-Dichloroethane	**2.03**		1.00	0.220	ug/L			05/17/23 13:30	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/17/23 13:30	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/17/23 13:30	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/17/23 13:30	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/17/23 13:30	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/17/23 13:30	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/17/23 13:30	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/17/23 13:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/17/23 13:30	1
Styrene	<1.00		1.00	0.370	ug/L			05/17/23 13:30	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/17/23 13:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/17/23 13:30	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/17/23 13:30	1
Toluene	<1.00		1.00	0.430	ug/L			05/17/23 13:30	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/17/23 13:30	1
trans-1,2-Dichloroethene	**0.580**	**J**	1.00	0.270	ug/L			05/17/23 13:30	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/17/23 13:30	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/17/23 13:30	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/17/23 13:30	1
Trichloroethene	**0.538**	**J**	1.00	0.430	ug/L			05/17/23 13:30	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/17/23 13:30	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/17/23 13:30	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/17/23 13:30	1
Vinyl chloride	**2.29**	**B**	1.00	0.180	ug/L			05/17/23 13:30	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/17/23 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/17/23 13:30*	*1*

Client Sample ID: MW-24
Date Collected: 05/11/23 11:40
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-19
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*05/17/23 13:30*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/17/23 13:30*	*1*

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.08**	**H**	1.00	0.390	mg/L			05/13/23 12:43	5
Sulfate	**135**		5.00	2.10	mg/L			05/13/23 12:43	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 19:26	1
Arsenic	**0.0124**		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 19:26	1
Barium	**0.109**		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 19:26	1
Beryllium	**0.000436**	**J**	0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 19:26	1
Cadmium	**0.000103**	**J**	0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 19:26	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:26	1
Cobalt	**0.0103**		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 19:26	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 19:26	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 19:26	1
Nickel	**0.0153**		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 19:26	1
Selenium	**0.00147**	**J**	0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 19:26	1
Iron	**47.7**		0.100	0.0360	mg/L		05/16/23 08:40	05/26/23 19:26	1
Silver	**0.000789**	**J**	0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 19:26	1
Thallium	**0.00257**		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 19:26	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:26	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 19:26	1
Manganese	**3.92**		0.0100	0.00360	mg/L		05/16/23 08:40	05/26/23 19:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**34.0**		7.50	2.55	mg/L			05/15/23 09:05	1

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-35

Date Collected: 05/11/23 10:32
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/17/23 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*05/17/23 13:54*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/17/23 13:54*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/17/23 13:54*	*1*

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.200		0.200	0.0780	mg/L			05/12/23 22:51	1
Sulfate	**1820**		20.0	8.40	mg/L			05/15/23 10:16	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.95**		0.100	0.0360	mg/L		05/16/23 08:40	05/26/23 19:29	1
Manganese	**6.68**		0.0400	0.0144	mg/L		05/16/23 08:40	05/27/23 20:43	4

Client Sample ID: Trip blank

Date Collected: 05/11/23 00:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-21

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/17/23 12:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/17/23 12:19	1
Benzene	<0.500		0.500	0.220	ug/L			05/17/23 12:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/17/23 12:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/17/23 12:19	1
Bromoform	<5.00		5.00	0.780	ug/L			05/17/23 12:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/17/23 12:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/17/23 12:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/17/23 12:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/17/23 12:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/17/23 12:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/17/23 12:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/17/23 12:19	1
Chloroform	<3.00		3.00	1.30	ug/L			05/17/23 12:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/17/23 12:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/17/23 12:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/17/23 12:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/17/23 12:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/17/23 12:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/17/23 12:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/17/23 12:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/17/23 12:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/17/23 12:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/17/23 12:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/17/23 12:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/17/23 12:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/17/23 12:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/17/23 12:19	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/17/23 12:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/17/23 12:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/17/23 12:19	1
Styrene	<1.00		1.00	0.370	ug/L			05/17/23 12:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/17/23 12:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/17/23 12:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/17/23 12:19	1
Toluene	<1.00		1.00	0.430	ug/L			05/17/23 12:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/17/23 12:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/17/23 12:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/17/23 12:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/17/23 12:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/17/23 12:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/17/23 12:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/17/23 12:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/17/23 12:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/17/23 12:19	1
Vinyl chloride	**0.184**	**J B**	1.00	0.180	ug/L			05/17/23 12:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/17/23 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*05/17/23 12:19*	*1*

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: Trip blank
Date Collected: 05/11/23 00:00
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-21
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*103*		*80 - 128*		*05/17/23 12:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/17/23 12:19*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-128)	(80-120)
310-255679-X-6 MS	Matrix Spike	99	91	106
310-255679-X-6 MSD	Matrix Spike Duplicate	100	90	107
310-255704-I-1 MS	Matrix Spike	99	90	105
310-255704-I-1 MSD	Matrix Spike Duplicate	101	92	107
310-255704-J-2 MS	Matrix Spike	102	99	97
310-255704-J-2 MSD	Matrix Spike Duplicate	100	97	101
310-255749-F-4 MS	Matrix Spike	101	98	99
310-255749-F-4 MSD	Matrix Spike Duplicate	102	100	99
310-255788-1	MW-19	106	101	98
310-255788-2	MW-5	105	104	97
310-255788-2 MS	MW-5	101	101	99
310-255788-2 MSD	MW-5	102	99	100
310-255788-3	MW-7	105	100	98
310-255788-4	MW-9R	105	101	97
310-255788-5	MW-13	105	103	99
310-255788-6	MW-14	105	104	97
310-255788-7	MW-20	105	103	98
310-255788-8	MW-21	99	103	102
310-255788-8	MW-21	99	112	96
310-255788-9	MW-23	98	105	102
310-255788-9	MW-23	99	116	97
310-255788-10	MW-25	98	106	102
310-255788-10	MW-25	100	114	98
310-255788-11	MW-26	97	102	102
310-255788-11	MW-26	98	117	97
310-255788-12	MW-27	100	105	101
310-255788-12	MW-27	102	112	98
310-255788-13	MW-28	97	104	102
310-255788-13	MW-28	101	118	96
310-255788-14	MW-29	103	104	97
310-255788-15	MW-34	105	102	98
310-255788-16	MW-D1	99	107	101
310-255788-16	MW-D1	99	114	96
310-255788-17	UD-3	103	103	97
310-255788-18	MW-D2	100	93	100
310-255788-18	MW-D2	100	116	96
310-255788-19	MW-24	105	104	97
310-255788-20	MW-35	105	102	96
310-255788-21	Trip blank	106	103	99
310-255806-C-1 MS	Matrix Spike	101	99	99
310-255806-C-1 MSD	Matrix Spike Duplicate	101	98	99
310-256190-B-13 MS	Matrix Spike	100	92	99
310-256190-B-13 MSD	Matrix Spike Duplicate	100	95	101
LCS 310-387530/6	Lab Control Sample	99	97	100
LCS 310-387530/7	Lab Control Sample	103	105	97
LCS 310-387643/6	Lab Control Sample	100	90	105
LCS 310-387643/7	Lab Control Sample	100	106	103
LCS 310-387646/6	Lab Control Sample	100	93	105
LCS 310-387646/7	Lab Control Sample	99	109	103

Surrogate Summary

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-128)	(80-120)
LCS 310-387658/6	Lab Control Sample	101	97	98
LCS 310-387658/7	Lab Control Sample	104	102	99
LCS 310-387785/6	Lab Control Sample	101	97	99
LCS 310-387785/7	Lab Control Sample	105	104	97
LCS 310-387941/6	Lab Control Sample	99	95	102
LCS 310-387941/7	Lab Control Sample	100	110	99
LCS 310-388038/6	Lab Control Sample	101	96	100
MB 310-387530/5	Method Blank	105	106	99
MB 310-387643/5	Method Blank	101	106	102
MB 310-387646/5	Method Blank	99	111	102
MB 310-387658/5	Method Blank	106	102	98
MB 310-387785/5	Method Blank	107	102	99
MB 310-387941/5	Method Blank	101	83	97
MB 310-388038/5	Method Blank	103	110	98

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		2FP	PHL	NBZ	FBP	TBP	TPHL
Lab Sample ID	Client Sample ID	(13-110)	(12-110)	(27-115)	(28-110)	(15-121)	(10-125)
310-255788-3	MW-7	60	55	87	77	83	72
310-255788-14	MW-29	62	54	85	75	76	86
LCS 310-387448/2-A	Lab Control Sample	78	68	104	87	117	106
LCSD 310-387448/3-A	Lab Control Sample Dup	68	57	88	73	95	81
MB 310-387448/1-A	Method Blank	61	54	80	60	80	82

Surrogate Legend

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-255788-3	MW-7	40	58
310-255788-14	MW-29	80	71
LCS 310-387447/4-A	Lab Control Sample	77	70
LCSD 310-387447/5-A	Lab Control Sample Dup	57	60
MB 310-387447/1-A	Method Blank	80	62

Surrogate Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-255788-3	MW-7	40	58
310-255788-14	MW-29	80	71
LCS 310-387447/2-A	Lab Control Sample	73	60
LCSD 310-387447/3-A	Lab Control Sample Dup	63	57
MB 310-387447/1-A	Method Blank	80	62

Surrogate Legend

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

Method: 8151A - Herbicides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		DCPAA1
Lab Sample ID	Client Sample ID	(25-130)
310-255788-3	MW-7	71
310-255788-14	MW-29	70
LCS 500-713586/2-A	Lab Control Sample	107
LCSD 500-713586/3-A	Lab Control Sample Dup	92
MB 500-713586/1-A	Method Blank	74

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-387530/5
Matrix: Water
Analysis Batch: 387530

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/15/23 23:36	1
Acrolein	<10.0		10.0	3.60	ug/L			05/15/23 23:36	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/15/23 23:36	1
Allyl chloride	<2.00		2.00	0.700	ug/L			05/15/23 23:36	1
Benzene	<0.500		0.500	0.220	ug/L			05/15/23 23:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/15/23 23:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/15/23 23:36	1
Bromoform	<5.00		5.00	0.780	ug/L			05/15/23 23:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/15/23 23:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/15/23 23:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/15/23 23:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/15/23 23:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/15/23 23:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/15/23 23:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/15/23 23:36	1
Chloroform	<3.00		3.00	1.30	ug/L			05/15/23 23:36	1
Chloromethane	0.9690	J	3.00	0.610	ug/L			05/15/23 23:36	1
Chloroprene	<1.00		1.00	0.230	ug/L			05/15/23 23:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/15/23 23:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/15/23 23:36	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/15/23 23:36	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/15/23 23:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/15/23 23:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/15/23 23:36	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			05/15/23 23:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/15/23 23:36	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			05/15/23 23:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/15/23 23:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/15/23 23:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/15/23 23:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/15/23 23:36	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			05/15/23 23:36	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			05/15/23 23:36	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			05/15/23 23:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/15/23 23:36	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			05/15/23 23:36	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/15/23 23:36	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/15/23 23:36	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			05/15/23 23:36	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/15/23 23:36	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			05/15/23 23:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/15/23 23:36	1
Naphthalene	<5.00		5.00	3.00	ug/L			05/15/23 23:36	1
Propionitrile	<10.0		10.0	3.40	ug/L			05/15/23 23:36	1
Styrene	<1.00		1.00	0.370	ug/L			05/15/23 23:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/15/23 23:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/15/23 23:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/15/23 23:36	1

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

Lab Sample ID: MB 310-387530/5
Matrix: Water
Analysis Batch: 387530

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<1.00		1.00	0.430	ug/L			05/15/23 23:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/15/23 23:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/15/23 23:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/15/23 23:36	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			05/15/23 23:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/15/23 23:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/15/23 23:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/15/23 23:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/15/23 23:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/15/23 23:36	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/15/23 23:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/15/23 23:36	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/15/23 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*05/15/23 23:36*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 128*		*05/15/23 23:36*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/15/23 23:36*	*1*

Lab Sample ID: LCS 310-387530/6
Matrix: Water
Analysis Batch: 387530

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	44.55		ug/L		111	50 - 150
Acrolein	95.6	87.63		ug/L		92	12 - 150
Acrylonitrile	200	219.7		ug/L		110	50 - 150
Allyl chloride	20.0	20.43		ug/L		102	50 - 150
Benzene	20.0	21.19		ug/L		106	73 - 122
Bromochloromethane	20.0	20.08		ug/L		100	68 - 132
Bromodichloromethane	20.0	21.02		ug/L		105	72 - 121
Bromoform	20.0	19.36		ug/L		97	55 - 129
2-Butanone (MEK)	40.0	42.60		ug/L		106	50 - 150
Carbon disulfide	20.0	18.05		ug/L		90	58 - 131
Carbon tetrachloride	20.0	21.02		ug/L		105	67 - 132
Chlorobenzene	20.0	20.38		ug/L		102	69 - 121
Chlorodibromomethane	20.0	18.96		ug/L		95	69 - 122
Chloroform	20.0	20.92		ug/L		105	72 - 120
Chloroprene	20.0	20.43		ug/L		102	67 - 131
cis-1,2-Dichloroethene	20.0	21.37		ug/L		107	74 - 120
cis-1,3-Dichloropropene	20.0	20.79		ug/L		104	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	20.50		ug/L		103	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.92		ug/L		105	73 - 125
Dibromomethane	20.0	20.83		ug/L		104	72 - 123
1,2-Dichlorobenzene	20.0	19.99		ug/L		100	68 - 120
1,3-Dichlorobenzene	20.0	19.87		ug/L		99	67 - 123
1,4-Dichlorobenzene	20.0	19.98		ug/L		100	67 - 120
1,1-Dichloroethane	20.0	19.90		ug/L		99	71 - 123

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

Lab Sample ID: LCS 310-387530/6
Matrix: Water
Analysis Batch: 387530

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloroethane	20.0	20.58		ug/L		103	70 - 124
1,1-Dichloroethene	20.0	20.79		ug/L		104	61 - 129
1,2-Dichloropropane	20.0	20.79		ug/L		104	73 - 121
1,3-Dichloropropane	20.0	21.05		ug/L		105	72 - 124
2,2-Dichloropropane	20.0	20.51		ug/L		103	50 - 150
1,1-Dichloropropene	20.0	21.37		ug/L		107	70 - 131
Ethylbenzene	20.0	20.20		ug/L		101	69 - 122
Ethyl methacrylate	20.0	21.67		ug/L		108	64 - 131
2-Hexanone	40.0	45.47		ug/L		114	60 - 132
Iodomethane	20.0	15.59		ug/L		78	10 - 150
Methacrylonitrile	200	209.2		ug/L		105	70 - 126
Methylene Chloride	20.0	19.81		ug/L		99	50 - 150
Methyl methacrylate	40.0	44.04		ug/L		110	68 - 127
4-Methyl-2-pentanone (MIBK)	40.0	43.85		ug/L		110	62 - 130
Naphthalene	20.0	20.10		ug/L		101	50 - 150
Propionitrile	200	220.5		ug/L		110	66 - 125
Styrene	20.0	19.62		ug/L		98	67 - 125
1,1,1,2-Tetrachloroethane	20.0	19.75		ug/L		99	68 - 123
1,1,2,2-Tetrachloroethane	20.0	20.71		ug/L		104	64 - 124
Tetrachloroethene	20.0	20.90		ug/L		104	69 - 131
Toluene	20.0	20.98		ug/L		105	72 - 121
trans-1,4-Dichloro-2-butene	20.0	18.63		ug/L		93	48 - 150
trans-1,2-Dichloroethene	20.0	20.18		ug/L		101	68 - 125
trans-1,3-Dichloropropene	20.0	20.63		ug/L		103	68 - 124
1,2,4-Trichlorobenzene	20.0	19.44		ug/L		97	61 - 124
1,1,1-Trichloroethane	20.0	21.25		ug/L		106	71 - 128
1,1,2-Trichloroethane	20.0	19.89		ug/L		99	70 - 124
Trichloroethene	20.0	20.89		ug/L		104	73 - 126
1,2,3-Trichloropropane	20.0	17.64		ug/L		88	64 - 125
Vinyl acetate	40.0	40.55		ug/L		101	50 - 150
Xylenes, Total	40.0	40.22		ug/L		101	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-387530/7
Matrix: Water
Analysis Batch: 387530

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.58		ug/L		78	24 - 150
Chloroethane	20.0	20.94		ug/L		105	51 - 137
Chloromethane	20.0	20.26		ug/L		101	37 - 150
Dichlorodifluoromethane	20.0	27.88		ug/L		139	37 - 150
Trichlorofluoromethane	20.0	22.60		ug/L		113	56 - 144
Vinyl chloride	20.0	22.60		ug/L		113	57 - 136

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

Lab Sample ID: LCS 310-387530/7
Matrix: Water
Analysis Batch: 387530

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-255788-2 MS
Matrix: Water
Analysis Batch: 387530

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	4.18	J	40.0	50.71		ug/L		116	35 - 150
Acrolein	<10.0		95.6	87.03		ug/L		91	10 - 150
Acrylonitrile	<10.0		200	214.4		ug/L		107	50 - 150
Allyl chloride	<2.00		20.0	19.62		ug/L		98	35 - 150
Benzene	<0.500		20.0	20.13		ug/L		101	47 - 130
Bromochloromethane	<5.00		20.0	20.59		ug/L		103	54 - 132
Bromodichloromethane	<1.00		20.0	20.51		ug/L		103	58 - 130
Bromoform	<5.00		20.0	19.37		ug/L		97	42 - 130
2-Butanone (MEK)	<10.0		40.0	42.84		ug/L		107	47 - 150
Carbon disulfide	<1.00		20.0	18.48		ug/L		92	39 - 131
Carbon tetrachloride	<2.00		20.0	20.18		ug/L		101	45 - 132
Chlorobenzene	<1.00		20.0	20.22		ug/L		101	54 - 130
Chlorodibromomethane	<5.00		20.0	19.12		ug/L		96	53 - 130
Chloroform	<3.00		20.0	20.49		ug/L		102	55 - 130
Chloroprene	<1.00		20.0	19.10		ug/L		96	47 - 131
cis-1,2-Dichloroethene	<1.00		20.0	20.61		ug/L		103	52 - 130
cis-1,3-Dichloropropene	<5.00		20.0	19.85		ug/L		99	55 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	22.55		ug/L		113	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	20.58		ug/L		103	59 - 130
Dibromomethane	<1.00		20.0	20.28		ug/L		101	61 - 130
1,2-Dichlorobenzene	<1.00		20.0	21.01		ug/L		105	53 - 130
1,3-Dichlorobenzene	<1.00		20.0	20.97		ug/L		105	54 - 130
1,4-Dichlorobenzene	<1.00		20.0	20.80		ug/L		104	53 - 130
1,1-Dichloroethane	<1.00		20.0	18.63		ug/L		93	53 - 130
1,2-Dichloroethane	<1.00		20.0	20.18		ug/L		101	57 - 130
1,1-Dichloroethene	<2.00		20.0	20.02		ug/L		100	39 - 130
1,2-Dichloropropane	<1.00		20.0	19.58		ug/L		98	60 - 130
1,3-Dichloropropane	<1.00		20.0	21.11		ug/L		106	57 - 130
2,2-Dichloropropane	<4.00		20.0	16.88		ug/L		84	28 - 150
1,1-Dichloropropene	<1.00		20.0	20.26		ug/L		101	50 - 131
Ethylbenzene	<1.00		20.0	19.85		ug/L		99	48 - 130
Ethyl methacrylate	<2.00		20.0	22.50		ug/L		112	50 - 131
2-Hexanone	<10.0		40.0	47.30		ug/L		118	45 - 132
Iodomethane	<10.0		20.0	18.36		ug/L		92	10 - 150
Methacrylonitrile	<10.0		200	204.4		ug/L		102	57 - 130
Methylene Chloride	<5.00		20.0	19.11		ug/L		96	50 - 150
Methyl methacrylate	<2.00		40.0	45.00		ug/L		112	50 - 131
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	45.73		ug/L		114	46 - 132
Naphthalene	<5.00		20.0	21.09		ug/L		105	33 - 150

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

Lab Sample ID: 310-255788-2 MS
Matrix: Water
Analysis Batch: 387530

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Propionitrile	<10.0		200	231.0		ug/L		115	53 - 130
Styrene	<1.00		20.0	20.27		ug/L		101	46 - 130
1,1,1,2-Tetrachloroethane	<1.00		20.0	19.72		ug/L		99	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		20.0	21.47		ug/L		107	51 - 130
Tetrachloroethene	<1.00		20.0	19.71		ug/L		99	42 - 131
Toluene	<1.00		20.0	20.14		ug/L		101	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		20.0	18.04		ug/L		90	33 - 150
trans-1,2-Dichloroethene	<1.00		20.0	19.93		ug/L		100	54 - 130
trans-1,3-Dichloropropene	<5.00		20.0	19.80		ug/L		99	51 - 130
1,2,4-Trichlorobenzene	<5.00		20.0	20.97		ug/L		105	45 - 130
1,1,1-Trichloroethane	<1.00		20.0	20.27		ug/L		101	49 - 130
1,1,2-Trichloroethane	<1.00		20.0	19.77		ug/L		99	56 - 130
Trichloroethene	<1.00		20.0	19.62		ug/L		98	55 - 130
1,2,3-Trichloropropane	<1.00		20.0	18.67		ug/L		93	50 - 130
Vinyl acetate	<10.0		40.0	34.97		ug/L		87	34 - 150
Xylenes, Total	<3.00		40.0	39.76		ug/L		99	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-255788-2 MSD
Matrix: Water
Analysis Batch: 387530

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	4.18	J	40.0	52.01		ug/L		120	35 - 150	3	26
Acrolein	<10.0		95.6	89.93		ug/L		94	10 - 150	3	27
Acrylonitrile	<10.0		200	226.1		ug/L		113	50 - 150	5	21
Allyl chloride	<2.00		20.0	16.55		ug/L		83	35 - 150	17	35
Benzene	<0.500		20.0	20.16		ug/L		101	47 - 130	0	20
Bromochloromethane	<5.00		20.0	19.93		ug/L		100	54 - 132	3	20
Bromodichloromethane	<1.00		20.0	20.33		ug/L		102	58 - 130	1	20
Bromoform	<5.00		20.0	20.05		ug/L		100	42 - 130	3	20
2-Butanone (MEK)	<10.0		40.0	44.84		ug/L		112	47 - 150	5	20
Carbon disulfide	<1.00		20.0	17.34		ug/L		87	39 - 131	6	32
Carbon tetrachloride	<2.00		20.0	19.55		ug/L		98	45 - 132	3	20
Chlorobenzene	<1.00		20.0	19.98		ug/L		100	54 - 130	1	20
Chlorodibromomethane	<5.00		20.0	18.87		ug/L		94	53 - 130	1	20
Chloroform	<3.00		20.0	20.26		ug/L		101	55 - 130	1	20
Chloroprene	<1.00		20.0	17.97		ug/L		90	47 - 131	6	20
cis-1,2-Dichloroethene	<1.00		20.0	20.48		ug/L		102	52 - 130	1	20
cis-1,3-Dichloropropene	<5.00		20.0	19.89		ug/L		99	55 - 130	0	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	22.85		ug/L		114	45 - 150	1	20
1,2-Dibromoethane (EDB)	<0.340		20.0	20.72		ug/L		104	59 - 130	1	20
Dibromomethane	<1.00		20.0	20.36		ug/L		102	61 - 130	0	20
1,2-Dichlorobenzene	<1.00		20.0	21.54		ug/L		108	53 - 130	2	20

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

Lab Sample ID: 310-255788-2 MSD
Matrix: Water
Analysis Batch: 387530

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichlorobenzene	<1.00		20.0	21.25		ug/L		106	54 - 130	1	20
1,4-Dichlorobenzene	<1.00		20.0	21.48		ug/L		107	53 - 130	3	20
1,1-Dichloroethane	<1.00		20.0	18.60		ug/L		93	53 - 130	0	20
1,2-Dichloroethane	<1.00		20.0	19.98		ug/L		100	57 - 130	1	21
1,1-Dichloroethene	<2.00		20.0	19.13		ug/L		96	39 - 130	5	28
1,2-Dichloropropane	<1.00		20.0	19.03		ug/L		95	60 - 130	3	31
1,3-Dichloropropane	<1.00		20.0	21.19		ug/L		106	57 - 130	0	20
2,2-Dichloropropane	<4.00		20.0	16.96		ug/L		85	28 - 150	0	20
1,1-Dichloropropene	<1.00		20.0	20.14		ug/L		101	50 - 131	1	20
Ethylbenzene	<1.00		20.0	19.82		ug/L		99	48 - 130	0	20
Ethyl methacrylate	<2.00		20.0	22.54		ug/L		113	50 - 131	0	20
2-Hexanone	<10.0		40.0	49.47		ug/L		124	45 - 132	4	20
Iodomethane	<10.0		20.0	19.45		ug/L		97	10 - 150	6	35
Methacrylonitrile	<10.0		200	212.6		ug/L		106	57 - 130	4	20
Methylene Chloride	<5.00		20.0	18.66		ug/L		93	50 - 150	2	24
Methyl methacrylate	<2.00		40.0	45.12		ug/L		113	50 - 131	0	20
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	47.03		ug/L		118	46 - 132	3	20
Naphthalene	<5.00		20.0	22.09		ug/L		110	33 - 150	5	30
Propionitrile	<10.0		200	233.5		ug/L		117	53 - 130	1	20
Styrene	<1.00		20.0	20.08		ug/L		100	46 - 130	1	20
1,1,1,2-Tetrachloroethane	<1.00		20.0	19.30		ug/L		97	52 - 130	2	20
1,1,2,2-Tetrachloroethane	<1.00		20.0	21.78		ug/L		109	51 - 130	1	20
Tetrachloroethene	<1.00		20.0	19.50		ug/L		97	42 - 131	1	20
Toluene	<1.00		20.0	19.81		ug/L		99	48 - 130	2	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	18.07		ug/L		90	33 - 150	0	20
trans-1,2-Dichloroethene	<1.00		20.0	19.25		ug/L		96	54 - 130	3	24
trans-1,3-Dichloropropene	<5.00		20.0	20.11		ug/L		101	51 - 130	2	20
1,2,4-Trichlorobenzene	<5.00		20.0	21.70		ug/L		109	45 - 130	3	20
1,1,1-Trichloroethane	<1.00		20.0	19.53		ug/L		98	49 - 130	4	20
1,1,2-Trichloroethane	<1.00		20.0	20.27		ug/L		101	56 - 130	3	20
Trichloroethene	<1.00		20.0	19.41		ug/L		97	55 - 130	1	20
1,2,3-Trichloropropane	<1.00		20.0	18.73		ug/L		94	50 - 130	0	20
Vinyl acetate	<10.0		40.0	35.33		ug/L		88	34 - 150	1	27
Xylenes, Total	<3.00		40.0	40.03		ug/L		100	44 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 310-387643/5
Matrix: Water
Analysis Batch: 387643

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 10:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 10:19	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 10:19	1

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

Lab Sample ID: MB 310-387643/5
Matrix: Water
Analysis Batch: 387643

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 10:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 10:19	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 10:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 10:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 10:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 10:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 10:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 10:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 10:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 10:19	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 10:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 10:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 10:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 10:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 10:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 10:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 10:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 10:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 10:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 10:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 10:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 10:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 10:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 10:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 10:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 10:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 10:19	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 10:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 10:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 10:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 10:19	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 10:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 10:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 10:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 10:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 10:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 10:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 10:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 10:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 10:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 10:19	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 10:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 10:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/16/23 10:19*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 128*		*05/16/23 10:19*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 10:19*	*1*

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

Lab Sample ID: LCS 310-387643/6
Matrix: Water
Analysis Batch: 387643

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	41.04		ug/L		103	50 - 150
Acrylonitrile	200	232.6		ug/L		116	50 - 150
Benzene	20.0	20.18		ug/L		101	73 - 122
Bromochloromethane	20.0	18.55		ug/L		93	68 - 132
Bromodichloromethane	20.0	20.79		ug/L		104	72 - 121
Bromoform	20.0	20.03		ug/L		100	55 - 129
2-Butanone (MEK)	40.0	50.19		ug/L		125	50 - 150
Carbon disulfide	20.0	16.12		ug/L		81	58 - 131
Carbon tetrachloride	20.0	21.11		ug/L		106	67 - 132
Chlorobenzene	20.0	21.11		ug/L		106	69 - 121
Chlorodibromomethane	20.0	20.17		ug/L		101	69 - 122
Chloroform	20.0	18.55		ug/L		93	72 - 120
cis-1,2-Dichloroethene	20.0	18.57		ug/L		93	74 - 120
cis-1,3-Dichloropropene	20.0	19.74		ug/L		99	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	24.63		ug/L		123	50 - 150
1,2-Dibromoethane (EDB)	20.0	21.32		ug/L		107	73 - 125
Dibromomethane	20.0	19.14		ug/L		96	72 - 123
1,2-Dichlorobenzene	20.0	22.18		ug/L		111	68 - 120
1,4-Dichlorobenzene	20.0	22.37		ug/L		112	67 - 120
1,1-Dichloroethane	20.0	19.11		ug/L		96	71 - 123
1,2-Dichloroethane	20.0	20.39		ug/L		102	70 - 124
1,1-Dichloroethene	20.0	16.56		ug/L		83	61 - 129
1,2-Dichloropropane	20.0	21.46		ug/L		107	73 - 121
Ethylbenzene	20.0	22.63		ug/L		113	69 - 122
2-Hexanone	40.0	56.68	*+	ug/L		142	60 - 132
Methylene Chloride	20.0	18.66		ug/L		93	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	54.13	*+	ug/L		135	62 - 130
Styrene	20.0	21.92		ug/L		110	67 - 125
1,1,1,2-Tetrachloroethane	20.0	25.07	*+	ug/L		125	68 - 123
1,1,2,2-Tetrachloroethane	20.0	23.81		ug/L		119	64 - 124
Tetrachloroethene	20.0	18.95		ug/L		95	69 - 131
Toluene	20.0	18.78		ug/L		94	72 - 121
trans-1,4-Dichloro-2-butene	20.0	24.32		ug/L		122	48 - 150
trans-1,2-Dichloroethene	20.0	20.51		ug/L		103	68 - 125
trans-1,3-Dichloropropene	20.0	19.59		ug/L		98	68 - 124
1,1,1-Trichloroethane	20.0	20.70		ug/L		103	71 - 128
1,1,2-Trichloroethane	20.0	22.20		ug/L		111	70 - 124
Trichloroethene	20.0	21.17		ug/L		106	73 - 126
1,2,3-Trichloropropane	20.0	24.57		ug/L		123	64 - 125
Vinyl acetate	40.0	43.08		ug/L		108	50 - 150
Xylenes, Total	40.0	43.32		ug/L		108	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 128*
Toluene-d8 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: LCS 310-387643/7
Matrix: Water
Analysis Batch: 387643

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromomethane			20.0	15.63		ug/L		78	24 - 150		
Chloroethane			20.0	18.84		ug/L		94	51 - 137		
Chloromethane			20.0	19.69		ug/L		98	37 - 150		
Trichlorofluoromethane			20.0	15.94		ug/L		80	56 - 144		
Vinyl chloride			20.0	20.63		ug/L		103	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 310-255679-X-6 MS
Matrix: Water
Analysis Batch: 387643

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	<10.0	F2	50.0	68.31		ug/L		137	35 - 150		
Acrylonitrile	<10.0	F2	250	287.0		ug/L		115	50 - 150		
Benzene	<0.500		25.0	22.37		ug/L		89	47 - 130		
Bromochloromethane	<5.00		25.0	21.59		ug/L		86	54 - 132		
Bromodichloromethane	<1.00		25.0	23.63		ug/L		95	58 - 130		
Bromoform	<5.00		25.0	22.70		ug/L		91	42 - 130		
2-Butanone (MEK)	<10.0	F2	50.0	64.57		ug/L		129	47 - 150		
Carbon disulfide	<1.00		25.0	13.85		ug/L		55	39 - 131		
Carbon tetrachloride	<2.00		25.0	23.34		ug/L		93	45 - 132		
Chlorobenzene	<1.00		25.0	23.73		ug/L		95	54 - 130		
Chlorodibromomethane	<5.00		25.0	22.56		ug/L		90	53 - 130		
Chloroform	<3.00		25.0	20.88		ug/L		84	55 - 130		
cis-1,2-Dichloroethene	<1.00		25.0	20.66		ug/L		83	52 - 130		
cis-1,3-Dichloropropene	<5.00		25.0	22.05		ug/L		88	55 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		25.0	29.58		ug/L		118	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		25.0	24.67		ug/L		99	59 - 130		
Dibromomethane	<1.00		25.0	22.38		ug/L		90	61 - 130		
1,2-Dichlorobenzene	<1.00		25.0	24.82		ug/L		99	53 - 130		
1,4-Dichlorobenzene	<1.00		25.0	25.00		ug/L		100	53 - 130		
1,1-Dichloroethane	<1.00		25.0	21.36		ug/L		85	53 - 130		
1,2-Dichloroethane	<1.00		25.0	23.46		ug/L		94	57 - 130		
1,1-Dichloroethene	<2.00		25.0	17.57		ug/L		70	39 - 130		
1,2-Dichloropropane	<1.00		25.0	24.00		ug/L		96	60 - 130		
Ethylbenzene	<1.00		25.0	25.33		ug/L		101	48 - 130		
2-Hexanone	<10.0	F2 F1 *+	50.0	76.74	F1 *+	ug/L		153	45 - 132		
Methylene Chloride	<5.00	F2	25.0	20.87		ug/L		83	50 - 150		
4-Methyl-2-pentanone (MIBK)	<10.0	F2 F1 *+	50.0	74.42	F1 *+	ug/L		149	46 - 132		
Styrene	<1.00		25.0	25.27		ug/L		101	46 - 130		
1,1,1,2-Tetrachloroethane	<1.00	*+	25.0	27.99	*+	ug/L		112	52 - 130		
1,1,2,2-Tetrachloroethane	<1.00		25.0	28.49		ug/L		114	51 - 130		
Tetrachloroethene	<1.00		25.0	20.59		ug/L		82	42 - 131		
Toluene	<1.00		25.0	21.00		ug/L		84	48 - 130		

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

Lab Sample ID: 310-255679-X-6 MS
Matrix: Water
Analysis Batch: 387643

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,4-Dichloro-2-butene	<10.0		25.0	29.29		ug/L		117	33 - 150
trans-1,2-Dichloroethene	<1.00	F2	25.0	22.91		ug/L		92	54 - 130
trans-1,3-Dichloropropene	<5.00		25.0	22.10		ug/L		88	51 - 130
1,1,1-Trichloroethane	<1.00		25.0	22.81		ug/L		91	49 - 130
1,1,2-Trichloroethane	<1.00		25.0	25.78		ug/L		103	56 - 130
Trichloroethene	<1.00		25.0	23.33		ug/L		93	55 - 130
1,2,3-Trichloropropane	<1.00		25.0	30.56		ug/L		122	50 - 130
Vinyl acetate	<10.0		50.0	42.20		ug/L		84	34 - 150
Xylenes, Total	<3.00		50.0	49.45		ug/L		99	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*80 - 128*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 310-255679-X-6 MSD
Matrix: Water
Analysis Batch: 387643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0	F2	50.0	47.73	F2	ug/L		95	35 - 150	35	26
Acrylonitrile	<10.0	F2	250	147.5	F2	ug/L		59	50 - 150	64	21
Benzene	<0.500		25.0	20.53		ug/L		82	47 - 130	9	20
Bromochloromethane	<5.00		25.0	19.51		ug/L		78	54 - 132	10	20
Bromodichloromethane	<1.00		25.0	22.03		ug/L		88	58 - 130	7	20
Bromoform	<5.00		25.0	21.17		ug/L		85	42 - 130	7	20
2-Butanone (MEK)	<10.0	F2	50.0	49.82	F2	ug/L		100	47 - 150	26	20
Carbon disulfide	<1.00		25.0	14.37		ug/L		57	39 - 131	4	32
Carbon tetrachloride	<2.00		25.0	21.68		ug/L		87	45 - 132	7	20
Chlorobenzene	<1.00		25.0	22.00		ug/L		88	54 - 130	8	20
Chlorodibromomethane	<5.00		25.0	21.43		ug/L		86	53 - 130	5	20
Chloroform	<3.00		25.0	19.30		ug/L		77	55 - 130	8	20
cis-1,2-Dichloroethene	<1.00		25.0	19.12		ug/L		76	52 - 130	8	20
cis-1,3-Dichloropropene	<5.00		25.0	20.54		ug/L		82	55 - 130	7	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	27.70		ug/L		111	45 - 150	7	20
1,2-Dibromoethane (EDB)	<0.340		25.0	22.83		ug/L		91	59 - 130	8	20
Dibromomethane	<1.00		25.0	21.01		ug/L		84	61 - 130	6	20
1,2-Dichlorobenzene	<1.00		25.0	24.04		ug/L		96	53 - 130	3	20
1,4-Dichlorobenzene	<1.00		25.0	23.97		ug/L		96	53 - 130	4	20
1,1-Dichloroethane	<1.00		25.0	19.49		ug/L		78	53 - 130	9	20
1,2-Dichloroethane	<1.00		25.0	21.63		ug/L		87	57 - 130	8	21
1,1-Dichloroethene	<2.00		25.0	16.90		ug/L		68	39 - 130	4	28
1,2-Dichloropropane	<1.00		25.0	22.32		ug/L		89	60 - 130	7	31
Ethylbenzene	<1.00		25.0	23.66		ug/L		95	48 - 130	7	20
2-Hexanone	<10.0	F2 F1 *+	50.0	61.36	F2 *+	ug/L		123	45 - 132	22	20
Methylene Chloride	<5.00	F2	25.0	14.17	F2	ug/L		57	50 - 150	38	24
4-Methyl-2-pentanone (MIBK)	<10.0	F2 F1 *+	50.0	59.29	F2 *+	ug/L		119	46 - 132	23	20
Styrene	<1.00		25.0	23.33		ug/L		93	46 - 130	8	20

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

Lab Sample ID: 310-255679-X-6 MSD
Matrix: Water
Analysis Batch: 387643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<1.00	*+	25.0	25.96	*+	ug/L		104	52 - 130	7	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	25.80		ug/L		103	51 - 130	10	20
Tetrachloroethene	<1.00		25.0	19.08		ug/L		76	42 - 131	8	20
Toluene	<1.00		25.0	19.34		ug/L		77	48 - 130	8	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	25.65		ug/L		103	33 - 150	13	20
trans-1,2-Dichloroethene	<1.00	F2	25.0	14.08	F2	ug/L		56	54 - 130	48	24
trans-1,3-Dichloropropene	<5.00		25.0	20.48		ug/L		82	51 - 130	8	20
1,1,1-Trichloroethane	<1.00		25.0	21.00		ug/L		84	49 - 130	8	20
1,1,2-Trichloroethane	<1.00		25.0	23.51		ug/L		94	56 - 130	9	20
Trichloroethene	<1.00		25.0	21.39		ug/L		86	55 - 130	9	20
1,2,3-Trichloropropane	<1.00		25.0	27.02		ug/L		108	50 - 130	12	20
Vinyl acetate	<10.0		50.0	38.77		ug/L		78	34 - 150	8	27
Xylenes, Total	<3.00		50.0	46.23		ug/L		92	44 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 128*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: MB 310-387646/5
Matrix: Water
Analysis Batch: 387646

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 20:38	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 20:38	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 20:38	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 20:38	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 20:38	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 20:38	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 20:38	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 20:38	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 20:38	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 20:38	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 20:38	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 20:38	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 20:38	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 20:38	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/16/23 20:38	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 20:38	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 20:38	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 20:38	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 20:38	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 20:38	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 20:38	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 20:38	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 20:38	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 20:38	1

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

Lab Sample ID: MB 310-387646/5
Matrix: Water
Analysis Batch: 387646

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 20:38	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 20:38	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 20:38	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 20:38	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 20:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 20:38	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 20:38	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 20:38	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 20:38	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 20:38	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 20:38	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 20:38	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 20:38	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 20:38	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 20:38	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 20:38	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 20:38	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 20:38	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 20:38	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 20:38	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 20:38	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*05/16/23 20:38*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 128*		*05/16/23 20:38*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/16/23 20:38*	*1*

Lab Sample ID: LCS 310-387646/6
Matrix: Water
Analysis Batch: 387646

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	47.74		ug/L		119	50 - 150
Acrylonitrile	200	202.3		ug/L		101	50 - 150
Benzene	20.0	20.45		ug/L		102	73 - 122
Bromochloromethane	20.0	19.30		ug/L		97	68 - 132
Bromodichloromethane	20.0	21.53		ug/L		108	72 - 121
Bromoform	20.0	20.16		ug/L		101	55 - 129
2-Butanone (MEK)	40.0	54.64		ug/L		137	50 - 150
Carbon disulfide	20.0	17.82		ug/L		89	58 - 131
Carbon tetrachloride	20.0	21.72		ug/L		109	67 - 132
Chlorobenzene	20.0	21.15		ug/L		106	69 - 121
Chlorodibromomethane	20.0	20.47		ug/L		102	69 - 122
Chloroform	20.0	19.35		ug/L		97	72 - 120
cis-1,2-Dichloroethene	20.0	19.06		ug/L		95	74 - 120
cis-1,3-Dichloropropene	20.0	19.46		ug/L		97	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	24.84		ug/L		124	50 - 150

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

Lab Sample ID: LCS 310-387646/6
Matrix: Water
Analysis Batch: 387646

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromoethane (EDB)	20.0	21.64		ug/L		108	73 - 125
Dibromomethane	20.0	20.39		ug/L		102	72 - 123
1,2-Dichlorobenzene	20.0	22.40		ug/L		112	68 - 120
1,4-Dichlorobenzene	20.0	22.75		ug/L		114	67 - 120
1,1-Dichloroethane	20.0	19.92		ug/L		100	71 - 123
1,2-Dichloroethane	20.0	21.52		ug/L		108	70 - 124
1,1-Dichloroethene	20.0	18.10		ug/L		90	61 - 129
1,2-Dichloropropane	20.0	21.57		ug/L		108	73 - 121
Ethylbenzene	20.0	22.58		ug/L		113	69 - 122
2-Hexanone	40.0	60.25	*+	ug/L		151	60 - 132
Methylene Chloride	20.0	18.83		ug/L		94	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	55.74	*+	ug/L		139	62 - 130
Styrene	20.0	22.40		ug/L		112	67 - 125
1,1,1,2-Tetrachloroethane	20.0	24.42		ug/L		122	68 - 123
1,1,2,2-Tetrachloroethane	20.0	23.83		ug/L		119	64 - 124
Tetrachloroethene	20.0	18.95		ug/L		95	69 - 131
Toluene	20.0	19.22		ug/L		96	72 - 121
trans-1,4-Dichloro-2-butene	20.0	23.98		ug/L		120	48 - 150
trans-1,2-Dichloroethene	20.0	17.36		ug/L		87	68 - 125
trans-1,3-Dichloropropene	20.0	19.25		ug/L		96	68 - 124
1,1,1-Trichloroethane	20.0	21.11		ug/L		106	71 - 128
1,1,2-Trichloroethane	20.0	22.53		ug/L		113	70 - 124
Trichloroethene	20.0	20.92		ug/L		105	73 - 126
1,2,3-Trichloropropane	20.0	25.95	*+	ug/L		130	64 - 125
Vinyl acetate	40.0	41.46		ug/L		104	50 - 150
Xylenes, Total	40.0	43.66		ug/L		109	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 128*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: LCS 310-387646/7
Matrix: Water
Analysis Batch: 387646

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	12.98		ug/L		65	24 - 150
Chloroethane	20.0	17.19		ug/L		86	51 - 137
Chloromethane	20.0	21.24		ug/L		106	37 - 150
Trichlorofluoromethane	20.0	18.18		ug/L		91	56 - 144
Vinyl chloride	20.0	22.37		ug/L		112	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 128*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: 310-255704-I-1 MS
Matrix: Water
Analysis Batch: 387646

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0	F2	50.0	47.08		ug/L		94	35 - 150
Acrylonitrile	<10.0	F2	250	232.6		ug/L		93	50 - 150
Benzene	<0.500		25.0	23.44		ug/L		94	47 - 130
Bromochloromethane	<5.00		25.0	21.92		ug/L		88	54 - 132
Bromodichloromethane	<1.00		25.0	25.17		ug/L		101	58 - 130
Bromoform	<5.00		25.0	23.93		ug/L		96	42 - 130
2-Butanone (MEK)	<10.0		50.0	57.11		ug/L		114	47 - 150
Carbon disulfide	<1.00	F2	25.0	18.84		ug/L		75	39 - 131
Carbon tetrachloride	<2.00		25.0	23.03		ug/L		92	45 - 132
Chlorobenzene	<1.00		25.0	24.91		ug/L		100	54 - 130
Chlorodibromomethane	<5.00		25.0	24.43		ug/L		98	53 - 130
Chloroform	<3.00		25.0	21.74		ug/L		87	55 - 130
cis-1,2-Dichloroethene	<1.00		25.0	21.46		ug/L		86	52 - 130
cis-1,3-Dichloropropene	<5.00		25.0	22.50		ug/L		90	55 - 130
1,2-Dibromo-3-Chloropropane	<1.20		25.0	30.43		ug/L		122	45 - 150
1,2-Dibromoethane (EDB)	<0.340		25.0	25.53		ug/L		102	59 - 130
Dibromomethane	<1.00		25.0	23.28		ug/L		93	61 - 130
1,2-Dichlorobenzene	<1.00		25.0	26.84		ug/L		107	53 - 130
1,4-Dichlorobenzene	<1.00		25.0	26.65		ug/L		107	53 - 130
1,1-Dichloroethane	<1.00		25.0	22.37		ug/L		89	53 - 130
1,2-Dichloroethane	<1.00		25.0	24.49		ug/L		98	57 - 130
1,1-Dichloroethene	<2.00		25.0	18.35		ug/L		73	39 - 130
1,2-Dichloropropane	<1.00		25.0	25.50		ug/L		102	60 - 130
Ethylbenzene	<1.00		25.0	25.80		ug/L		103	48 - 130
2-Hexanone	<10.0	*+ F1	50.0	70.80	F1	ug/L		142	45 - 132
Methylene Chloride	<5.00		25.0	18.46		ug/L		74	50 - 150
4-Methyl-2-pentanone (MIBK)	<10.0	*+ F1	50.0	69.21	F1	ug/L		138	46 - 132
Styrene	<1.00		25.0	26.69		ug/L		107	46 - 130
1,1,1,2-Tetrachloroethane	<1.00		25.0	30.17		ug/L		121	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	30.00		ug/L		120	51 - 130
Tetrachloroethene	<1.00		25.0	19.60		ug/L		78	42 - 131
Toluene	<1.00		25.0	21.67		ug/L		87	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		25.0	28.50		ug/L		114	33 - 150
trans-1,2-Dichloroethene	<1.00	F2	25.0	19.71		ug/L		79	54 - 130
trans-1,3-Dichloropropene	<5.00		25.0	22.89		ug/L		92	51 - 130
1,1,1-Trichloroethane	<1.00		25.0	23.01		ug/L		92	49 - 130
1,1,2-Trichloroethane	<1.00		25.0	27.41		ug/L		110	56 - 130
Trichloroethene	<1.00		25.0	23.58		ug/L		94	55 - 130
1,2,3-Trichloropropane	<1.00	*+	25.0	30.34		ug/L		121	50 - 130
Vinyl acetate	<10.0		50.0	44.36		ug/L		89	34 - 150
Xylenes, Total	<3.00		50.0	50.72		ug/L		101	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 128*
Toluene-d8 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: 310-255704-I-1 MSD
Matrix: Water
Analysis Batch: 387646

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0	F2	50.0	30.26	F2	ug/L		61	35 - 150	43	26
Acrylonitrile	<10.0	F2	250	164.1	F2	ug/L		66	50 - 150	35	21
Benzene	<0.500		25.0	20.53		ug/L		82	47 - 130	13	20
Bromochloromethane	<5.00		25.0	19.50		ug/L		78	54 - 132	12	20
Bromodichloromethane	<1.00		25.0	22.52		ug/L		90	58 - 130	11	20
Bromoform	<5.00		25.0	22.44		ug/L		90	42 - 130	6	20
2-Butanone (MEK)	<10.0		50.0	55.12		ug/L		110	47 - 150	4	20
Carbon disulfide	<1.00	F2	25.0	12.99	F2	ug/L		52	39 - 131	37	32
Carbon tetrachloride	<2.00		25.0	20.52		ug/L		82	45 - 132	11	20
Chlorobenzene	<1.00		25.0	22.31		ug/L		89	54 - 130	11	20
Chlorodibromomethane	<5.00		25.0	22.09		ug/L		88	53 - 130	10	20
Chloroform	<3.00		25.0	19.53		ug/L		78	55 - 130	11	20
cis-1,2-Dichloroethene	<1.00		25.0	19.12		ug/L		76	52 - 130	12	20
cis-1,3-Dichloropropene	<5.00		25.0	20.18		ug/L		81	55 - 130	11	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	27.69		ug/L		111	45 - 150	9	20
1,2-Dibromoethane (EDB)	<0.340		25.0	22.98		ug/L		92	59 - 130	11	20
Dibromomethane	<1.00		25.0	21.31		ug/L		85	61 - 130	9	20
1,2-Dichlorobenzene	<1.00		25.0	24.40		ug/L		98	53 - 130	10	20
1,4-Dichlorobenzene	<1.00		25.0	24.58		ug/L		98	53 - 130	8	20
1,1-Dichloroethane	<1.00		25.0	19.98		ug/L		80	53 - 130	11	20
1,2-Dichloroethane	<1.00		25.0	22.08		ug/L		88	57 - 130	10	21
1,1-Dichloroethene	<2.00		25.0	13.83		ug/L		55	39 - 130	28	28
1,2-Dichloropropane	<1.00		25.0	22.41		ug/L		90	60 - 130	13	31
Ethylbenzene	<1.00		25.0	22.91		ug/L		92	48 - 130	12	20
2-Hexanone	<10.0	*+ F1	50.0	67.60	F1	ug/L		135	45 - 132	5	20
Methylene Chloride	<5.00		25.0	15.02		ug/L		60	50 - 150	21	24
4-Methyl-2-pentanone (MIBK)	<10.0	*+ F1	50.0	65.07		ug/L		130	46 - 132	6	20
Styrene	<1.00		25.0	24.18		ug/L		97	46 - 130	10	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	26.99		ug/L		108	52 - 130	11	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	27.73		ug/L		111	51 - 130	8	20
Tetrachloroethene	<1.00		25.0	17.81		ug/L		71	42 - 131	10	20
Toluene	<1.00		25.0	19.05		ug/L		76	48 - 130	13	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	26.72		ug/L		107	33 - 150	6	20
trans-1,2-Dichloroethene	<1.00	F2	25.0	15.10	F2	ug/L		60	54 - 130	27	24
trans-1,3-Dichloropropene	<5.00		25.0	20.91		ug/L		84	51 - 130	9	20
1,1,1-Trichloroethane	<1.00		25.0	20.45		ug/L		82	49 - 130	12	20
1,1,2-Trichloroethane	<1.00		25.0	24.52		ug/L		98	56 - 130	11	20
Trichloroethene	<1.00		25.0	20.99		ug/L		84	55 - 130	12	20
1,2,3-Trichloropropane	<1.00	*+	25.0	28.19		ug/L		113	50 - 130	7	20
Vinyl acetate	<10.0		50.0	39.89		ug/L		80	34 - 150	11	27
Xylenes, Total	<3.00		50.0	45.32		ug/L		91	44 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 128*
Toluene-d8 (Surr)	*107*		*80 - 120*

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

Lab Sample ID: MB 310-387658/5
Matrix: Water
Analysis Batch: 387658

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/16/23 11:36	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/16/23 11:36	1
Benzene	<0.500		0.500	0.220	ug/L			05/16/23 11:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/16/23 11:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/16/23 11:36	1
Bromoform	<5.00		5.00	0.780	ug/L			05/16/23 11:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/16/23 11:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/16/23 11:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/16/23 11:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/16/23 11:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/16/23 11:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/16/23 11:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/16/23 11:36	1
Chloroform	<3.00		3.00	1.30	ug/L			05/16/23 11:36	1
Chloromethane	0.6830	J	3.00	0.610	ug/L			05/16/23 11:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/16/23 11:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/16/23 11:36	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/16/23 11:36	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/16/23 11:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/16/23 11:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/16/23 11:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/16/23 11:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/16/23 11:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/16/23 11:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/16/23 11:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/16/23 11:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/16/23 11:36	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/16/23 11:36	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/16/23 11:36	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/16/23 11:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/16/23 11:36	1
Styrene	<1.00		1.00	0.370	ug/L			05/16/23 11:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/16/23 11:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/16/23 11:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/16/23 11:36	1
Toluene	<1.00		1.00	0.430	ug/L			05/16/23 11:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/16/23 11:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/16/23 11:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/16/23 11:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/16/23 11:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/16/23 11:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/16/23 11:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/16/23 11:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/16/23 11:36	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/16/23 11:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/16/23 11:36	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/16/23 11:36	1

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

Lab Sample ID: MB 310-387658/5
Matrix: Water
Analysis Batch: 387658

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		80 - 120		05/16/23 11:36	1
Dibromofluoromethane (Surr)	102		80 - 128		05/16/23 11:36	1
Toluene-d8 (Surr)	98		80 - 120		05/16/23 11:36	1

Lab Sample ID: LCS 310-387658/6
Matrix: Water
Analysis Batch: 387658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	51.50		ug/L		129	50 - 150
Acrylonitrile	200	245.2		ug/L		123	50 - 150
Benzene	20.0	21.56		ug/L		108	73 - 122
Bromochloromethane	20.0	20.88		ug/L		104	68 - 132
Bromodichloromethane	20.0	21.56		ug/L		108	72 - 121
Bromoform	20.0	21.08		ug/L		105	55 - 129
2-Butanone (MEK)	40.0	50.73		ug/L		127	50 - 150
Carbon disulfide	20.0	17.25		ug/L		86	58 - 131
Carbon tetrachloride	20.0	20.98		ug/L		105	67 - 132
Chlorobenzene	20.0	20.81		ug/L		104	69 - 121
Chlorodibromomethane	20.0	20.18		ug/L		101	69 - 122
Chloroform	20.0	21.17		ug/L		106	72 - 120
cis-1,2-Dichloroethene	20.0	21.13		ug/L		106	74 - 120
cis-1,3-Dichloropropene	20.0	22.42		ug/L		112	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	23.16		ug/L		116	50 - 150
1,2-Dibromoethane (EDB)	20.0	22.46		ug/L		112	73 - 125
Dibromomethane	20.0	22.15		ug/L		111	72 - 123
1,2-Dichlorobenzene	20.0	20.90		ug/L		105	68 - 120
1,4-Dichlorobenzene	20.0	20.75		ug/L		104	67 - 120
1,1-Dichloroethane	20.0	19.50		ug/L		98	71 - 123
1,2-Dichloroethane	20.0	21.44		ug/L		107	70 - 124
1,1-Dichloroethene	20.0	20.22		ug/L		101	61 - 129
1,2-Dichloropropane	20.0	21.54		ug/L		108	73 - 121
Ethylbenzene	20.0	20.83		ug/L		104	69 - 122
2-Hexanone	40.0	51.96		ug/L		130	60 - 132
Iodomethane	20.0	16.86		ug/L		84	10 - 150
Methylene Chloride	20.0	18.92		ug/L		95	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	50.00		ug/L		125	62 - 130
Styrene	20.0	20.53		ug/L		103	67 - 125
1,1,1,2-Tetrachloroethane	20.0	20.61		ug/L		103	68 - 123
1,1,2,2-Tetrachloroethane	20.0	22.64		ug/L		113	64 - 124
Tetrachloroethene	20.0	21.28		ug/L		106	69 - 131
Toluene	20.0	20.90		ug/L		104	72 - 121
trans-1,4-Dichloro-2-butene	20.0	20.84		ug/L		104	48 - 150
trans-1,2-Dichloroethene	20.0	19.87		ug/L		99	68 - 125
trans-1,3-Dichloropropene	20.0	22.51		ug/L		113	68 - 124
1,1,1-Trichloroethane	20.0	20.92		ug/L		105	71 - 128
1,1,2-Trichloroethane	20.0	21.97		ug/L		110	70 - 124
Trichloroethene	20.0	20.99		ug/L		105	73 - 126

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

Lab Sample ID: LCS 310-387658/6
Matrix: Water
Analysis Batch: 387658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	20.0	20.64		ug/L		103	64 - 125
Vinyl acetate	40.0	44.50		ug/L		111	50 - 150
Xylenes, Total	40.0	40.91		ug/L		102	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LCS 310-387658/7
Matrix: Water
Analysis Batch: 387658

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	13.97		ug/L		70	24 - 150
Chloroethane	20.0	19.37		ug/L		97	51 - 137
Chloromethane	20.0	17.55		ug/L		88	37 - 150
Trichlorofluoromethane	20.0	21.70		ug/L		108	56 - 144
Vinyl chloride	20.0	21.45		ug/L		107	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-255749-F-4 MS
Matrix: Water
Analysis Batch: 387658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0		40.0	52.65		ug/L		132	35 - 150
Acrylonitrile	<10.0		200	237.7		ug/L		119	50 - 150
Benzene	<0.500		20.0	21.07		ug/L		105	47 - 130
Bromochloromethane	<5.00		20.0	18.23		ug/L		91	54 - 132
Bromodichloromethane	<1.00		20.0	23.03		ug/L		115	58 - 130
Bromoform	<5.00		20.0	22.75		ug/L		114	42 - 130
2-Butanone (MEK)	<10.0		40.0	49.83		ug/L		125	47 - 150
Carbon disulfide	<1.00		20.0	16.47		ug/L		82	39 - 131
Carbon tetrachloride	<2.00		20.0	17.92		ug/L		90	45 - 132
Chlorobenzene	<1.00		20.0	21.84		ug/L		109	54 - 130
Chlorodibromomethane	<5.00		20.0	21.74		ug/L		109	53 - 130
Chloroform	<3.00		20.0	20.40		ug/L		102	55 - 130
cis-1,2-Dichloroethene	<1.00		20.0	20.15		ug/L		101	52 - 130
cis-1,3-Dichloropropene	<5.00		20.0	22.54		ug/L		113	55 - 130
1,2-Dibromo-3-Chloropropane	<1.20		20.0	25.57		ug/L		128	45 - 150
1,2-Dibromoethane (EDB)	<0.340		20.0	23.64		ug/L		118	59 - 130
Dibromomethane	<1.00		20.0	22.36		ug/L		112	61 - 130
1,2-Dichlorobenzene	<1.00		20.0	22.05		ug/L		110	53 - 130

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

Lab Sample ID: 310-255749-F-4 MS
Matrix: Water
Analysis Batch: 387658

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	<1.00		20.0	22.07		ug/L		110	53 - 130
1,1-Dichloroethane	<1.00		20.0	18.40		ug/L		92	53 - 130
1,2-Dichloroethane	<1.00		20.0	21.08		ug/L		105	57 - 130
1,1-Dichloroethene	<2.00		20.0	14.26		ug/L		71	39 - 130
1,2-Dichloropropane	<1.00		20.0	20.59		ug/L		103	60 - 130
Ethylbenzene	<1.00		20.0	21.23		ug/L		106	48 - 130
2-Hexanone	<10.0	F1	40.0	55.98	F1	ug/L		140	45 - 132
Iodomethane	<10.0		20.0	16.65		ug/L		83	10 - 150
Methylene Chloride	<5.00		20.0	17.72		ug/L		89	50 - 150
4-Methyl-2-pentanone (MIBK)	<10.0	F1	40.0	54.01	F1	ug/L		135	46 - 132
Styrene	<1.00		20.0	22.13		ug/L		111	46 - 130
1,1,1,2-Tetrachloroethane	<1.00		20.0	22.27		ug/L		111	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		20.0	24.90		ug/L		125	51 - 130
Tetrachloroethene	<1.00		20.0	19.27		ug/L		96	42 - 131
Toluene	<1.00		20.0	20.96		ug/L		105	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		20.0	21.08		ug/L		105	33 - 150
trans-1,2-Dichloroethene	<1.00		20.0	18.31		ug/L		92	54 - 130
trans-1,3-Dichloropropene	<5.00		20.0	23.03		ug/L		115	51 - 130
1,1,1-Trichloroethane	<1.00		20.0	18.64		ug/L		93	49 - 130
1,1,2-Trichloroethane	<1.00		20.0	23.06		ug/L		115	56 - 130
Trichloroethene	<1.00		20.0	19.51		ug/L		98	55 - 130
1,2,3-Trichloropropane	<1.00		20.0	23.48		ug/L		117	50 - 130
Vinyl acetate	<10.0		40.0	39.81		ug/L		100	34 - 150
Xylenes, Total	<3.00		40.0	43.48		ug/L		109	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-255749-F-4 MSD
Matrix: Water
Analysis Batch: 387658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0		40.0	49.42		ug/L		124	35 - 150	6	26
Acrylonitrile	<10.0		200	238.5		ug/L		119	50 - 150	0	21
Benzene	<0.500		20.0	19.73		ug/L		99	47 - 130	7	20
Bromochloromethane	<5.00		20.0	20.57		ug/L		103	54 - 132	12	20
Bromodichloromethane	<1.00		20.0	22.27		ug/L		111	58 - 130	3	20
Bromoform	<5.00		20.0	22.52		ug/L		113	42 - 130	1	20
2-Butanone (MEK)	<10.0		40.0	49.19		ug/L		123	47 - 150	1	20
Carbon disulfide	<1.00		20.0	15.69		ug/L		78	39 - 131	5	32
Carbon tetrachloride	<2.00		20.0	17.98		ug/L		90	45 - 132	0	20
Chlorobenzene	<1.00		20.0	21.77		ug/L		109	54 - 130	0	20
Chlorodibromomethane	<5.00		20.0	20.63		ug/L		103	53 - 130	5	20
Chloroform	<3.00		20.0	20.50		ug/L		103	55 - 130	0	20
cis-1,2-Dichloroethene	<1.00		20.0	19.67		ug/L		98	52 - 130	2	20

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

Lab Sample ID: 310-255749-F-4 MSD
Matrix: Water
Analysis Batch: 387658

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	<5.00		20.0	21.84		ug/L		109	55 - 130	3	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	25.32		ug/L		127	45 - 150	1	20
1,2-Dibromoethane (EDB)	<0.340		20.0	22.88		ug/L		114	59 - 130	3	20
Dibromomethane	<1.00		20.0	22.17		ug/L		111	61 - 130	1	20
1,2-Dichlorobenzene	<1.00		20.0	22.63		ug/L		113	53 - 130	3	20
1,4-Dichlorobenzene	<1.00		20.0	22.68		ug/L		113	53 - 130	3	20
1,1-Dichloroethane	<1.00		20.0	18.36		ug/L		92	53 - 130	0	20
1,2-Dichloroethane	<1.00		20.0	20.43		ug/L		102	57 - 130	3	21
1,1-Dichloroethene	<2.00		20.0	17.90		ug/L		90	39 - 130	23	28
1,2-Dichloropropane	<1.00		20.0	20.48		ug/L		102	60 - 130	1	31
Ethylbenzene	<1.00		20.0	20.87		ug/L		104	48 - 130	2	20
2-Hexanone	<10.0	F1	40.0	55.26	F1	ug/L		138	45 - 132	1	20
Iodomethane	<10.0		20.0	16.73		ug/L		84	10 - 150	0	35
Methylene Chloride	<5.00		20.0	17.89		ug/L		89	50 - 150	1	24
4-Methyl-2-pentanone (MIBK)	<10.0	F1	40.0	52.20		ug/L		130	46 - 132	3	20
Styrene	<1.00		20.0	21.93		ug/L		110	46 - 130	1	20
1,1,1,2-Tetrachloroethane	<1.00		20.0	21.53		ug/L		108	52 - 130	3	20
1,1,2,2-Tetrachloroethane	<1.00		20.0	24.35		ug/L		122	51 - 130	2	20
Tetrachloroethene	<1.00		20.0	18.63		ug/L		93	42 - 131	3	20
Toluene	<1.00		20.0	20.16		ug/L		101	48 - 130	4	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	21.44		ug/L		107	33 - 150	2	20
trans-1,2-Dichloroethene	<1.00		20.0	17.42		ug/L		87	54 - 130	5	24
trans-1,3-Dichloropropene	<5.00		20.0	23.18		ug/L		116	51 - 130	1	20
1,1,1-Trichloroethane	<1.00		20.0	18.22		ug/L		91	49 - 130	2	20
1,1,2-Trichloroethane	<1.00		20.0	22.50		ug/L		113	56 - 130	2	20
Trichloroethene	<1.00		20.0	18.76		ug/L		94	55 - 130	4	20
1,2,3-Trichloropropane	<1.00		20.0	22.27		ug/L		111	50 - 130	5	20
Vinyl acetate	<10.0		40.0	39.52		ug/L		99	34 - 150	1	27
Xylenes, Total	<3.00		40.0	42.43		ug/L		106	44 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-387785/5
Matrix: Water
Analysis Batch: 387785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/17/23 11:08	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			05/17/23 11:08	1
Benzene	<0.500		0.500	0.220	ug/L			05/17/23 11:08	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/17/23 11:08	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/17/23 11:08	1
Bromoform	<5.00		5.00	0.780	ug/L			05/17/23 11:08	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/17/23 11:08	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/17/23 11:08	1

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

Lab Sample ID: MB 310-387785/5
Matrix: Water
Analysis Batch: 387785

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/17/23 11:08	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/17/23 11:08	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/17/23 11:08	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/17/23 11:08	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/17/23 11:08	1
Chloroform	<3.00		3.00	1.30	ug/L			05/17/23 11:08	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/17/23 11:08	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/17/23 11:08	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/17/23 11:08	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/17/23 11:08	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/17/23 11:08	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/17/23 11:08	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/17/23 11:08	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/17/23 11:08	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/17/23 11:08	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/17/23 11:08	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/17/23 11:08	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/17/23 11:08	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/17/23 11:08	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/17/23 11:08	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/17/23 11:08	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/17/23 11:08	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/17/23 11:08	1
Styrene	<1.00		1.00	0.370	ug/L			05/17/23 11:08	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/17/23 11:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/17/23 11:08	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/17/23 11:08	1
Toluene	<1.00		1.00	0.430	ug/L			05/17/23 11:08	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/17/23 11:08	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/17/23 11:08	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/17/23 11:08	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/17/23 11:08	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/17/23 11:08	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/17/23 11:08	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/17/23 11:08	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/17/23 11:08	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/17/23 11:08	1
Vinyl chloride	0.2033	J	1.00	0.180	ug/L			05/17/23 11:08	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/17/23 11:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*05/17/23 11:08*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 128*		*05/17/23 11:08*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/17/23 11:08*	*1*

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

Lab Sample ID: LCS 310-387785/6
Matrix: Water
Analysis Batch: 387785

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	45.25		ug/L		113	50 - 150
Acrylonitrile	200	217.4		ug/L		109	50 - 150
Benzene	20.0	21.11		ug/L		106	73 - 122
Bromochloromethane	20.0	20.71		ug/L		104	68 - 132
Bromodichloromethane	20.0	21.48		ug/L		107	72 - 121
Bromoform	20.0	20.10		ug/L		100	55 - 129
2-Butanone (MEK)	40.0	43.08		ug/L		108	50 - 150
Carbon disulfide	20.0	18.09		ug/L		90	58 - 131
Carbon tetrachloride	20.0	21.06		ug/L		105	67 - 132
Chlorobenzene	20.0	21.03		ug/L		105	69 - 121
Chlorodibromomethane	20.0	19.45		ug/L		97	69 - 122
Chloroform	20.0	21.69		ug/L		108	72 - 120
cis-1,2-Dichloroethene	20.0	21.61		ug/L		108	74 - 120
cis-1,3-Dichloropropene	20.0	21.42		ug/L		107	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	21.40		ug/L		107	50 - 150
1,2-Dibromoethane (EDB)	20.0	21.45		ug/L		107	73 - 125
Dibromomethane	20.0	20.97		ug/L		105	72 - 123
1,2-Dichlorobenzene	20.0	20.85		ug/L		104	68 - 120
1,4-Dichlorobenzene	20.0	20.64		ug/L		103	67 - 120
1,1-Dichloroethane	20.0	19.60		ug/L		98	71 - 123
1,2-Dichloroethane	20.0	20.24		ug/L		101	70 - 124
1,1-Dichloroethene	20.0	20.41		ug/L		102	61 - 129
1,2-Dichloropropane	20.0	21.06		ug/L		105	73 - 121
Ethylbenzene	20.0	21.08		ug/L		105	69 - 122
2-Hexanone	40.0	46.17		ug/L		115	60 - 132
Iodomethane	20.0	15.74		ug/L		79	10 - 150
Methylene Chloride	20.0	19.13		ug/L		96	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	44.86		ug/L		112	62 - 130
Styrene	20.0	20.50		ug/L		102	67 - 125
1,1,1,2-Tetrachloroethane	20.0	20.62		ug/L		103	68 - 123
1,1,2,2-Tetrachloroethane	20.0	21.03		ug/L		105	64 - 124
Tetrachloroethene	20.0	20.89		ug/L		104	69 - 131
Toluene	20.0	21.36		ug/L		107	72 - 121
trans-1,4-Dichloro-2-butene	20.0	19.61		ug/L		98	48 - 150
trans-1,2-Dichloroethene	20.0	20.26		ug/L		101	68 - 125
trans-1,3-Dichloropropene	20.0	20.86		ug/L		104	68 - 124
1,1,1-Trichloroethane	20.0	21.09		ug/L		105	71 - 128
1,1,2-Trichloroethane	20.0	20.94		ug/L		105	70 - 124
Trichloroethene	20.0	20.57		ug/L		103	73 - 126
1,2,3-Trichloropropane	20.0	22.44		ug/L		112	64 - 125
Vinyl acetate	40.0	40.92		ug/L		102	50 - 150
Xylenes, Total	40.0	42.24		ug/L		106	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: LCS 310-387785/7
Matrix: Water
Analysis Batch: 387785

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromomethane			20.0	14.25		ug/L		71	24 - 150		
Chloroethane			20.0	20.25		ug/L		101	51 - 137		
Chloromethane			20.0	19.28		ug/L		96	37 - 150		
Trichlorofluoromethane			20.0	22.41		ug/L		112	56 - 144		
Vinyl chloride			20.0	21.76		ug/L		109	57 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-255806-C-1 MS
Matrix: Water
Analysis Batch: 387785

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	<10.0		40.0	39.00		ug/L		97	35 - 150		
Acrylonitrile	<10.0		200	178.7		ug/L		89	50 - 150		
Benzene	<0.500		20.0	17.32		ug/L		87	47 - 130		
Bromochloromethane	<5.00		20.0	17.17		ug/L		86	54 - 132		
Bromodichloromethane	<1.00		20.0	17.26		ug/L		86	58 - 130		
Bromoform	<5.00		20.0	16.20		ug/L		81	42 - 130		
2-Butanone (MEK)	<10.0		40.0	36.20		ug/L		90	47 - 150		
Carbon disulfide	<1.00		20.0	15.26		ug/L		76	39 - 131		
Carbon tetrachloride	<2.00		20.0	16.24		ug/L		81	45 - 132		
Chlorobenzene	<1.00		20.0	16.60		ug/L		83	54 - 130		
Chlorodibromomethane	<5.00		20.0	14.87		ug/L		74	53 - 130		
Chloroform	<3.00		20.0	17.56		ug/L		88	55 - 130		
cis-1,2-Dichloroethene	<1.00		20.0	17.49		ug/L		87	52 - 130		
cis-1,3-Dichloropropene	<5.00		20.0	17.02		ug/L		85	55 - 130		
1,2-Dibromo-3-Chloropropane	<1.20		20.0	18.00		ug/L		90	45 - 150		
1,2-Dibromoethane (EDB)	<0.340		20.0	17.22		ug/L		86	59 - 130		
Dibromomethane	<1.00		20.0	17.66		ug/L		88	61 - 130		
1,2-Dichlorobenzene	<1.00		20.0	17.01		ug/L		85	53 - 130		
1,4-Dichlorobenzene	<1.00		20.0	16.75		ug/L		84	53 - 130		
1,1-Dichloroethane	<1.00		20.0	15.85		ug/L		79	53 - 130		
1,2-Dichloroethane	<1.00		20.0	17.24		ug/L		86	57 - 130		
1,1-Dichloroethene	<2.00		20.0	16.17		ug/L		81	39 - 130		
1,2-Dichloropropane	<1.00		20.0	17.31		ug/L		87	60 - 130		
Ethylbenzene	<1.00		20.0	16.38		ug/L		82	48 - 130		
2-Hexanone	<10.0		40.0	39.68		ug/L		99	45 - 132		
Iodomethane	<10.0		20.0	13.91		ug/L		70	10 - 150		
Methylene Chloride	<5.00		20.0	16.19		ug/L		81	50 - 150		
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	37.01		ug/L		93	46 - 132		
Styrene	<1.00		20.0	16.15		ug/L		81	46 - 130		
1,1,1,2-Tetrachloroethane	<1.00		20.0	16.42		ug/L		82	52 - 130		
1,1,2,2-Tetrachloroethane	<1.00		20.0	17.41		ug/L		87	51 - 130		
Tetrachloroethene	14.7		20.0	28.50		ug/L		69	42 - 131		

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

Lab Sample ID: 310-255806-C-1 MS
Matrix: Water
Analysis Batch: 387785

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<1.00		20.0	16.72		ug/L		84	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		20.0	14.89		ug/L		74	33 - 150
trans-1,2-Dichloroethene	<1.00		20.0	16.40		ug/L		82	54 - 130
trans-1,3-Dichloropropene	<5.00		20.0	17.44		ug/L		87	51 - 130
1,1,1-Trichloroethane	<1.00		20.0	16.62		ug/L		83	49 - 130
1,1,2-Trichloroethane	<1.00		20.0	17.14		ug/L		86	56 - 130
Trichloroethene	1.61		20.0	17.99		ug/L		82	55 - 130
1,2,3-Trichloropropane	<1.00		20.0	15.46		ug/L		77	50 - 130
Vinyl acetate	<10.0		40.0	30.45		ug/L		76	34 - 150
Xylenes, Total	<3.00		40.0	32.87		ug/L		82	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-255806-C-1 MSD
Matrix: Water
Analysis Batch: 387785

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0		40.0	42.54		ug/L		106	35 - 150	9	26
Acrylonitrile	<10.0		200	191.9		ug/L		96	50 - 150	7	21
Benzene	<0.500		20.0	16.91		ug/L		85	47 - 130	2	20
Bromochloromethane	<5.00		20.0	17.67		ug/L		88	54 - 132	3	20
Bromodichloromethane	<1.00		20.0	17.40		ug/L		87	58 - 130	1	20
Bromoform	<5.00		20.0	16.78		ug/L		84	42 - 130	4	20
2-Butanone (MEK)	<10.0		40.0	38.94		ug/L		97	47 - 150	7	20
Carbon disulfide	<1.00		20.0	13.93		ug/L		70	39 - 131	9	32
Carbon tetrachloride	<2.00		20.0	15.77		ug/L		79	45 - 132	3	20
Chlorobenzene	<1.00		20.0	16.97		ug/L		85	54 - 130	2	20
Chlorodibromomethane	<5.00		20.0	16.17		ug/L		81	53 - 130	8	20
Chloroform	<3.00		20.0	17.22		ug/L		86	55 - 130	2	20
cis-1,2-Dichloroethene	<1.00		20.0	17.17		ug/L		86	52 - 130	2	20
cis-1,3-Dichloropropene	<5.00		20.0	17.29		ug/L		86	55 - 130	2	20
1,2-Dibromo-3-Chloropropane	<1.20		20.0	18.73		ug/L		94	45 - 150	4	20
1,2-Dibromoethane (EDB)	<0.340		20.0	17.97		ug/L		90	59 - 130	4	20
Dibromomethane	<1.00		20.0	17.71		ug/L		89	61 - 130	0	20
1,2-Dichlorobenzene	<1.00		20.0	17.34		ug/L		87	53 - 130	2	20
1,4-Dichlorobenzene	<1.00		20.0	16.93		ug/L		85	53 - 130	1	20
1,1-Dichloroethane	<1.00		20.0	15.39		ug/L		77	53 - 130	3	20
1,2-Dichloroethane	<1.00		20.0	17.18		ug/L		86	57 - 130	0	21
1,1-Dichloroethene	<2.00		20.0	15.93		ug/L		80	39 - 130	1	28
1,2-Dichloropropane	<1.00		20.0	17.37		ug/L		87	60 - 130	0	31
Ethylbenzene	<1.00		20.0	16.68		ug/L		83	48 - 130	2	20
2-Hexanone	<10.0		40.0	42.16		ug/L		105	45 - 132	6	20
Iodomethane	<10.0		20.0	14.19		ug/L		71	10 - 150	2	35
Methylene Chloride	<5.00		20.0	15.21		ug/L		76	50 - 150	6	24

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

Lab Sample ID: 310-255806-C-1 MSD
Matrix: Water
Analysis Batch: 387785

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	40.24		ug/L		101	46 - 132	8	20
Styrene	<1.00		20.0	16.17		ug/L		81	46 - 130	0	20
1,1,1,2-Tetrachloroethane	<1.00		20.0	16.50		ug/L		83	52 - 130	1	20
1,1,2,2-Tetrachloroethane	<1.00		20.0	18.36		ug/L		92	51 - 130	5	20
Tetrachloroethene	14.7		20.0	29.33		ug/L		73	42 - 131	3	20
Toluene	<1.00		20.0	16.72		ug/L		84	48 - 130	0	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	16.41		ug/L		82	33 - 150	10	20
trans-1,2-Dichloroethene	<1.00		20.0	15.67		ug/L		78	54 - 130	5	24
trans-1,3-Dichloropropene	<5.00		20.0	17.34		ug/L		87	51 - 130	1	20
1,1,1-Trichloroethane	<1.00		20.0	16.26		ug/L		81	49 - 130	2	20
1,1,2-Trichloroethane	<1.00		20.0	17.37		ug/L		87	56 - 130	1	20
Trichloroethene	1.61		20.0	17.26		ug/L		78	55 - 130	4	20
1,2,3-Trichloropropane	<1.00		20.0	18.59		ug/L		93	50 - 130	18	20
Vinyl acetate	<10.0		40.0	32.78		ug/L		82	34 - 150	7	27
Xylenes, Total	<3.00		40.0	33.60		ug/L		84	44 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-387941/5
Matrix: Water
Analysis Batch: 387941

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			05/18/23 12:09	1
Benzene	<0.500		0.500	0.220	ug/L			05/18/23 12:09	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			05/18/23 12:09	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			05/18/23 12:09	1
Bromoform	<5.00		5.00	0.780	ug/L			05/18/23 12:09	1
Bromomethane	<4.00		4.00	1.10	ug/L			05/18/23 12:09	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			05/18/23 12:09	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			05/18/23 12:09	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			05/18/23 12:09	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			05/18/23 12:09	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			05/18/23 12:09	1
Chloroethane	<4.00		4.00	0.790	ug/L			05/18/23 12:09	1
Chloroform	<3.00		3.00	1.30	ug/L			05/18/23 12:09	1
Chloromethane	<3.00		3.00	0.610	ug/L			05/18/23 12:09	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			05/18/23 12:09	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			05/18/23 12:09	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			05/18/23 12:09	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			05/18/23 12:09	1
Dibromomethane	<1.00		1.00	0.330	ug/L			05/18/23 12:09	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			05/18/23 12:09	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			05/18/23 12:09	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			05/18/23 12:09	1

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

Lab Sample ID: MB 310-387941/5
Matrix: Water
Analysis Batch: 387941

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			05/18/23 12:09	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			05/18/23 12:09	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			05/18/23 12:09	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			05/18/23 12:09	1
2-Hexanone	<10.0		10.0	2.00	ug/L			05/18/23 12:09	1
Iodomethane	<10.0		10.0	7.00	ug/L			05/18/23 12:09	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			05/18/23 12:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			05/18/23 12:09	1
Styrene	<1.00		1.00	0.370	ug/L			05/18/23 12:09	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			05/18/23 12:09	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			05/18/23 12:09	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			05/18/23 12:09	1
Toluene	<1.00		1.00	0.430	ug/L			05/18/23 12:09	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			05/18/23 12:09	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			05/18/23 12:09	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			05/18/23 12:09	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			05/18/23 12:09	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			05/18/23 12:09	1
Trichloroethene	<1.00		1.00	0.430	ug/L			05/18/23 12:09	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			05/18/23 12:09	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			05/18/23 12:09	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			05/18/23 12:09	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			05/18/23 12:09	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			05/18/23 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*05/18/23 12:09*	*1*
Dibromofluoromethane (Surr)	*83*		*80 - 128*		*05/18/23 12:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/18/23 12:09*	*1*

Lab Sample ID: LCS 310-387941/6
Matrix: Water
Analysis Batch: 387941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	36.34		ug/L		91	50 - 150
Benzene	20.0	19.38		ug/L		97	73 - 122
Bromochloromethane	20.0	19.31		ug/L		97	68 - 132
Bromodichloromethane	20.0	20.10		ug/L		100	72 - 121
Bromoform	20.0	20.71		ug/L		104	55 - 129
2-Butanone (MEK)	40.0	38.78		ug/L		97	50 - 150
Carbon disulfide	20.0	17.08		ug/L		85	58 - 131
Carbon tetrachloride	20.0	19.58		ug/L		98	67 - 132
Chlorobenzene	20.0	20.14		ug/L		101	69 - 121
Chlorodibromomethane	20.0	19.86		ug/L		99	69 - 122
Chloroform	20.0	18.24		ug/L		91	72 - 120
cis-1,2-Dichloroethene	20.0	19.04		ug/L		95	74 - 120
cis-1,3-Dichloropropene	20.0	19.99		ug/L		100	71 - 126

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

Lab Sample ID: LCS 310-387941/6
Matrix: Water
Analysis Batch: 387941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	20.0	18.83		ug/L		94	50 - 150
1,2-Dibromoethane (EDB)	20.0	20.37		ug/L		102	73 - 125
Dibromomethane	20.0	19.58		ug/L		98	72 - 123
1,2-Dichlorobenzene	20.0	18.73		ug/L		94	68 - 120
1,4-Dichlorobenzene	20.0	19.14		ug/L		96	67 - 120
1,1-Dichloroethane	20.0	18.22		ug/L		91	71 - 123
1,2-Dichloroethane	20.0	19.00		ug/L		95	70 - 124
1,1-Dichloroethene	20.0	18.10		ug/L		91	61 - 129
1,2-Dichloropropane	20.0	20.42		ug/L		102	73 - 121
Ethylbenzene	20.0	20.57		ug/L		103	69 - 122
2-Hexanone	40.0	39.81		ug/L		100	60 - 132
Iodomethane	20.0	15.61		ug/L		78	10 - 150
Methylene Chloride	20.0	19.63		ug/L		98	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	39.20		ug/L		98	62 - 130
Styrene	20.0	20.89		ug/L		104	67 - 125
1,1,1,2-Tetrachloroethane	20.0	21.78		ug/L		109	68 - 123
1,1,2,2-Tetrachloroethane	20.0	19.20		ug/L		96	64 - 124
Tetrachloroethene	20.0	18.97		ug/L		95	69 - 131
Toluene	20.0	19.20		ug/L		96	72 - 121
trans-1,4-Dichloro-2-butene	20.0	19.47		ug/L		97	48 - 150
trans-1,2-Dichloroethene	20.0	19.75		ug/L		99	68 - 125
trans-1,3-Dichloropropene	20.0	19.60		ug/L		98	68 - 124
1,1,1-Trichloroethane	20.0	19.68		ug/L		98	71 - 128
1,1,2-Trichloroethane	20.0	20.39		ug/L		102	70 - 124
Trichloroethene	20.0	20.06		ug/L		100	73 - 126
1,2,3-Trichloropropane	20.0	18.94		ug/L		95	64 - 125
Vinyl acetate	40.0	40.87		ug/L		102	50 - 150
Xylenes, Total	40.0	41.15		ug/L		103	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCS 310-387941/7
Matrix: Water
Analysis Batch: 387941

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	17.91		ug/L		90	24 - 150
Chloroethane	20.0	19.05		ug/L		95	51 - 137
Chloromethane	20.0	17.84		ug/L		89	37 - 150
Trichlorofluoromethane	20.0	20.28		ug/L		101	56 - 144
Vinyl chloride	20.0	17.86		ug/L		89	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 128*

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

Lab Sample ID: LCS 310-387941/7
Matrix: Water
Analysis Batch: 387941

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-255704-J-2 MS
Matrix: Water
Analysis Batch: 387941

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0	F2 F1	50.0	79.13	F1	ug/L		158	35 - 150
Benzene	<0.500		25.0	19.26		ug/L		77	47 - 130
Bromochloromethane	<5.00		25.0	21.78		ug/L		87	54 - 132
Bromodichloromethane	<1.00		25.0	20.84		ug/L		83	58 - 130
Bromoform	<5.00		25.0	25.98		ug/L		104	42 - 130
2-Butanone (MEK)	<10.0		50.0	42.57		ug/L		85	47 - 150
Carbon disulfide	<1.00	F2	25.0	28.65		ug/L		115	39 - 131
Carbon tetrachloride	<2.00		25.0	20.49		ug/L		82	45 - 132
Chlorobenzene	<1.00		25.0	21.47		ug/L		86	54 - 130
Chlorodibromomethane	<5.00		25.0	24.08		ug/L		96	53 - 130
Chloroform	<3.00		25.0	17.88		ug/L		72	55 - 130
cis-1,2-Dichloroethene	<1.00		25.0	19.71		ug/L		79	52 - 130
cis-1,3-Dichloropropene	<5.00		25.0	19.93		ug/L		80	55 - 130
1,2-Dibromo-3-Chloropropane	<1.20		25.0	20.92		ug/L		84	45 - 150
1,2-Dibromoethane (EDB)	<0.340		25.0	24.52		ug/L		98	59 - 130
Dibromomethane	<1.00		25.0	20.75		ug/L		83	61 - 130
1,2-Dichlorobenzene	<1.00		25.0	21.57		ug/L		86	53 - 130
1,4-Dichlorobenzene	<1.00		25.0	21.32		ug/L		85	53 - 130
1,1-Dichloroethane	<1.00		25.0	17.02		ug/L		68	53 - 130
1,2-Dichloroethane	<1.00		25.0	18.47		ug/L		74	57 - 130
1,1-Dichloroethene	<2.00	F2	25.0	30.24		ug/L		121	39 - 130
1,2-Dichloropropane	<1.00		25.0	19.48		ug/L		78	60 - 130
Ethylbenzene	<1.00		25.0	20.61		ug/L		82	48 - 130
2-Hexanone	<10.0		50.0	46.21		ug/L		92	45 - 132
Iodomethane	<10.0		25.0	17.18		ug/L		69	10 - 150
Methylene Chloride	<5.00	F2	25.0	32.84		ug/L		131	50 - 150
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	43.66		ug/L		87	46 - 132
Styrene	<1.00		25.0	22.92		ug/L		92	46 - 130
1,1,1,2-Tetrachloroethane	<1.00		25.0	24.44		ug/L		98	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	22.33		ug/L		89	51 - 130
Tetrachloroethene	<1.00		25.0	22.61		ug/L		90	42 - 131
Toluene	<1.00		25.0	20.26		ug/L		81	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		25.0	20.46		ug/L		82	33 - 150
trans-1,2-Dichloroethene	<1.00	F2	25.0	29.83		ug/L		119	54 - 130
trans-1,3-Dichloropropene	<5.00		25.0	20.18		ug/L		81	51 - 130
1,1,1-Trichloroethane	<1.00		25.0	19.65		ug/L		79	49 - 130
1,1,2-Trichloroethane	<1.00		25.0	23.25		ug/L		93	56 - 130
Trichloroethene	<1.00		25.0	20.40		ug/L		82	55 - 130
1,2,3-Trichloropropane	<1.00		25.0	23.86		ug/L		95	50 - 130
Vinyl acetate	<10.0		50.0	42.82		ug/L		86	34 - 150
Xylenes, Total	<3.00		50.0	43.55		ug/L		87	44 - 130

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

Lab Sample ID: 310-255704-J-2 MS
Matrix: Water
Analysis Batch: 387941

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-255704-J-2 MSD
Matrix: Water
Analysis Batch: 387941

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0	F2 F1	50.0	51.40	F2	ug/L		103	35 - 150	42	26
Benzene	<0.500		25.0	19.52		ug/L		78	47 - 130	1	20
Bromochloromethane	<5.00		25.0	20.03		ug/L		80	54 - 132	8	20
Bromodichloromethane	<1.00		25.0	21.13		ug/L		85	58 - 130	1	20
Bromoform	<5.00		25.0	23.62		ug/L		94	42 - 130	10	20
2-Butanone (MEK)	<10.0		50.0	49.04		ug/L		98	47 - 150	14	20
Carbon disulfide	<1.00	F2	25.0	18.09	F2	ug/L		72	39 - 131	45	32
Carbon tetrachloride	<2.00		25.0	19.22		ug/L		77	45 - 132	6	20
Chlorobenzene	<1.00		25.0	20.45		ug/L		82	54 - 130	5	20
Chlorodibromomethane	<5.00		25.0	21.99		ug/L		88	53 - 130	9	20
Chloroform	<3.00		25.0	18.32		ug/L		73	55 - 130	2	20
cis-1,2-Dichloroethene	<1.00		25.0	19.14		ug/L		77	52 - 130	3	20
cis-1,3-Dichloropropene	<5.00		25.0	20.51		ug/L		82	55 - 130	3	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	22.62		ug/L		90	45 - 150	8	20
1,2-Dibromoethane (EDB)	<0.340		25.0	22.87		ug/L		91	59 - 130	7	20
Dibromomethane	<1.00		25.0	20.55		ug/L		82	61 - 130	1	20
1,2-Dichlorobenzene	<1.00		25.0	20.92		ug/L		84	53 - 130	3	20
1,4-Dichlorobenzene	<1.00		25.0	20.73		ug/L		83	53 - 130	3	20
1,1-Dichloroethane	<1.00		25.0	18.46		ug/L		74	53 - 130	8	20
1,2-Dichloroethane	<1.00		25.0	19.67		ug/L		79	57 - 130	6	21
1,1-Dichloroethene	<2.00	F2	25.0	19.37	F2	ug/L		77	39 - 130	44	28
1,2-Dichloropropane	<1.00		25.0	20.96		ug/L		84	60 - 130	7	31
Ethylbenzene	<1.00		25.0	20.61		ug/L		82	48 - 130	0	20
2-Hexanone	<10.0		50.0	53.53		ug/L		107	45 - 132	15	20
Iodomethane	<10.0		25.0	13.85		ug/L		55	10 - 150	21	35
Methylene Chloride	<5.00	F2	25.0	22.05	F2	ug/L		88	50 - 150	39	24
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	51.53		ug/L		103	46 - 132	17	20
Styrene	<1.00		25.0	22.02		ug/L		88	46 - 130	4	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	23.34		ug/L		93	52 - 130	5	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	23.08		ug/L		92	51 - 130	3	20
Tetrachloroethene	<1.00		25.0	18.90		ug/L		76	42 - 131	18	20
Toluene	<1.00		25.0	19.27		ug/L		77	48 - 130	5	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	23.05		ug/L		92	33 - 150	12	20
trans-1,2-Dichloroethene	<1.00	F2	25.0	20.86	F2	ug/L		83	54 - 130	35	24
trans-1,3-Dichloropropene	<5.00		25.0	20.76		ug/L		83	51 - 130	3	20
1,1,1-Trichloroethane	<1.00		25.0	19.35		ug/L		77	49 - 130	2	20
1,1,2-Trichloroethane	<1.00		25.0	23.01		ug/L		92	56 - 130	1	20
Trichloroethene	<1.00		25.0	19.87		ug/L		79	55 - 130	3	20
1,2,3-Trichloropropane	<1.00		25.0	23.22		ug/L		93	50 - 130	3	20

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

Lab Sample ID: 310-255704-J-2 MSD
Matrix: Water
Analysis Batch: 387941

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	<10.0		50.0	43.69		ug/L		87	34 - 150	2	27
Xylenes, Total	<3.00		50.0	41.71		ug/L		83	44 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 310-388038/5
Matrix: Water
Analysis Batch: 388038

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	<10.0		10.0	7.00	ug/L			05/19/23 09:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*05/19/23 09:27*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 128*		*05/19/23 09:27*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/19/23 09:27*	*1*

Lab Sample ID: LCS 310-388038/6
Matrix: Water
Analysis Batch: 388038

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iodomethane	20.0	14.46		ug/L		72	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 310-256190-B-13 MS
Matrix: Water
Analysis Batch: 388038

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0	F2	50.0	30.94		ug/L		62	35 - 150
Acrylonitrile	NC	F1	250	NC		ug/L			50 - 150
Benzene	<0.500		25.0	22.02		ug/L		88	47 - 130
Bromochloromethane	<5.00		25.0	24.61		ug/L		98	54 - 132
Bromodichloromethane	<1.00		25.0	19.96		ug/L		80	58 - 130
Bromoform	<5.00	F2	25.0	12.90		ug/L		52	42 - 130
2-Butanone (MEK)	<10.0		50.0	43.71		ug/L		87	47 - 150
Carbon disulfide	<1.00		25.0	18.66		ug/L		75	39 - 131
Carbon tetrachloride	<2.00	F1 F2	25.0	10.56	F1	ug/L		42	45 - 132
Chlorobenzene	<1.00		25.0	21.13		ug/L		85	54 - 130
Chlorodibromomethane	<5.00		25.0	16.46		ug/L		66	53 - 130

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

Lab Sample ID: 310-256190-B-13 MS
Matrix: Water
Analysis Batch: 388038

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	<3.00	F2	25.0	25.59		ug/L		102	55 - 130
cis-1,2-Dichloroethene	<1.00		25.0	21.49		ug/L		86	52 - 130
cis-1,3-Dichloropropene	<5.00		25.0	20.85		ug/L		83	55 - 130
1,2-Dibromo-3-Chloropropane	<1.20		25.0	18.29		ug/L		73	45 - 150
1,2-Dibromoethane (EDB)	<0.340		25.0	23.16		ug/L		93	59 - 130
Dibromomethane	<1.00		25.0	26.54		ug/L		106	61 - 130
1,2-Dichlorobenzene	<1.00		25.0	21.36		ug/L		85	53 - 130
1,4-Dichlorobenzene	<1.00		25.0	21.63		ug/L		87	53 - 130
1,1-Dichloroethane	<1.00		25.0	16.86		ug/L		67	53 - 130
1,2-Dichloroethane	<1.00		25.0	21.20		ug/L		85	57 - 130
1,1-Dichloroethene	<2.00		25.0	24.81		ug/L		99	39 - 130
1,2-Dichloropropane	<1.00		25.0	23.39		ug/L		94	60 - 130
Ethylbenzene	<1.00		25.0	21.49		ug/L		86	48 - 130
2-Hexanone	<10.0	F1 F2	50.0	72.06	F1	ug/L		144	45 - 132
Iodomethane	<10.0		25.0	13.26		ug/L		53	10 - 150
Methylene Chloride	<5.00	F2	25.0	13.16		ug/L		53	50 - 150
4-Methyl-2-pentanone (MIBK)	<10.0	F1 F2	50.0	68.59	F1	ug/L		137	46 - 132
Styrene	<1.00		25.0	22.52		ug/L		90	46 - 130
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.17		ug/L		85	52 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	18.48		ug/L		74	51 - 130
Tetrachloroethene	<1.00		25.0	20.89		ug/L		84	42 - 131
Toluene	<1.00		25.0	20.71		ug/L		83	48 - 130
trans-1,4-Dichloro-2-butene	<10.0		25.0	18.34		ug/L		73	33 - 150
trans-1,2-Dichloroethene	<1.00	F1	25.0	13.12	F1	ug/L		52	54 - 130
trans-1,3-Dichloropropene	<5.00		25.0	21.28		ug/L		85	51 - 130
1,1,1-Trichloroethane	<1.00		25.0	21.69		ug/L		87	49 - 130
1,1,2-Trichloroethane	<1.00		25.0	24.18		ug/L		97	56 - 130
Trichloroethene	<1.00		25.0	24.76		ug/L		99	55 - 130
1,2,3-Trichloropropane	<1.00		25.0	24.79		ug/L		99	50 - 130
Vinyl acetate	<10.0		50.0	53.39		ug/L		107	34 - 150
Xylenes, Total	<3.00		50.0	42.81		ug/L		86	44 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 128*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 310-256190-B-13 MSD
Matrix: Water
Analysis Batch: 388038

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	<10.0	F2	50.0	46.20	F2	ug/L		92	35 - 150	40	26
Acrylonitrile	NC	F1	250	NC	F1	ug/L		0	50 - 150	NC	21
Benzene	<0.500		25.0	21.08		ug/L		84	47 - 130	4	20
Bromochloromethane	<5.00		25.0	23.39		ug/L		94	54 - 132	5	20
Bromodichloromethane	<1.00		25.0	21.06		ug/L		84	58 - 130	5	20
Bromoform	<5.00	F2	25.0	18.19	F2	ug/L		73	42 - 130	34	20

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

Lab Sample ID: 310-256190-B-13 MSD
Matrix: Water
Analysis Batch: 388038

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Butanone (MEK)	<10.0		50.0	43.73		ug/L		87	47 - 150	0	20
Carbon disulfide	<1.00		25.0	13.95		ug/L		56	39 - 131	29	32
Carbon tetrachloride	<2.00	F1 F2	25.0	19.80	F2	ug/L		79	45 - 132	61	20
Chlorobenzene	<1.00		25.0	20.96		ug/L		84	54 - 130	1	20
Chlorodibromomethane	<5.00		25.0	18.87		ug/L		75	53 - 130	14	20
Chloroform	<3.00	F2	25.0	19.97	F2	ug/L		80	55 - 130	25	20
cis-1,2-Dichloroethene	<1.00		25.0	21.16		ug/L		85	52 - 130	2	20
cis-1,3-Dichloropropene	<5.00		25.0	20.60		ug/L		82	55 - 130	1	20
1,2-Dibromo-3-Chloropropane	<1.20		25.0	19.42		ug/L		78	45 - 150	6	20
1,2-Dibromoethane (EDB)	<0.340		25.0	21.22		ug/L		85	59 - 130	9	20
Dibromomethane	<1.00		25.0	23.35		ug/L		93	61 - 130	13	20
1,2-Dichlorobenzene	<1.00		25.0	22.10		ug/L		88	53 - 130	3	20
1,4-Dichlorobenzene	<1.00		25.0	21.98		ug/L		88	53 - 130	2	20
1,1-Dichloroethane	<1.00		25.0	20.20		ug/L		81	53 - 130	18	20
1,2-Dichloroethane	<1.00		25.0	20.82		ug/L		83	57 - 130	2	21
1,1-Dichloroethene	<2.00		25.0	21.76		ug/L		87	39 - 130	13	28
1,2-Dichloropropane	<1.00		25.0	22.28		ug/L		89	60 - 130	5	31
Ethylbenzene	<1.00		25.0	21.37		ug/L		85	48 - 130	1	20
2-Hexanone	<10.0	F1 F2	50.0	47.94	F2	ug/L		96	45 - 132	40	20
Iodomethane	<10.0		25.0	13.59		ug/L		54	10 - 150	2	35
Methylene Chloride	<5.00	F2	25.0	24.15	F2	ug/L		97	50 - 150	59	24
4-Methyl-2-pentanone (MIBK)	<10.0	F1 F2	50.0	46.14	F2	ug/L		92	46 - 132	39	20
Styrene	<1.00		25.0	22.27		ug/L		89	46 - 130	1	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.97		ug/L		88	52 - 130	4	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	18.83		ug/L		75	51 - 130	2	20
Tetrachloroethene	<1.00		25.0	20.60		ug/L		82	42 - 131	1	20
Toluene	<1.00		25.0	19.98		ug/L		80	48 - 130	4	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	19.95		ug/L		80	33 - 150	8	20
trans-1,2-Dichloroethene	<1.00	F1	25.0	15.96		ug/L		64	54 - 130	20	24
trans-1,3-Dichloropropene	<5.00		25.0	20.38		ug/L		82	51 - 130	4	20
1,1,1-Trichloroethane	<1.00		25.0	21.36		ug/L		85	49 - 130	2	20
1,1,2-Trichloroethane	<1.00		25.0	22.04		ug/L		88	56 - 130	9	20
Trichloroethene	<1.00		25.0	23.19		ug/L		93	55 - 130	7	20
1,2,3-Trichloropropane	<1.00		25.0	22.11		ug/L		88	50 - 130	11	20
Vinyl acetate	<10.0		50.0	46.27		ug/L		93	34 - 150	14	27
Xylenes, Total	<3.00		50.0	43.02		ug/L		86	44 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 310-387448/1-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 14:00	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
1,4-phenylenediamine	<10.0		10.0	1.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 14:00	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		05/15/23 07:26	05/18/23 14:00	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		05/15/23 07:26	05/18/23 14:00	1
3-Methylcholanthrene	3.865	J	10.0	0.320	ug/L		05/15/23 07:26	05/18/23 14:00	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 14:00	1
Methylphenol, 3 & 4	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 14:00	1
7,12-Dimethylbenz(a)anthracene	2.142	J	10.0	1.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
Acenaphthene	<10.0		10.0	0.640	ug/L		05/15/23 07:26	05/18/23 14:00	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		05/15/23 07:26	05/18/23 14:00	1
Acetophenone	<10.0		10.0	0.690	ug/L		05/15/23 07:26	05/18/23 14:00	1
Anthracene	<10.0		10.0	0.870	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzo[b]fluoranthene	<10.0		10.0	4.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		05/15/23 07:26	05/18/23 14:00	1

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

Lab Sample ID: MB 310-387448/1-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		05/15/23 07:26	05/18/23 14:00	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		05/15/23 07:26	05/18/23 14:00	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		05/15/23 07:26	05/18/23 14:00	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		05/15/23 07:26	05/18/23 14:00	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Chrysene	<10.0		10.0	0.870	ug/L		05/15/23 07:26	05/18/23 14:00	1
Diallate	<10.0		10.0	4.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
Dibenzo(a,h)anthracene	<10.0		10.0	3.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		05/15/23 07:26	05/18/23 14:00	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
Dimethoate	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
Dinoseb	<10.0		10.0	2.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
Diphenylamine	<10.0		10.0	6.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
Disulfoton	<10.0		10.0	2.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Ethyl Parathion	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
Famphur	<10.0		10.0	3.80	ug/L		05/15/23 07:26	05/18/23 14:00	1
Fluoranthene	<10.0		10.0	1.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
Fluorene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 14:00	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		05/15/23 07:26	05/18/23 14:00	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		05/15/23 07:26	05/18/23 14:00	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		05/15/23 07:26	05/18/23 14:00	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		05/15/23 07:26	05/18/23 14:00	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
Isodrin	<10.0		10.0	4.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
Isophorone	<10.0		10.0	0.930	ug/L		05/15/23 07:26	05/18/23 14:00	1
Isosafrole	<10.0		10.0	2.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
Kepone	<10.0		10.0	1.00	ug/L		05/15/23 07:26	05/18/23 14:00	1
Methapyrilene	3.608	J	10.0	0.760	ug/L		05/15/23 07:26	05/18/23 14:00	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
Methyl parathion	<10.0		10.0	2.30	ug/L		05/15/23 07:26	05/18/23 14:00	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
o,o',o''-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
o-Toluidine	<10.0		10.0	2.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 14:00	1

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

Lab Sample ID: MB 310-387448/1-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		05/15/23 07:26	05/18/23 14:00	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		05/15/23 07:26	05/18/23 14:00	1
Phenacetin	<10.0		10.0	1.90	ug/L		05/15/23 07:26	05/18/23 14:00	1
Phenanthrene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 14:00	1
Phenol	<10.0		10.0	1.10	ug/L		05/15/23 07:26	05/18/23 14:00	1
Phorate	<10.0		10.0	3.20	ug/L		05/15/23 07:26	05/18/23 14:00	1
Pronamide	<10.0		10.0	2.70	ug/L		05/15/23 07:26	05/18/23 14:00	1
Pyrene	<10.0		10.0	0.790	ug/L		05/15/23 07:26	05/18/23 14:00	1
Safrole	<10.0		10.0	2.80	ug/L		05/15/23 07:26	05/18/23 14:00	1
Thionazin	<10.0		10.0	3.50	ug/L		05/15/23 07:26	05/18/23 14:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*61*		*13 - 110*	*05/15/23 07:26*	*05/18/23 14:00*	*1*
Phenol-d5 (Surr)	*54*		*12 - 110*	*05/15/23 07:26*	*05/18/23 14:00*	*1*
Nitrobenzene-d5 (Surr)	*80*		*27 - 115*	*05/15/23 07:26*	*05/18/23 14:00*	*1*
2-Fluorobiphenyl (Surr)	*60*		*28 - 110*	*05/15/23 07:26*	*05/18/23 14:00*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*15 - 121*	*05/15/23 07:26*	*05/18/23 14:00*	*1*
Terphenyl-d14 (Surr)	*82*		*10 - 125*	*05/15/23 07:26*	*05/18/23 14:00*	*1*

Lab Sample ID: LCS 310-387448/2-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4,5-Tetrachlorobenzene	100	79.40		ug/L		79	25 - 110
1,3,5-Trinitrobenzene	64.0	70.76		ug/L		111	20 - 120
1,3-Dinitrobenzene	100	102.7		ug/L		103	29 - 119
1,4-Naphthoquinone	64.0	65.61		ug/L		103	20 - 120
1,4-phenylenediamine	64.0	<10.0	*-	ug/L		0.5	20 - 120
1-Naphthylamine	64.0	44.95		ug/L		70	20 - 120
2,3,4,6-Tetrachlorophenol	100	99.50		ug/L		100	15 - 116
2,4,5-Trichlorophenol	100	102.2		ug/L		102	25 - 113
2,4,6-Trichlorophenol	100	99.61		ug/L		100	21 - 117
2,4-Dichlorophenol	100	100.7		ug/L		101	31 - 110
2,4-Dimethylphenol	100	106.0		ug/L		106	22 - 110
2,4-Dinitrophenol	200	197.1		ug/L		99	10 - 110
2,4-Dinitrotoluene	100	105.6		ug/L		106	36 - 115
2,6-Dichlorophenol	100	99.73		ug/L		100	24 - 112
2,6-Dinitrotoluene	100	104.8		ug/L		105	35 - 117
2-Acetylaminofluorene	64.0	77.21	*+	ug/L		121	20 - 120
2-Chloronaphthalene	100	79.50		ug/L		79	24 - 110
2-Chlorophenol	100	93.13		ug/L		93	32 - 110
2-Methylnaphthalene	100	79.29		ug/L		79	26 - 110
2-Methylphenol	100	98.46		ug/L		98	29 - 110
2-Naphthylamine	64.0	49.64		ug/L		78	20 - 120
2-Nitroaniline	100	106.8		ug/L		107	33 - 115
2-Nitrophenol	100	105.1		ug/L		105	28 - 112
3,3'-Dimethylbenzidine	64.0	5.127	J *-	ug/L		8	20 - 120

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

Lab Sample ID: LCS 310-387448/2-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
3-Methylcholanthrene	64.0	69.62		ug/L		109	20 - 120
3-Nitroaniline	100	114.5		ug/L		115	20 - 119
4,6-Dinitro-2-methylphenol	200	210.0		ug/L		105	10 - 125
4-Aminobiphenyl	64.0	57.79		ug/L		90	20 - 120
4-Bromophenyl phenyl ether	100	103.7		ug/L		104	33 - 110
4-Chloro-3-methylphenol	100	107.8		ug/L		108	34 - 115
4-Chloroaniline	100	90.74		ug/L		91	10 - 121
4-Chlorophenyl phenyl ether	100	104.0		ug/L		104	31 - 110
Methylphenol, 3 & 4	100	97.76		ug/L		98	24 - 110
4-Nitroaniline	100	122.7	*+	ug/L		123	18 - 118
4-Nitrophenol	200	139.9		ug/L		70	10 - 110
5-Nitro-o-toluidine	64.0	73.89		ug/L		115	20 - 120
7,12-Dimethylbenz(a)anthracene	64.0	65.08		ug/L		102	20 - 120
Acenaphthene	100	94.73		ug/L		95	26 - 110
Acenaphthylene	100	84.62		ug/L		85	20 - 110
Acetophenone	100	96.50		ug/L		97	35 - 110
Anthracene	100	101.4		ug/L		101	30 - 113
Benzo[a]anthracene	100	105.4		ug/L		105	38 - 110
Benzo[a]pyrene	100	106.1		ug/L		106	15 - 126
Benzo[b]fluoranthene	100	108.7		ug/L		109	35 - 114
Benzo[g,h,i]perylene	100	108.6		ug/L		109	30 - 114
Benzo[k]fluoranthene	100	106.4		ug/L		106	39 - 111
Benzyl alcohol	100	99.40		ug/L		99	28 - 110
Bis(2-chloroethoxy)methane	100	94.06		ug/L		94	31 - 110
Bis(2-chloroethyl)ether	100	89.39		ug/L		89	30 - 110
bis (2-chloroisopropyl) ether	100	89.33		ug/L		89	27 - 110
Bis(2-ethylhexyl) phthalate	100	113.1		ug/L		113	29 - 126
Butyl benzyl phthalate	100	109.2		ug/L		109	31 - 121
Chlorobenzilate	64.0	71.13		ug/L		111	20 - 120
Chrysene	100	105.9		ug/L		106	40 - 110
Diallate	64.0	71.15		ug/L		111	20 - 120
Dibenzo(a,h)anthracene	100	111.2		ug/L		111	31 - 122
Dibenzofuran	100	91.50		ug/L		92	31 - 110
Diethyl phthalate	100	103.9		ug/L		104	36 - 113
Dimethoate	64.0	96.80	*+	ug/L		151	20 - 120
Dimethyl phthalate	100	98.79		ug/L		99	23 - 117
Di-n-butyl phthalate	100	111.4		ug/L		111	39 - 119
Di-n-octyl phthalate	100	94.19		ug/L		94	25 - 139
Dinoseb	64.0	65.89		ug/L		103	20 - 120
Disulfoton	64.0	72.60		ug/L		113	20 - 120
Ethyl methanesulfonate	64.0	54.86		ug/L		86	20 - 120
Ethyl Parathion	64.0	70.85		ug/L		111	20 - 120
Famphur	64.0	277.2	E *+	ug/L		433	50 - 150
Fluoranthene	100	104.3		ug/L		104	39 - 111
Fluorene	100	94.96		ug/L		95	32 - 110
Hexachlorobenzene	100	103.0		ug/L		103	35 - 110
Hexachlorobutadiene	100	72.61		ug/L		73	21 - 110
Hexachlorocyclopentadiene	100	75.62		ug/L		76	10 - 110
Hexachloroethane	100	65.61		ug/L		66	17 - 110

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

Lab Sample ID: LCS 310-387448/2-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachloropropene	64.0	23.66		ug/L		37	10 - 110
Indeno[1,2,3-cd]pyrene	100	110.3		ug/L		110	26 - 124
Isodrin	64.0	66.54		ug/L		104	20 - 120
Isophorone	100	100.5		ug/L		101	33 - 111
Methapyrilene	64.0	5.574	J *-	ug/L		9	10 - 110
Methyl methanesulfonate	64.0	44.17		ug/L		69	20 - 120
Methyl parathion	64.0	90.96	*+	ug/L		142	20 - 120
Nitrobenzene	100	96.26		ug/L		96	31 - 110
N-Nitrosodiethylamine	64.0	65.79		ug/L		103	20 - 120
N-Nitrosodimethylamine	100	76.99		ug/L		77	24 - 110
N-Nitrosodi-n-butylamine	64.0	73.18		ug/L		114	20 - 120
N-Nitrosodi-n-propylamine	100	96.01		ug/L		96	32 - 114
N-Nitrosodiphenylamine	100	98.85		ug/L		99	22 - 119
N-Nitrosomethylethylamine	64.0	59.92		ug/L		94	20 - 120
N-Nitrosopiperidine	64.0	67.14		ug/L		105	20 - 120
N-Nitrosopyrrolidine	64.0	77.33	*+	ug/L		121	20 - 120
o,o',o''-Triethylphosphorothioate	64.0	57.64		ug/L		90	20 - 120
o-Toluidine	64.0	59.09		ug/L		92	20 - 120
p-Dimethylamino azobenzene	64.0	65.95		ug/L		103	20 - 120
Pentachlorobenzene	64.0	49.39		ug/L		77	20 - 120
Pentachloronitrobenzene	64.0	68.19		ug/L		107	20 - 120
Pentachlorophenol	200	210.3		ug/L		105	10 - 116
Phenacetin	64.0	80.63	*+	ug/L		126	20 - 120
Phenanthrene	100	100.1		ug/L		100	37 - 110
Phenol	100	63.58		ug/L		64	20 - 110
Phorate	64.0	67.58		ug/L		106	20 - 120
Pronamide	64.0	79.88	*+	ug/L		125	20 - 120
Pyrene	100	101.9		ug/L		102	35 - 115
Safrole	64.0	47.97		ug/L		75	20 - 120
Thionazin	64.0	74.06		ug/L		116	20 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*78*		*13 - 110*
Phenol-d5 (Surr)	*68*		*12 - 110*
Nitrobenzene-d5 (Surr)	*104*		*27 - 115*
2-Fluorobiphenyl (Surr)	*87*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*117*		*15 - 121*
Terphenyl-d14 (Surr)	*106*		*10 - 125*

Lab Sample ID: LCSD 310-387448/3-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387448

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4,5-Tetrachlorobenzene	100	66.39		ug/L		66	25 - 110	18	35
1,3,5-Trinitrobenzene	64.0	55.27		ug/L		86	20 - 120	25	35
1,3-Dinitrobenzene	100	80.68		ug/L		81	29 - 119	24	35
1,4-Naphthoquinone	64.0	54.79		ug/L		86	20 - 120	18	35

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

Lab Sample ID: LCSD 310-387448/3-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-phenylenediamine			64.0	<10.0	*- *1	ug/L		0.8	20 - 120	42	35
1-Naphthylamine			64.0	36.33		ug/L		57	20 - 120	21	35
2,3,4,6-Tetrachlorophenol			100	78.05		ug/L		78	15 - 116	24	35
2,4,5-Trichlorophenol			100	82.22		ug/L		82	25 - 113	22	35
2,4,6-Trichlorophenol			100	80.47		ug/L		80	21 - 117	21	35
2,4-Dichlorophenol			100	78.01		ug/L		78	31 - 110	25	35
2,4-Dimethylphenol			100	79.46		ug/L		79	22 - 110	29	35
2,4-Dinitrophenol			200	150.9		ug/L		75	10 - 110	27	35
2,4-Dinitrotoluene			100	78.57		ug/L		79	36 - 115	29	35
2,6-Dichlorophenol			100	75.81		ug/L		76	24 - 112	27	35
2,6-Dinitrotoluene			100	80.05		ug/L		80	35 - 117	27	35
2-Acetylaminofluorene			64.0	64.64		ug/L		101	20 - 120	18	35
2-Chloronaphthalene			100	66.39		ug/L		66	24 - 110	18	35
2-Chlorophenol			100	75.05		ug/L		75	32 - 110	22	35
2-Methylnaphthalene			100	62.28		ug/L		62	26 - 110	24	35
2-Methylphenol			100	75.26		ug/L		75	29 - 110	27	35
2-Naphthylamine			64.0	44.75		ug/L		70	20 - 120	10	35
2-Nitroaniline			100	83.57		ug/L		84	33 - 115	24	35
2-Nitrophenol			100	82.43		ug/L		82	28 - 112	24	35
3,3'-Dimethylbenzidine			64.0	45.17	*1	ug/L		71	20 - 120	159	35
3-Methylcholanthrene			64.0	57.79		ug/L		90	20 - 120	19	35
3-Nitroaniline			100	86.68		ug/L		87	20 - 119	28	35
4,6-Dinitro-2-methylphenol			200	159.0		ug/L		79	10 - 125	28	35
4-Aminobiphenyl			64.0	55.87		ug/L		87	20 - 120	3	35
4-Bromophenyl phenyl ether			100	80.42		ug/L		80	33 - 110	25	35
4-Chloro-3-methylphenol			100	79.67		ug/L		80	34 - 115	30	35
4-Chloroaniline			100	76.92		ug/L		77	10 - 121	16	35
4-Chlorophenyl phenyl ether			100	80.22		ug/L		80	31 - 110	26	35
Methylphenol, 3 & 4			100	72.87		ug/L		73	24 - 110	29	35
4-Nitroaniline			100	85.91		ug/L		86	18 - 118	35	35
4-Nitrophenol			200	100.7		ug/L		50	10 - 110	33	35
5-Nitro-o-toluidine			64.0	58.70		ug/L		92	20 - 120	23	35
7,12-Dimethylbenz(a)anthracene			64.0	51.75		ug/L		81	20 - 120	23	35
Acenaphthene			100	70.00		ug/L		70	26 - 110	30	35
Acenaphthylene			100	66.95		ug/L		67	20 - 110	23	35
Acetophenone			100	75.06		ug/L		75	35 - 110	25	35
Anthracene			100	76.91		ug/L		77	30 - 113	27	35
Benzo[a]anthracene			100	76.05		ug/L		76	38 - 110	32	35
Benzo[a]pyrene			100	77.23		ug/L		77	15 - 126	31	35
Benzo[b]fluoranthene			100	81.10		ug/L		81	35 - 114	29	35
Benzo[g,h,i]perylene			100	81.48		ug/L		81	30 - 114	29	35
Benzo[k]fluoranthene			100	80.91		ug/L		81	39 - 111	27	35
Benzyl alcohol			100	79.22		ug/L		79	28 - 110	23	35
Bis(2-chloroethoxy)methane			100	72.86		ug/L		73	31 - 110	25	35
Bis(2-chloroethyl)ether			100	74.17		ug/L		74	30 - 110	19	35
bis (2-chloroisopropyl) ether			100	68.35		ug/L		68	27 - 110	27	35
Bis(2-ethylhexyl) phthalate			100	82.77		ug/L		83	29 - 126	31	35
Butyl benzyl phthalate			100	80.14		ug/L		80	31 - 121	31	35
Chlorobenzilate			64.0	56.12		ug/L		88	20 - 120	24	35

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

Lab Sample ID: LCSD 310-387448/3-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chrysene			100	79.89		ug/L		80	40 - 110	28	35
Diallate			64.0	57.43		ug/L		90	20 - 120	21	35
Dibenzo(a,h)anthracene			100	86.86		ug/L		87	31 - 122	25	35
Dibenzofuran			100	70.68		ug/L		71	31 - 110	26	35
Diethyl phthalate			100	76.78		ug/L		77	36 - 113	30	35
Dimethoate			64.0	77.84	*+	ug/L		122	20 - 120	22	35
Dimethyl phthalate			100	78.50		ug/L		78	23 - 117	23	35
Di-n-butyl phthalate			100	82.71		ug/L		83	39 - 119	30	35
Di-n-octyl phthalate			100	70.05		ug/L		70	25 - 139	29	35
Dinoseb			64.0	55.13		ug/L		86	20 - 120	18	35
Disulfoton			64.0	58.39		ug/L		91	20 - 120	22	35
Ethyl methanesulfonate			64.0	46.96		ug/L		73	20 - 120	16	35
Ethyl Parathion			64.0	59.47		ug/L		93	20 - 120	17	35
Famphur			64.0	204.0	E *+	ug/L		319	50 - 150	30	35
Fluoranthene			100	76.27		ug/L		76	39 - 111	31	35
Fluorene			100	72.92		ug/L		73	32 - 110	26	35
Hexachlorobenzene			100	78.79		ug/L		79	35 - 110	27	35
Hexachlorobutadiene			100	62.25		ug/L		62	21 - 110	15	35
Hexachlorocyclopentadiene			100	66.30		ug/L		66	10 - 110	13	35
Hexachloroethane			100	57.80		ug/L		58	17 - 110	13	35
Hexachloropropene			64.0	28.14		ug/L		44	10 - 110	17	35
Indeno[1,2,3-cd]pyrene			100	84.65		ug/L		85	26 - 124	26	35
Isodrin			64.0	53.54		ug/L		84	20 - 120	22	35
Isophorone			100	76.94		ug/L		77	33 - 111	27	35
Methapyrilene			64.0	10.80	*1	ug/L		17	10 - 110	64	35
Methyl methanesulfonate			64.0	37.97		ug/L		59	20 - 120	15	35
Methyl parathion			64.0	74.16		ug/L		116	20 - 120	20	35
Nitrobenzene			100	75.87		ug/L		76	31 - 110	24	35
N-Nitrosodiethylamine			64.0	55.55		ug/L		87	20 - 120	17	35
N-Nitrosodimethylamine			100	63.57		ug/L		64	24 - 110	19	35
N-Nitrosodi-n-butylamine			64.0	60.80		ug/L		95	20 - 120	18	35
N-Nitrosodi-n-propylamine			100	69.86		ug/L		70	32 - 114	32	35
N-Nitrosodiphenylamine			100	75.52		ug/L		76	22 - 119	27	35
N-Nitrosomethylethylamine			64.0	52.25		ug/L		82	20 - 120	14	35
N-Nitrosopiperidine			64.0	56.53		ug/L		88	20 - 120	17	35
N-Nitrosopyrrolidine			64.0	65.02		ug/L		102	20 - 120	17	35
o,o',o''-Triethylphosphorothioate			64.0	50.82		ug/L		79	20 - 120	13	35
o-Toluidine			64.0	51.03		ug/L		80	20 - 120	15	35
p-Dimethylamino azobenzene			64.0	53.60		ug/L		84	20 - 120	21	35
Pentachlorobenzene			64.0	41.83		ug/L		65	20 - 120	17	35
Pentachloronitrobenzene			64.0	57.09		ug/L		89	20 - 120	18	35
Pentachlorophenol			200	157.9		ug/L		79	10 - 116	28	35
Phenacetin			64.0	62.28		ug/L		97	20 - 120	26	35
Phenanthrene			100	75.21		ug/L		75	37 - 110	28	35
Phenol			100	49.01		ug/L		49	20 - 110	26	35
Phorate			64.0	54.22		ug/L		85	20 - 120	22	35
Pronamide			64.0	65.17		ug/L		102	20 - 120	20	35
Pyrene			100	73.36		ug/L		73	35 - 115	33	35
Safrole			64.0	43.14		ug/L		67	20 - 120	11	35

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

Lab Sample ID: LCSD 310-387448/3-A
Matrix: Water
Analysis Batch: 387890

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thionazin			64.0	62.68		ug/L		98	20 - 120	17	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol (Surr)	*68*		*13 - 110*
Phenol-d5 (Surr)	*57*		*12 - 110*
Nitrobenzene-d5 (Surr)	*88*		*27 - 115*
2-Fluorobiphenyl (Surr)	*73*		*28 - 110*
2,4,6-Tribromophenol (Surr)	*95*		*15 - 121*
Terphenyl-d14 (Surr)	*81*		*10 - 125*

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

Lab Sample ID: MB 310-388146/3
Matrix: Water
Analysis Batch: 388146

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	0.570	mg/L			05/20/23 12:54	1
Isobutanol	<10.0		10.0	0.550	mg/L			05/20/23 12:54	1

Lab Sample ID: LCS 310-388146/4
Matrix: Water
Analysis Batch: 388146

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile			102	105.1		mg/L		103	66 - 122		
Isobutanol			105	116.9		mg/L		111	77 - 120		

Lab Sample ID: 310-255788-3 MS
Matrix: Water
Analysis Batch: 388146

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetonitrile	<10.0		102	92.49		mg/L		90	58 - 129		
Isobutanol	<10.0		105	115.7		mg/L		110	60 - 130		

Lab Sample ID: 310-255788-3 MSD
Matrix: Water
Analysis Batch: 388146

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetonitrile	<10.0		102	102.0		mg/L		100	58 - 129	10	35
Isobutanol	<10.0		105	114.1		mg/L		108	60 - 130	1	35

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-387447/1-A
Matrix: Water
Analysis Batch: 387895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0640		0.0640	0.0270	ug/L		05/15/23 07:19	05/18/23 14:34	1
4,4'-DDE	<0.0640		0.0640	0.0270	ug/L		05/15/23 07:19	05/18/23 14:34	1
4,4'-DDT	<0.0640		0.0640	0.0420	ug/L		05/15/23 07:19	05/18/23 14:34	1
Aldrin	<0.0640		0.0640	0.0320	ug/L		05/15/23 07:19	05/18/23 14:34	1
alpha-BHC	<0.0640		0.0640	0.0290	ug/L		05/15/23 07:19	05/18/23 14:34	1
beta-BHC	<0.0640		0.0640	0.0370	ug/L		05/15/23 07:19	05/18/23 14:34	1
Chlordane (technical)	<2.00		2.00	0.810	ug/L		05/15/23 07:19	05/18/23 14:34	1
delta-BHC	<0.0640		0.0640	0.0270	ug/L		05/15/23 07:19	05/18/23 14:34	1
Dieldrin	<0.0640		0.0640	0.0260	ug/L		05/15/23 07:19	05/18/23 14:34	1
Endosulfan I	<0.0640		0.0640	0.0330	ug/L		05/15/23 07:19	05/18/23 14:34	1
Endosulfan II	<0.0640		0.0640	0.0290	ug/L		05/15/23 07:19	05/18/23 14:34	1
Endosulfan sulfate	<0.0640		0.0640	0.0300	ug/L		05/15/23 07:19	05/18/23 14:34	1
Endrin	<0.0640		0.0640	0.0260	ug/L		05/15/23 07:19	05/18/23 14:34	1
Endrin aldehyde	<0.0640		0.0640	0.0290	ug/L		05/15/23 07:19	05/18/23 14:34	1
gamma-BHC (Lindane)	<0.0640		0.0640	0.0360	ug/L		05/15/23 07:19	05/18/23 14:34	1
Heptachlor	<0.0640		0.0640	0.0330	ug/L		05/15/23 07:19	05/18/23 14:34	1
Heptachlor epoxide	<0.0640		0.0640	0.0290	ug/L		05/15/23 07:19	05/18/23 14:34	1
Methoxychlor	<0.0640		0.0640	0.0410	ug/L		05/15/23 07:19	05/18/23 14:34	1
Toxaphene	<2.00		2.00	0.690	ug/L		05/15/23 07:19	05/18/23 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*10 - 136*	*05/15/23 07:19*	*05/18/23 14:34*	*1*
Tetrachloro-m-xylene	*62*		*10 - 130*	*05/15/23 07:19*	*05/18/23 14:34*	*1*

Lab Sample ID: LCS 310-387447/4-A
Matrix: Water
Analysis Batch: 388198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.00	0.7424		ug/L		74	36 - 149
4,4'-DDE	1.00	0.7248		ug/L		72	34 - 130
4,4'-DDT	1.00	0.8413		ug/L		84	23 - 150
Aldrin	1.00	0.5859		ug/L		59	13 - 120
alpha-BHC	1.00	0.7285		ug/L		73	36 - 127
beta-BHC	1.00	0.8018		ug/L		80	37 - 136
delta-BHC	1.00	0.7763		ug/L		78	33 - 134
Dieldrin	1.00	0.7325		ug/L		73	39 - 130
Endosulfan I	1.00	0.7114		ug/L		71	10 - 120
Endosulfan II	1.00	0.7186		ug/L		72	14 - 120
Endosulfan sulfate	1.00	0.8428		ug/L		84	36 - 147
Endrin	1.00	0.8063		ug/L		81	39 - 140
Endrin aldehyde	1.00	0.7456		ug/L		75	32 - 137
gamma-BHC (Lindane)	1.00	0.7832		ug/L		78	36 - 132
Heptachlor	1.00	0.6928		ug/L		69	27 - 120
Heptachlor epoxide	1.00	0.7591		ug/L		76	38 - 133
Methoxychlor	1.00	0.7977		ug/L		80	10 - 150

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

Lab Sample ID: LCS 310-387447/4-A
Matrix: Water
Analysis Batch: 388198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387447

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	77		10 - 136
Tetrachloro-m-xylene	70		10 - 130

Lab Sample ID: LCSD 310-387447/5-A
Matrix: Water
Analysis Batch: 388198

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387447

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDD			1.00	0.6650		ug/L		67	36 - 149	11	35
4,4'-DDE			1.00	0.6335		ug/L		63	34 - 130	13	35
4,4'-DDT			1.00	0.7477		ug/L		75	23 - 150	12	35
Aldrin			1.00	0.4761		ug/L		48	13 - 120	21	35
alpha-BHC			1.00	0.6493		ug/L		65	36 - 127	12	35
beta-BHC			1.00	0.7162		ug/L		72	37 - 136	11	35
delta-BHC			1.00	0.6918		ug/L		69	33 - 134	12	35
Dieldrin			1.00	0.6561		ug/L		66	39 - 130	11	35
Endosulfan I			1.00	0.6437		ug/L		64	10 - 120	10	35
Endosulfan II			1.00	0.6456		ug/L		65	14 - 120	11	35
Endosulfan sulfate			1.00	0.7517		ug/L		75	36 - 147	11	35
Endrin			1.00	0.7206		ug/L		72	39 - 140	11	35
Endrin aldehyde			1.00	0.6798		ug/L		68	32 - 137	9	35
gamma-BHC (Lindane)			1.00	0.7009		ug/L		70	36 - 132	11	35
Heptachlor			1.00	0.5777		ug/L		58	27 - 120	18	35
Heptachlor epoxide			1.00	0.6780		ug/L		68	38 - 133	11	35
Methoxychlor			1.00	0.7102		ug/L		71	10 - 150	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	57		10 - 136
Tetrachloro-m-xylene	60		10 - 130

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

Lab Sample ID: MB 310-387447/1-A
Matrix: Water
Analysis Batch: 387898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.800		0.800	0.170	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1221	<0.800		0.800	0.170	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1232	<0.800		0.800	0.170	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1242	<0.800		0.800	0.170	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1248	<0.800		0.800	0.110	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1254	<0.800		0.800	0.110	ug/L		05/15/23 07:19	05/18/23 14:34	1
PCB-1260	<0.800		0.800	0.110	ug/L		05/15/23 07:19	05/18/23 14:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	80		10 - 136	05/15/23 07:19	05/18/23 14:34	1
Tetrachloro-m-xylene	62		10 - 130	05/15/23 07:19	05/18/23 14:34	1

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

Lab Sample ID: LCS 310-387447/2-A
Matrix: Water
Analysis Batch: 387898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387447

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			10.0	5.820		ug/L		58	30 - 133		
PCB-1260			10.0	6.156		ug/L		62	31 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*73*		*10 - 136*
Tetrachloro-m-xylene	*60*		*10 - 130*

Lab Sample ID: LCSD 310-387447/3-A
Matrix: Water
Analysis Batch: 387898

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 387447

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016			10.0	5.966		ug/L		60	30 - 133	21	35
PCB-1260			10.0	5.028		ug/L		50	31 - 133	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*63*		*10 - 136*
Tetrachloro-m-xylene	*57*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-713586/1-A
Matrix: Water
Analysis Batch: 713975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 713586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<1.00		1.00	0.307	ug/L		05/16/23 17:02	05/18/23 09:14	1
Silvex (2,4,5-TP)	<1.00		1.00	0.0834	ug/L		05/16/23 17:02	05/18/23 09:14	1
2,4,5-T	<1.00		1.00	0.144	ug/L		05/16/23 17:02	05/18/23 09:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*74*		*25 - 130*	*05/16/23 17:02*	*05/18/23 09:14*	*1*

Lab Sample ID: LCS 500-713586/2-A
Matrix: Water
Analysis Batch: 713975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 713586

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			10.1	7.963		ug/L		79	30 - 115		
Silvex (2,4,5-TP)			2.50	2.066		ug/L		83	32 - 115		
2,4,5-T			2.53	2.242		ug/L		89	30 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*107*		*25 - 130*

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 500-713586/3-A
Matrix: Water
Analysis Batch: 713975

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 713586

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			10.1	7.551		ug/L		75	30 - 115	5	20
Silvex (2,4,5-TP)			2.50	1.838		ug/L		74	32 - 115	12	20
2,4,5-T			2.53	1.984		ug/L		79	30 - 115	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*92*		*25 - 130*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-387670/3
Matrix: Water
Analysis Batch: 387670

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.200		0.200	0.0780	mg/L			05/12/23 19:13	1

Lab Sample ID: LCS 310-387670/4
Matrix: Water
Analysis Batch: 387670

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			2.00	2.057		mg/L		103	90 - 110		

Lab Sample ID: 310-255675-H-4 MS
Matrix: Water
Analysis Batch: 387670

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	1.67		1.00	2.632		mg/L		96	80 - 120		

Lab Sample ID: 310-255675-H-4 MSD
Matrix: Water
Analysis Batch: 387670

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	1.67		1.00	2.640		mg/L		97	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-387583/1-A
Matrix: Water
Analysis Batch: 388866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 16:12	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 16:12	1
Barium	<0.00200		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 16:12	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 16:12	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 16:12	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 16:12	1

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

Lab Sample ID: MB 310-387583/1-A
Matrix: Water
Analysis Batch: 388866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 16:12	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 16:12	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 16:12	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 16:12	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 16:12	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 16:12	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 16:12	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 16:12	1
Tin	<0.00500		0.00500	0.00230	mg/L		05/16/23 08:40	05/26/23 16:12	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 16:12	1

Lab Sample ID: LCS 310-387583/2-A
Matrix: Water
Analysis Batch: 388866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2150		mg/L		108	80 - 120
Arsenic	0.200	0.2046		mg/L		102	80 - 120
Barium	0.100	0.1026		mg/L		103	80 - 120
Beryllium	0.100	0.1022		mg/L		102	80 - 120
Cadmium	0.100	0.1012		mg/L		101	80 - 120
Chromium	0.100	0.1038		mg/L		104	80 - 120
Cobalt	0.100	0.1071		mg/L		107	80 - 120
Copper	0.200	0.2170		mg/L		109	80 - 120
Lead	0.200	0.2113		mg/L		106	80 - 120
Nickel	0.200	0.2146		mg/L		107	80 - 120
Selenium	0.400	0.4178		mg/L		104	80 - 120
Silver	0.100	0.1017		mg/L		102	80 - 120
Thallium	0.200	0.2085		mg/L		104	80 - 120
Vanadium	0.100	0.1038		mg/L		104	80 - 120
Tin	0.200	0.2279		mg/L		114	80 - 120
Zinc	0.200	0.2104		mg/L		105	80 - 120

Lab Sample ID: 310-255788-10 MS
Matrix: Water
Analysis Batch: 388866

Client Sample ID: MW-25
Prep Type: Total/NA
Prep Batch: 387583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200	F1 F2	0.200	0.3163	F1	mg/L		158	75 - 125
Arsenic	0.00760	F1 F2	0.200	0.3163	F1	mg/L		154	75 - 125
Barium	0.0993	F1 F2	0.100	0.2504	F1	mg/L		151	75 - 125
Beryllium	<0.00100	F1 F2	0.100	0.1430	F1	mg/L		143	75 - 125
Cadmium	<0.000200	F1 F2	0.100	0.1557	F1	mg/L		156	75 - 125
Chromium	<0.00500	F1 F2	0.100	0.1533	F1	mg/L		153	75 - 125
Cobalt	0.0515	F1 F2	0.100	0.2066	F1	mg/L		155	75 - 125
Copper	0.00198	J F1 F2	0.200	0.3033	F1	mg/L		151	75 - 125
Lead	0.000506	F1 F2	0.200	0.3007	F1	mg/L		150	75 - 125
Nickel	0.0154	F1 F2	0.200	0.3136	F1	mg/L		149	75 - 125
Selenium	<0.00500	F1 F2	0.400	0.6164	E F1	mg/L		154	75 - 125

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

Lab Sample ID: 310-255788-10 MS
Matrix: Water
Analysis Batch: 388866

Client Sample ID: MW-25
Prep Type: Total/NA
Prep Batch: 387583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	<0.00100		0.100	0.09679		mg/L		97	75 - 125
Thallium	<0.00100	F1 F2	0.200	0.2665	F1	mg/L		133	75 - 125
Vanadium	<0.00500	F1 F2	0.100	0.1553	F1	mg/L		155	75 - 125
Tin	<0.00500		0.200	0.1950		mg/L		97	75 - 125
Zinc	<0.0200	F1 F2	0.200	0.3010	F1	mg/L		150	75 - 125

Lab Sample ID: 310-255788-10 MSD
Matrix: Water
Analysis Batch: 388866

Client Sample ID: MW-25
Prep Type: Total/NA
Prep Batch: 387583

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200	F1 F2	0.200	0.2012	F2	mg/L		101	75 - 125	44	20
Arsenic	0.00760	F1 F2	0.200	0.2079	F2	mg/L		100	75 - 125	41	20
Barium	0.0993	F1 F2	0.100	0.1996	F2	mg/L		100	75 - 125	23	20
Beryllium	<0.00100	F1 F2	0.100	0.09534	F2	mg/L		95	75 - 125	40	20
Cadmium	<0.000200	F1 F2	0.100	0.1006	F2	mg/L		101	75 - 125	43	20
Chromium	<0.00500	F1 F2	0.100	0.09783	F2	mg/L		98	75 - 125	44	20
Cobalt	0.0515	F1 F2	0.100	0.1509	F2	mg/L		99	75 - 125	31	20
Copper	0.00198	J F1 F2	0.200	0.1994	F2	mg/L		99	75 - 125	41	20
Lead	0.000506	F1 F2	0.200	0.1983	F2	mg/L		99	75 - 125	41	20
Nickel	0.0154	F1 F2	0.200	0.2108	F2	mg/L		98	75 - 125	39	20
Selenium	<0.00500	F1 F2	0.400	0.3942	F2	mg/L		99	75 - 125	44	20
Silver	<0.00100		0.100	0.09387		mg/L		94	75 - 125	3	20
Thallium	<0.00100	F1 F2	0.200	0.1762	F2	mg/L		88	75 - 125	41	20
Vanadium	<0.00500	F1 F2	0.100	0.1008	F2	mg/L		101	75 - 125	43	20
Tin	<0.00500		0.200	0.2280		mg/L		114	75 - 125	16	20
Zinc	<0.0200	F1 F2	0.200	0.1977	F2	mg/L		99	75 - 125	41	20

Lab Sample ID: 310-255761-A-1-C DU
Matrix: Water
Analysis Batch: 388866

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 387583

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.00253		0.002289		mg/L		10	20
Arsenic	0.0190		0.01918		mg/L		0.9	20
Barium	0.272		0.2758		mg/L		2	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	0.00181		0.001861		mg/L		3	20
Chromium	0.0132		0.01204		mg/L		9	20
Cobalt	0.00563		0.005708		mg/L		1	20
Copper	0.0505		0.05148		mg/L		2	20
Lead	0.302		0.2992		mg/L		0.9	20
Nickel	0.0135		0.01278		mg/L		5	20
Selenium	0.00301	J	0.001814	J F5	mg/L		50	20
Silver	0.000662	J	<0.00100		mg/L		NC	20
Thallium	0.00237		<0.00100		mg/L		NC	20
Vanadium	0.00253	J	0.002245	J	mg/L		12	20
Tin	0.00321	J	0.002547	J F5	mg/L		23	20
Zinc	0.402		0.3985		mg/L		0.8	20

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

Lab Sample ID: MB 310-387586/1-A
Matrix: Water
Analysis Batch: 388887

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		05/16/23 08:40	05/26/23 19:02	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		05/16/23 08:40	05/26/23 19:02	1
Barium	<0.00200		0.00200	0.000640	mg/L		05/16/23 08:40	05/26/23 19:02	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		05/16/23 08:40	05/26/23 19:02	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		05/16/23 08:40	05/26/23 19:02	1
Chromium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:02	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		05/16/23 08:40	05/26/23 19:02	1
Copper	<0.00500		0.00500	0.00180	mg/L		05/16/23 08:40	05/26/23 19:02	1
Lead	<0.000500		0.000500	0.000240	mg/L		05/16/23 08:40	05/26/23 19:02	1
Nickel	<0.00500		0.00500	0.00190	mg/L		05/16/23 08:40	05/26/23 19:02	1
Selenium	<0.00500		0.00500	0.00140	mg/L		05/16/23 08:40	05/26/23 19:02	1
Iron	<0.100		0.100	0.0360	mg/L		05/16/23 08:40	05/26/23 19:02	1
Silver	<0.00100		0.00100	0.000500	mg/L		05/16/23 08:40	05/26/23 19:02	1
Thallium	<0.00100		0.00100	0.000260	mg/L		05/16/23 08:40	05/26/23 19:02	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		05/16/23 08:40	05/26/23 19:02	1
Zinc	<0.0200		0.0200	0.00640	mg/L		05/16/23 08:40	05/26/23 19:02	1
Manganese	<0.0100		0.0100	0.00360	mg/L		05/16/23 08:40	05/26/23 19:02	1

Lab Sample ID: LCS 310-387586/2-A
Matrix: Water
Analysis Batch: 388887

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2051		mg/L		103	80 - 120
Arsenic	0.200	0.1983		mg/L		99	80 - 120
Barium	0.100	0.1040		mg/L		104	80 - 120
Beryllium	0.100	0.09144		mg/L		91	80 - 120
Cadmium	0.100	0.1013		mg/L		101	80 - 120
Chromium	0.100	0.09693		mg/L		97	80 - 120
Cobalt	0.100	0.1017		mg/L		102	80 - 120
Copper	0.200	0.2108		mg/L		105	80 - 120
Lead	0.200	0.2113		mg/L		106	80 - 120
Nickel	0.200	0.2101		mg/L		105	80 - 120
Selenium	0.400	0.4188		mg/L		105	80 - 120
Iron	0.200	0.2105		mg/L		105	80 - 120
Silver	0.100	0.1083		mg/L		108	80 - 120
Thallium	0.200	0.2080		mg/L		104	80 - 120
Vanadium	0.100	0.09742		mg/L		97	80 - 120
Zinc	0.200	0.2021		mg/L		101	80 - 120
Manganese	0.100	0.09968		mg/L		100	80 - 120

Lab Sample ID: 310-255788-18 MS
Matrix: Water
Analysis Batch: 388887

Client Sample ID: MW-D2
Prep Type: Total/NA
Prep Batch: 387586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.1971		mg/L		99	75 - 125
Arsenic	0.00139	J	0.200	0.1977		mg/L		98	75 - 125
Barium	0.203		0.100	0.3055		mg/L		103	75 - 125

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

Lab Sample ID: 310-255788-18 MS
Matrix: Water
Analysis Batch: 388887

Client Sample ID: MW-D2
Prep Type: Total/NA
Prep Batch: 387586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	<0.00100		0.100	0.09162		mg/L		92	75 - 125
Cadmium	0.000150	J	0.100	0.09892		mg/L		99	75 - 125
Chromium	<0.00500		0.100	0.09347		mg/L		93	75 - 125
Cobalt	0.0119		0.100	0.1069		mg/L		95	75 - 125
Copper	0.00258	J	0.200	0.1989		mg/L		98	75 - 125
Lead	<0.000500		0.200	0.1966		mg/L		98	75 - 125
Nickel	0.0160		0.200	0.2106		mg/L		97	75 - 125
Selenium	<0.00500		0.400	0.4193		mg/L		105	75 - 125
Iron	2.13		0.200	2.329	4	mg/L		97	75 - 125
Silver	0.000664	J F2 F1	0.100	0.1379	F1	mg/L		137	75 - 125
Thallium	0.00198		0.200	0.1750		mg/L		86	75 - 125
Vanadium	<0.00500		0.100	0.09536		mg/L		95	75 - 125
Zinc	0.00796	J	0.200	0.2020		mg/L		97	75 - 125
Manganese	3.51		0.100	3.568	4	mg/L		61	75 - 125

Lab Sample ID: 310-255788-18 MSD
Matrix: Water
Analysis Batch: 388887

Client Sample ID: MW-D2
Prep Type: Total/NA
Prep Batch: 387586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200		0.200	0.2008		mg/L		100	75 - 125	2	20
Arsenic	0.00139	J	0.200	0.2006		mg/L		100	75 - 125	1	20
Barium	0.203		0.100	0.3085		mg/L		106	75 - 125	1	20
Beryllium	<0.00100		0.100	0.09230		mg/L		92	75 - 125	1	20
Cadmium	0.000150	J	0.100	0.1012		mg/L		101	75 - 125	2	20
Chromium	<0.00500		0.100	0.09465		mg/L		95	75 - 125	1	20
Cobalt	0.0119		0.100	0.1090		mg/L		97	75 - 125	2	20
Copper	0.00258	J	0.200	0.2002		mg/L		99	75 - 125	1	20
Lead	<0.000500		0.200	0.1992		mg/L		100	75 - 125	1	20
Nickel	0.0160		0.200	0.2141		mg/L		99	75 - 125	2	20
Selenium	<0.00500		0.400	0.4256		mg/L		106	75 - 125	2	20
Iron	2.13		0.200	2.383	4	mg/L		125	75 - 125	2	20
Silver	0.000664	J F2 F1	0.100	0.1038	F2	mg/L		103	75 - 125	28	20
Thallium	0.00198		0.200	0.1793		mg/L		89	75 - 125	2	20
Vanadium	<0.00500		0.100	0.09587		mg/L		96	75 - 125	1	20
Zinc	0.00796	J	0.200	0.2107		mg/L		101	75 - 125	4	20
Manganese	3.51		0.100	3.644	4	mg/L		138	75 - 125	2	20

Lab Sample ID: 310-255679-B-4-B DU
Matrix: Water
Analysis Batch: 388887

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 387586

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	0.000966	J	0.001104	J	mg/L		13	20
Barium	0.753		0.7614		mg/L		1	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	0.000510		0.0004740		mg/L		7	20
Chromium	<0.00500		<0.00500		mg/L		NC	20

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

Lab Sample ID: 310-255679-B-4-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 388887 — **Prep Batch: 387586**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cobalt	0.000950			0.001063		mg/L				11	20
Copper	<0.00500			<0.00500		mg/L				NC	20
Lead	0.000989			0.001061		mg/L				7	20
Nickel	<0.00500			<0.00500		mg/L				NC	20
Selenium	<0.00500			<0.00500		mg/L				NC	20
Iron	2.55			2.753		mg/L				8	20
Silver	<0.00100			<0.00100		mg/L				NC	20
Thallium	<0.00100			<0.00100		mg/L				NC	20
Vanadium	0.00173	J		0.001953	J	mg/L				12	20
Zinc	0.00837	J		0.01009	J	mg/L				19	20
Manganese	0.186			0.1885		mg/L				1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-387820/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387997 — **Prep Batch: 387820**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000140	mg/L		05/17/23 12:57	05/18/23 11:10	1

Lab Sample ID: LCS 310-387820/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387997 — **Prep Batch: 387820**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001815		mg/L		109	80 - 120		

Lab Sample ID: 310-255018-A-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387997 — **Prep Batch: 387820**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000200		0.00167	0.001654		mg/L		99	80 - 120		

Lab Sample ID: 310-255018-A-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 387997 — **Prep Batch: 387820**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000200		0.00167	0.001670		mg/L		100	80 - 120	1	20

Lab Sample ID: MB 310-388222/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 388429 — **Prep Batch: 388222**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000140	mg/L		05/22/23 10:50	05/23/23 11:18	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 310-388222/2-A
Matrix: Water
Analysis Batch: 388429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388222

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00167	0.001741		mg/L		104	80 - 120		

Lab Sample ID: 310-255962-A-1-C MS
Matrix: Water
Analysis Batch: 388429

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 388222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.000200	F1	0.00167	0.001068	F1	mg/L		64	80 - 120		

Lab Sample ID: 310-255962-A-1-D MSD
Matrix: Water
Analysis Batch: 388429

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 388222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.000200	F1	0.00167	0.001000	F1	mg/L		60	80 - 120	7	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-387514/1-A
Matrix: Water
Analysis Batch: 387718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 387514

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0100		0.0100	0.00430	mg/L		05/15/23 10:49	05/16/23 17:53	1

Lab Sample ID: LCS 310-387514/2-A
Matrix: Water
Analysis Batch: 387718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 387514

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.200	0.1885		mg/L		94	90 - 110		

Lab Sample ID: 310-255749-C-4-B MS
Matrix: Water
Analysis Batch: 387718

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 387514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	<0.0100	F1 F2	0.200	0.1804		mg/L		90	59 - 126		

Lab Sample ID: 310-255749-C-4-C MSD
Matrix: Water
Analysis Batch: 387718

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 387514

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	<0.0100	F1 F2	0.200	0.1101	F1 F2	mg/L		55	59 - 126	48	35

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-713624/1-A
Matrix: Water
Analysis Batch: 713625

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 713624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.00		1.00	0.231	mg/L		05/15/23 18:00	05/16/23 20:06	1

Lab Sample ID: LCS 500-713624/2-A
Matrix: Water
Analysis Batch: 713625

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 713624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.96	4.016		mg/L		102	80 - 120

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

Lab Sample ID: MB 310-387450/1
Matrix: Water
Analysis Batch: 387450

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	1.70	mg/L			05/15/23 08:12	1

Lab Sample ID: LCS 310-387450/2
Matrix: Water
Analysis Batch: 387450

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	105.0		mg/L		105	75 - 116

Lab Sample ID: 310-255788-3 DU
Matrix: Water
Analysis Batch: 387450

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	118		118.0		mg/L		0	35

Lab Sample ID: MB 310-387478/1
Matrix: Water
Analysis Batch: 387478

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	1.70	mg/L			05/15/23 09:05	1

Lab Sample ID: LCS 310-387478/2
Matrix: Water
Analysis Batch: 387478

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	100.0		mg/L		100	75 - 116

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

Lab Sample ID: 310-255767-C-2 DU
Matrix: Water
Analysis Batch: 387478

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	960			880.0		mg/L				9	35

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Analysis Batch: 387530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	8260D	
310-255788-2	MW-5	Total/NA	Water	8260D	
310-255788-3	MW-7	Total/NA	Water	8260D	
310-255788-4	MW-9R	Total/NA	Water	8260D	
310-255788-5	MW-13	Total/NA	Water	8260D	
310-255788-6	MW-14	Total/NA	Water	8260D	
310-255788-7	MW-20	Total/NA	Water	8260D	
310-255788-14	MW-29	Total/NA	Water	8260D	
MB 310-387530/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387530/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387530/7	Lab Control Sample	Total/NA	Water	8260D	
310-255788-2 MS	MW-5	Total/NA	Water	8260D	
310-255788-2 MSD	MW-5	Total/NA	Water	8260D	

Analysis Batch: 387643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-8	MW-21	Total/NA	Water	8260D	
310-255788-9	MW-23	Total/NA	Water	8260D	
310-255788-10	MW-25	Total/NA	Water	8260D	
310-255788-11	MW-26	Total/NA	Water	8260D	
310-255788-12	MW-27	Total/NA	Water	8260D	
310-255788-13	MW-28	Total/NA	Water	8260D	
MB 310-387643/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387643/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387643/7	Lab Control Sample	Total/NA	Water	8260D	
310-255679-X-6 MS	Matrix Spike	Total/NA	Water	8260D	
310-255679-X-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 387646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-16	MW-D1	Total/NA	Water	8260D	
310-255788-18	MW-D2	Total/NA	Water	8260D	
MB 310-387646/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387646/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387646/7	Lab Control Sample	Total/NA	Water	8260D	
310-255704-I-1 MS	Matrix Spike	Total/NA	Water	8260D	
310-255704-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 387658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-15	MW-34	Total/NA	Water	8260D	
310-255788-17	UD-3	Total/NA	Water	8260D	
MB 310-387658/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387658/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387658/7	Lab Control Sample	Total/NA	Water	8260D	
310-255749-F-4 MS	Matrix Spike	Total/NA	Water	8260D	
310-255749-F-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 387785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-19	MW-24	Total/NA	Water	8260D	

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Analysis Batch: 387785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-20	MW-35	Total/NA	Water	8260D	
310-255788-21	Trip blank	Total/NA	Water	8260D	
MB 310-387785/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387785/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387785/7	Lab Control Sample	Total/NA	Water	8260D	
310-255806-C-1 MS	Matrix Spike	Total/NA	Water	8260D	
310-255806-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 387941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-8	MW-21	Total/NA	Water	8260D	
310-255788-9	MW-23	Total/NA	Water	8260D	
310-255788-10	MW-25	Total/NA	Water	8260D	
310-255788-11	MW-26	Total/NA	Water	8260D	
310-255788-13	MW-28	Total/NA	Water	8260D	
310-255788-16	MW-D1	Total/NA	Water	8260D	
310-255788-18	MW-D2	Total/NA	Water	8260D	
MB 310-387941/5	Method Blank	Total/NA	Water	8260D	
LCS 310-387941/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-387941/7	Lab Control Sample	Total/NA	Water	8260D	
310-255704-J-2 MS	Matrix Spike	Total/NA	Water	8260D	
310-255704-J-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Analysis Batch: 388038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-12	MW-27	Total/NA	Water	8260D	
MB 310-388038/5	Method Blank	Total/NA	Water	8260D	
LCS 310-388038/6	Lab Control Sample	Total/NA	Water	8260D	
310-256190-B-13 MS	Matrix Spike	Total/NA	Water	8260D	
310-256190-B-13 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

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Prep Batch: 387448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	3510C	
310-255788-14	MW-29	Total/NA	Water	3510C	
MB 310-387448/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-387448/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-387448/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 387890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8270E	387448
310-255788-14	MW-29	Total/NA	Water	8270E	387448
MB 310-387448/1-A	Method Blank	Total/NA	Water	8270E	387448
LCS 310-387448/2-A	Lab Control Sample	Total/NA	Water	8270E	387448
LCSD 310-387448/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	387448

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Prep Batch: 387447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	3510C	
310-255788-14	MW-29	Total/NA	Water	3510C	
MB 310-387447/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-387447/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 310-387447/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-387447/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 310-387447/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 387895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-387447/1-A	Method Blank	Total/NA	Water	8081B	387447

Analysis Batch: 387898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-387447/1-A	Method Blank	Total/NA	Water	8082A	387447
LCS 310-387447/2-A	Lab Control Sample	Total/NA	Water	8082A	387447
LCSD 310-387447/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	387447

Analysis Batch: 388146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8015C	
310-255788-14	MW-29	Total/NA	Water	8015C	
MB 310-388146/3	Method Blank	Total/NA	Water	8015C	
LCS 310-388146/4	Lab Control Sample	Total/NA	Water	8015C	
310-255788-3 MS	MW-7	Total/NA	Water	8015C	
310-255788-3 MSD	MW-7	Total/NA	Water	8015C	

Analysis Batch: 388198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8081B	387447
310-255788-14	MW-29	Total/NA	Water	8081B	387447
LCS 310-387447/4-A	Lab Control Sample	Total/NA	Water	8081B	387447
LCSD 310-387447/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	387447

Analysis Batch: 388201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8082A	387447
310-255788-14	MW-29	Total/NA	Water	8082A	387447

Prep Batch: 713586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8151A	
310-255788-14	MW-29	Total/NA	Water	8151A	
MB 500-713586/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-713586/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-713586/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 713975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	8151A	713586
310-255788-14	MW-29	Total/NA	Water	8151A	713586

GC Semi VOA (Continued)

Analysis Batch: 713975 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-713586/1-A	Method Blank	Total/NA	Water	8151A	713586
LCS 500-713586/2-A	Lab Control Sample	Total/NA	Water	8151A	713586
LCSD 500-713586/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	713586

HPLC/IC

Analysis Batch: 387670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-15	MW-34	Total/NA	Water	9056A	
310-255788-19	MW-24	Total/NA	Water	9056A	
310-255788-20	MW-35	Total/NA	Water	9056A	
310-255788-20	MW-35	Total/NA	Water	9056A	
MB 310-387670/3	Method Blank	Total/NA	Water	9056A	
LCS 310-387670/4	Lab Control Sample	Total/NA	Water	9056A	
310-255675-H-4 MS	Matrix Spike	Total/NA	Water	9056A	
310-255675-H-4 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Metals

Prep Batch: 387583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	3005A	
310-255788-2	MW-5	Total/NA	Water	3005A	
310-255788-3	MW-7	Total/NA	Water	3005A	
310-255788-4	MW-9R	Total/NA	Water	3005A	
310-255788-5	MW-13	Total/NA	Water	3005A	
310-255788-6	MW-14	Total/NA	Water	3005A	
310-255788-7	MW-20	Total/NA	Water	3005A	
310-255788-8	MW-21	Total/NA	Water	3005A	
310-255788-9	MW-23	Total/NA	Water	3005A	
310-255788-10	MW-25	Total/NA	Water	3005A	
310-255788-11	MW-26	Total/NA	Water	3005A	
310-255788-12	MW-27	Total/NA	Water	3005A	
310-255788-13	MW-28	Total/NA	Water	3005A	
310-255788-14	MW-29	Total/NA	Water	3005A	
310-255788-15	MW-34	Total/NA	Water	3005A	
310-255788-16	MW-D1	Total/NA	Water	3005A	
310-255788-17	UD-3	Total/NA	Water	3005A	
MB 310-387583/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-387583/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-255788-10 MS	MW-25	Total/NA	Water	3005A	
310-255788-10 MSD	MW-25	Total/NA	Water	3005A	
310-255761-A-1-C DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 387586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-18	MW-D2	Total/NA	Water	3005A	
310-255788-19	MW-24	Total/NA	Water	3005A	
310-255788-20	MW-35	Total/NA	Water	3005A	
MB 310-387586/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-387586/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-255788-18 MS	MW-D2	Total/NA	Water	3005A	

Metals (Continued)

Prep Batch: 387586 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-18 MSD	MW-D2	Total/NA	Water	3005A	
310-255679-B-4-B DU	Duplicate	Total/NA	Water	3005A	

Prep Batch: 387820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-14	MW-29	Total/NA	Water	7470A	
MB 310-387820/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-387820/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-255018-A-3-C MS	Matrix Spike	Total/NA	Water	7470A	
310-255018-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 387997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-14	MW-29	Total/NA	Water	7470A	387820
MB 310-387820/1-A	Method Blank	Total/NA	Water	7470A	387820
LCS 310-387820/2-A	Lab Control Sample	Total/NA	Water	7470A	387820
310-255018-A-3-C MS	Matrix Spike	Total/NA	Water	7470A	387820
310-255018-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	387820

Prep Batch: 388222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	7470A	
MB 310-388222/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-388222/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-255962-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	
310-255962-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 388429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	7470A	388222
MB 310-388222/1-A	Method Blank	Total/NA	Water	7470A	388222
LCS 310-388222/2-A	Lab Control Sample	Total/NA	Water	7470A	388222
310-255962-A-1-C MS	Matrix Spike	Total/NA	Water	7470A	388222
310-255962-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	388222

Analysis Batch: 388866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-10	MW-25	Total/NA	Water	6020B	387583
MB 310-387583/1-A	Method Blank	Total/NA	Water	6020B	387583
LCS 310-387583/2-A	Lab Control Sample	Total/NA	Water	6020B	387583
310-255788-10 MS	MW-25	Total/NA	Water	6020B	387583
310-255788-10 MSD	MW-25	Total/NA	Water	6020B	387583
310-255761-A-1-C DU	Duplicate	Total/NA	Water	6020B	387583

Analysis Batch: 388887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	6020B	387583
310-255788-2	MW-5	Total/NA	Water	6020B	387583
310-255788-3	MW-7	Total/NA	Water	6020B	387583
310-255788-4	MW-9R	Total/NA	Water	6020B	387583
310-255788-5	MW-13	Total/NA	Water	6020B	387583

Metals (Continued)

Analysis Batch: 388887 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-6	MW-14	Total/NA	Water	6020B	387583
310-255788-7	MW-20	Total/NA	Water	6020B	387583
310-255788-8	MW-21	Total/NA	Water	6020B	387583
310-255788-9	MW-23	Total/NA	Water	6020B	387583
310-255788-11	MW-26	Total/NA	Water	6020B	387583
310-255788-12	MW-27	Total/NA	Water	6020B	387583
310-255788-13	MW-28	Total/NA	Water	6020B	387583
310-255788-14	MW-29	Total/NA	Water	6020B	387583
310-255788-15	MW-34	Total/NA	Water	6020B	387583
310-255788-16	MW-D1	Total/NA	Water	6020B	387583
310-255788-17	UD-3	Total/NA	Water	6020B	387583
310-255788-18	MW-D2	Total/NA	Water	6020B	387586
310-255788-19	MW-24	Total/NA	Water	6020B	387586
310-255788-20	MW-35	Total/NA	Water	6020B	387586
MB 310-387586/1-A	Method Blank	Total/NA	Water	6020B	387586
LCS 310-387586/2-A	Lab Control Sample	Total/NA	Water	6020B	387586
310-255788-18 MS	MW-D2	Total/NA	Water	6020B	387586
310-255788-18 MSD	MW-D2	Total/NA	Water	6020B	387586
310-255679-B-4-B DU	Duplicate	Total/NA	Water	6020B	387586

Analysis Batch: 388931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-20	MW-35	Total/NA	Water	6020B	387586

General Chemistry

Analysis Batch: 387450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	I-3765-85	
310-255788-2	MW-5	Total/NA	Water	I-3765-85	
310-255788-3	MW-7	Total/NA	Water	I-3765-85	
310-255788-4	MW-9R	Total/NA	Water	I-3765-85	
310-255788-5	MW-13	Total/NA	Water	I-3765-85	
310-255788-6	MW-14	Total/NA	Water	I-3765-85	
310-255788-7	MW-20	Total/NA	Water	I-3765-85	
310-255788-8	MW-21	Total/NA	Water	I-3765-85	
310-255788-9	MW-23	Total/NA	Water	I-3765-85	
310-255788-10	MW-25	Total/NA	Water	I-3765-85	
310-255788-11	MW-26	Total/NA	Water	I-3765-85	
310-255788-12	MW-27	Total/NA	Water	I-3765-85	
310-255788-13	MW-28	Total/NA	Water	I-3765-85	
MB 310-387450/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-387450/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-255788-3 DU	MW-7	Total/NA	Water	I-3765-85	

Analysis Batch: 387478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-14	MW-29	Total/NA	Water	I-3765-85	
310-255788-15	MW-34	Total/NA	Water	I-3765-85	
310-255788-16	MW-D1	Total/NA	Water	I-3765-85	
310-255788-17	UD-3	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 387478 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-18	MW-D2	Total/NA	Water	I-3765-85	
310-255788-19	MW-24	Total/NA	Water	I-3765-85	
MB 310-387478/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-387478/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-255767-C-2 DU	Duplicate	Total/NA	Water	I-3765-85	

Prep Batch: 387514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	9012B	
310-255788-14	MW-29	Total/NA	Water	9012B	
MB 310-387514/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-387514/2-A	Lab Control Sample	Total/NA	Water	9012B	
310-255749-C-4-B MS	Matrix Spike	Total/NA	Water	9012B	
310-255749-C-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	

Analysis Batch: 387718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-3	MW-7	Total/NA	Water	9012B	387514
310-255788-14	MW-29	Total/NA	Water	9012B	387514
MB 310-387514/1-A	Method Blank	Total/NA	Water	9012B	387514
LCS 310-387514/2-A	Lab Control Sample	Total/NA	Water	9012B	387514
310-255749-C-4-B MS	Matrix Spike	Total/NA	Water	9012B	387514
310-255749-C-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	9012B	387514

Prep Batch: 713624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	9030B	
310-255788-3	MW-7	Total/NA	Water	9030B	
310-255788-4	MW-9R	Total/NA	Water	9030B	
310-255788-11	MW-26	Total/NA	Water	9030B	
310-255788-14	MW-29	Total/NA	Water	9030B	
MB 500-713624/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-713624/2-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 713625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-255788-1	MW-19	Total/NA	Water	9034	713624
310-255788-3	MW-7	Total/NA	Water	9034	713624
310-255788-4	MW-9R	Total/NA	Water	9034	713624
310-255788-11	MW-26	Total/NA	Water	9034	713624
310-255788-14	MW-29	Total/NA	Water	9034	713624
MB 500-713624/1-A	Method Blank	Total/NA	Water	9034	713624
LCS 500-713624/2-A	Lab Control Sample	Total/NA	Water	9034	713624

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-19

Lab Sample ID: 310-255788-1
Date Collected: 05/10/23 11:32
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 01:31
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:21
Total/NA	Prep	9030B			713624	CLB	EET CHI	05/15/23 18:05 - 05/15/23 18:07 [1]
Total/NA	Analysis	9034		1	713625	CLB	EET CHI	05/16/23 20:22 - 05/16/23 20:30 [1]
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-5

Lab Sample ID: 310-255788-2
Date Collected: 05/10/23 09:53
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 01:56
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:24
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-7

Lab Sample ID: 310-255788-3
Date Collected: 05/09/23 16:18
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 02:18
Total/NA	Prep	3510C			387448	Y6AF	EET CF	05/15/23 07:26
Total/NA	Analysis	8270E		1	387890	L0FS	EET CF	05/18/23 15:17
Total/NA	Analysis	8015C		1	388146	V7YZ	EET CF	05/20/23 14:07
Total/NA	Prep	3510C			387447	Y6AF	EET CF	05/15/23 07:19
Total/NA	Analysis	8081B		1	388198	BW2O	EET CF	05/22/23 18:41
Total/NA	Prep	3510C			387447	Y6AF	EET CF	05/15/23 07:19
Total/NA	Analysis	8082A		1	388201	BW2O	EET CF	05/22/23 18:41
Total/NA	Prep	8151A			713586	DAK	EET CHI	05/16/23 17:02
Total/NA	Analysis	8151A		1	713975	SB	EET CHI	05/18/23 12:37
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:28
Total/NA	Prep	7470A			388222	XXW3	EET CF	05/22/23 10:51
Total/NA	Analysis	7470A		1	388429	XXW3	EET CF	05/23/23 11:31
Total/NA	Prep	9012B			387514	ENB7	EET CF	05/15/23 10:49
Total/NA	Analysis	9012B		1	387718	ZJX4	EET CF	05/16/23 18:13
Total/NA	Prep	9030B			713624	CLB	EET CHI	05/15/23 18:07 - 05/15/23 18:10 [1]
Total/NA	Analysis	9034		1	713625	CLB	EET CHI	05/16/23 20:30 - 05/16/23 20:38 [1]
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Lab Chronicle

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

Client Sample ID: MW-9R
Lab Sample ID: 310-255788-4
Date Collected: 05/10/23 12:38
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 02:41
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:31
Total/NA	Prep	9030B			713624	CLB	EET CHI	05/15/23 18:10 - 05/15/23 18:12 [1]
Total/NA	Analysis	9034		1	713625	CLB	EET CHI	05/16/23 20:38 - 05/16/23 20:46 [1]
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-13
Lab Sample ID: 310-255788-5
Date Collected: 05/10/23 15:37
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 07:16
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:35
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-14
Lab Sample ID: 310-255788-6
Date Collected: 05/10/23 10:38
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 07:39
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:38
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-20
Lab Sample ID: 310-255788-7
Date Collected: 05/10/23 12:00
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 08:01
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:42
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-21
Lab Sample ID: 310-255788-8
Date Collected: 05/10/23 17:17
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 14:34
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 15:20

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Client Sample ID: MW-21
Date Collected: 05/10/23 17:17
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 17:45
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-23
Date Collected: 05/10/23 16:12
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 14:55
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 15:42
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:10
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-25
Date Collected: 05/10/23 14:38
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 15:17
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 16:03
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388866	A6US	EET CF	05/26/23 16:26
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-26
Date Collected: 05/10/23 13:19
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 15:38
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 16:24
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:13
Total/NA	Prep	9030B			713624	CLB	EET CHI	05/15/23 18:12 - 05/15/23 18:15 [1]
Total/NA	Analysis	9034		1	713625	CLB	EET CHI	05/16/23 20:46 - 05/16/23 20:54 [1]
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-27
Date Collected: 05/10/23 15:06
Date Received: 05/12/23 15:45

Lab Sample ID: 310-255788-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 15:59

Lab Chronicle

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

Client Sample ID: MW-27
Lab Sample ID: 310-255788-12
Date Collected: 05/10/23 15:06
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	388038	WSE8	EET CF	05/19/23 10:30
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:17
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-28
Lab Sample ID: 310-255788-13
Date Collected: 05/10/23 16:44
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387643	WSE8	EET CF	05/16/23 16:21
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 17:06
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:20
Total/NA	Analysis	I-3765-85		1	387450	DGU1	EET CF	05/15/23 08:12

Client Sample ID: MW-29
Lab Sample ID: 310-255788-14
Date Collected: 05/09/23 15:14
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387530	FE5V	EET CF	05/16/23 03:04
Total/NA	Prep	3510C			387448	Y6AF	EET CF	05/15/23 07:26
Total/NA	Analysis	8270E		1	387890	L0FS	EET CF	05/18/23 15:42
Total/NA	Analysis	8015C		1	388146	V7YZ	EET CF	05/20/23 14:25
Total/NA	Prep	3510C			387447	Y6AF	EET CF	05/15/23 07:19
Total/NA	Analysis	8081B		1	388198	BW2O	EET CF	05/22/23 18:54
Total/NA	Prep	3510C			387447	Y6AF	EET CF	05/15/23 07:19
Total/NA	Analysis	8082A		1	388201	BW2O	EET CF	05/22/23 18:54
Total/NA	Prep	8151A			713586	DAK	EET CHI	05/16/23 17:02
Total/NA	Analysis	8151A		1	713975	SB	EET CHI	05/18/23 12:56
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:24
Total/NA	Prep	7470A			387820	XXW3	EET CF	05/17/23 12:57
Total/NA	Analysis	7470A		1	387997	XXW3	EET CF	05/18/23 11:14
Total/NA	Prep	9012B			387514	ENB7	EET CF	05/15/23 10:49
Total/NA	Analysis	9012B		1	387718	ZJX4	EET CF	05/16/23 18:15
Total/NA	Prep	9030B			713624	CLB	EET CHI	05/15/23 18:15 - 05/15/23 18:17 [1]
Total/NA	Analysis	9034		1	713625	CLB	EET CHI	05/16/23 20:54 - 05/16/23 21:02 [1]
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Lab Chronicle

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

Client Sample ID: MW-34
Lab Sample ID: 310-255788-15
Date Collected: 05/11/23 11:03
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387658	FE5V	EET CF	05/16/23 18:31
Total/NA	Analysis	9056A		1	387670	QTZ5	EET CF	05/12/23 22:35
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:27
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Client Sample ID: MW-D1
Lab Sample ID: 310-255788-16
Date Collected: 05/10/23 09:53
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387646	WSE8	EET CF	05/17/23 01:14
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 17:27
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:31
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Client Sample ID: UD-3
Lab Sample ID: 310-255788-17
Date Collected: 05/11/23 12:00
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387658	FE5V	EET CF	05/16/23 18:54
Total/NA	Prep	3005A			387583	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 18:34
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Client Sample ID: MW-D2
Lab Sample ID: 310-255788-18
Date Collected: 05/10/23 10:38
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387646	WSE8	EET CF	05/17/23 01:35
Total/NA	Analysis	8260D		1	387941	WSE8	EET CF	05/18/23 17:49
Total/NA	Prep	3005A			387586	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 19:09
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Client Sample ID: MW-24
Lab Sample ID: 310-255788-19
Date Collected: 05/11/23 11:40
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387785	FE5V	EET CF	05/17/23 13:30

Lab Chronicle

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

Client Sample ID: MW-24
Lab Sample ID: 310-255788-19
Date Collected: 05/11/23 11:40
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9056A		5	387670	QTZ5	EET CF	05/13/23 12:43
Total/NA	Prep	3005A			387586	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 19:26
Total/NA	Analysis	I-3765-85		1	387478	DGU1	EET CF	05/15/23 09:05

Client Sample ID: MW-35
Lab Sample ID: 310-255788-20
Date Collected: 05/11/23 10:32
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387785	FE5V	EET CF	05/17/23 13:54
Total/NA	Analysis	9056A		1	387670	QTZ5	EET CF	05/12/23 22:51
Total/NA	Analysis	9056A		20	387670	QTZ5	EET CF	05/15/23 10:16
Total/NA	Prep	3005A			387586	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		1	388887	A6US	EET CF	05/26/23 19:29
Total/NA	Prep	3005A			387586	DHM5	EET CF	05/16/23 08:40
Total/NA	Analysis	6020B		4	388931	A6US	EET CF	05/27/23 20:43

Client Sample ID: Trip blank
Lab Sample ID: 310-255788-21
Date Collected: 05/11/23 00:00
Matrix: Water
Date Received: 05/12/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	387785	FE5V	EET CF	05/17/23 12:19

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

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

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 310-255788-1
Project/Site: SEMCO (1st 2023 Semi-Annual)

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	Allyl chloride
8260D		Water	Ethyl methacrylate

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-29-23 *
Georgia	State	N/A	04-30-23 *
Georgia (DW)	State	939	04-30-23 *
Hawaii	State	NA	04-29-23 *
Illinois	NELAP	IL00035	04-29-23 *
Indiana	State	C-IL-02	04-29-23 *
Iowa	State	082	05-01-24
Kansas	NELAP	E-10161	10-31-23
Kentucky (UST)	State	AI # 108083	04-29-23 *
Kentucky (WW)	State	KY90023	12-31-22 *
Louisiana (All)	NELAP	02046	06-30-23
Mississippi	State	NA	04-30-23 *
North Carolina (WW/SW)	State	291	12-31-23
North Dakota	State	R-194	04-30-23 *
Oklahoma	State	8908	08-31-23
South Carolina	State	77001003	04-29-23 *
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-23
Wyoming	State	8TMS-Q	04-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: SCS Engineers
Project/Site: SEMCO (1st 2023 Semi-Annual)

Job ID: 310-255788-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	EET CHI
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
9012B	Cyanide, Total andor Amenable	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	EET CHI
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

Protocol References:

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

eurofins | Environment Testing America

310-255788 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/12/23 | TIME 1545 | Received By: LR

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 4

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

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

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

MW-25, MW-20, MW-19, MW-13, MW-27, MW-9R, MW-23

Temperature Record

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

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

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

Uncorrected Temp (°C): 0.6 | Corrected Temp (°C): 0.6

• Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/12/23 | TIME 1545 | Received By: LR

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 4

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

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

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

MW-01, MW-02, MW-5, MW-21, MW-25, MW-26, MW-14

Temperature Record

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

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

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

Uncorrected Temp (°C): 0.6 | Corrected Temp (°C): 0.6

Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/12/23 | TIME 1545 | Received By: LR

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 3 of 4

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

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

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

UP-3, MW-34, MW-35, MW-24

Temperature Record

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

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

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

Uncorrected Temp (°C): 0.1 | Corrected Temp (°C): 0.1

Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS Engineers

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 5/12/23 | TIME 1545 | Received By: LR

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 4 of 4

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

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

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

MW-29, MW-7

Temperature Record

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

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

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

Uncorrected Temp (°C): 6.7 | Corrected Temp (°C): 6.7

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:	1L PL NT	
Uncorrected Temp (°C):	9.8	
Corrected Temp (°C):	9.8	

Exceptions Noted

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

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

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

Additional Comments

TestAmerica
704 Enterprise Drive
Cedar Falls, Iowa 50613
319.277 2401 (phone)
515 792.7989 (fax)

SAMPLER: SCS Engineers ####
SITE NAME: SEMCO Sanitary Landfill
ADDRESS:
CITY/STATE/ZIP:
TELEPHONE NUMBER: Fax:
SAMPLED BY- (PRINT NAME): Scott Stoller
SIGNATURE:
####

REPORT TO:
NAME: Nathan Ohrt (nohrt@scsengineers.com)
COMPANY NAME: SCS Engineers
PROJECT NAME: SEMCO (1st 2023 semi-annual)
PROJECT NUMBER: 27223215
ADDRESS: 1690 All State Court, Suite 100
CITY/STATE/ZIP: West Des Moines, IA 50265

								Preservative								Matrix						Analyze For:																
Sample ID	# of Containers Ordered	Date Sampled	Time Sampled	# of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO_3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H_2SO_4 Plastic (Yellow & White Label)	H_2SO_4 Glass (Yellow & White Label)	None (Black & White Label)	1 oz Bark	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Trip Blank	Appendix I	Appendix II	Total Suspended Solids	Sulfide	Natural Attenuation*	Vinyl Chloride											Trip Blank
MW-19		5/10	11 32		X			x								x						x		x	x												
MW-5		5/10	9.53		X			x								x						x		x													
MW-7		5/9	16:18		X			x								x							x	x													
MW-9R		5/10	12.38		X			x								x						x		x	x												
MW-13		5/10	15:37		X			x								x						x		x													
MW-14		5/10	10.38		X			x								x						x		x													
MW-20		5/10	12.00		X			x								x						x		x													
MW-21		5/10	17 17		X			x								x						x		x													
MW-23		5/10	16:12		X			x								x						x		x													
MW-25		5/10	14:38		X			x								x						x		x													
MW-26		5/10	13:19		X			x								x						x		x	x												
MW-27		5/10	15:06		X			x								x						x		x													
MW-28		5/10	16 44		X			x								x						x		x													
MW-29		5/9	15:19		X			x								x							x	x													
MW-34		5/11	11:03		X			x								x						x		x		x											
UD-2								x								x						x		x													
MW-01		5/10	9:53		X			x								x						x		x													
UD-3		5/11	12:00		X			x								x						x		x													
MW-02		5/10	10.38		X			x								x						x		x													
MW-24		5/11	11 40		X			x								x						x		x		x											
MW-35		5/11	10 32		X			x								x										x	x										
MW-36								x								x										x	x										
Trip Blank																					x															x	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Scott Stoller	5/12/23	12:00						

Shipped Via:

Comments:

* Natural Attenuation includes nitrate, manganese, iron, and sulfate.

Shipped Via:

Received for Lab by:	Date:	Time:
LR	5/12/23	1545

Temperature Upon Receipt:

Laboratory Comments: (1) For Appendix I and II analyses, report to the reporting limit, not the detection limit. Make sure that the reporting limits are below the EPA MCL. (2) For analyses other than Appendix I and II report to the detection limit. Please make sure that the detection limit are below the EPA MCLs. (3) In the "Result" column for EDD files, when non-detects, please report "<" the reporting limit or the detection limit instead of indicating with "ND".

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613
Phone 319-277-2401 Fax 319-277-2425

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Liechti Meredith L	Carrier Tracking No(s)	COC No. 310-61407 1
Client Contact: Shipping/Receiving	Phone	E-Mail: meredith.liechti@et.eurofinsus.com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-255788-1
Address: 2417 Bond Street,	Due Date Requested: 5/25/2023			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	#:			
Email:	O #:			
Project Name: SEMCO (1st 2023 Semi-Annual)	roject #: 31001976			
Site	SSOW#:			

310-255788 COC

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide, Acid soluble and Insoluble	8151A/8151A_AP Default List	9034_Calc/9030B	Total Number of containers	Special Instructions/Note
			Preservation Code:								
MW-19 (310-255788-1)	5/10/23	11 32 Central		Water			X			1	
MW-7 (310-255788-3)	5/9/23	16 18 Central		Water				X	X	3	
MW-9R (310-255788-4)	5/10/23	12 38 Central		Water			X			1	
MW-26 (310-255788-11)	5/10/23	13 19 Central		Water			X			1	
MW-29 (310-255788-14)	5/9/23	15 14 Central		Water				X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing North Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/5/23 1335			5/6/23 1005	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3.9 → 3.8

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-255788-1

Login Number: 255788
List Number: 1
Creator: Richardson, Lydia E

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	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-255788-1

Login Number: 255788
List Number: 2
Creator: Scott, Sherri L

List Source: Eurofins Chicago
List Creation: 05/16/23 02:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
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.	True	

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/16/2023 3:11:43 PM

JOB DESCRIPTION

SEMCO Sanitary Landfill

JOB NUMBER

310-268892-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

myEOL

Job Notes

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

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

Authorization



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11/16/2023 3:11:43 PM

Authorized for release by
Meredith Liechti, Service Center Manager
meredith.liechti@et.eurofinsus.com
(319)277-2401

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Job ID: 310-268892-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-268892-1

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 11/3/2023 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.2°C, 1.1°C and 1.1°C

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 310-405466 recovered outside of the control limits for Chloroethane (-21.6%D). The LCS associated with this CCV passed CCV criteria for the affected analyte; therefore, the data have been reported. The associated sample is impacted: (CCV 310-405466/4).

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

Pesticides
Method 8081B: The continuing calibration verification (CCV) associated with batch 310-405774 recovered above the upper control limit for Endosulfan I. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

HPLC/IC
Method 9056A_ORGFM_48H: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MW-36 (310-268892-19).

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

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

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

Sample Summary

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-268892-1	MW-19	Water	11/02/23 11:50	11/03/23 16:30
310-268892-2	MW-5	Water	11/01/23 16:00	11/03/23 16:30
310-268892-3	MW-7	Water	11/02/23 12:50	11/03/23 16:30
310-268892-4	MW-9R	Water	11/01/23 13:40	11/03/23 16:30
310-268892-5	MW-13	Water	11/02/23 14:54	11/03/23 16:30
310-268892-6	MW-20	Water	11/01/23 12:48	11/03/23 16:30
310-268892-7	MW-21	Water	11/01/23 16:38	11/03/23 16:30
310-268892-8	MW-23	Water	11/02/23 10:36	11/03/23 16:30
310-268892-9	MW-26	Water	11/01/23 14:19	11/03/23 16:30
310-268892-10	MW-27	Water	11/02/23 13:53	11/03/23 16:30
310-268892-11	MW-28	Water	11/01/23 17:12	11/03/23 16:30
310-268892-12	MW-29	Water	11/02/23 11:13	11/03/23 16:30
310-268892-13	MW-34	Water	11/02/23 15:51	11/03/23 16:30
310-268892-14	UD-2	Water	11/03/23 09:30	11/03/23 16:30
310-268892-15	UD-3	Water	11/02/23 09:52	11/03/23 16:30
310-268892-16	MW-D1	Water	11/02/23 14:54	11/03/23 16:30
310-268892-17	MW-D2	Water	11/02/23 13:53	11/03/23 16:30
310-268892-18	MW-24	Water	11/02/23 16:38	11/03/23 16:30
310-268892-19	MW-36	Water	11/01/23 17:48	11/03/23 16:30
310-268892-20	Trip Blank	Water	11/02/23 00:00	11/03/23 16:30

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-19 — Lab Sample ID: 310-268892-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00231		0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.00138	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.390		0.00200	0.000640	mg/L	1		6020B	Total/NA
Beryllium	0.000669	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000555		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000666	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00101		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.00194	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00299	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Silver	0.00123		0.00100	0.000500	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.88		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 310-268892-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.00290		0.00200	0.00100	mg/L	1		6020B	Total/NA
Arsenic	0.0107		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.250		0.00200	0.000640	mg/L	1		6020B	Total/NA
Beryllium	0.000734	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000571		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00937	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00233	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00129		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.0198		0.00500	0.00190	mg/L	1		6020B	Total/NA
Selenium	0.00281	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Silver	0.00125		0.00100	0.000500	mg/L	1		6020B	Total/NA
Vanadium	0.00192	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	35.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 310-268892-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13.2		10.0	3.10	ug/L	1		8260D	Total/NA
Chlorobenzene	0.529	J	1.00	0.400	ug/L	1		8260D	Total/NA
Chloromethane	0.646	J	3.00	0.610	ug/L	1		8260D	Total/NA
Arsenic	0.00926		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.262		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000249	J B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00270	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	66.0		15.0	5.10	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-9R — Lab Sample ID: 310-268892-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.31	J	10.0	3.10	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.72		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.572	J	1.00	0.220	ug/L	1		8260D	Total/NA
Trichloroethene	1.32		1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.00394		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0425		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0149	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000440	J	0.000500	0.000240	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-9R (Continued) — Lab Sample ID: 310-268892-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.0339		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000523	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Zinc	0.00964	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	22.3		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 310-268892-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0279		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000169	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00284	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00562		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.50		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 310-268892-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00526		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.00988		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000741	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00228	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	35.0		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 310-268892-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0329		0.00200	0.000640	mg/L	1		6020B	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 310-268892-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000925	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.00990		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000128	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000476	J B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Zinc	0.00958	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	28.8		3.75	1.28	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-26 — Lab Sample ID: 310-268892-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.273	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.00150	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0304		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00340	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00569		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	31.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-27 — Lab Sample ID: 310-268892-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000665	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.113		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00139	B	0.000500	0.000170	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-27 (Continued) — Lab Sample ID: 310-268892-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Solids	1.38	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-28 — Lab Sample ID: 310-268892-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0103		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000105	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00704	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0168		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	19.9		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-29 — Lab Sample ID: 310-268892-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000703	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.00759		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cadmium	0.000133	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000413	J B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00529		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	44.0		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-34 — Lab Sample ID: 310-268892-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00124	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.112		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.000644	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000879		0.000500	0.000240	mg/L	1		6020B	Total/NA
Nickel	0.00290	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Vanadium	0.00161	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0190	J	0.0200	0.00640	mg/L	1		6020B	Total/NA
Total Suspended Solids	115		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: UD-2 — Lab Sample ID: 310-268892-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.10	J	10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.000720	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0406		0.00200	0.000640	mg/L	1		6020B	Total/NA
Chromium	0.00254	J B	0.00500	0.00110	mg/L	1		6020B	Total/NA
Cobalt	0.000457	J B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00456	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Nickel	0.00707		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.38	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: UD-3 — Lab Sample ID: 310-268892-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000557	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0502		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00508	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0140		0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.00		1.88	0.638	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-D1 — Lab Sample ID: 310-268892-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0258		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00230	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00448	J	0.00500	0.00190	mg/L	1		6020B	Total/NA
Total Suspended Solids	3.63		1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D2 — Lab Sample ID: 310-268892-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000670	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.116		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.00139	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Total Suspended Solids	1.13	J	1.88	0.638	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-24 — Lab Sample ID: 310-268892-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.73		0.500	0.220	ug/L	1		8260D	Total/NA
Chloroethane	1.78	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	13.7		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.04		1.00	0.220	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	0.835	J	1.00	0.270	ug/L	1		8260D	Total/NA
Vinyl chloride	1.37		1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.0113		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0460		0.00200	0.000640	mg/L	1		6020B	Total/NA
Cobalt	0.0137	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.0196		0.00500	0.00190	mg/L	1		6020B	Total/NA
Thallium	0.000692	J	0.00100	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	40.5		7.50	2.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-36 — Lab Sample ID: 310-268892-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	2260		100	42.0	mg/L	100		9056A	Total/NA
Iron	5.18		0.500	0.180	mg/L	5		6020B	Total/NA
Manganese	6.57	B	0.0500	0.0180	mg/L	5		6020B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 310-268892-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.31	J	5.00	1.70	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Quantitation Limit Exceptions Summary

Client: SCS Engineers
Job ID: 310-268892-1
Project/Site: SEMCO 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	Water	Total/NA	ug/L	1.20	5
8260D	1,2-Dibromoethane (EDB)	Water	Total/NA	ug/L	0.340	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-19
Date Collected: 11/02/23 11:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 00:03	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 00:03	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 00:03	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 00:03	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 00:03	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 00:03	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 00:03	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 00:03	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 00:03	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 00:03	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 00:03	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 00:03	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 00:03	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 00:03	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 00:03	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 00:03	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 00:03	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 00:03	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 00:03	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 00:03	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 00:03	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 00:03	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 00:03	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 00:03	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 00:03	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 00:03	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 00:03	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 00:03	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 00:03	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 00:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 00:03	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 00:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 00:03	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 00:03	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 00:03	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 00:03	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 00:03	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 00:03	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 00:03	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 00:03	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 00:03	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 00:03	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 00:03	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 00:03	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 00:03	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 00:03	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 00:03*	*1*

Client Sample ID: MW-19
Date Collected: 11/02/23 11:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-1
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 00:03*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 00:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00231**		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:00	1
Arsenic	**0.00138**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:00	1
Barium	**0.390**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:00	1
Beryllium	**0.000669**	**J**	0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:00	1
Cadmium	**0.000555**		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:00	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:00	1
Cobalt	**0.000666**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:00	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:00	1
Lead	**0.00101**		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:00	1
Nickel	**0.00194**	**J**	0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:00	1
Selenium	**0.00299**	**J**	0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:00	1
Silver	**0.00123**		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:00	1
Thallium	<0.00100	F1 F2	0.00100	0.000260	mg/L		11/07/23 09:30	11/10/23 16:34	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:00	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		11/07/23 18:07	11/07/23 22:32	1
Total Suspended Solids (USGS I-3765-85)	**4.88**		1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-5
Date Collected: 11/01/23 16:00
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 00:25	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 00:25	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 00:25	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 00:25	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 00:25	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 00:25	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 00:25	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 00:25	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 00:25	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 00:25	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 00:25	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 00:25	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 00:25	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 00:25	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 00:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 00:25	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 00:25	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 00:25	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 00:25	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 00:25	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 00:25	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 00:25	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 00:25	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 00:25	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 00:25	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 00:25	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 00:25	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 00:25	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 00:25	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 00:25	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 00:25	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 00:25	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 00:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 00:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 00:25	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 00:25	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 00:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 00:25	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 00:25	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 00:25	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 00:25	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 00:25	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 00:25	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 00:25	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 00:25	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 00:25	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/10/23 00:25*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-5

Date Collected: 11/01/23 16:00
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 00:25*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 00:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00290**		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:31	1
Arsenic	**0.0107**		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:31	1
Barium	**0.250**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:31	1
Beryllium	**0.000734**	**J**	0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:31	1
Cadmium	**0.000571**		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:31	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:31	1
Cobalt	**0.00937**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:31	1
Copper	**0.00233**	**J**	0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:31	1
Lead	**0.00129**		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:31	1
Nickel	**0.0198**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:31	1
Selenium	**0.00281**	**J**	0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:31	1
Silver	**0.00125**		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:31	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/10/23 16:38	1
Vanadium	**0.00192**	**J**	0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:31	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**35.5**		7.50	2.55	mg/L			11/06/23 11:11	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-7

Date Collected: 11/02/23 12:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13.2**		10.0	3.10	ug/L			11/10/23 00:47	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 00:47	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 00:47	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 00:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 00:47	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 00:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 00:47	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 00:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 00:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 00:47	1
Chlorobenzene	**0.529**	**J**	1.00	0.400	ug/L			11/10/23 00:47	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 00:47	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 00:47	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 00:47	1
Chloromethane	**0.646**	**J**	3.00	0.610	ug/L			11/10/23 00:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 00:47	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 00:47	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 00:47	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 00:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 00:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 00:47	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 00:47	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 00:47	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 00:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 00:47	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 00:47	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 00:47	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 00:47	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 00:47	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 00:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 00:47	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 00:47	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 00:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 00:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 00:47	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 00:47	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 00:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 00:47	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 00:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 00:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 00:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 00:47	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 00:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 00:47	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 00:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 00:47	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/10/23 00:47*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-7

Date Collected: 11/02/23 12:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*80 - 128*		*11/10/23 00:47*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 00:47*	*1*

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0640		0.0640	0.0370	ug/L		11/07/23 05:30	11/13/23 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*52*		*10 - 136*	*11/07/23 05:30*	*11/13/23 23:13*	*1*
Tetrachloro-m-xylene	*65*		*10 - 130*	*11/07/23 05:30*	*11/13/23 23:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:34	1
Arsenic	**0.00926**		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:34	1
Barium	**0.262**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:34	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:34	1
Cobalt	**0.000249**	**J B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:34	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:34	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:34	1
Nickel	**0.00270**	**J**	0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:34	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/10/23 16:41	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:34	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		11/07/23 18:18	11/07/23 23:05	1
Total Suspended Solids (USGS I-3765-85)	**66.0**		15.0	5.10	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-9R
Date Collected: 11/01/23 13:40
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.31**	**J**	10.0	3.10	ug/L			11/10/23 01:08	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 01:08	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 01:08	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 01:08	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 01:08	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 01:08	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 01:08	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 01:08	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 01:08	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 01:08	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 01:08	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 01:08	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 01:08	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 01:08	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 01:08	1
cis-1,2-Dichloroethene	**4.72**		1.00	0.210	ug/L			11/10/23 01:08	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 01:08	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 01:08	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 01:08	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 01:08	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 01:08	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 01:08	1
1,1-Dichloroethane	**0.572**	**J**	1.00	0.220	ug/L			11/10/23 01:08	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 01:08	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 01:08	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 01:08	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 01:08	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 01:08	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 01:08	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 01:08	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 01:08	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 01:08	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 01:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 01:08	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 01:08	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 01:08	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 01:08	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 01:08	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 01:08	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 01:08	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 01:08	1
Trichloroethene	**1.32**		1.00	0.430	ug/L			11/10/23 01:08	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 01:08	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 01:08	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 01:08	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 01:08	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/10/23 01:08*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-9R

Date Collected: 11/01/23 13:40
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-4

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 128*		*11/10/23 01:08*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/10/23 01:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:37	1
Arsenic	**0.00394**		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:37	1
Barium	**0.0425**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:37	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:37	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:37	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:37	1
Cobalt	**0.0149**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:37	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:37	1
Lead	**0.000440**	**J**	0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:37	1
Nickel	**0.0339**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:37	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:37	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:37	1
Thallium	**0.000523**	**J**	0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 19:37	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:37	1
Zinc	**0.00964**	**J**	0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		11/07/23 18:22	11/07/23 23:16	1
Total Suspended Solids (USGS I-3765-85)	**22.3**		3.75	1.28	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-13
Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 01:30	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 01:30	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 01:30	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 01:30	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 01:30	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 01:30	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 01:30	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 01:30	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 01:30	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 01:30	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 01:30	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 01:30	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 01:30	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 01:30	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 01:30	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 01:30	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 01:30	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 01:30	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 01:30	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 01:30	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 01:30	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 01:30	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 01:30	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 01:30	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 01:30	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 01:30	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 01:30	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 01:30	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 01:30	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 01:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 01:30	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 01:30	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 01:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 01:30	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 01:30	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 01:30	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 01:30	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 01:30	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 01:30	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 01:30	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 01:30	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 01:30	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 01:30	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 01:30	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 01:30	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 01:30	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/10/23 01:30*	*1*

Client Sample ID: MW-13

Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-5

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*108*		*80 - 128*		*11/10/23 01:30*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 01:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:41	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:41	1
Barium	**0.0279**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:41	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:41	1
Cadmium	**0.000169**	**J**	0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:41	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:41	1
Cobalt	**0.00284**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:41	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:41	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:41	1
Nickel	**0.00562**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:41	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:41	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:41	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 19:41	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:41	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.50**		1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-20
Date Collected: 11/01/23 12:48
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 01:52	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 01:52	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 01:52	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 01:52	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 01:52	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 01:52	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 01:52	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 01:52	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 01:52	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 01:52	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 01:52	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 01:52	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 01:52	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 01:52	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 01:52	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 01:52	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 01:52	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 01:52	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 01:52	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 01:52	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 01:52	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 01:52	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 01:52	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 01:52	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 01:52	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 01:52	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 01:52	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 01:52	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 01:52	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 01:52	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 01:52	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 01:52	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 01:52	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 01:52	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 01:52	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 01:52	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 01:52	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 01:52	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 01:52	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 01:52	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 01:52	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 01:52	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 01:52	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 01:52	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 01:52	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 01:52	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/10/23 01:52*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-20

Date Collected: 11/01/23 12:48
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-6

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 01:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/10/23 01:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:44	1
Arsenic	**0.00526**		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:44	1
Barium	**0.00988**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:44	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:44	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:44	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:44	1
Cobalt	**0.000741**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:44	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:44	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:44	1
Nickel	**0.00228**	**J**	0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:44	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:44	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:44	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 19:44	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:44	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**35.0**		7.50	2.55	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-21

Date Collected: 11/01/23 16:38
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 02:14	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 02:14	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 02:14	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 02:14	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 02:14	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 02:14	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 02:14	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 02:14	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 02:14	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 02:14	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 02:14	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 02:14	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 02:14	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 02:14	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 02:14	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 02:14	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 02:14	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 02:14	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 02:14	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 02:14	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 02:14	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 02:14	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 02:14	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 02:14	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 02:14	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 02:14	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 02:14	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 02:14	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 02:14	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 02:14	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 02:14	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 02:14	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 02:14	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 02:14	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 02:14	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 02:14	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 02:14	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 02:14	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 02:14	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 02:14	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 02:14	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 02:14	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 02:14	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 02:14	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 02:14	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 02:14	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/10/23 02:14*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-21

Date Collected: 11/01/23 16:38
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-7

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*80 - 128*		*11/10/23 02:14*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 02:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:48	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:48	1
Barium	**0.0329**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:48	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:48	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:48	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:48	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:48	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:48	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:48	1
Nickel	<0.00500		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:48	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:48	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:48	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 19:48	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:48	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	<1.88		1.88	0.638	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-23
Date Collected: 11/02/23 10:36
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 02:35	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 02:35	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 02:35	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 02:35	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 02:35	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 02:35	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 02:35	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 02:35	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 02:35	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 02:35	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 02:35	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 02:35	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 02:35	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 02:35	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 02:35	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 02:35	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 02:35	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 02:35	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 02:35	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 02:35	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 02:35	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 02:35	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 02:35	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 02:35	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 02:35	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 02:35	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 02:35	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 02:35	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 02:35	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 02:35	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 02:35	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 02:35	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 02:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 02:35	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 02:35	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 02:35	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 02:35	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 02:35	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 02:35	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 02:35	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 02:35	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 02:35	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 02:35	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 02:35	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 02:35	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 02:35	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*11/10/23 02:35*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-23

Date Collected: 11/02/23 10:36
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-8

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*80 - 128*		*11/10/23 02:35*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/10/23 02:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 19:51	1
Arsenic	**0.000925**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 19:51	1
Barium	**0.00990**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 19:51	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 19:51	1
Cadmium	**0.000128**	**J**	0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 19:51	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:51	1
Cobalt	**0.000476**	**J B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 19:51	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 19:51	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 19:51	1
Nickel	<0.00500		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 19:51	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 19:51	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 19:51	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 19:51	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 19:51	1
Zinc	**0.00958**	**J**	0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 19:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**28.8**		3.75	1.28	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-26
Date Collected: 11/01/23 14:19
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 02:57	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 02:57	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 02:57	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 02:57	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 02:57	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 02:57	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 02:57	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 02:57	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 02:57	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 02:57	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 02:57	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 02:57	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 02:57	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 02:57	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 02:57	1
cis-1,2-Dichloroethene	**0.273**	**J**	1.00	0.210	ug/L			11/10/23 02:57	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 02:57	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 02:57	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 02:57	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 02:57	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 02:57	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 02:57	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 02:57	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 02:57	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 02:57	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 02:57	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 02:57	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 02:57	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 02:57	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 02:57	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 02:57	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 02:57	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 02:57	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 02:57	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 02:57	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 02:57	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 02:57	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 02:57	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 02:57	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 02:57	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 02:57	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 02:57	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 02:57	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 02:57	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 02:57	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 02:57	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/10/23 02:57*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-26

Date Collected: 11/01/23 14:19
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-9

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*80 - 128*		*11/10/23 02:57*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/10/23 02:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:08	1
Arsenic	**0.00150**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:08	1
Barium	**0.0304**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:08	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:08	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:08	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:08	1
Cobalt	**0.00340**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:08	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:08	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:08	1
Nickel	**0.00569**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:08	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:08	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:08	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:08	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:08	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		11/07/23 18:26	11/07/23 23:27	1
Total Suspended Solids (USGS I-3765-85)	**31.5**		7.50	2.55	mg/L			11/06/23 11:51	1

Client Sample ID: MW-27

Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 03:19	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 03:19	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 03:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 03:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 03:19	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 03:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 03:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 03:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 03:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 03:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 03:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 03:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 03:19	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 03:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 03:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 03:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 03:19	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 03:19	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 03:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 03:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 03:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 03:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 03:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 03:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 03:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 03:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 03:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 03:19	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 03:19	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 03:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 03:19	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 03:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 03:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 03:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 03:19	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 03:19	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 03:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 03:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 03:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 03:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 03:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 03:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 03:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 03:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 03:19	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 03:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 03:19*	*1*

Client Sample ID: MW-27
Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-10
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*80 - 128*		*11/10/23 03:19*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 03:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:12	1
Arsenic	**0.000665**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:12	1
Barium	**0.113**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:12	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:12	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:12	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:12	1
Cobalt	**0.00139**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:12	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:12	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:12	1
Nickel	<0.00500		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:12	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:12	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:12	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:12	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:12	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.38**	**J**	1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-28
Date Collected: 11/01/23 17:12
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 03:41	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 03:41	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 03:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 03:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 03:41	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 03:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 03:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 03:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 03:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 03:41	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 03:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 03:41	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 03:41	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 03:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 03:41	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 03:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 03:41	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 03:41	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 03:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 03:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 03:41	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 03:41	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 03:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 03:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 03:41	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 03:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 03:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 03:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 03:41	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 03:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 03:41	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 03:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 03:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 03:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 03:41	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 03:41	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 03:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 03:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 03:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 03:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 03:41	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 03:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 03:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 03:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 03:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 03:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 03:41*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-28

Date Collected: 11/01/23 17:12
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-11

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 03:41*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 03:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:15	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:15	1
Barium	**0.0103**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:15	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:15	1
Cadmium	**0.000105**	**J**	0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:15	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:15	1
Cobalt	**0.00704**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:15	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:15	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:15	1
Nickel	**0.0168**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:15	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:15	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:15	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:15	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:15	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**19.9**		1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-29
Date Collected: 11/02/23 11:13
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 04:03	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 04:03	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 04:03	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 04:03	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 04:03	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 04:03	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 04:03	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 04:03	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 04:03	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 04:03	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 04:03	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 04:03	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 04:03	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 04:03	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 04:03	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 04:03	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 04:03	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 04:03	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 04:03	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 04:03	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 04:03	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 04:03	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 04:03	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 04:03	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 04:03	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 04:03	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 04:03	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 04:03	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 04:03	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 04:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 04:03	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 04:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 04:03	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 04:03	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 04:03	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 04:03	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 04:03	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 04:03	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 04:03	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 04:03	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 04:03	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 04:03	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 04:03	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 04:03	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 04:03	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 04:03	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 04:03*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-29

Date Collected: 11/02/23 11:13
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-12

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 04:03*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 04:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:22	1
Arsenic	**0.000703**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:22	1
Barium	**0.00759**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:22	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:22	1
Cadmium	**0.000133**	**J**	0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:22	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:22	1
Cobalt	**0.000413**	**J B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:22	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:22	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:22	1
Nickel	**0.00529**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:22	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:22	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:22	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:22	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**44.0**		7.50	2.55	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-34
Date Collected: 11/02/23 15:51
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 06:35	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 06:35	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 06:35	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 06:35	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 06:35	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 06:35	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 06:35	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 06:35	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 06:35	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 06:35	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 06:35	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 06:35	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 06:35	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 06:35	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 06:35	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 06:35	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 06:35	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 06:35	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 06:35	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 06:35	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 06:35	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 06:35	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 06:35	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 06:35	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 06:35	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 06:35	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 06:35	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 06:35	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 06:35	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 06:35	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 06:35	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 06:35	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 06:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 06:35	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 06:35	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 06:35	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 06:35	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 06:35	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 06:35	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 06:35	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 06:35	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 06:35	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 06:35	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 06:35	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 06:35	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 06:35	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 06:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 06:35*	*1*

Client Sample ID: MW-34
Date Collected: 11/02/23 15:51
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-13
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 06:35*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 06:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:25	1
Arsenic	**0.00124**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:25	1
Barium	**0.112**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:25	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:25	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:25	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:25	1
Cobalt	**0.000644**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:25	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:25	1
Lead	**0.000879**		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:25	1
Nickel	**0.00290**	**J**	0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:25	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:25	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:25	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:25	1
Vanadium	**0.00161**	**J**	0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:25	1
Zinc	**0.0190**	**J**	0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**115**		7.50	2.55	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: UD-2

Date Collected: 11/03/23 09:30
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.10	J	10.0	3.10	ug/L			11/10/23 04:24	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 04:24	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 04:24	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 04:24	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 04:24	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 04:24	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 04:24	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 04:24	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 04:24	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 04:24	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 04:24	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 04:24	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 04:24	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 04:24	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 04:24	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 04:24	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 04:24	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 04:24	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 04:24	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 04:24	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 04:24	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 04:24	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 04:24	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 04:24	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 04:24	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 04:24	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 04:24	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 04:24	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 04:24	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 04:24	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 04:24	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 04:24	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 04:24	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 04:24	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 04:24	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 04:24	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 04:24	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 04:24	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 04:24	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 04:24	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 04:24	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 04:24	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 04:24	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 04:24	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 04:24	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 04:24	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/10/23 04:24*	*1*

Client Sample ID: UD-2
Date Collected: 11/03/23 09:30
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-14
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*80 - 128*		*11/10/23 04:24*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 04:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:29	1
Arsenic	**0.000720**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:29	1
Barium	**0.0406**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:29	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:29	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:29	1
Chromium	**0.00254**	**J B**	0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:29	1
Cobalt	**0.000457**	**J B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:29	1
Copper	**0.00456**	**J**	0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:29	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:29	1
Nickel	**0.00707**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:29	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:29	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:29	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:29	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:29	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.38**	**J**	1.88	0.638	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: UD-3

Date Collected: 11/02/23 09:52
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 04:46	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 04:46	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 04:46	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 04:46	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 04:46	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 04:46	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 04:46	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 04:46	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 04:46	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 04:46	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 04:46	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 04:46	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 04:46	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 04:46	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 04:46	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 04:46	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 04:46	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 04:46	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 04:46	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 04:46	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 04:46	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 04:46	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 04:46	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 04:46	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 04:46	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 04:46	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 04:46	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 04:46	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 04:46	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 04:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 04:46	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 04:46	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 04:46	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 04:46	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 04:46	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 04:46	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 04:46	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 04:46	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 04:46	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 04:46	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 04:46	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 04:46	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 04:46	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 04:46	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 04:46	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 04:46	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 04:46*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: UD-3

Date Collected: 11/02/23 09:52
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-15

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 04:46*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 04:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:32	1
Arsenic	**0.000557**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:32	1
Barium	**0.0502**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:32	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:32	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:32	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:32	1
Cobalt	**0.00508**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:32	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:32	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:32	1
Nickel	**0.0140**		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:32	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:32	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:32	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:32	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:32	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.00**		1.88	0.638	mg/L			11/06/23 13:14	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-D1
Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 05:08	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 05:08	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 05:08	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 05:08	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 05:08	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 05:08	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 05:08	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 05:08	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 05:08	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 05:08	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 05:08	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 05:08	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 05:08	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 05:08	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 05:08	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 05:08	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 05:08	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 05:08	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 05:08	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 05:08	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 05:08	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 05:08	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 05:08	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 05:08	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 05:08	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 05:08	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 05:08	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 05:08	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 05:08	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 05:08	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 05:08	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 05:08	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 05:08	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 05:08	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 05:08	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 05:08	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 05:08	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 05:08	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 05:08	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 05:08	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 05:08	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 05:08	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 05:08	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 05:08	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 05:08	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 05:08	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 05:08*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-D1

Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-16

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 05:08*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 05:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:35	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:35	1
Barium	**0.0258**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:35	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:35	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:35	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:35	1
Cobalt	**0.00230**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:35	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:35	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:35	1
Nickel	**0.00448**	**J**	0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:35	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:35	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:35	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:35	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:35	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**3.63**		1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-D2
Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 05:30	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 05:30	1
Benzene	<0.500		0.500	0.220	ug/L			11/10/23 05:30	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 05:30	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 05:30	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 05:30	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 05:30	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 05:30	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 05:30	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 05:30	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 05:30	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 05:30	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/10/23 05:30	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 05:30	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 05:30	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/10/23 05:30	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 05:30	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 05:30	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 05:30	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 05:30	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 05:30	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 05:30	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/10/23 05:30	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 05:30	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 05:30	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 05:30	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 05:30	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 05:30	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 05:30	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 05:30	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 05:30	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 05:30	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 05:30	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 05:30	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 05:30	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 05:30	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 05:30	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/10/23 05:30	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 05:30	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 05:30	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 05:30	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 05:30	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 05:30	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 05:30	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 05:30	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 05:30	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*11/10/23 05:30*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-D2

Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-17

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*80 - 128*		*11/10/23 05:30*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/10/23 05:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 20:39	1
Arsenic	**0.000670**	**J**	0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 20:39	1
Barium	**0.116**		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 20:39	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 20:39	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 20:39	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:39	1
Cobalt	**0.00139**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 20:39	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 20:39	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 20:39	1
Nickel	<0.00500		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 20:39	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 20:39	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 20:39	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 20:39	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 20:39	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1.13**	**J**	1.88	0.638	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-24

Date Collected: 11/02/23 16:38
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/10/23 05:52	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/10/23 05:52	1
Benzene	**1.73**		0.500	0.220	ug/L			11/10/23 05:52	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/10/23 05:52	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/10/23 05:52	1
Bromoform	<5.00		5.00	0.780	ug/L			11/10/23 05:52	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/10/23 05:52	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/10/23 05:52	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/10/23 05:52	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/10/23 05:52	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/10/23 05:52	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/10/23 05:52	1
Chloroethane	**1.78**	**J**	4.00	0.790	ug/L			11/10/23 05:52	1
Chloroform	<3.00		3.00	1.30	ug/L			11/10/23 05:52	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/10/23 05:52	1
cis-1,2-Dichloroethene	**13.7**		1.00	0.210	ug/L			11/10/23 05:52	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/10/23 05:52	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/10/23 05:52	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/10/23 05:52	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/10/23 05:52	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/10/23 05:52	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/10/23 05:52	1
1,1-Dichloroethane	**2.04**		1.00	0.220	ug/L			11/10/23 05:52	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/10/23 05:52	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/10/23 05:52	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/10/23 05:52	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/10/23 05:52	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/10/23 05:52	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/10/23 05:52	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/10/23 05:52	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/10/23 05:52	1
Styrene	<1.00		1.00	0.370	ug/L			11/10/23 05:52	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/10/23 05:52	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/10/23 05:52	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/10/23 05:52	1
Toluene	<1.00		1.00	0.430	ug/L			11/10/23 05:52	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/10/23 05:52	1
trans-1,2-Dichloroethene	**0.835**	**J**	1.00	0.270	ug/L			11/10/23 05:52	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/10/23 05:52	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/10/23 05:52	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/10/23 05:52	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/10/23 05:52	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/10/23 05:52	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/10/23 05:52	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/10/23 05:52	1
Vinyl chloride	**1.37**		1.00	0.180	ug/L			11/10/23 05:52	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/10/23 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/10/23 05:52*	*1*

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-24

Date Collected: 11/02/23 16:38
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-18

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 128*		*11/10/23 05:52*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/10/23 05:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/14/23 12:38	1
Arsenic	**0.0113**		0.00200	0.000530	mg/L		11/07/23 09:30	11/14/23 12:38	1
Barium	**0.0460**		0.00200	0.000640	mg/L		11/07/23 09:30	11/14/23 12:38	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/14/23 12:38	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/14/23 12:38	1
Chromium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/14/23 12:38	1
Cobalt	**0.0137**	**B**	0.000500	0.000170	mg/L		11/07/23 09:30	11/14/23 12:38	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/15/23 11:06	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/14/23 12:38	1
Nickel	**0.0196**		0.00500	0.00190	mg/L		11/07/23 09:30	11/14/23 12:38	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/14/23 12:38	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/14/23 12:38	1
Thallium	**0.000692**	**J**	0.00100	0.000260	mg/L		11/07/23 09:30	11/14/23 12:38	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/14/23 12:38	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/14/23 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**40.5**		7.50	2.55	mg/L			11/06/23 11:51	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-36

Date Collected: 11/01/23 17:48
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/10/23 06:13	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.200	H	0.200	0.0780	mg/L			11/06/23 20:39	1
Sulfate	**2260**		100	42.0	mg/L			11/06/23 21:07	100

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.18**		0.500	0.180	mg/L		11/07/23 09:30	11/14/23 12:48	5
Manganese	**6.57**	**B**	0.0500	0.0180	mg/L		11/07/23 09:30	11/14/23 12:48	5

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: Trip Blank

Date Collected: 11/02/23 00:00
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/09/23 23:41	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/09/23 23:41	1
Benzene	<0.500		0.500	0.220	ug/L			11/09/23 23:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/09/23 23:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/09/23 23:41	1
Bromoform	<5.00		5.00	0.780	ug/L			11/09/23 23:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/09/23 23:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/09/23 23:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/09/23 23:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/09/23 23:41	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/09/23 23:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/09/23 23:41	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/09/23 23:41	1
Chloroform	<3.00		3.00	1.30	ug/L			11/09/23 23:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/09/23 23:41	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/09/23 23:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/09/23 23:41	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/09/23 23:41	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/09/23 23:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/09/23 23:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/09/23 23:41	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/09/23 23:41	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/09/23 23:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/09/23 23:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/09/23 23:41	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/09/23 23:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/09/23 23:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/09/23 23:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/09/23 23:41	1
Methylene Chloride	**3.31**	**J**	5.00	1.70	ug/L			11/09/23 23:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/09/23 23:41	1
m,p-Xylene	<2.00		2.00	0.380	ug/L			11/09/23 23:41	1
o-Xylene	<1.00		1.00	0.400	ug/L			11/09/23 23:41	1
Styrene	<1.00		1.00	0.370	ug/L			11/09/23 23:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/09/23 23:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/09/23 23:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/09/23 23:41	1
Toluene	<1.00		1.00	0.430	ug/L			11/09/23 23:41	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/09/23 23:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/09/23 23:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/09/23 23:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/09/23 23:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/09/23 23:41	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/09/23 23:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/09/23 23:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/09/23 23:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/09/23 23:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/09/23 23:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/09/23 23:41	1

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: Trip Blank
Date Collected: 11/02/23 00:00
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-20
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		11/09/23 23:41	1
Dibromofluoromethane (Surr)	106		80 - 128		11/09/23 23:41	1
Toluene-d8 (Surr)	96		80 - 120		11/09/23 23:41	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.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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: SEMCO Sanitary Landfill

Job ID: 310-268892-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-128)	(80-120)
310-268892-1	MW-19	102	105	95
310-268892-1 MS	MW-19	100	96	101
310-268892-1 MSD	MW-19	101	96	102
310-268892-2	MW-5	101	105	95
310-268892-3	MW-7	103	107	94
310-268892-4	MW-9R	103	104	96
310-268892-5	MW-13	99	108	95
310-268892-6	MW-20	100	105	96
310-268892-7	MW-21	100	113	94
310-268892-8	MW-23	98	114	93
310-268892-9	MW-26	99	113	93
310-268892-10	MW-27	102	107	95
310-268892-11	MW-28	102	105	94
310-268892-12	MW-29	102	105	95
310-268892-13	MW-34	102	105	94
310-268892-14	UD-2	101	107	94
310-268892-15	UD-3	102	105	95
310-268892-16	MW-D1	102	105	94
310-268892-17	MW-D2	104	106	94
310-268892-18	MW-24	102	105	95
310-268892-20	Trip Blank	97	106	96
LCS 310-405466/6	Lab Control Sample	99	98	101
LCS 310-405466/7	Lab Control Sample	103	105	95
MB 310-405466/5	Method Blank	101	101	96

Surrogate Legend

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

Method: 8081B - Organochlorine Pesticides (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(10-136)	(10-130)
310-268892-3	MW-7	52	65
LCS 310-405050/4-A	Lab Control Sample	73	64
LCSD 310-405050/5-A	Lab Control Sample Dup	64	68
MB 310-405050/1-A	Method Blank	78	63

Surrogate Legend

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

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

Lab Sample ID: MB 310-405466/5
Matrix: Water
Analysis Batch: 405466

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0		10.0	3.10	ug/L			11/09/23 22:36	1
Acrylonitrile	<10.0		10.0	2.20	ug/L			11/09/23 22:36	1
Benzene	<0.500		0.500	0.220	ug/L			11/09/23 22:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/09/23 22:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/09/23 22:36	1
Bromoform	<5.00		5.00	0.780	ug/L			11/09/23 22:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/09/23 22:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/09/23 22:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/09/23 22:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/09/23 22:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/09/23 22:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/09/23 22:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/09/23 22:36	1
Chloroform	<3.00		3.00	1.30	ug/L			11/09/23 22:36	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/09/23 22:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/09/23 22:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/09/23 22:36	1
1,2-Dibromo-3-Chloropropane	<1.20		1.20	1.20	ug/L			11/09/23 22:36	1
1,2-Dibromoethane (EDB)	<0.340		0.340	0.340	ug/L			11/09/23 22:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/09/23 22:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/09/23 22:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/09/23 22:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/09/23 22:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/09/23 22:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/09/23 22:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/09/23 22:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/09/23 22:36	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/09/23 22:36	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/09/23 22:36	1
Methylene Chloride	<5.00		5.00	1.70	ug/L			11/09/23 22:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/09/23 22:36	1
m,p-Xylene	<2.00		2.00	0.380	ug/L			11/09/23 22:36	1
o-Xylene	<1.00		1.00	0.400	ug/L			11/09/23 22:36	1
Styrene	<1.00		1.00	0.370	ug/L			11/09/23 22:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/09/23 22:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/09/23 22:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/09/23 22:36	1
Toluene	<1.00		1.00	0.430	ug/L			11/09/23 22:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/09/23 22:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/09/23 22:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/09/23 22:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/09/23 22:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/09/23 22:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/09/23 22:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/09/23 22:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/09/23 22:36	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/09/23 22:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/09/23 22:36	1

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

Lab Sample ID: MB 310-405466/5
Matrix: Water
Analysis Batch: 405466

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/09/23 22:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/09/23 22:36*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 128*		*11/09/23 22:36*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/09/23 22:36*	*1*

Lab Sample ID: LCS 310-405466/6
Matrix: Water
Analysis Batch: 405466

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	39.63		ug/L		99	50 - 150
Acrylonitrile	200	204.8		ug/L		102	50 - 150
Benzene	20.0	20.21		ug/L		101	73 - 122
Bromochloromethane	20.0	20.85		ug/L		104	68 - 132
Bromodichloromethane	20.0	19.55		ug/L		98	72 - 121
Bromoform	20.0	17.92		ug/L		90	55 - 129
2-Butanone (MEK)	40.0	35.85		ug/L		90	50 - 150
Carbon disulfide	20.0	20.16		ug/L		101	58 - 131
Carbon tetrachloride	20.0	20.15		ug/L		101	67 - 132
Chlorobenzene	20.0	20.01		ug/L		100	69 - 121
Chlorodibromomethane	20.0	19.63		ug/L		98	69 - 122
Chloroform	20.0	19.62		ug/L		98	72 - 120
cis-1,2-Dichloroethene	20.0	20.21		ug/L		101	74 - 120
cis-1,3-Dichloropropene	20.0	18.68		ug/L		93	71 - 126
1,2-Dibromo-3-Chloropropane	20.0	20.54		ug/L		103	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.99		ug/L		100	73 - 125
Dibromomethane	20.0	20.57		ug/L		103	72 - 123
1,2-Dichlorobenzene	20.0	21.04		ug/L		105	68 - 120
1,4-Dichlorobenzene	20.0	20.20		ug/L		101	67 - 120
1,1-Dichloroethane	20.0	20.01		ug/L		100	71 - 123
1,2-Dichloroethane	20.0	19.06		ug/L		95	70 - 124
1,1-Dichloroethene	20.0	19.89		ug/L		99	61 - 129
1,2-Dichloropropane	20.0	21.06		ug/L		105	73 - 121
Ethylbenzene	20.0	20.79		ug/L		104	69 - 122
2-Hexanone	40.0	38.36		ug/L		96	60 - 132
Iodomethane	20.0	15.83		ug/L		79	10 - 150
Methylene Chloride	20.0	20.74		ug/L		104	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	34.58		ug/L		86	62 - 130
Styrene	20.0	20.09		ug/L		100	67 - 125
1,1,2,2-Tetrachloroethane	20.0	18.14		ug/L		91	64 - 124
1,1,1,2-Tetrachloroethane	20.0	19.38		ug/L		97	68 - 123
Tetrachloroethene	20.0	19.32		ug/L		97	69 - 131
Toluene	20.0	19.38		ug/L		97	72 - 121
trans-1,4-Dichloro-2-butene	20.0	18.49		ug/L		92	48 - 150
trans-1,2-Dichloroethene	20.0	20.83		ug/L		104	68 - 125
trans-1,3-Dichloropropene	20.0	18.58		ug/L		93	68 - 124

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

Lab Sample ID: LCS 310-405466/6
Matrix: Water
Analysis Batch: 405466

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-Trichloroethane	20.0	20.24		ug/L		101	71 - 128
1,1,2-Trichloroethane	20.0	20.45		ug/L		102	70 - 124
Trichloroethene	20.0	19.95		ug/L		100	73 - 126
1,2,3-Trichloropropane	20.0	19.79		ug/L		99	64 - 125
Vinyl acetate	40.0	36.30		ug/L		91	50 - 150
Xylenes, Total	40.0	41.31		ug/L		103	68 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCS 310-405466/7
Matrix: Water
Analysis Batch: 405466

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	20.0	15.32		ug/L		77	24 - 150
Chloroethane	20.0	16.08		ug/L		80	51 - 137
Chloromethane	20.0	16.75		ug/L		84	37 - 150
Trichlorofluoromethane	20.0	17.31		ug/L		87	56 - 144
Vinyl chloride	20.0	16.83		ug/L		84	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 128*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: 310-268892-1 MS
Matrix: Water
Analysis Batch: 405466

Client Sample ID: MW-19
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 310-268892-1 MSD
Matrix: Water
Analysis Batch: 405466

Client Sample ID: MW-19
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 128*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-405050/1-A
Matrix: Water
Analysis Batch: 405774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	<0.0640		0.0640	0.0370	ug/L		11/07/23 05:30	11/13/23 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*10 - 136*	*11/07/23 05:30*	*11/13/23 20:46*	*1*
Tetrachloro-m-xylene	*63*		*10 - 130*	*11/07/23 05:30*	*11/13/23 20:46*	*1*

Lab Sample ID: LCS 310-405050/4-A
Matrix: Water
Analysis Batch: 405774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405050

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
beta-BHC			1.00	0.8593		ug/L		86	37 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*73*		*10 - 136*
Tetrachloro-m-xylene	*64*		*10 - 130*

Lab Sample ID: LCSD 310-405050/5-A
Matrix: Water
Analysis Batch: 405774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405050

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
beta-BHC			1.00	0.7869		ug/L		79	37 - 136	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*64*		*10 - 136*
Tetrachloro-m-xylene	*68*		*10 - 130*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-405262/3
Matrix: Water
Analysis Batch: 405262

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.200		0.200	0.0780	mg/L			11/06/23 11:04	1

Lab Sample ID: LCS 310-405262/4
Matrix: Water
Analysis Batch: 405262

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			2.00	2.135		mg/L		107	90 - 110		

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-405039/1-A
Matrix: Water
Analysis Batch: 405587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/07/23 09:30	11/09/23 18:53	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/07/23 09:30	11/09/23 18:53	1
Barium	<0.00200		0.00200	0.000640	mg/L		11/07/23 09:30	11/09/23 18:53	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/07/23 09:30	11/09/23 18:53	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/07/23 09:30	11/09/23 18:53	1
Chromium	0.002808	J	0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 18:53	1
Cobalt	0.0001780	J	0.000500	0.000170	mg/L		11/07/23 09:30	11/09/23 18:53	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/07/23 09:30	11/09/23 18:53	1
Lead	<0.000500		0.000500	0.000240	mg/L		11/07/23 09:30	11/09/23 18:53	1
Nickel	<0.00500		0.00500	0.00190	mg/L		11/07/23 09:30	11/09/23 18:53	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/07/23 09:30	11/09/23 18:53	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/07/23 09:30	11/09/23 18:53	1
Thallium	<0.00100		0.00100	0.000260	mg/L		11/07/23 09:30	11/09/23 18:53	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/07/23 09:30	11/09/23 18:53	1
Zinc	<0.0200		0.0200	0.00640	mg/L		11/07/23 09:30	11/09/23 18:53	1

Lab Sample ID: MB 310-405039/1-A
Matrix: Water
Analysis Batch: 405978

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.100		0.100	0.0360	mg/L		11/07/23 09:30	11/14/23 13:48	1

Lab Sample ID: LCS 310-405039/2-A
Matrix: Water
Analysis Batch: 405587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2000		mg/L		100	80 - 120
Arsenic	0.200	0.1970		mg/L		99	80 - 120
Barium	0.100	0.09322		mg/L		93	80 - 120
Beryllium	0.100	0.08889		mg/L		89	80 - 120
Cadmium	0.100	0.09082		mg/L		91	80 - 120
Chromium	0.100	0.09253		mg/L		93	80 - 120
Cobalt	0.100	0.09145		mg/L		91	80 - 120
Copper	0.200	0.1827		mg/L		91	80 - 120
Lead	0.200	0.1920		mg/L		96	80 - 120
Nickel	0.200	0.1914		mg/L		96	80 - 120
Selenium	0.400	0.3587		mg/L		90	80 - 120
Silver	0.100	0.09711		mg/L		97	80 - 120
Thallium	0.200	0.1651		mg/L		83	80 - 120
Vanadium	0.100	0.09156		mg/L		92	80 - 120
Zinc	0.200	0.1723		mg/L		86	80 - 120

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

Lab Sample ID: 310-268892-1 MS
Matrix: Water
Analysis Batch: 405587

Client Sample ID: MW-19
Prep Type: Total/NA
Prep Batch: 405039

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.00231		0.200	0.2381		mg/L		118	75 - 125
Arsenic	0.00138	J	0.200	0.2266		mg/L		113	75 - 125
Barium	0.390		0.100	0.5129		mg/L		123	75 - 125
Beryllium	0.000669	J	0.100	0.1024		mg/L		102	75 - 125
Cadmium	0.000555		0.100	0.1061		mg/L		106	75 - 125
Chromium	<0.00500		0.100	0.1030		mg/L		103	75 - 125
Cobalt	0.000666	B	0.100	0.09908		mg/L		98	75 - 125
Copper	<0.00500		0.200	0.2010		mg/L		100	75 - 125
Lead	0.00101		0.200	0.2094		mg/L		104	75 - 125
Nickel	0.00194	J	0.200	0.2033		mg/L		101	75 - 125
Selenium	0.00299	J	0.400	0.4170		mg/L		103	75 - 125
Silver	0.00123		0.100	0.1073		mg/L		106	75 - 125
Thallium	<0.00100	F2 F1	0.200	0.1110	F1	mg/L		47	75 - 125
Vanadium	<0.00500		0.100	0.1020		mg/L		102	75 - 125
Zinc	<0.0200		0.200	0.1993		mg/L		100	75 - 125

Lab Sample ID: 310-268892-1 MSD
Matrix: Water
Analysis Batch: 405587

Client Sample ID: MW-19
Prep Type: Total/NA
Prep Batch: 405039

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.00231		0.200	0.2331		mg/L		115	75 - 125	2	20
Arsenic	0.00138	J	0.200	0.2264		mg/L		113	75 - 125	0	20
Barium	0.390		0.100	0.5103		mg/L		120	75 - 125	1	20
Beryllium	0.000669	J	0.100	0.1005		mg/L		100	75 - 125	2	20
Cadmium	0.000555		0.100	0.1038		mg/L		103	75 - 125	2	20
Chromium	<0.00500		0.100	0.1021		mg/L		102	75 - 125	1	20
Cobalt	0.000666	B	0.100	0.09711		mg/L		96	75 - 125	2	20
Copper	<0.00500		0.200	0.1984		mg/L		99	75 - 125	1	20
Lead	0.00101		0.200	0.2079		mg/L		103	75 - 125	1	20
Nickel	0.00194	J	0.200	0.2009		mg/L		99	75 - 125	1	20
Selenium	0.00299	J	0.400	0.4191		mg/L		104	75 - 125	1	20
Silver	0.00123		0.100	0.1063		mg/L		105	75 - 125	1	20
Thallium	<0.00100	F2 F1	0.200	0.1393	F2 F1	mg/L		61	75 - 125	23	20
Vanadium	<0.00500		0.100	0.1014		mg/L		101	75 - 125	1	20
Zinc	<0.0200		0.200	0.1957		mg/L		98	75 - 125	2	20

Lab Sample ID: 310-268892-11 DU
Matrix: Water
Analysis Batch: 405587

Client Sample ID: MW-28
Prep Type: Total/NA
Prep Batch: 405039

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.00200		<0.00200		mg/L		NC	20
Arsenic	<0.00200		<0.00200		mg/L		NC	20
Barium	0.0103		0.01028		mg/L		0.6	20
Beryllium	<0.00100		<0.00100		mg/L		NC	20
Cadmium	0.000105	J	<0.000200		mg/L		NC	20
Chromium	<0.00500		<0.00500		mg/L		NC	20
Cobalt	0.00704	B	0.007966		mg/L		12	20

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

Lab Sample ID: 310-268892-11 DU
Matrix: Water
Analysis Batch: 405587

Client Sample ID: MW-28
Prep Type: Total/NA
Prep Batch: 405039

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	<0.00500		<0.00500		mg/L		NC	20
Lead	<0.000500		0.0002650	J	mg/L		NC	20
Nickel	0.0168		0.01723		mg/L		2	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Silver	<0.00100		<0.00100		mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	<0.00500		<0.00500		mg/L		NC	20
Zinc	<0.0200		<0.0200		mg/L		NC	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-741031/1-A
Matrix: Water
Analysis Batch: 741035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741031

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.00		1.00	0.231	mg/L		11/07/23 18:00	11/07/23 22:10	1

Lab Sample ID: LCS 500-741031/2-A
Matrix: Water
Analysis Batch: 741035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 741031

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.33	3.243		mg/L		97	80 - 120

Lab Sample ID: 310-268892-1 MS
Matrix: Water
Analysis Batch: 741035

Client Sample ID: MW-19
Prep Type: Total/NA
Prep Batch: 741031

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	<1.00		8.32	8.384		mg/L		101	75 - 125

Lab Sample ID: 310-268892-1 MSD
Matrix: Water
Analysis Batch: 741035

Client Sample ID: MW-19
Prep Type: Total/NA
Prep Batch: 741031

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<1.00		8.32	8.659		mg/L		104	75 - 125	3	20

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

Lab Sample ID: MB 310-404992/1
Matrix: Water
Analysis Batch: 404992

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	1.70	mg/L			11/06/23 11:11	1

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

Lab Sample ID: LCS 310-404992/2
Matrix: Water
Analysis Batch: 404992

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	90.00		mg/L		90	75 - 116		

Lab Sample ID: MB 310-404997/1
Matrix: Water
Analysis Batch: 404997

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	1.70	mg/L			11/06/23 11:51	1

Lab Sample ID: LCS 310-404997/2
Matrix: Water
Analysis Batch: 404997

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	95.00		mg/L		95	75 - 116		

Lab Sample ID: 310-268892-18 DU
Matrix: Water
Analysis Batch: 404997

Client Sample ID: MW-24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Suspended Solids	40.5			37.00		mg/L				9	35

Lab Sample ID: MB 310-405010/1
Matrix: Water
Analysis Batch: 405010

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	1.70	mg/L			11/06/23 13:14	1

Lab Sample ID: LCS 310-405010/2
Matrix: Water
Analysis Batch: 405010

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

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

QC Association Summary

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

GC/MS VOA

Analysis Batch: 405466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	8260D	
310-268892-2	MW-5	Total/NA	Water	8260D	
310-268892-3	MW-7	Total/NA	Water	8260D	
310-268892-4	MW-9R	Total/NA	Water	8260D	
310-268892-5	MW-13	Total/NA	Water	8260D	
310-268892-6	MW-20	Total/NA	Water	8260D	
310-268892-7	MW-21	Total/NA	Water	8260D	
310-268892-8	MW-23	Total/NA	Water	8260D	
310-268892-9	MW-26	Total/NA	Water	8260D	
310-268892-10	MW-27	Total/NA	Water	8260D	
310-268892-11	MW-28	Total/NA	Water	8260D	
310-268892-12	MW-29	Total/NA	Water	8260D	
310-268892-13	MW-34	Total/NA	Water	8260D	
310-268892-14	UD-2	Total/NA	Water	8260D	
310-268892-15	UD-3	Total/NA	Water	8260D	
310-268892-16	MW-D1	Total/NA	Water	8260D	
310-268892-17	MW-D2	Total/NA	Water	8260D	
310-268892-18	MW-24	Total/NA	Water	8260D	
310-268892-19	MW-36	Total/NA	Water	8260D	
310-268892-20	Trip Blank	Total/NA	Water	8260D	
MB 310-405466/5	Method Blank	Total/NA	Water	8260D	
LCS 310-405466/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-405466/7	Lab Control Sample	Total/NA	Water	8260D	
310-268892-1 MS	MW-19	Total/NA	Water	8260D	
310-268892-1 MSD	MW-19	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 405050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-3	MW-7	Total/NA	Water	3510C	
MB 310-405050/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-405050/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-405050/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 405774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-3	MW-7	Total/NA	Water	8081B	405050
MB 310-405050/1-A	Method Blank	Total/NA	Water	8081B	405050
LCS 310-405050/4-A	Lab Control Sample	Total/NA	Water	8081B	405050
LCSD 310-405050/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	405050

HPLC/IC

Analysis Batch: 405262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-19	MW-36	Total/NA	Water	9056A	
310-268892-19	MW-36	Total/NA	Water	9056A	
MB 310-405262/3	Method Blank	Total/NA	Water	9056A	
LCS 310-405262/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 405039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	3005A	
310-268892-2	MW-5	Total/NA	Water	3005A	
310-268892-3	MW-7	Total/NA	Water	3005A	
310-268892-4	MW-9R	Total/NA	Water	3005A	
310-268892-5	MW-13	Total/NA	Water	3005A	
310-268892-6	MW-20	Total/NA	Water	3005A	
310-268892-7	MW-21	Total/NA	Water	3005A	
310-268892-8	MW-23	Total/NA	Water	3005A	
310-268892-9	MW-26	Total/NA	Water	3005A	
310-268892-10	MW-27	Total/NA	Water	3005A	
310-268892-11	MW-28	Total/NA	Water	3005A	
310-268892-12	MW-29	Total/NA	Water	3005A	
310-268892-13	MW-34	Total/NA	Water	3005A	
310-268892-14	UD-2	Total/NA	Water	3005A	
310-268892-15	UD-3	Total/NA	Water	3005A	
310-268892-16	MW-D1	Total/NA	Water	3005A	
310-268892-17	MW-D2	Total/NA	Water	3005A	
310-268892-18	MW-24	Total/NA	Water	3005A	
310-268892-19	MW-36	Total/NA	Water	3005A	
MB 310-405039/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-405039/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-268892-1 MS	MW-19	Total/NA	Water	3005A	
310-268892-1 MSD	MW-19	Total/NA	Water	3005A	
310-268892-11 DU	MW-28	Total/NA	Water	3005A	

Analysis Batch: 405587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	6020B	405039
310-268892-2	MW-5	Total/NA	Water	6020B	405039
310-268892-3	MW-7	Total/NA	Water	6020B	405039
310-268892-4	MW-9R	Total/NA	Water	6020B	405039
310-268892-5	MW-13	Total/NA	Water	6020B	405039
310-268892-6	MW-20	Total/NA	Water	6020B	405039
310-268892-7	MW-21	Total/NA	Water	6020B	405039
310-268892-8	MW-23	Total/NA	Water	6020B	405039
310-268892-9	MW-26	Total/NA	Water	6020B	405039
310-268892-10	MW-27	Total/NA	Water	6020B	405039
310-268892-11	MW-28	Total/NA	Water	6020B	405039
310-268892-12	MW-29	Total/NA	Water	6020B	405039
310-268892-13	MW-34	Total/NA	Water	6020B	405039
310-268892-14	UD-2	Total/NA	Water	6020B	405039
310-268892-15	UD-3	Total/NA	Water	6020B	405039
310-268892-16	MW-D1	Total/NA	Water	6020B	405039
310-268892-17	MW-D2	Total/NA	Water	6020B	405039
MB 310-405039/1-A	Method Blank	Total/NA	Water	6020B	405039
LCS 310-405039/2-A	Lab Control Sample	Total/NA	Water	6020B	405039
310-268892-1 MS	MW-19	Total/NA	Water	6020B	405039
310-268892-1 MSD	MW-19	Total/NA	Water	6020B	405039
310-268892-11 DU	MW-28	Total/NA	Water	6020B	405039

Metals

Analysis Batch: 405720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	6020B	405039
310-268892-2	MW-5	Total/NA	Water	6020B	405039
310-268892-3	MW-7	Total/NA	Water	6020B	405039

Analysis Batch: 405968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-18	MW-24	Total/NA	Water	6020B	405039
310-268892-19	MW-36	Total/NA	Water	6020B	405039

Analysis Batch: 405978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-405039/1-A	Method Blank	Total/NA	Water	6020B	405039

Analysis Batch: 406110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-18	MW-24	Total/NA	Water	6020B	405039

General Chemistry

Analysis Batch: 404992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-2	MW-5	Total/NA	Water	I-3765-85	
MB 310-404992/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-404992/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 404997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	I-3765-85	
310-268892-3	MW-7	Total/NA	Water	I-3765-85	
310-268892-4	MW-9R	Total/NA	Water	I-3765-85	
310-268892-5	MW-13	Total/NA	Water	I-3765-85	
310-268892-9	MW-26	Total/NA	Water	I-3765-85	
310-268892-10	MW-27	Total/NA	Water	I-3765-85	
310-268892-11	MW-28	Total/NA	Water	I-3765-85	
310-268892-16	MW-D1	Total/NA	Water	I-3765-85	
310-268892-17	MW-D2	Total/NA	Water	I-3765-85	
310-268892-18	MW-24	Total/NA	Water	I-3765-85	
MB 310-404997/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-404997/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-268892-18 DU	MW-24	Total/NA	Water	I-3765-85	

Analysis Batch: 405010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-6	MW-20	Total/NA	Water	I-3765-85	
310-268892-7	MW-21	Total/NA	Water	I-3765-85	
310-268892-8	MW-23	Total/NA	Water	I-3765-85	
310-268892-12	MW-29	Total/NA	Water	I-3765-85	
310-268892-13	MW-34	Total/NA	Water	I-3765-85	
310-268892-14	UD-2	Total/NA	Water	I-3765-85	
310-268892-15	UD-3	Total/NA	Water	I-3765-85	
MB 310-405010/1	Method Blank	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 405010 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-405010/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 741031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	9030B	
310-268892-3	MW-7	Total/NA	Water	9030B	
310-268892-4	MW-9R	Total/NA	Water	9030B	
310-268892-9	MW-26	Total/NA	Water	9030B	
MB 500-741031/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-741031/2-A	Lab Control Sample	Total/NA	Water	9030B	
310-268892-1 MS	MW-19	Total/NA	Water	9030B	
310-268892-1 MSD	MW-19	Total/NA	Water	9030B	

Analysis Batch: 741035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-268892-1	MW-19	Total/NA	Water	9034	741031
310-268892-3	MW-7	Total/NA	Water	9034	741031
310-268892-4	MW-9R	Total/NA	Water	9034	741031
310-268892-9	MW-26	Total/NA	Water	9034	741031
MB 500-741031/1-A	Method Blank	Total/NA	Water	9034	741031
LCS 500-741031/2-A	Lab Control Sample	Total/NA	Water	9034	741031
310-268892-1 MS	MW-19	Total/NA	Water	9034	741031
310-268892-1 MSD	MW-19	Total/NA	Water	9034	741031

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-19
Date Collected: 11/02/23 11:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 00:03
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:00
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405720	A6US	EET CF	11/10/23 16:34
Total/NA	Prep	9030B			741031	CLB	EET CHI	11/07/23 18:07 - 11/07/23 18:11 [1]
Total/NA	Analysis	9034		1	741035	CLB	EET CHI	11/07/23 22:32 - 11/07/23 22:43 [1]
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-5
Date Collected: 11/01/23 16:00
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 00:25
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:31
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405720	A6US	EET CF	11/10/23 16:38
Total/NA	Analysis	I-3765-85		1	404992	DGU1	EET CF	11/06/23 11:11

Client Sample ID: MW-7
Date Collected: 11/02/23 12:50
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 00:47
Total/NA	Prep	3510C			405050	Y6AF	EET CF	11/07/23 05:30
Total/NA	Analysis	8081B		1	405774	BW2O	EET CF	11/13/23 23:13
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:34
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405720	A6US	EET CF	11/10/23 16:41
Total/NA	Prep	9030B			741031	CLB	EET CHI	11/07/23 18:18 - 11/07/23 18:22 [1]
Total/NA	Analysis	9034		1	741035	CLB	EET CHI	11/07/23 23:05 - 11/07/23 23:16 [1]
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-9R
Date Collected: 11/01/23 13:40
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 01:08
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:37

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-9R
Date Collected: 11/01/23 13:40
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	9030B			741031	CLB	EET CHI	11/07/23 18:22 - 11/07/23 18:26 [1]
Total/NA	Analysis	9034		1	741035	CLB	EET CHI	11/07/23 23:16 - 11/07/23 23:27 [1]
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-13
Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 01:30
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:41
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-20
Date Collected: 11/01/23 12:48
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 01:52
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:44
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: MW-21
Date Collected: 11/01/23 16:38
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 02:14
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:48
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: MW-23
Date Collected: 11/02/23 10:36
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 02:35
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 19:51
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-26
Date Collected: 11/01/23 14:19
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 02:57
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:08
Total/NA	Prep	9030B			741031	CLB	EET CHI	11/07/23 18:26 - 11/07/23 18:30 [1]
Total/NA	Analysis	9034		1	741035	CLB	EET CHI	11/07/23 23:27 - 11/07/23 23:39 [1]
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-27
Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 03:19
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:12
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-28
Date Collected: 11/01/23 17:12
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 03:41
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:15
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-29
Date Collected: 11/02/23 11:13
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 04:03
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:22
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: MW-34
Date Collected: 11/02/23 15:51
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 06:35
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:25

Lab Chronicle

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Client Sample ID: MW-34
Date Collected: 11/02/23 15:51
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: UD-2
Date Collected: 11/03/23 09:30
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 04:24
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:29
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: UD-3
Date Collected: 11/02/23 09:52
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 04:46
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:32
Total/NA	Analysis	I-3765-85		1	405010	DGU1	EET CF	11/06/23 13:14

Client Sample ID: MW-D1
Date Collected: 11/02/23 14:54
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 05:08
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:35
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-D2
Date Collected: 11/02/23 13:53
Date Received: 11/03/23 16:30

Lab Sample ID: 310-268892-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 05:30
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405587	A6US	EET CF	11/09/23 20:39
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Lab Chronicle

Client: SCS Engineers
Job ID: 310-268892-1
Project/Site: SEMCO Sanitary Landfill

Client Sample ID: MW-24
Lab Sample ID: 310-268892-18
Date Collected: 11/02/23 16:38
Matrix: Water
Date Received: 11/03/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 05:52
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	405968	A6US	EET CF	11/14/23 12:38
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		1	406110	A6US	EET CF	11/15/23 11:06
Total/NA	Analysis	I-3765-85		1	404997	DGU1	EET CF	11/06/23 11:51

Client Sample ID: MW-36
Lab Sample ID: 310-268892-19
Date Collected: 11/01/23 17:48
Matrix: Water
Date Received: 11/03/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/10/23 06:13
Total/NA	Analysis	9056A		1	405262	QTZ5	EET CF	11/06/23 20:39
Total/NA	Analysis	9056A		100	405262	QTZ5	EET CF	11/06/23 21:07
Total/NA	Prep	3005A			405039	DHM5	EET CF	11/07/23 09:30
Total/NA	Analysis	6020B		5	405968	A6US	EET CF	11/14/23 12:48

Client Sample ID: Trip Blank
Lab Sample ID: 310-268892-20
Date Collected: 11/02/23 00:00
Matrix: Water
Date Received: 11/03/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	405466	WSE8	EET CF	11/09/23 23:41

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

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

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 310-268892-1
Project/Site: SEMCO Sanitary Landfill

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D		Water	m,p-Xylene
8260D		Water	o-Xylene

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-29-24
Georgia	State	N/A	04-29-24
Georgia (DW)	State	939	04-29-24
Hawaii	State	NA	04-29-24
Illinois	NELAP	IL00035	04-29-24
Indiana	State	C-IL-02	04-29-24
Iowa	State	082	05-01-24
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	04-29-24
Kentucky (WW)	State	KY90023	12-31-23
Louisiana (All)	NELAP	02046	06-30-23 *
Mississippi	State	NA	04-29-24
North Carolina (WW/SW)	State	291	12-31-23
North Dakota	State	R-194	04-29-24
South Carolina	State	77001003	04-29-24
USDA	US Federal Programs	P330-18-00018	02-11-24
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	04-29-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: SCS Engineers
Project/Site: SEMCO Sanitary Landfill

Job ID: 310-268892-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
9056A	Anions, Ion Chromatography	SW846	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CHI
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
3005A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

Protocol References:

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

eurofins | Environment Testing America

310-268892 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11/3/23 | TIME 1630 | Received By: EM

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 1 of 3

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

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

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

MW-7, MW-19, MW-34, UD-3, MW-24

Temperature Record

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

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

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

Uncorrected Temp (°C): 1.1 | Corrected Temp (°C): 1.1

Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

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Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11/3/23 | TIME 1630 | Received By: EM

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

Condition of Cooler/Containers

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

Multiple Coolers? ☒ Yes ☐ No *If yes:* Cooler # 2 of 3

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

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

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

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

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

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

Uncorrected Temp (°C): 1.1 | Corrected Temp (°C): 1.1

Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11/3/23 | TIME 1630 | Received By: EM

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

Condition of Cooler/Containers

Sample(s) received in Cooler?	☒ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☒ Yes	☐ No	*If yes:* Cooler # 3 of 3
Cooler Custody Seals Present?	☐ Yes	☒ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☒ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☒ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

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

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

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

Uncorrected Temp (°C): -0.2 | Corrected Temp (°C): -0.2

Sample Container Temperature

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

Exceptions Noted

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

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

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

Additional Comments

TestAmerica

704 Enterprise Drive
Cedar Falls, Iowa 50613

319.277.2401 (phone)
515.792.7989 (fax)

TestAmerica Des Moines SC
214

SAMPLER: Konner
SITE NAME: SEMCO Sanitary Landfill
ADDRESS:
CITY/STATE/ZIP:
TELEPHONE NUMBER: Fax:
SAMPLED BY- (PRINT NAME) Konner Roth
SIGNATURE: Konner Roth

REPORT TO:
NAME: Nathan Ohrt
COMPANY NAME: SCS Engineers
PROJECT NAME: SEMCO (2nd 2023 semi-annual)
PROJECT NUMBER: 27223215.24
ADDRESS: 1690 All State Court, Suite 100
CITY/STATE/ZIP: West Des Moines, IA 50265

								Preservative								Matrix						Analyze For:																			
Sample ID	# of Containers Ordered	Date Sampled	Time Sampled	# of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO_3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H_2SO_4 Plastic (Yellow & White Label)	H_2SO_4 Glass (Yellow & White Label)	None (Black & White Label)	Trip Blank	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Trip Blank	Appendix I	beta-BHC	Total Suspended Solids	Sulfide	Natural Attenuation*	Vinyl Chloride													Trip Blank
MW-19		11-2	1150		X			X								X						X		X	X														
MW-5		11-1-23	1600		X			X								X						X		X															
MW-7		11-2	1250		X			X								X						X	X	X	X														
MW-9R		11-2-23	1340		X			X								X						X		X	X														
MW-13		11-2	1454		X			X								X						X		X															
MW-14								X								X						X		X															
MW-20		11-1-23	1248		X			X								X						X		X															
MW-21		11-1-23	1638		X			X								X						X		X															
MW-23		11-2	1036		X			X								X						X		X															
MW-25								X								X						X		X															
MW-26		11-1-23	1419		X			X								X						X		X	X														
MW-27		11-2	1353		X			X								X						X		X															
MW-28		11-1-23	1712		X			X								X						X		X															
MW-29		11-2	1113		X			X								X						X		X															
MW-34		11-2	1551		X			X								X						X		X															
UD-2	11-3-23	11-3	0920		X			X								X						X		X															
UD-3		11-2-23	0952					X								X						X		X															
MW-D1		11-2	1454		X			X								X						X		X															
MW-D2		11-2	1353		X			X								X						X		X															
MW-24		11-2	1638		X			X								X						X		X															
MW-36		11-1-23	1748		X			X								X										X	X												
Trip Blank																					X																		X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Relinquished by:	Date:	Time:
Konner Roth	11-3-23	1400						

Shipped Via:

Comments:

Shipped Via:

* - Natural Attenuation includes nitrate, manganese, iron, and sulfate.

Received for lab by: EM Date: 11/3/23 Time: 1630

Temperature Upon Receipt:

Laboratory Comments: (1) For Appendix I and II analysis, report to the reporting limits, not the detection limits. Make sure that the reporting limits are below the EPA's MCLs.
(2) For analysis other than Appendix I and II, report to the detection limits. Please make sure that the detection limits are below the EPA's MCLs.
(3) In the "Result" column for all EDD files, when non-detect, please report "<" the reporting limits or the detection limits instead of indicating with "ND"

C:\Users\E3WA\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\E0U7V6LL\COC 2nd 2023 semi-annual order

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

Chain of Custody Record

eurofins

Client Information (Sub Contract Lab)	Sampler	Lab PM: Liechti, Meredith L	Carrier Tracking No(s)	COC No: 310-67145 1
Client Contact: Shipping/Receiving	Phone	E-Mail: meredith liechti@et.eurofinsus com	State of Origin: Iowa	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): State Program - Iowa		Job #: 310-268892-1
Address: 2417 Bond Street, ,	Due Date Requested: 11/16/2023			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484	PO #:			
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	WO #:			
Email:	310-268892 COC			
Project Name: SEMCO Sanitary Landfill	Project #: 31001976			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K EDTA, L - EDA, M Hexane, N None, O AsNaO2, P - Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030B Sulfide, Acid soluble and Insoluble	Total Number of containers	Special Instructions/Note:
			Preservation Code						
MW-19 (310-268892-1)	11/2/23	11 50 Central		Water			X	1	
MW-7 (310-268892-3)	11/2/23	12 50 Central		Water			X	1	
MW-9R (310-268892-4)	11/1/23	13 40 Central		Water			X	1	
MW-26 (310-268892-9)	11/1/23	14 19 Central		Water			X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing North Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing North Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing North Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing North Central LLC

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/6/23 1610			11/7/23 0935	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.8-2.7

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-268892-1

Login Number: 268892
List Number: 1
Creator: Costello, Mackenzie K

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.	False	No vials received for MW-36.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-268892-1

Login Number: 268892
List Number: 2
Creator: Scott, Sherri L

List Source: Eurofins Chicago
List Creation: 11/07/23 02:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7
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.	True	

Appendix B-2
Data Validation Documentation

Completed by: Nathan Ohrt
Date of Sampling: 5/9-11/2023
Lab Report Date: 5/31/2023
Site Name: Southeast Iowa Multi-County Sanitary Landfill
Project Type: 1st 2023 Semi-Annual HMSP
Lab Report Number: 310-255788

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature		X		Samples MW-7 and MW-29 were received outside of temperature criteria; analysis was performed with client approval.
Preservation		X		Samples MW-7, MW-24, and UD-3 were received with insufficient preservation; the samples were preserved to the appropriate pH by the laboratory.
Condition	X			
Case Narrative	X			
Holding Times		X		Reanalysis of MW-24 was performed outside of the analytical holding time due to nitrate interference.
Analytical Sensitivity and Blanks				
Method Blank Detections		X		Multiple analytes were detected above the MDL; the analytes were below the reporting limit so re-analysis was not performed.
Trip Blank Detections		X		Vinyl chloride was detected at a J flag concentration.
Accuracy				
ICV/CCV		X		ICVs and CCVs for multiple analytes were above the upper control limits; either the affected samples were non-detect or the associated LCSs passed using CCV criteria, so the data was reported.
LCS/LCSD		X		LCSs for multiple analytes were outside control limits; the analytes were biased high in the LCS and were not detected in the associated samples so the data was reported.
MS/MSD		X		Insufficient sample volumes were available to perform MS/MSDs associated with multiple preparation batches.
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			Concentrations for sample MW-5 and duplicate sample MW-D1 were <50% RPD for analyzed parameters. Concentrations for sample MW-13 and duplicate sample MW-D2 were <50% RPD for analyzed parameters with the exceptions of Barium (154%), Cobalt (118%), Nickel (94%), and Thallium (66%).

Completed by: Nathan Ohrt
Date of Sampling: 11/1-3/2023
Lab Report Date: 11/16/2023
Site Name: Southeast Iowa Multi-County Sanitary Landfill
Project Type: 2nd 2023 Semi-Annual HMSP
Lab Report Number: 310-268892

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature	X			
Preservation	X			
Condition	X			
Case Narrative	X			
Holding Times		X		MW-36 received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time.
Analytical Sensitivity and Blanks				
Method Blank Detections	X			No detections.
Trip Blank Detections		X		Methylene chloride was detected at a J flag concentration.
Accuracy				
ICV/CCV		X		CCVs for chloroethane and Endosulfan I were above the upper control limits; either the affected samples were non-detect or the associated LCSs passed using CCV criteria, so the data was reported.
LCS/LCSD	X			
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			Concentrations for sample MW-13 and duplicate sample MW-D1 and concentrations for sample MW-27 and duplicate sample MW-D2 were <50% RPD for analyzed parameters.

Appendix C-1
Summary of Groundwater Chemistry – HMSP

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	1/28/2008	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.006	N/A	< 0.006	< 0.006	< 0.012	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00834	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.00695	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	0.00695	< 0.006	N/A	N/A	N/A
	2/24/2010	N/A	< 0.018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.018	< 0.018	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.018	N/A	N/A	N/A
	4/13/2010	< 0.006	< 0.006	< 0.006	< 0.006	0.0071	0.0137	< 0.006	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.0137	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	0.0137	< 0.006	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A
	10/21/2010	< 0.006	0.00987	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	0.00645	< 0.006	< 0.006	< 0.006	0.00987	< 0.006	N/A	N/A	N/A
	10/21/2010	N/A	0.0201	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0201	N/A	N/A	N/A	N/A
	3/22/2011	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A
	3/22/2011	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A
	4/10/2012	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.024	N/A	N/A	N/A
	8/16/2012	< 0.006	0.0121	N/A	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	< 0.006	< 0.006	N/A	N/A	< 0.006	0.0121	0.00617	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.006	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	0.0069	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	0.00763	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.006	0.00428	< 0.006	< 0.006	< 0.006	0.00225	< 0.006	0.00178	0.00375	0.00131	0.00517	< 0.006	< 0.006	< 0.006	0.00428	0.000825	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A
	3/13/2014	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A
	9/29/2014	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	0.000332*	< 0.001	< 0.001	0.000489	0.000555	< 0.001	0.000299	< 0.001	N/A	0.000225	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000713*	< 0.001	< 0.001	< 0.001	0.000687*	0.00024*	< 0.001	< 0.001	N/A	**0.00249**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	0.000481*	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	0.000671*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	0.0016*	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	N/A	N/A	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	N/A	< 0.003	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	0.00092*	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000815*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 0.002	N/A	< 0.002	0.000776*	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.000706*	< 0.002	< 0.002	< 0.002	0.000753*	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	10/4/2022	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	5/9/2023	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002
	5/9/2023	N/A	N/A	< 0.002	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	**0.00231**	N/A	**0.0029**	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
Arsenic, mg/L (CAS NO - 7440-38-2)	1/28/2008	0.00223	N/A	0.0106	0.0153	0.00527	0.0284	0.00196	N/A	N/A	N/A	0.00939	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.001	N/A	0.0082	0.00836	< 0.001	< 0.001	0.00245	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	0.0022	N/A	0.0109	0.0249	0.00308	0.00503	0.00341	N/A	N/A	N/A	0.00335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0107	N/A	0.0158	0.0147	0.00619	0.0209	0.00552	N/A	N/A	N/A	0.0245	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.0188	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.001	N/A	0.0133	0.0139	0.00404	0.00368	0.00257	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.00293	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.00845	0.0295	0.00192	0.00119	0.00258	N/A	N/A	0.0156	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.001	N/A	0.00855	0.0165	0.00211	0.00707	0.00452	N/A	N/A	0.0106	0.00236	N/A	N/A	N/A	N/A	N/A	N/A	< 0.003	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00901	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	0.0038	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.00642	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00637	0.548	< 0.001	0.00642	0.0113	N/A	N/A	N/A
	2/24/2010	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.0298	< 0.001	< 0.004	< 0.004	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00453	N/A	N/A	N/A
	4/13/2010	< 0.002	< 0.04	0.0191	0.061	< 0.008	0.00604	0.00793	N/A	N/A	< 0.024	0.00432	0.00321	0.041	< 0.001	< 0.04	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.00712	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	0.02	< 0.002	< 0.02	< 0.01	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	10/21/2010	< 0.001	< 0.012	0.0112	< 0.001	0.00177	< 0.002	0.0102	N/A	N/A	< 0.002	0.0144	< 0.001	0.0122	< 0.001	< 0.012	0.003	N/A	N/A	N/A
	10/21/2010	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A
	3/22/2011	< 0.001	< 0.004	0.0151	0.0242	0.0101	0.00577	0.0189	N/A	N/A	< 0.003	0.00475	< 0.001	0.0328	< 0.001	< 0.008	< 0.004	N/A	< 0.003	N/A
	3/22/2011	N/A	< 0.008	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.0182	N/A	N/A	N/A	N/A	N/A	0.0183	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.001	< 0.001	0.0182	0.0216	0.0111	0.00332	0.0143	N/A	N/A	0.00218	0.0136	N/A	0.0286	< 0.001	< 0.001	0.00327	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.001	0.035	0.012	0.0154	< 0.002	0.0482	< 0.001	N/A	N/A	< 0.001	< 0.002	0.00841	< 0.002	< 0.001	0.035	< 0.004	N/A	< 0.004	N/A
	4/10/2012	N/A	N/A	0.00935	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	7/27/2012	N/A	0.0138	N/A	N/A	N/A	0.00386	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0138	N/A	N/A	N/A	N/A
	8/16/2012	< 0.001	0.00343	N/A	0.0144	0.0081	0.00324	N/A	N/A	N/A	0.0036	0.00461	N/A	N/A	< 0.001	0.00343	0.00348	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.0025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	0.0132	N/A	N/A	0.0411	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.001	< 0.001	0.0119	0.00903	0.00523	0.0023	0.0149	< 0.001	< 0.001	< 0.001	0.00198	< 0.001	0.0147	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.00201	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.00119	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.0011	0.0274	0.0121	0.014	0.0079	0.00526	0.00904	0.0046	0.00673	0.00169	0.00661	0.00506	0.0268	0.00319	0.0274	0.0177	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00123	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.001	< 0.001	0.0105	0.00687	0.00973	0.00166	0.00694	N/A	N/A	0.000526	0.0039	0.00267	0.00932	< 0.001	< 0.001	0.000704	N/A	< 0.002	N/A
	3/13/2014	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	9/29/2014	0.000853	0.0021	0.0117	0.00771	0.00757	N/A	0.0099	N/A	N/A	< 0.001	0.00433	0.00291	0.0221	< 0.001	0.0021	0.00322	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.002	**0.00271**	0.00286	0.0754	0.00265	0.00143	0.00582	< 0.002	N/A	0.00207	0.00818	0.00464	0.0294	< 0.002	**0.00271**	< 0.002	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.00281	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.002	< 0.002	**0.00319**	**0.0295**	0.00184*	**0.00411**	**0.0085**	0.0038	N/A	< 0.002	**0.00744**	**0.0038**	**0.0158**	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.002	< 0.002	**0.00339**	**0.0239**	< 0.002	< 0.002	**0.00676**	0.00185	N/A	0.00118*	**0.00616**	**0.00431**	**0.0132**	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	3/15/2016	N/A	N/A	**0.00414**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.002	< 0.002	**0.0063**	**0.0338**	**0.00358**	0.000744*	**0.00538**	N/A	N/A	0.00157*	**0.00812**	**0.00296**	**0.011**	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.002	< 0.002	**0.00819**	**0.01**	0.000818*	< 0.002	**0.00507**	N/A	N/A	0.0014*	**0.00574**	**0.00285**	**0.00769**	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.002	< 0.002	**0.00715**	**0.00845**	0.000617*	< 0.002	**0.00456**	N/A	N/A	0.00143*	**0.00857**	N/A	**0.00758**	0.00106*	< 0.002	< 0.002	N/A	< 0.002	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00142*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00393**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.002	< 0.002	**0.00773**	**0.00562**	0.00147*	< 0.002	0.000952*	N/A	N/A	0.00129*	**0.00975**	**0.00392**	**0.0171**	0.000732*	< 0.002	< 0.002	N/A	N/A	N/A
	2/26/2018	N/A	N/A	**0.00751**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.00143**	**0.00274**	**0.0159**	**0.0152**	**0.00823**	**0.00103**	**0.00493**	N/A	N/A	**0.00211**	**0.00975**	**0.00609**	**0.0113**	**0.00112**	**0.00274**	**0.00387**	N/A	**0.00195**	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	**0.00469**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2019	N/A	0.00129*	**0.00801**	N/A	N/A	N/A	N/A	N/A	N/A	0.00163*	N/A	N/A	N/A	N/A	0.00129*	N/A	N/A	**0.0101**	N/A
	4/10/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	5/16/2019	< 0.002	< 0.002	**0.00478**	**0.00923**	< 0.002	< 0.002	**0.00283**	N/A	N/A	0.000919*	**0.00854**	**0.00523**	**0.0135**	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	**0.00432**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.002	0.00144*	**0.00695**	**0.0108**	**0.00334**	< 0.002	**0.0193**	N/A	N/A	0.00163*	**0.00972**	**0.00421**	**0.00652**	0.00149*	0.00144*	0.000799*	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.002	**0.00247**	**0.00503**	**0.0102**	< 0.002	< 0.002	< 0.002	N/A	N/A	0.00102*	**0.00788**	**0.00637**	**0.00395**	< 0.002	**0.00247**	0.00143*	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.00121*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.002	0.00161*	**0.00788**	**0.0106**	**0.00336**	< 0.002	**0.0109**	N/A	N/A	0.000993*	**0.00925**	**0.00395**	**0.00374**	< 0.002	0.00161*	**0.0108**	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00102*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.002	0.00161*	**0.0041**	**0.0101**	**0.00235**	< 0.002	0.00136*	N/A	N/A	0.00102*	**0.00806**	**0.00647**	0.00114*	< 0.002	0.00161*	0.00199*	< 0.002	< 0.002	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00611**	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	10/12/2021	< 0.002	0.00104*	**0.00664**	**0.00589**	**0.00332**	< 0.002	**0.0081**	**0.0046**	< 0.002	0.000858*	**0.0103**	**0.00432**	0.00152*	0.000903*	0.00104*	**0.00278**	0.00106*	< 0.002	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000858*	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.000755*	N/A	**0.00224**	**0.0233**	0.00125*	< 0.002	**0.0028**	**0.00301**	< 0.002	0.00185*	**0.0199**	**0.00634**	**0.0028**	< 0.002	< 0.002	< 0.002	< 0.002	0.00188*	< 0.002
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	10/4/2022	< 0.002	N/A	**0.00593**	**0.00306**	0.00146*	< 0.002	**0.0127**	**0.00453**	< 0.002	0.000821*	**0.0119**	**0.00452**	< 0.002	0.000771*	< 0.002	0.000911*	0.000863*	0.00091*	< 0.002
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00429**	N/A	N/A	N/A	N/A	N/A	0.00075*	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.002	N/A	**0.00339**	**0.0575**	**0.00355**	0.00139*	0.00149*	**0.00428**	< 0.002	0.00115*	**0.0124**	**0.0076**	0.00154*	< 0.002	< 0.002	0.000563*	0.000751*	N/A	**0.00376**
	5/9/2023	N/A	N/A	**0.00348**	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.00138*	N/A	**0.0107**	**0.00926**	**0.00394**	< 0.002	N/A	**0.00526**	< 0.002	0.000925*	**0.0113**	N/A	0.0015*	0.00067*	< 0.002	0.000703*	0.00124*	0.00072*	0.000557*
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000665*	N/A	N/A	N/A	N/A	N/A
Barium, mg/L (CAS NO - 7440-39-3)	1/28/2008	0.26	N/A	0.536	0.328	0.0219	0.94	0.227	N/A	N/A	N/A	0.245	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	0.246	N/A	0.143	0.276	0.0191	0.0582	0.283	N/A	N/A	N/A	0.183	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	0.264	N/A	0.203	0.319	0.0175	0.0884	0.26	N/A	N/A	N/A	0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.356	N/A	0.337	0.25	0.0389	0.503	0.4	N/A	N/A	N/A	0.527	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.654	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	0.246	N/A	0.412	0.258	0.0201	0.0682	0.302	N/A	N/A	N/A	0.132	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.0739	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.24	0.301	0.0172	0.0681	0.375	N/A	N/A	0.0523	0.0955	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	0.287	N/A	0.169	0.341	0.0181	0.193	0.379	N/A	N/A	0.0385	0.178	N/A	N/A	N/A	N/A	N/A	N/A	0.0256	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0467	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	0.0174	N/A	N/A	N/A	N/A	N/A	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.0951	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.44	0.639	0.0794	0.0951	0.0672	N/A	N/A	N/A
	2/24/2010	N/A	0.083	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0607	0.345	0.0712	0.083	< 0.01	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0167	N/A	N/A	N/A
	4/13/2010	0.382	0.0872	0.332	0.54	0.0207	0.157	0.469	N/A	N/A	0.0207	0.185	0.168	0.317	0.0741	0.0872	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.553	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.114	0.314	0.092	0.1	0.0216	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0298	N/A	N/A	N/A
	10/21/2010	0.406	< 0.05	0.256	0.382	0.0211	0.0266	0.686	N/A	N/A	0.018	0.267	0.0717	0.251	0.0934	0.0726	0.0195	N/A	N/A	N/A
	10/21/2010	N/A	0.0726	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A
	3/22/2011	0.244	< 0.01	0.209	0.222	0.0151	0.119	0.4	N/A	N/A	0.0125	0.158	0.0614	0.26	0.0988	< 0.01	< 0.01	N/A	< 0.01	N/A
	3/22/2011	N/A	< 0.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.03	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.405	N/A	N/A	N/A	N/A	N/A	0.469	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	0.38	0.0488	0.252	0.282	0.0195	0.088	0.441	N/A	N/A	0.0262	0.184	N/A	0.346	0.131	0.0488	0.0241	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	0.0414	0.0812	0.419	0.351	0.0204	0.0683	0.352	N/A	N/A	0.0213	0.13	0.0724	0.146	0.122	0.0812	0.0186	N/A	0.02	N/A
	4/10/2012	N/A	N/A	0.332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.016	N/A	N/A	N/A
	8/16/2012	0.426	0.0507	N/A	0.246	0.0175	0.1	N/A	N/A	N/A	0.0235	0.122	N/A	N/A	0.142	0.0507	0.027	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.0779	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	0.297	N/A	N/A	0.771	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	0.0481	0.0434	0.543	0.3	0.0194	0.14	0.468	0.0113	0.0651	0.0193	0.214	0.204	0.334	0.102	0.0434	0.0311	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0144	0.106	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0118	0.0901	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.383	0.025	0.341	0.242	0.0298	0.118	0.392	0.0101	0.0738	0.0199	0.162	0.125	0.649	0.143	0.025	0.0281	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.154	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.402	0.0155	0.295	0.29	0.0212	0.156	0.323	N/A	N/A	0.0141	0.297	0.173	0.222	0.145	0.0155	0.00546	N/A	0.00381*	N/A
	3/13/2014	N/A	0.0131	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0131	N/A	N/A	N/A	N/A
	9/29/2014	0.401	0.0267	0.299	0.247	0.109	N/A	0.366	N/A	N/A	0.0189	0.118	0.0971	0.229	0.167	0.0267	0.0392	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0183	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	**0.247**	**0.0172**	0.199	0.51	0.0309	0.0359	0.266	0.00805	N/A	0.0187	0.0896	0.0758	0.155	0.116	**0.0172**	0.0129	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.196	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	**0.284**	**0.0108**	**0.212**	**0.338**	**0.136**	**0.0721**	**0.342**	0.0597	N/A	**0.0157**	**0.415**	**0.0501**	**0.16**	**0.126**	**0.0108**	**0.0117**	N/A	**0.0221**	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.121**	N/A	N/A	N/A	N/A	N/A
	3/15/2016	**0.423**	**0.00895**	**0.198**	**0.278**	**0.0304**	**0.0363**	**0.273**	0.0127	N/A	**0.0227**	**0.193**	**0.051**	**0.156**	**0.135**	**0.00895**	**0.00853**	N/A	N/A	N/A
	3/15/2016	N/A	N/A	**0.225**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	**0.256**	**0.0105**	**0.301**	**0.336**	**0.0603**	**0.0496**	**0.334**	N/A	N/A	**0.0195**	**0.0797**	**0.0883**	**0.0893**	**0.112**	**0.0105**	**0.0078**	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.109**	N/A	N/A	N/A	N/A	N/A
	2/6/2017	**0.297**	**0.00748**	**0.208**	**0.268**	**0.0512**	**0.0392**	**0.377**	N/A	N/A	**0.0187**	**0.0628**	**0.0751**	**0.0948**	**0.134**	**0.00748**	**0.00817**	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	**0.0401**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	**0.303**	**0.00881**	**0.295**	**0.254**	**0.112**	**0.0328**	**0.393**	N/A	N/A	**0.0199**	**0.0645**	N/A	**0.0654**	**0.145**	**0.00881**	**0.00846**	N/A	**0.0188**	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0187**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.162**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	**0.378**	**0.00816**	**0.258**	**0.227**	**0.0415**	**0.0311**	**0.179**	N/A	N/A	**0.0173**	**0.0637**	**0.12**	**0.0753**	**0.148**	**0.00816**	**0.0065**	N/A	N/A	N/A
	2/26/2018	N/A	N/A	**0.243**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.331**	**0.0243**	**0.0529**	**0.212**	**0.0376**	**0.0281**	**0.2**	N/A	N/A	**0.0148**	**0.0767**	**0.107**	**0.0742**	**0.144**	**0.0243**	**0.189**	N/A	**0.136**	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	**0.198**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2019	N/A	**0.0134**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0134**	N/A	N/A	N/A	N/A
	4/10/2019	N/A	**0.0125**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0125**	N/A	N/A	N/A	N/A
	5/16/2019	**0.339**	**0.0105**	**0.218**	**0.201**	**0.112**	**0.0349**	**0.144**	N/A	N/A	**0.0162**	**0.118**	**0.0668**	**0.104**	**0.147**	**0.0105**	**0.00706**	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	**0.114**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	**0.231**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	**0.353**	**0.0108**	**0.277**	**0.218**	**0.211**	**0.0302**	**0.326**	N/A	N/A	**0.0107**	**0.117**	**0.143**	**0.0958**	**0.143**	**0.0108**	**0.0149**	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	**0.032**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Barium, mg/L (CAS NO - 7440-39-3)	5/12/2020	0.321	0.0149	0.19	0.192	0.11	0.0315	0.172	N/A	N/A	0.0156	0.125	0.0783	0.0299	0.142	0.0149	0.0165	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.189	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	0.315	0.00984	0.272	0.235	0.12	0.0298	0.406	N/A	N/A	0.0101	0.0707	0.135	0.0658	0.128	0.00984	0.0273	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.286	0.0381	0.182	0.197	0.0555	0.0297	0.168	N/A	N/A	0.0203	0.113	0.115	0.0245	0.149	0.0381	0.0127	0.0397	0.0118	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.107	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/8/2021	N/A	0.0134	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0134	N/A	N/A	N/A	N/A
	10/12/2021	0.371	0.0116	0.222	0.214	0.0328	0.0271	0.31	0.0108	0.0301	0.00936	0.0769	0.136	0.0641	0.133	0.0116	0.0123	0.13	0.0206	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.133	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.325	N/A	0.136	0.29	0.0256	0.0298	0.166	0.00974	0.028	0.0308	0.0656	0.0772	0.0253	0.139	0.0205	0.00978	0.0374	0.0901	0.129
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.0293	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00956	N/A	N/A	N/A
	10/4/2022	0.285	N/A	0.225	0.248	0.0277	0.0271	0.563	0.0107	0.0312	0.0105	0.0736	0.138	0.038	0.13	0.019	0.00897	0.138	0.0561	0.117
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0104	N/A	N/A	N/A	N/A	N/A	0.124	N/A	N/A	N/A	N/A	N/A
	5/9/2023	0.346	N/A	0.137	0.331	0.0387	0.203	0.199	0.00987	0.0297	0.0167	0.109	0.0993	0.0255	0.132	0.0162	0.00714	0.0508	N/A	0.133
	5/9/2023	N/A	N/A	0.13	N/A	N/A	0.0264	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.39	N/A	0.25	0.262	0.0425	0.0279	N/A	0.00988	0.0329	0.0099	0.046	N/A	0.0304	0.116	0.0103	0.00759	0.112	0.0406	0.0502
	11/1/2023	N/A	N/A	N/A	N/A	N/A	0.0258	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.113	N/A	N/A	N/A	N/A	N/A
Beryllium, mg/L (CAS NO - 7440-41-7)	1/28/2008	< 0.001	N/A	0.00119	< 0.001	< 0.001	0.00923	< 0.001	N/A	N/A	N/A	0.00222	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	0.00273	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.001	N/A	< 0.001	< 0.001	< 0.001	0.00117	< 0.001	N/A	N/A	N/A	0.00129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.00155	N/A	< 0.001	< 0.001	< 0.001	0.00516	< 0.001	N/A	N/A	N/A	0.00205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.0048	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.001	N/A	0.00151	< 0.001	< 0.001	0.00218	< 0.001	N/A	N/A	N/A	0.00159	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.00176	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.00102	< 0.001	< 0.001	0.0014	< 0.001	N/A	N/A	0.0216	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.008	< 0.001	N/A	N/A	< 0.01	0.00292	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0175	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.00752	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00728	0.00863	< 0.001	0.00752	0.00456	N/A	N/A	N/A
	2/24/2010	N/A	0.0115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.00535	< 0.001	0.0115	0.00232	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/13/2010	< 0.001	< 0.001	0.00143	< 0.001	< 0.001	0.00752	0.0019	N/A	N/A	< 0.001	< 0.001	0.00261	0.00462	< 0.001	< 0.001	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.00154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.00115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00241	0.00326	< 0.01	0.00115	< 0.001	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00155	N/A	N/A	N/A
	10/21/2010	< 0.001	0.00881	0.00228	< 0.001	< 0.001	< 0.001	0.00303	N/A	N/A	< 0.001	< 0.001	0.00106	0.00636	< 0.001	0.00881	0.00103	N/A	N/A	N/A
	10/21/2010	N/A	0.00419	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00419	N/A	N/A	N/A	N/A
	1/19/2011	N/A	N/A	< 0.001	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00754	< 0.001	N/A	N/A	0.00212	< 0.001	< 0.001	0.00728	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	3/22/2011	N/A	0.00641	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00641	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	0.00115	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.001	0.00226	< 0.001	< 0.001	< 0.001	0.00388	< 0.001	N/A	N/A	0.00161	< 0.001	N/A	0.0343	< 0.001	0.00226	< 0.001	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.001	< 0.004	< 0.001	< 0.001	< 0.001	0.00113	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001	N/A	< 0.001	N/A
	4/10/2012	N/A	N/A	0.00115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	8/16/2012	< 0.001	0.00327	N/A	< 0.001	< 0.001	0.00168	N/A	N/A	N/A	< 0.001	< 0.001	N/A	N/A	< 0.001	0.00327	0.00178	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.00149	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.001	N/A	N/A	0.00106	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.001	0.00313	0.00323	< 0.001	< 0.001	0.00325	< 0.001	< 0.001	0.0017	< 0.001	0.00272	0.00182	0.00886	< 0.001	0.00313	0.00236	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.0035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	0.00154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.000496	0.00267	0.000302	< 0.001	< 0.001	0.0041	0.000201	< 0.001	0.00235	< 0.001	0.00295	0.00115	0.0162	0.000173	0.00267	0.000903	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.000467	0.00349	< 0.001	< 0.001	< 0.001	0.00563	0.000259	N/A	N/A	0.00103	0.00593	0.00173	0.00582	< 0.001	0.00349	0.000516	N/A	< 0.001	N/A
	3/13/2014	N/A	0.00276	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00276	N/A	N/A	N/A	N/A
	9/29/2014	0.00118	0.00198	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	N/A	< 0.001	0.000618	0.000231	0.00291	< 0.001	0.00198	0.00276	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.001	0.000499*	< 0.001	0.000092	< 0.001	0.000239	0.000124	< 0.001	N/A	0.000266	0.000402	0.000608	0.000736	0.00006	0.000499*	0.000252	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.001	0.00009*	0.000047*	0.000084*	0.000094*	0.00119	0.000048*	0.000374	N/A	0.000089*	0.000081*	0.000112*	0.000171*	0.000048*	0.00009*	0.000054*	N/A	0.000042*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000955*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Beryllium, mg/L (CAS NO - 7440-41-7)	10/8/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.000374*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	0.00137	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000959*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	10/4/2022	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000436*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.000669*	N/A	0.000734*	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Cadmium, mg/L (CAS NO - 7440-43-9)	1/28/2008	< 0.0005	N/A	0.0144	< 0.0005	< 0.0005	0.0029	< 0.0005	N/A	N/A	N/A	0.000618	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.0005	N/A	0.000639	< 0.0005	< 0.0005	< 0.0005	0.00234	N/A	N/A	N/A	0.00143	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.0005	N/A	0.00382	< 0.0005	< 0.0005	0.00081	0.00072	N/A	N/A	N/A	0.00097	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.000602	N/A	0.0052	< 0.0005	< 0.0005	0.00143	0.00338	N/A	N/A	N/A	0.00136	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.00129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.0005	N/A	0.0068	< 0.0005	0.000813	0.0017	0.00296	N/A	N/A	N/A	0.00126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.00338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.00192	0.0336	0.000983	0.00139	0.00224	N/A	N/A	0.0152	0.000902	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.0005	N/A	0.00715	0.000738	< 0.0005	0.000534	0.00114	N/A	N/A	0.00102	0.00124	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00158	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	0.00153	N/A	N/A	N/A	N/A	N/A	0.00155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.0111	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00356	0.0017	0.00147	0.0111	0.00312	N/A	N/A	N/A
	2/24/2010	N/A	0.0126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000593	0.00108	< 0.0005	0.0126	0.000601	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00185	N/A	N/A	N/A
	4/13/2010	0.00485	0.00948	0.0107	< 0.0005	0.00111	0.00712	0.00262	N/A	N/A	0.00286	< 0.0005	0.00507	0.00165	0.000863	0.00948	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.00341	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.0092	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00163	0.000993	0.00331	0.0092	0.00091	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0013	N/A	N/A	N/A
	10/21/2010	0.00247	0.00501	0.00684	0.0097	< 0.0005	0.000843	0.00256	N/A	N/A	0.00215	0.00104	0.00647	0.00306	0.00117	0.00501	0.0107	N/A	N/A	N/A
	10/21/2010	N/A	0.00833	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00833	N/A	N/A	N/A	N/A
	3/22/2011	< 0.0005	0.00936	0.00354	0.00772	< 0.0005	0.00398	0.00173	N/A	N/A	0.00394	0.0015	0.00278	0.00372	0.00221	0.00936	0.00448	N/A	< 0.0005	N/A
	3/22/2011	N/A	0.0108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0108	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.00109	N/A	N/A	N/A	N/A	N/A	0.000997	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	0.00169	0.00304	0.00169	< 0.0005	< 0.0005	0.00211	< 0.0005	N/A	N/A	0.00519	0.00251	N/A	0.00223	< 0.0005	0.00304	< 0.0005	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	0.00177	0.00656	0.00172	< 0.0005	< 0.0005	0.00208	0.0007	N/A	N/A	0.0042	0.00059	0.00166	< 0.0005	0.00054	0.00656	0.0022	N/A	< 0.0005	N/A
	4/10/2012	N/A	N/A	0.00448	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	8/16/2012	0.000901	0.00526	N/A	< 0.0005	0.00081	0.00412	N/A	N/A	N/A	0.00544	0.00238	N/A	N/A	0.00311	0.00526	0.000605	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.00265	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	0.000522	N/A	N/A	0.00278	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	0.00299	0.0068	0.00232	0.000762	0.00149	0.00404	0.00265	< 0.0005	0.00157	0.00315	0.00448	0.00269	0.00275	0.00071	0.0068	0.00138	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0106	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	0.00216	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	0.00181	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.000976	0.0019	0.00141	0.00728	0.000999	0.00785	0.007	0.000232	0.00129	0.00832	0.00412	0.0117	0.000784	0.00376	0.0019	0.00169	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000451	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.00973	0.00213	0.00598	0.00012	0.0007	0.00507	0.000914	N/A	N/A	0.0037	0.00623	0.00267	0.000508	0.000248	0.00287	0.000262	N/A	< 0.0005	N/A
	3/13/2014	N/A	0.00287	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00213	N/A	N/A	N/A	N/A
	9/29/2014	0.00469	0.00273	0.000988	0.000438	0.00271	N/A	0.00215	N/A	N/A	0.0101	0.00144	0.00157	0.000606	0.00237	0.00273	0.00284	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00568	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	0.00209	0.000929	< 0.0005	0.000728	0.000169	0.00163	0.000582	< 0.0005	N/A	0.00404	0.00128	0.000806	0.000459	0.000148	0.000929	0.000129	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000164*	0.000187*	< 0.0005	< 0.0005	0.000125*	0.00108	0.000264*	0.00536	N/A	0.00126	< 0.0005	< 0.0005	< 0.0005	0.00019*	0.000187*	< 0.0005	N/A	0.000162*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000225*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.000156*	0.000223*	< 0.0005	< 0.0005	< 0.0005	0.000251*	0.000129*	0.000424	N/A	0.0001*	< 0.0005	0.000056*	< 0.0005	0.000085*	0.000223*	0.000251*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.000076*	0.000175*	0.000042*	< 0.0005	< 0.0005	0.00016*	0.000119*	N/A	N/A	0.000161*	< 0.0005	0.000392*	< 0.0005	< 0.0005	0.000175*	< 0.0005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.00009*	0.000128*	0.000098*	0.000111*	0.000163*	< 0.0005	0.000243*	N/A	N/A	0.000147*	< 0.0005	0.000169*	< 0.0005	0.000126*	0.000128*	< 0.0005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	0.000056*	0.000047*	< 0.0005	0.000055*	< 0.0005	< 0.0005	0.000114*	N/A	N/A	0.000182*	< 0.0005	N/A	< 0.0005	< 0.0005	0.000047*	< 0.0005	N/A	0.000109*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000183*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Cadmium, mg/L (CAS NO - 7440-43-9)	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00229**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.000073*	0.000071*	0.0001*	< 0.0005	< 0.0005	0.000047*	0.000193*	N/A	N/A	0.000226*	< 0.0005	0.000058*	0.000123*	0.000045*	0.000071*	< 0.0005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.000098*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.00106**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000448*	N/A	N/A	< 0.0005	< 0.0005	0.000209*	< 0.0005	< 0.0005	< 0.0005	0.000403*	N/A	< 0.0005	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.000447*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.0005	0.000101*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0003*	N/A	N/A	0.000319*	0.000157*	< 0.0005	< 0.0005	0.000155*	0.000101*	< 0.0005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.0001	0.000086*	< 0.0001	< 0.0001	0.000069*	< 0.0001	**0.000206**	N/A	N/A	**0.0002**	0.000039*	< 0.0001	< 0.0001	< 0.0001	0.000086*	0.000063*	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000163**	**0.000326**	N/A	N/A	**0.000119**	< 0.0001	< 0.0001	0.000061*	**0.000129**	< 0.0001	< 0.0001	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	**0.00031**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	0.000078*	< 0.0001	< 0.0001	< 0.0001	**0.000131**	**0.000379**	0.000077*	N/A	N/A	**0.000141**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000138**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.000085*	**0.000114**	< 0.0001	0.000075*	< 0.0001	< 0.0001	**0.000103**	N/A	N/A	**0.000123**	< 0.0001	< 0.0001	< 0.0001	0.000055*	**0.000114**	< 0.0001	< 0.0001	< 0.0001	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.0001	0.000084*	< 0.0001	**0.000609**	< 0.0001	< 0.0001	0.000066*	0.000063*	< 0.0001	**0.000134**	< 0.0001	0.00007*	< 0.0001	< 0.0001	0.000084*	< 0.0001	**0.000101**	**0.000212**	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A
	4/19/2022	**0.000164**	N/A	0.000057*	**0.000107**	< 0.0001	**0.00188**	**0.000203**	< 0.0001	< 0.0001	0.000076*	< 0.0001	< 0.0001	< 0.0001	**0.000134**	**0.000225**	0.000062*	< 0.0001	**0.000234**	< 0.0001
	4/19/2022	N/A	N/A	N/A	N/A	N/A	**0.0017**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A
	10/4/2022	**0.000123**	N/A	0.000059*	**0.000161**	0.000056*	**0.000118**	0.000062*	< 0.0001	0.000056*	**0.000386**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.000157**	0.000062*	0.000082*	0.000095*	0.000055*
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0002	N/A	< 0.0002	< 0.0002	< 0.0002	0.00015*	**0.000341**	< 0.0002	< 0.0002	< 0.0002	0.000103*	< 0.0002	< 0.0002	0.000113*	0.000118*	< 0.0002	< 0.0002	N/A	< 0.0002
	5/9/2023	N/A	N/A	0.000104*	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	**0.000555**	N/A	**0.000571**	< 0.0002	< 0.0002	0.000169*	N/A	< 0.0002	< 0.0002	0.000128*	< 0.0002	N/A	< 0.0002	< 0.0002	0.000105*	0.000133*	< 0.0002	< 0.0002	< 0.0002
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A
Chromium, mg/L (CAS NO - 7440-47-3)	1/28/2008	< 0.02	N/A	0.0307	< 0.02	< 0.02	0.218	< 0.02	N/A	N/A	N/A	0.0314	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0476	N/A	< 0.02	< 0.02	< 0.02	0.18	< 0.02	N/A	N/A	N/A	0.107	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.198	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.02	N/A	0.027	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	0.0203	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0206	< 0.02	< 0.1	< 0.06	N/A	N/A	N/A
	2/24/2010	N/A	< 0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	4/13/2010	< 0.02	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.1	< 0.02	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	10/21/2010	< 0.02	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.02	N/A	N/A	N/A
	10/21/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
	3/22/2011	< 0.02	< 0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	0.0224	< 0.02	< 0.06	< 0.02	N/A	< 0.02	N/A
	3/22/2011	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.02	< 0.06	< 0.02	< 0.02	0.23	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.06	< 0.02	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.02	< 0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	N/A	< 0.02	N/A
	4/10/2012	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/16/2012	< 0.02	< 0.04	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.04	< 0.02	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.02	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.00422	0.0186	0.00421	0.00186	0.00347	0.00652	< 0.02	0.00468	0.00658	0.00329	0.00961	0.00539	0.0174	0.00224	0.0186	0.00489	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00198	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.00375	0.0137	0.00298	< 0.02	0.00221	0.0039	< 0.02	N/A	N/A	0.00478	0.00936	0.00702	0.00806	< 0.02	0.0137	0.00717	N/A	0.00334*	N/A
	3/13/2014	N/A	0.00908	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00908	N/A	N/A	N/A	N/A
	9/29/2014	0.00745	0.00975	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	0.00548	< 0.02	0.00975	0.0114	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.005	0.00401*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	0.00206	0.00209	0.00311	0.00185	< 0.005	0.00401*	< 0.005	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00308*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.000834*	0.000534*	0.00107*	< 0.005	< 0.005	0.000818*	0.00153*	0.00113	N/A	< 0.005	0.00123*	0.000871*	**0.0135**	0.000453*	0.000534*	0.0017*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	0.00102*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.00103*	0.00139*	0.000578*	0.000584*	0.000412*	0.00132*	0.000379*	N/A	N/A	0.00203*	0.00247*	0.00253*	0.000591*	< 0.005	0.00139*	< 0.005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chromium, mg/L (CAS NO - 7440-47-3)	2/6/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	0.000496*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0103**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.000918*	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.00504**	0.00216*	**0.00563**	0.00168*	0.00248*	0.00157*	0.00378*	N/A	N/A	0.00173*	0.00164*	0.00345*	0.00167*	< 0.005	0.00216*	0.00189*	N/A	0.00259*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.00471*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2019	N/A	N/A	0.000913*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	**0.00905**	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00273*	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	< 0.005	**0.00513**	< 0.005
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	10/4/2022	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00254*	< 0.005
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Cobalt, mg/L (CAS NO - 7440-48-4)	1/28/2008	< 0.02	N/A	0.0582	< 0.02	0.0213	0.116	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.02	N/A	0.0532	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.02	N/A	0.0515	< 0.02	< 0.02	< 0.02	0.0222	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.02	N/A	0.0786	< 0.02	< 0.02	0.0692	0.0277	N/A	N/A	N/A	0.0336	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.0807	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.02	N/A	0.0489	< 0.02	< 0.02	< 0.02	0.0284	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.0425	< 0.02	< 0.02	< 0.02	0.0306	N/A	N/A	0.0348	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.02	N/A	0.0383	< 0.02	< 0.02	0.058	0.0386	N/A	N/A	0.0338	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0811	0.0515	< 0.02	< 0.1	< 0.06	N/A	N/A	N/A
	2/24/2010	N/A	0.0596	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0265	0.0337	0.00207	0.0596	0.0155	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0064	N/A	N/A	N/A
	4/13/2010	< 0.00155	0.0462	0.0553	0.0137	0.016	0.0468	0.0575	N/A	N/A	0.00387	0.00558	0.0452	0.0221	< 0.00155	0.0462	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.0565	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.0383	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0362	0.0308	0.00218	0.0383	0.0119	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00654	N/A	N/A	N/A
	10/21/2010	< 0.00155	0.0328	0.0598	0.0121	0.0161	< 0.00155	0.0567	N/A	N/A	< 0.00155	0.011	0.0287	0.0405	< 0.00155	0.017	0.00931	N/A	N/A	N/A
	10/21/2010	N/A	0.017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0328	N/A	N/A	N/A	N/A
	3/22/2011	0.00343	0.0115	0.0533	0.00269	0.0143	0.0519	0.058	N/A	N/A	0.0114	0.011	0.0254	0.0362	< 0.00155	0.065	0.00753	N/A	< 0.00155	N/A
	3/22/2011	N/A	0.065	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0115	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.0576	N/A	N/A	N/A	N/A	N/A	0.0133	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	0.00335	0.035	0.0446	0.00459	0.0114	0.0319	0.0674	N/A	N/A	0.0108	0.0173	N/A	0.0956	< 0.00155	0.035	0.0259	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/17/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0198	N/A	N/A	N/A
	4/10/2012	< 0.00155	0.0323	0.0488	< 0.00155	0.0187	0.0138	0.0238	N/A	N/A	0.00474	0.0123	0.0292	0.0386	< 0.00155	0.0323	0.00591	N/A	< 0.00155	N/A
	4/10/2012	N/A	N/A	0.0425	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00694	N/A	N/A	N/A
	8/16/2012	0.00269	0.0315	N/A	0.00162	0.019	0.0247	N/A	N/A	N/A	0.00702	0.0193	N/A	N/A	< 0.00155	0.0315	0.00782	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.0185	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	0.00215	N/A	N/A	0.109	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.00132	0.0289	0.083	0.00254	0.0223	0.0301	0.0937	< 0.00132	< 0.00132	0.00222	0.0209	0.0492	0.104	< 0.00132	0.0289	0.0289	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00341	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00365	0.00794	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	0.0253	N/A	N/A	N/A	N/A	0.0044	0.00386	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.00985	0.047	0.0299	0.0047	0.0149	0.0273	0.0393	< 0.00132	0.00202	< 0.00132	0.0261	0.0472	0.0982	< 0.00132	0.047	0.00531	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00182	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.00526	0.0624	0.0922	< 0.00132	0.0127	0.0336	0.0309	N/A	N/A	0.00574	0.0353	0.0512	0.0726	0.00174	0.0624	0.0115	N/A	< 0.00132	N/A
	3/13/2014	N/A	0.0701	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0701	N/A	N/A	N/A	N/A
	6/10/2014	N/A	0.028	0.0299	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.028	N/A	N/A	N/A	N/A
	9/29/2014	0.0301	0.0706	0.0438	< 0.00241	0.00966	N/A	0.085	0.0127	N/A	0.00776	0.0237	0.0805	0.048	0.00447	0.0706	0.0292	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00881	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2015	N/A	**0.0623**	0.0114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0623**	N/A	N/A	N/A	N/A
	3/20/2015	N/A	**0.0231**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0231**	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	5/20/2015	0.00102	0.0383	0.0086	0.000332	0.0139	0.00495	0.039	0.00142	N/A	0.00188	0.0145	0.0828	0.0382	0.000147	0.0383	0.00157	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.00934	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000235*	0.0616	0.006	0.000221*	0.00709	0.00995	0.0605	0.0128	N/A	0.00183	0.00791	0.0902	0.00224	0.00006*	0.0616	0.000847	N/A	0.000087*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00008*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.000059*	0.0379	0.00469	0.000156*	0.00586	0.00665	0.0598	0.00316	N/A	0.0041	0.00834	0.101	0.00207	0.000031*	0.0379	0.000254*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	0.00543	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.000419*	0.0412	0.00661	0.000191*	0.0124	0.00777	0.0797	N/A	N/A	0.00451	0.0144	0.0911	0.0382	0.000879	0.0412	0.000305*	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0009	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.00266	0.0867	0.143	0.000176*	0.0116	0.00541	0.0797	N/A	N/A	0.00291	0.0162	0.1	0.0288	0.000235*	0.0867	0.00013*	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	0.00532	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/17/2017	N/A	0.0225	0.0523	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0225	N/A	N/A	N/A	N/A
	8/16/2017	0.000857	0.0656	0.00793	0.000123*	0.000198*	0.0036	0.0912	N/A	N/A	0.00348	0.0121	N/A	0.0169	0.000693	0.0656	0.000127*	N/A	< 0.0005	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00355	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0618	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.000234*	0.0184	0.0395	0.000126*	0.0142	0.00374	0.0113	N/A	N/A	0.00251	0.0148	0.0832	0.0177	0.000723	0.0184	0.000149*	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.0423	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	0.00138	0.028	0.00214	< 0.001	0.00885	0.00325	0.0297	N/A	N/A	0.00174	0.0115	0.0764	0.00367	0.000877*	0.028	0.0286	N/A	0.00134	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.0286	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	0.00016*	0.0133	0.0212	0.000144*	0.000133*	0.00368	0.0135	N/A	N/A	0.00108	0.0138	0.139	0.00347	< 0.0005	0.0133	0.00115	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	0.000134*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.0151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	0.000107*	0.0429	0.0128	0.000143*	0.00182	0.00311	0.0473	N/A	N/A	0.00104	0.0134	0.103	0.0172	0.000914	0.0429	0.00701	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	0.00288	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	0.000155*	0.00915	0.0154	0.000153*	0.00017*	0.00332	0.00236	N/A	N/A	0.0016	0.0113	0.162	0.000479*	0.000101*	0.00915	0.00609	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.00881	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	0.000535	0.0248	0.00724	0.000146*	0.0165	0.00394	0.0743	N/A	N/A	0.000576	0.013	0.0954	0.000617	0.000805	0.0248	0.00608	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00061	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.000242*	0.00423	0.00597	0.000183*	0.0149	0.00348	0.00733	N/A	N/A	0.000728	0.00952	0.101	0.00158	< 0.0005	0.00423	0.00107	0.000234*	0.000117*	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0979	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	0.000217*	0.0116	0.00953	0.000269*	0.0157	0.00341	0.0528	0.00152	< 0.0005	0.000729	0.017	0.115	0.000432*	0.0011	0.0116	0.00166	0.00063	0.000657	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00114	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00226	N/A	0.0299	0.000259*	0.0147	0.00533	0.0258	0.00103	< 0.0005	0.00165	0.0162	0.125	0.00145	< 0.0005	0.00466	0.00125	< 0.0005	0.00398	0.00288
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.00538	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00169	N/A	N/A	N/A
	10/4/2022	0.000406*	N/A	0.00501	0.000223*	0.0144	0.00331	0.0884	0.000954	< 0.0005	0.000818	0.0194	0.0751	0.000321*	0.00177	0.00885	0.00109	0.000412*	0.00264	0.00369
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000895	N/A	N/A	N/A	N/A	N/A	0.00176	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0005	N/A	0.0588	0.000353*	0.0103	0.0119	0.0104	0.000903	< 0.0005	0.000744	0.0103	0.0515	0.000525	< 0.0005	0.000715	0.000405*	0.000196*	N/A	0.00493
	5/9/2023	N/A	N/A	0.0637	N/A	N/A	0.00306	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.000666	N/A	0.00937	0.000249*	0.0149	0.00284	N/A	0.000741	< 0.0005	0.000476*	0.0137	N/A	0.0034	0.00139	0.00704	0.000413*	0.000644	0.000457*	0.00508
	11/1/2023	N/A	N/A	N/A	N/A	N/A	0.0023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00139	N/A	N/A	N/A	N/A	N/A
Copper, mg/L (CAS NO - 7440-50-8)	1/28/2008	< 0.02	N/A	0.072	< 0.02	< 0.02	0.16	< 0.02	N/A	N/A	N/A	0.0296	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	0.0291	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.02	N/A	0.0251	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	0.0249	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0339	N/A	0.0294	< 0.02	< 0.02	0.126	0.0209	N/A	N/A	N/A	0.0911	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.02	N/A	0.0518	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.0802	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	0.0706	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.02	N/A	0.0357	< 0.02	< 0.02	0.0424	< 0.02	N/A	N/A	0.131	0.07	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0617	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	0.0339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.079	0.111	< 0.02	< 0.1	< 0.06	N/A	N/A	N/A
	2/24/2010	N/A	0.113	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0486	< 0.02	0.113	0.0401	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0214	N/A	N/A	N/A
	4/13/2010	< 0.02	< 0.1	0.0516	< 0.02	< 0.02	0.035	0.0278	N/A	N/A	< 0.02	0.0219	0.0375	0.0484	< 0.02	< 0.1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.0332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0212	0.0251	< 0.02	< 0.1	0.0245	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	10/21/2010	< 0.02	< 0.1	0.0284	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	0.0266	0.0354	0.0711	< 0.02	< 0.1	0.0359	N/A	N/A	N/A
	10/21/2010	N/A	0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.11	N/A	N/A	N/A	N/A
	3/22/2011	< 0.02	0.112	< 0.02	< 0.02	< 0.02	0.0483	< 0.02	N/A	N/A	0.0275	0.0306	0.0463	0.0722	< 0.02	0.0484	0.0582	N/A	< 0.02	N/A
	3/22/2011	N/A	0.0484	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.112	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.0221	N/A	N/A	N/A	N/A	N/A	0.033	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.02	0.0715	0.039	< 0.02	0.0254	0.0463	< 0.02	N/A	N/A	0.0424	0.085	N/A	0.125	< 0.02	0.0715	0.054	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.02	0.116	0.029	< 0.02	< 0.02	0.0229	0.0227	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.116	0.0247	N/A	< 0.02	N/A
	4/10/2012	N/A	N/A	0.0454	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/16/2012	< 0.02	< 0.04	N/A	< 0.02	< 0.02	0.0215	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.04	< 0.02	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.02	N/A	N/A	0.0364	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.02	0.0356	< 0.02	< 0.02	< 0.02	0.0265	< 0.02	< 0.02	0.0352	< 0.02	< 0.02	0.0347	< 0.02	< 0.02	0.0356	0.0469	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0731	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0367	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.00746	0.0314	< 0.02	< 0.02	< 0.02	0.024	0.0113	< 0.02	0.0255	0.0063	0.00463	0.00276	< 0.02	< 0.02	0.0314	0.0111	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Copper, mg/L (CAS NO - 7440-50-8)	3/13/2014	0.0113	0.0349	0.00742	< 0.02	0.00265	0.0264	0.0128	N/A	N/A	0.0133	0.0197	0.0293	< 0.02	0.00375	0.0349	0.013	N/A	< 0.02	N/A
	3/13/2014	N/A	0.0473	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0473	N/A	N/A	N/A	N/A
	9/29/2014	0.0266	0.0289	< 0.02	< 0.02	0.00664	N/A	0.0127	N/A	N/A	0.00413	0.0114	0.0051	< 0.02	0.00461	0.0289	0.0455	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0059	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	**0.0031**	**0.0147**	0.000532	0.00174	0.00106	0.00735	0.0104	0.000755	N/A	0.00815	0.00408	0.00728	0.0103	0.00181	**0.0147**	0.00312	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.000599	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000777*	0.000951*	0.000998*	< 0.002	**0.00255**	**0.018**	**0.00233**	0.00187	N/A	0.00194*	0.00126*	0.000781*	0.000837*	0.0015*	0.000951*	0.000579*	N/A	**0.00216**	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00132*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00159*	0.00737	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00171*	< 0.005	N/A	N/A	< 0.005	< 0.005	0.00282*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.005	< 0.005	< 0.005	< 0.005	0.00153*	< 0.005	0.00128*	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00132*	< 0.005	< 0.005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.005	**0.00574**	0.00221*	0.00245*	0.00331*	< 0.005	0.00466*	N/A	N/A	< 0.005	< 0.005	N/A	0.00483*	< 0.005	**0.00574**	< 0.005	N/A	0.00288*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0253**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00468*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.00742**	0.00137*	0.00154*	0.00105*	**0.00369**	0.000801*	**0.00679**	N/A	N/A	0.000667*	0.00108*	**0.0167**	0.00107*	< 0.002	0.00137*	**0.00678**	N/A	**0.00269**	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	**0.00802**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.005	< 0.005	< 0.005	< 0.005	0.00352*	< 0.005	0.0033*	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00341*	< 0.005	< 0.005	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	0.0039*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.005	0.00379*	< 0.005	< 0.005	< 0.005	< 0.005	0.00242*	N/A	N/A	< 0.005	< 0.005	**0.0302**	< 0.005	< 0.005	0.00379*	< 0.005	0.00208*	< 0.005	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0182**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00182*	< 0.005	< 0.005	< 0.005	< 0.005	0.0019*	0.00232*	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00431*	N/A	< 0.005	< 0.005	< 0.005	0.00205*	0.00247*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00212*	< 0.005	< 0.005	**0.0206**	< 0.005
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00527**	N/A
	10/4/2022	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00261*	0.0018*	0.00338*	< 0.005
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/9/2023	0.00229*	N/A	0.00281*	0.00226*	< 0.005	0.00258*	0.00303*	< 0.005	< 0.005	< 0.005	< 0.005	0.00198*	< 0.005	< 0.005	0.0041*	< 0.005	< 0.005	N/A	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.005	N/A	0.00233*	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00456*	< 0.005
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Lead, mg/L (CAS NO - 7439-92-1)	1/28/2008	< 0.004	N/A	0.0235	< 0.004	< 0.004	0.0387	< 0.004	N/A	N/A	N/A	0.0194	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	0.00824	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.004	N/A	0.00859	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	0.00875	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0158	N/A	0.01	< 0.004	< 0.004	0.0269	0.00774	N/A	N/A	N/A	0.038	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.0268	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.004	N/A	0.0194	< 0.004	< 0.004	0.00494	< 0.004	N/A	N/A	N/A	0.00498	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.00752	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.0238	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	0.00867	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.004	N/A	0.0144	< 0.004	< 0.004	0.00804	< 0.004	N/A	N/A	0.00862	0.0114	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	0.00947	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.0132	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0385	0.0305	0.0106	0.0132	0.0113	N/A	N/A	N/A
	2/24/2010	N/A	0.0257	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00762	0.0211	< 0.004	0.0257	0.01	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00556	N/A	N/A	N/A
	4/13/2010	< 0.004	< 0.004	0.0291	< 0.004	< 0.004	< 0.004	0.0173	N/A	N/A	< 0.004	< 0.004	0.0207	0.0113	< 0.004	< 0.004	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.0126	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.0139	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0152	0.0187	< 0.004	0.0139	0.00808	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0108	N/A	N/A	N/A
	10/21/2010	< 0.004	0.0242	0.0231	< 0.004	< 0.004	< 0.004	0.0143	N/A	N/A	< 0.004	0.00503	0.0102	0.0222	< 0.004	0.0358	0.0158	N/A	N/A	N/A
	10/21/2010	N/A	0.0358	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0242	N/A	N/A	N/A	N/A
	3/22/2011	< 0.004	0.0146	0.00449	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	< 0.004	0.00509	0.00833	0.0139	< 0.004	0.0146	0.00796	N/A	< 0.004	N/A
	3/22/2011	N/A	0.0136	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0136	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.00408	N/A	N/A	N/A	N/A	N/A	0.00974	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	0.00764	0.00767	0.0105	< 0.004	< 0.004	0.00442	< 0.004	N/A	N/A	0.00404	0.0132	N/A	0.0587	< 0.004	0.00767	0.00813	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.004	0.0144	0.0182	0.022	< 0.004	< 0.004	0.00645	N/A	N/A	< 0.004	0.00508	0.0138	0.00552	< 0.004	0.0144	< 0.004	N/A	< 0.004	N/A
	4/10/2012	N/A	N/A	0.0265	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	7/27/2012	N/A	N/A	N/A	0.0092	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2012	0.00449	0.023	N/A	< 0.004	< 0.004	0.00576	N/A	N/A	N/A	0.00549	0.015	N/A	N/A	< 0.004	0.023	0.0212	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.00587	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.004	N/A	N/A	0.0208	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Lead, mg/L (CAS NO - 7439-92-1)	1/15/2013	< 0.004	0.0316	0.0123	< 0.004	< 0.004	0.00691	0.00495	< 0.004	0.0144	< 0.004	0.00443	0.027	0.0324	< 0.004	0.0316	0.0367	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	0.0184	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	0.0135	N/A	N/A	N/A	N/A	N/A	< 0.004	0.0155	N/A	N/A	N/A	N/A	N/A	0.0135	N/A	N/A	N/A	N/A
	8/7/2013	0.00529	0.0207	0.00244	0.00155	0.0116	0.00862	0.00478	0.00183	0.0131	0.00195	0.0237	0.0108	0.0171	0.00352	0.0207	0.00268	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00242	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.00149	0.0194	< 0.004	< 0.004	0.00526	0.00564	0.00307	N/A	N/A	0.00384	0.0527	0.0142	0.00598	< 0.004	0.0136	0.00483	N/A	< 0.004	N/A
	3/13/2014	N/A	0.0136	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0194	N/A	N/A	N/A	N/A
	9/29/2014	0.0098	0.0186	0.00201	< 0.004	0.00982	N/A	0.00191	N/A	N/A	< 0.004	0.0114	0.00593	0.00751	0.00551	0.0186	0.0334	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	**0.00129**	**0.0082**	0.00013	0.000716	0.0011	0.00178	0.00253	0.00017	N/A	0.00472	0.00888	0.00889	0.00848	0.000694	**0.0082**	0.000614	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.000153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000267*	**0.000654**	0.000178*	< 0.0005	**0.000687**	**0.00557**	0.000151*	0.000795	N/A	**0.000989**	0.000211*	**0.000663**	**0.000705**	0.000106*	**0.000654**	0.000206*	N/A	< 0.0005	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000388*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.0005	0.000359*	< 0.0005	< 0.0005	< 0.0005	0.000443*	< 0.0005	0.00279	N/A	< 0.0005	< 0.0005	**0.000632**	< 0.0005	< 0.0005	0.000359*	0.000397*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.000454*	< 0.0005	0.000353*	< 0.0005	< 0.0005	**0.000714**	0.000358*	N/A	N/A	< 0.0005	< 0.0005	**0.00156**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.0005	< 0.0005	**0.000855**	< 0.0005	0.000342*	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	0.000467*	< 0.0005	0.000486*	< 0.0005	< 0.0005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.0005	0.000341*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	0.000341*	< 0.0005	N/A	< 0.0005	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0138**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.0005	0.000331*	< 0.0005	< 0.0005	**0.000621**	< 0.0005	< 0.0005	N/A	N/A	**0.0225**	< 0.0005	**0.000523**	**0.000665**	< 0.0005	0.000331*	< 0.0005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.000371*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.00228**	0.00029*	0.000198*	< 0.0005	0.000243*	< 0.0005	0.000198*	N/A	N/A	< 0.0005	< 0.0005	**0.00283**	< 0.0005	< 0.0005	0.00029*	< 0.0005	N/A	0.000308*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	**0.000562**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	0.000463*	< 0.0005	< 0.0005	< 0.0005	0.000141*	0.000395*	< 0.0005	N/A	N/A	0.00029*	< 0.0005	0.00033*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000205*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000784**	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	0.0003*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000377*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.0005	0.000473*	< 0.0005	< 0.0005	**0.0013**	< 0.0005	< 0.0005	0.000402*	< 0.0005	< 0.0005	< 0.0005	**0.000695**	< 0.0005	< 0.0005	0.000473*	< 0.0005	0.000449*	0.000283*	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	4/19/2022	**0.00182**	N/A	< 0.0005	< 0.0005	< 0.0005	**0.00051**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000994**	< 0.0005
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.000326*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	10/4/2022	0.000419*	N/A	< 0.0005	< 0.0005	0.000337*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000282*	< 0.0005	0.000267*	< 0.0005	< 0.0005	**0.000709**	0.000292*	< 0.0005	< 0.0005	< 0.0005
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.0005	N/A	< 0.0005	0.000446*	**0.00081**	< 0.0005	**0.000645**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000506**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000546**	N/A	< 0.0005
	5/9/2023	N/A	N/A	< 0.0005	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	**0.00101**	N/A	**0.00129**	< 0.0005	0.00044*	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.000879**	< 0.0005	< 0.0005
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A
Mercury, mg/L (CAS NO - 7439-97-6)	8/28/2009	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	0.0000298	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.0002	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	N/A	N/A	N/A
Nickel, mg/L (CAS NO - 7440-02-0)	1/28/2008	< 0.05	N/A	0.0925	< 0.05	< 0.05	0.296	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.05	N/A	0.104	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.05	N/A	0.0942	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.05	N/A	0.137	< 0.05	< 0.05	0.23	0.0614	N/A	N/A	N/A	0.0996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.201	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.05	N/A	0.0819	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.0739	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	0.0528	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	8/28/2009	< 0.05	N/A	0.0727	< 0.05	< 0.05	0.063	0.0591	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0634	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0873	< 0.05	< 0.05	< 0.25	< 0.15	N/A	N/A	N/A
	2/24/2010	N/A	< 0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.15	< 0.05	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	4/13/2010	< 0.05	< 0.25	0.0945	< 0.05	< 0.05	0.0596	0.071	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.0624	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.25	< 0.05	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	10/21/2010	< 0.05	< 0.25	0.121	< 0.05	< 0.05	< 0.05	0.0655	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	< 0.05	N/A	N/A	N/A
	10/21/2010	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A
	3/22/2011	< 0.05	< 0.05	0.115	< 0.05	< 0.05	0.0626	< 0.05	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.15	< 0.05	N/A	< 0.05	N/A
	3/22/2011	N/A	< 0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.05	< 0.15	0.086	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	< 0.05	0.0883	N/A	0.109	< 0.05	< 0.15	< 0.05	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.05	< 0.15	0.0673	< 0.05	0.0881	< 0.05	< 0.05	N/A	N/A	< 0.05	0.0572	< 0.05	< 0.05	< 0.05	< 0.15	< 0.05	N/A	< 0.05	N/A
	4/10/2012	N/A	N/A	0.0621	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/16/2012	< 0.05	< 0.1	N/A	< 0.05	0.135	< 0.05	N/A	N/A	N/A	< 0.05	0.0764	N/A	N/A	< 0.05	< 0.1	< 0.05	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.05	N/A	N/A	0.0616	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.05	< 0.05	0.14	< 0.05	0.102	< 0.05	0.0518	< 0.05	< 0.05	< 0.05	0.0917	< 0.05	0.0945	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.0137	0.0355	0.0446	0.00416	0.0435	0.0334	0.0324	0.00204	0.00826	0.00383	0.0992	0.0315	0.106	< 0.05	0.0355	0.00775	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.0123	0.0428	0.141	0.0113	0.05	0.038	0.0311	N/A	N/A	0.0138	0.131	0.0444	0.0718	0.00395	0.0459	0.0238	N/A	0.0113*	N/A
	3/13/2014	N/A	0.0459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0428	N/A	N/A	N/A	N/A
	6/10/2014	N/A	N/A	0.0484	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2014	0.0293	0.0354	0.0645	0.0154	0.0324	N/A	0.0489	N/A	N/A	0.0149	0.0732	0.0432	0.0591	0.013	0.0354	0.0458	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0144	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	0.00348*	0.0175	0.0131	0.00182	0.0339	0.00954	0.031	0.00468	N/A	0.00759	0.0366	0.0318	0.0405	0.000955	0.0175	0.00878	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.0135	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.00109*	0.016	0.0124	0.000658*	0.0229	0.0254	0.0384	0.0385	N/A	0.00382*	0.0156	0.0331	0.0122	0.000979*	0.016	0.0108	N/A	0.00415*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00078*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.005	0.0177	0.00987	< 0.005	0.0204	0.0114	0.0333	0.0087	N/A	0.00805	0.0155	0.0297	0.0176	< 0.005	0.0177	0.00573	N/A	N/A	N/A
	3/15/2016	N/A	N/A	0.0109	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.0018*	0.0106	0.0196	< 0.005	0.0304	0.0132	0.0415	N/A	N/A	0.00578	0.0189	0.0348	0.0284	< 0.005	0.0106	0.00439*	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.00264*	0.0135	0.187	< 0.005	0.0325	0.0101	0.0459	N/A	N/A	0.00353*	0.0344	0.0353	0.0288	< 0.005	0.0135	0.00239*	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	0.0101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/17/2017	N/A	N/A	0.0582	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/19/2017	N/A	N/A	0.0114	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	0.00148*	0.0112	0.0147	< 0.005	0.00256*	0.00754	0.0403	N/A	N/A	0.00465*	0.0204	N/A	0.0225	< 0.005	0.0112	0.00335*	N/A	0.00279*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00498*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0429	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.005	0.0149	0.052	< 0.005	0.0354	0.00713	0.0144	N/A	N/A	0.00372*	0.0218	0.0405	0.0266	0.00102*	0.0149	0.00222*	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.0558	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2018	N/A	N/A	0.0163	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	0.00407	0.0136	0.0936	< 0.002	0.0282	0.00674	0.033	N/A	N/A	0.00305	0.0194	0.0362	0.0105	0.00131*	0.0136	0.0326	N/A	0.00524	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.0336	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2019	N/A	N/A	0.0194	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.005	0.0152	0.0222	< 0.005	0.00189*	0.00699	0.0278	N/A	N/A	0.00396*	0.0211	0.0285	0.00555	0.00249*	0.0152	0.00352*	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	0.00229*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.0204	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	0.0133	0.0229	< 0.005	0.00579	0.00646	0.0257	N/A	N/A	0.00194*	0.0166	0.0406	0.0177	< 0.005	0.0133	0.0118	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	0.00577	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.005	0.009	0.0163	< 0.005	0.00249*	0.00593	0.0144	N/A	N/A	0.00288*	0.0145	0.0324	< 0.005	< 0.005	0.009	0.00624	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.0118	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.005	0.0152	0.0187	< 0.005	0.028	0.00862	0.0376	N/A	N/A	< 0.005	0.0142	0.0372	0.00452*	< 0.005	0.0152	0.00459*	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.005	0.00423*	0.00992	< 0.005	0.0341	0.00682	0.0116	N/A	N/A	< 0.005	0.014	0.0348	0.0038*	< 0.005	0.00423*	0.0019*	< 0.005	0.0039*	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0309	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.005	0.0207	0.0143	< 0.005	0.0386	0.00681	0.0273	0.00412*	< 0.005	< 0.005	0.0178	0.038	0.00228*	< 0.005	0.0207	0.00324*	0.00392*	0.00889	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	1/31/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.016	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00474*	N/A	0.0653	< 0.005	0.0375	0.0108	0.0165	0.00261*	< 0.005	0.00291*	0.0203	0.0256	< 0.005	< 0.005	0.0126	0.00602	< 0.005	0.0175	0.0288
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0055	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0142	N/A
	10/4/2022	< 0.005	N/A	0.00972	< 0.005	0.0351	0.00624	0.0436	0.00191*	< 0.005	< 0.005	0.0229	0.0331	< 0.005	< 0.005	0.0152	0.00572	< 0.005	0.0115	0.0225
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	5/9/2023	< 0.005	N/A	0.0693	0.00217*	0.0266	0.016	0.0152	< 0.005	< 0.005	< 0.005	0.0153	0.0154	< 0.005	< 0.005	0.011	0.00378*	< 0.005	N/A	0.0158
	5/9/2023	N/A	N/A	0.0712	N/A	N/A	0.0058	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.00194*	N/A	0.0198	0.0027*	0.0339	0.00562	N/A	0.00228*	< 0.005	< 0.005	0.0196	N/A	0.00569	< 0.005	0.0168	0.00529	0.0029*	0.00707	0.014
	11/1/2023	N/A	N/A	N/A	N/A	N/A	0.00448*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Selenium, mg/L (CAS NO - 7782-49-2)	1/28/2008	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	0.00842	< 0.005	< 0.005	N/A	N/A	N/A
	2/24/2010	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	0.015	< 0.02	< 0.02	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	4/13/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00715	< 0.005	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	0.00536	< 0.02	< 0.005	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	10/21/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00677	< 0.005	< 0.005	N/A	N/A	N/A
	10/21/2010	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	3/22/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00501	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A
	3/22/2011	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005	< 0.01	< 0.005	N/A	N/A	< 0.01	< 0.005	N/A	< 0.005	< 0.005	< 0.01	< 0.01	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A
	4/10/2012	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/16/2012	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.000925	< 0.005	< 0.005	< 0.005	< 0.005	0.00196	< 0.005	N/A	N/A	< 0.005	0.00121	< 0.005	< 0.005	0.00231	< 0.005	< 0.005	N/A	< 0.005	N/A
	3/13/2014	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	9/29/2014	0.00119	0.00136	0.00291	< 0.005	0.000661	N/A	< 0.005	N/A	N/A	< 0.005	0.00456	0.000773	0.00128	0.00314	0.00136	0.00293	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00796	< 0.005	< 0.005	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00502	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.0078	< 0.005	< 0.005	N/A	< 0.005	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00791	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.00175*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00875	< 0.005	< 0.005	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.00114*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.000935*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00589	< 0.005	< 0.005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	0.00323*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00149*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.000955*	0.000939*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.000939*	< 0.005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	0.00102*	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	N/A	N/A	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	N/A	< 0.0025	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00393*	< 0.005	< 0.005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	0.00153*	0.00141*	< 0.005	< 0.005	0.00104*	0.00101*	< 0.005	N/A	N/A	0.00121*	< 0.005	0.00105*	< 0.005	0.00207*	0.00141*	< 0.005	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.00173*	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	0.00232*	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/8/2021	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	10/12/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00215*	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Selenium, mg/L (CAS NO - 7782-49-2)	4/19/2022	0.00131*	N/A	< 0.005	< 0.005	< 0.005	0.00139*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00123*	0.00244*	< 0.005	< 0.005	< 0.005	< 0.005
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/4/2022	0.00135*	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00147*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.00299*	N/A	0.00281*	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Silver, mg/L (CAS NO - 7440-22-4)	1/28/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.1	< 0.06	N/A	N/A	N/A
	2/24/2010	N/A	< 0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	4/13/2010	< 0.02	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.1	< 0.02	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	10/21/2010	< 0.02	< 0.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.02	N/A	N/A	N/A
	10/21/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
	3/22/2011	< 0.02	< 0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	N/A	< 0.02	N/A
	3/22/2011	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.02	< 0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.06	< 0.02	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.02	< 0.06	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.06	< 0.02	N/A	< 0.02	N/A
	4/10/2012	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/16/2012	< 0.02	< 0.04	N/A	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.04	< 0.02	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.02	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A
	3/13/2014	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	9/29/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.001	< 0.001	0.000064	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	0.000079	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.000122*	< 0.001	0.000124*	< 0.001	0.000042*	< 0.001	< 0.001	0.000055	N/A	0.000048*	< 0.001	< 0.001	< 0.001	0.000117*	< 0.001	< 0.001	N/A	< 0.001	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.001	< 0.001	< 0.001	0.000172*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	0.000216*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.000181*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	0.000197*	0.000162*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.000178*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	0.000473*	< 0.001	< 0.001	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Silver, mg/L (CAS NO - 7440-22-4)	3/8/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00077*	N/A	< 0.001	0.000593*	< 0.001	0.000751*	< 0.001	< 0.001	< 0.001	< 0.001	0.000567*	< 0.001	< 0.001	0.00058*	0.000805*	< 0.001	< 0.001	< 0.001	< 0.001
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A	N/A
	10/4/2022	0.00147	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	N/A	< 0.001	< 0.001	< 0.001	0.000664*	< 0.001	< 0.001	< 0.001	< 0.001	0.000789*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	0.00123	N/A	0.00125	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Thallium, mg/L (CAS NO - 7440-28-0)	1/28/2008	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	2/24/2010	N/A	0.00238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	0.00238	< 0.002	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	4/13/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	10/21/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	10/21/2010	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	3/22/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00231	< 0.002	N/A	< 0.002	N/A
	3/22/2011	N/A	0.00231	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A
	4/10/2012	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	8/16/2012	< 0.002	0.00331	N/A	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	0.0034	N/A	N/A	< 0.002	0.00331	< 0.002	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.002	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/14/2012	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	1/15/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.000866	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	0.00276	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A
	3/13/2014	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	9/29/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	N/A	< 0.002	0.000944	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.001	0.00027*	< 0.001	< 0.001	0.000065	< 0.001	0.000036	< 0.001	N/A	0.000064	0.000851	0.000052	0.000063	< 0.001	0.00027*	< 0.001	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.001	0.000334*	< 0.001	< 0.001	0.000057*	0.000079*	< 0.001	0.000117	N/A	0.000063*	< 0.001	< 0.001	< 0.001	< 0.001	0.000334*	0.00006*	N/A	0.000076*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.001	0.000122*	< 0.001	< 0.001	0.000028*	0.000074*	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000122*	< 0.001	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.000036*	0.00029*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	0.000065*	< 0.001	< 0.001	< 0.001	0.00029*	< 0.001	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.001	0.000226*	0.000034*	< 0.001	0.000028*	0.000026*	0.000027*	N/A	N/A	< 0.001	0.000062*	< 0.001	< 0.001	< 0.001	0.000226*	< 0.001	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.001	0.000198*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	0.000074*	N/A	< 0.001	< 0.001	0.000198*	< 0.001	N/A	< 0.001	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.001	0.000134*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	0.000104*	< 0.001	< 0.001	< 0.001	0.000134*	< 0.001	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Thallium, mg/L (CAS NO - 7440-28-0)	5/12/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.001	0.00093*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00093*	< 0.001	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	0.0016	0.000301*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	0.000658*	< 0.001	< 0.001	< 0.001	0.000301*	< 0.001	< 0.001	< 0.001	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.001	0.000476*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000476*	< 0.001	< 0.001	< 0.001	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.000266*	N/A	< 0.001	< 0.001	< 0.001	0.000417*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000529*	< 0.001	< 0.001	< 0.001	0.00029*
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	10/4/2022	0.000754*	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000297*
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.001	N/A	< 0.001	< 0.001	< 0.001	0.00198	0.000489*	< 0.001	< 0.001	< 0.001	0.00257	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001
	5/9/2023	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.001	N/A	< 0.001	< 0.001	0.000523*	< 0.001	N/A	< 0.001	< 0.001	< 0.001	0.000692*	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A
Tin, mg/L (CAS NO - 7440-31-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.172	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.29	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.286	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.1	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.083	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0496	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	3/15/2016	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
Vanadium, mg/L (CAS NO - 7440-62-2)	1/28/2008	< 0.05	N/A	0.0547	< 0.05	< 0.05	0.254	< 0.05	N/A	N/A	N/A	0.0574	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0704	N/A	< 0.05	< 0.05	< 0.05	0.224	< 0.05	N/A	N/A	N/A	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.199	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.05	N/A	0.061	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	0.108	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.05	N/A	< 0.05	< 0.05	< 0.05	0.0742	< 0.05	N/A	N/A	0.0989	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0534	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0886	0.0736	< 0.05	< 0.25	< 0.15	N/A	N/A	N/A
	2/24/2010	N/A	< 0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	0.0574	< 0.05	< 0.15	< 0.05	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	4/13/2010	< 0.05	< 0.25	< 0.05	< 0.05	< 0.05	0.0699	< 0.05	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.25	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.25	< 0.05	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	10/21/2010	< 0.05	< 0.25	< 0.05	< 0.05	< 0.05	< 0.05	0.0694	N/A	N/A	< 0.05	< 0.05	< 0.05	0.078	< 0.05	< 0.25	< 0.05	N/A	N/A	N/A
	10/21/2010	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A
	1/19/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.0722	< 0.05	N/A	N/A	< 0.05	< 0.05	< 0.05	0.0927	< 0.05	< 0.15	< 0.05	N/A	< 0.05	N/A
	3/22/2011	N/A	< 0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.05	< 0.15	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	N/A	0.146	< 0.05	< 0.15	< 0.05	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.05	< 0.15	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.15	< 0.05	N/A	< 0.05	N/A
	4/10/2012	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/16/2012	< 0.05	< 0.1	N/A	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	< 0.05	< 0.1	< 0.05	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.05	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.05	< 0.05	0.106	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.141	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Vanadium, mg/L (CAS NO - 7440-62-2)	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.00402	0.0231	0.00497	< 0.05	< 0.05	0.0395	0.00542	< 0.05	0.0177	< 0.05	0.0305	0.0102	0.183	< 0.05	0.0231	0.00425	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A
	3/13/2014	0.00314	0.0219	0.00396	< 0.05	< 0.05	0.0459	0.00622	N/A	N/A	0.00429	0.0575	0.0177	0.0712	< 0.05	0.0219	0.00491	N/A	< 0.05	N/A
	3/13/2014	N/A	0.0156	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0156	N/A	N/A	N/A	N/A
	9/29/2014	0.0182	0.03	0.0122	0.00462	0.00464	N/A	0.00665	N/A	N/A	0.00437	0.016	0.00916	0.0507	0.00662	0.03	0.0629	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00401	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	0.0012*	**0.0082**	0.0013	0.00342	< 0.005	0.00514	0.00377	< 0.005	N/A	0.00365	0.00659	0.00991	0.0205	0.000594	**0.0082**	0.00134	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.00118	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.005	0.000539*	0.00133*	0.000936*	< 0.005	**0.0165**	0.00122*	0.00273	N/A	0.000926*	0.00088*	< 0.005	0.00307*	< 0.005	0.000539*	< 0.005	N/A	< 0.005	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.000347*	0.000815*	0.00235*	0.000606*	< 0.005	0.00189*	0.00087*	0.00323	N/A	0.000466*	0.000478*	0.0003*	0.00181*	0.00042*	0.000815*	0.000771*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	0.00161*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	0.000831*	< 0.005	0.000882*	0.000641*	0.000282*	0.00199*	0.000686*	N/A	N/A	< 0.005	< 0.005	0.00145*	0.00097*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.00029*	< 0.005	0.00086*	0.000884*	0.000271*	0.000437*	0.00081*	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00108*	0.00042*	< 0.005	< 0.005	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	0.000443*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.005	< 0.005	0.00102*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	N/A	0.0013*	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.017**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.005	< 0.005	< 0.005	< 0.005	0.00138*	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	0.0013*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	0.00431*	< 0.005	< 0.005	< 0.005	0.00238*	< 0.005	0.00357*	N/A	N/A	< 0.005	< 0.005	0.00398*	0.00328*	< 0.005	< 0.005	< 0.005	N/A	0.00251*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.00406*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.005	< 0.005	0.00102*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00126*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.000885*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00241*	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00106*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.005	< 0.005	0.00104*	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00107*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.005	< 0.005	0.000868*	< 0.005	< 0.005	0.00215*	0.00135*	N/A	N/A	< 0.005	< 0.005	< 0.005	0.00133*	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.005	0.00205*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00205*	< 0.005	0.00154*	< 0.005	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00128*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	4/19/2022	0.00245*	N/A	< 0.005	< 0.005	< 0.005	0.00183*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00222*	< 0.005
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.00162*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	10/4/2022	< 0.005	N/A	0.00166*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.005	N/A	0.00166*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00123*	< 0.005	< 0.005	< 0.005	0.00216*	0.00137*	0.00135*	0.00116*	0.0026*	N/A	0.00124*
	5/9/2023	N/A	N/A	< 0.005	N/A	N/A	0.0012*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.005	N/A	0.00192*	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00161*	< 0.005	< 0.005
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A
Zinc, mg/L (CAS NO - 7440-66-6)	1/28/2008	0.0216	N/A	0.167	0.03	0.0362	0.719	< 0.02	N/A	N/A	N/A	0.0891	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	0.0272	N/A	0.0587	0.0619	0.0612	0.0694	0.0476	N/A	N/A	N/A	0.0816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	0.0715	N/A	0.129	0.0789	0.225	0.207	0.0592	N/A	N/A	N/A	0.206	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	0.0914	N/A	0.109	< 0.02	0.0869	0.535	0.0816	N/A	N/A	N/A	0.218	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	0.472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	0.0399	N/A	0.138	0.0216	0.104	0.117	0.0463	N/A	N/A	N/A	0.0899	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	0.101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	0.211	0.0574	0.121	0.107	0.0485	N/A	N/A	0.419	0.0678	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	0.0658	N/A	0.157	0.0872	0.168	0.28	0.0584	N/A	N/A	0.33	0.202	N/A	N/A	N/A	N/A	N/A	N/A	**0.198**	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.506	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	0.135	N/A	N/A	N/A	N/A	N/A	0.0924	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	0.874	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.207	0.234	0.0518	0.874	0.514	N/A	N/A	N/A
	2/24/2010	N/A	< 0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	0.0342	< 0.02	< 0.06	0.0861	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0268	N/A	N/A	N/A
	4/13/2010	0.0263	0.174	0.218	0.0585	0.0706	0.14	0.0603	N/A	N/A	0.0561	0.046	0.0765	0.0636	< 0.02	0.174	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	0.0525	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	0.275	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0546	0.0769	0.0431	0.275	0.209	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.184	N/A	N/A	N/A
	10/21/2010	< 0.02	< 0.1	0.169	0.197	0.0795	< 0.02	0.14	N/A	N/A	< 0.02	0.0536	< 0.02	0.0657	< 0.02	< 0.1	0.0348	N/A	N/A	N/A
	10/21/2010	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A	N/A
	3/22/2011	< 0.02	< 0.06	0.0415	< 0.02	< 0.02	0.101	0.0203	N/A	N/A	< 0.02	0.0227	< 0.02	0.0755	< 0.02	< 0.06	< 0.02	N/A	< 0.02	N/A
	3/22/2011	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.02	< 0.06	0.0713	< 0.02	< 0.02	0.0923	< 0.02	N/A	N/A	0.0386	0.0928	N/A	0.154	< 0.02	< 0.06	0.0302	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.02	0.0664	0.094	< 0.02	< 0.02	0.027	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0664	0.0271	N/A	< 0.02	N/A
	4/10/2012	N/A	N/A	0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/16/2012	< 0.02	0.0971	N/A	0.0265	0.0476	0.0707	N/A	N/A	N/A	0.0546	0.0933	N/A	N/A	0.0224	0.0971	0.0401	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	0.0702	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Zinc, mg/L (CAS NO - 7440-66-6)	10/29/2012	N/A	N/A	N/A	< 0.02	N/A	N/A	0.0551	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	0.0497	0.217	0.366	0.076	0.142	0.135	0.0408	0.096	0.132	0.118	0.214	0.145	0.241	0.069	0.217	0.139	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0964	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/26/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0681	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0647	0.085	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	0.032	0.0547	0.0609	0.0527	0.0493	0.104	0.0368	0.0816	0.0589	0.0651	0.112	0.0584	0.2	0.088	0.0547	0.0496	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0337	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.02	0.0582	0.0301	< 0.02	< 0.02	0.0479	0.0221	N/A	N/A	0.0585	0.0957	0.0177	0.0662	0.0262	0.0139	0.0376	N/A	**0.0517**	N/A
	3/13/2014	N/A	0.0139	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0582	N/A	N/A	N/A	N/A
	9/29/2014	0.0272	0.0353	0.0547	< 0.02	0.0136	N/A	0.0343	N/A	N/A	< 0.02	0.037	< 0.02	0.0461	0.0156	0.0353	0.121	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	0.00798*	**0.0218**	< 0.01	0.0115	0.013	0.0408	0.0171	< 0.01	N/A	0.0302	0.0727	0.0286	0.0346	< 0.01	**0.0218**	0.00896	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.01	< 0.01	< 0.01	< 0.01	0.00979*	**0.0588**	**0.026**	0.0344	N/A	**0.0121**	< 0.01	< 0.01	**0.0309**	< 0.01	< 0.01	0.00887*	N/A	0.00964*	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.01	< 0.01	< 0.01	< 0.01	0.00595*	0.006*	0.00864*	0.0124	N/A	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00766*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.01	0.00769*	< 0.01	0.00608*	0.0097*	0.00588*	**0.0168**	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.00769*	< 0.01	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.01	< 0.01	0.00538*	< 0.01	**0.0174**	< 0.01	**0.0147**	N/A	N/A	< 0.01	0.00521*	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0146*	N/A	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.048**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**0.0279**	0.0116*	0.0141*	0.0111*	0.0109*	< 0.02	0.00957*	N/A	N/A	< 0.02	0.00807*	0.0173*	0.0121*	0.00831*	0.0116*	0.0132*	N/A	0.00824*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.0126*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	0.0104*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	**0.0339**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	0.0174*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.02	< 0.02	< 0.02	< 0.02	0.0109*	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	0.0135*	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	**0.0244**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0136*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.02	< 0.02	< 0.02	< 0.02	0.0131*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0129*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 0.02	N/A	0.0125*	< 0.02	< 0.02	**0.0209**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0169*	< 0.02
	4/19/2022	N/A	N/A	N/A	N/A	N/A	0.0159*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	10/4/2022	< 0.02	N/A	< 0.02	< 0.02	0.012*	< 0.02	0.0109*	< 0.02	< 0.02	**0.0232**	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.02	N/A	0.00657*	0.0114*	0.00996*	0.00796*	0.0109*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.00673*	< 0.02	< 0.02	N/A	< 0.02
	5/9/2023	N/A	N/A	0.00905*	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.02	N/A	< 0.02	< 0.02	0.00964*	< 0.02	N/A	< 0.02	< 0.02	0.00958*	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	0.019*	< 0.02	< 0.02
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/L (CAS NO - TSS)	3/13/2014	358	9960	260	74	76	15700	154	N/A	N/A	640	830	2050	10100	21	9960	1460	N/A	< 5	N/A
	3/13/2014	N/A	11700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11700	N/A	N/A	N/A	N/A
	6/10/2014	N/A	2950	522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2950	N/A	N/A	N/A	N/A
	9/29/2014	3480	3520	668	100	135	N/A	1210	N/A	N/A	70.5	4350	1470	2660	222	3520	1010	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2015	N/A	**29.6**	72.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**29.6**	N/A	N/A	N/A	N/A
	3/20/2015	N/A	**115**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**115**	N/A	N/A	N/A	N/A
	5/20/2015	**123**	**726**	115	126	34.4	17.6	142	99.6	878	119	744	606	927	< 1.88	**726**	272	N/A	N/A	N/A
	5/20/2015	N/A	N/A	105	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	**41.3**	**71**	**25.3**	**105**	**20.4**	**3580**	**26.5**	14300	914	**42.3**	**49.8**	**34.6**	**147**	< 1.88	**71**	**10.1**	N/A	< 1.88	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.25*	N/A	N/A	N/A	N/A	N/A
	3/15/2016	**6.62**	**24.3**	**41.5**	**86.9**	**11.8**	**123**	**18.8**	710	1080	**4.75**	**34.4**	**10.4**	**84.4**	< 1.88	**24.3**	**39.9**	N/A	N/A	N/A
	3/15/2016	N/A	N/A	**17**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	**85**	**5.5**	**28.5**	**99**	**16**	**285**	**17.7**	N/A	N/A	**7.25**	**11.6**	**43.8**	**50**	0.75*	**5.5**	**9**	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.5*	N/A	N/A	N/A	N/A	N/A
	2/6/2017	**3.5**	**3.25**	**12.4**	**64.1**	**11**	**32.6**	**11.8**	N/A	N/A	**14.5**	**8.37**	**15.4**	**22**	**3.75**	**3.25**	**4.88**	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	**42.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/17/2017	N/A	**15.6**	**31**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**15.6**	N/A	N/A	N/A	N/A
	7/19/2017	N/A	N/A	**27**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	**20.3**	**4.5**	**39.5**	**72.5**	**8.75**	**12.6**	**23.8**	N/A	N/A	**6**	**16**	N/A	**37.6**	**38.9**	**4.5**	**3.5**	**15.3**	1.25*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**6.63**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1880**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	**8**	**23.5**	**31**	**66.5**	**18**	**7**	1.63*	N/A	N/A	**5.88**	**9.12**	**16.1**	**76**	**3.63**	**23.5**	**3.75**	N/A	N/A	N/A
	2/26/2018	N/A	N/A	**32.7**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2018	N/A	N/A	**22.5**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	**73**	**6**	**15.2**	**67.3**	**11**	**9.38**	1.75*	N/A	N/A	**6.5**	**32.5**	**30.1**	**54**	**1.88**	**6**	1.13*	1.75*	**210**	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	1.75*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Metals Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Total Suspended Solids, mg/L (CAS NO - TSS)	1/15/2019	N/A	5.37	22.8	N/A	N/A	N/A	N/A	N/A	N/A	6.87	N/A	N/A	N/A	N/A	5.37	N/A	N/A	26	N/A
	4/10/2019	N/A	4.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.37	N/A	N/A	0.75*	N/A
	5/16/2019	< 1.88	3	13.8	59.5	2	1.63*	1.63*	N/A	N/A	15.9	52	21.8	78	< 1.88	3	1*	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	1.63*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	8.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1.88	4	14.5	51	1.63*	1.88	21.5	N/A	N/A	44.8	44	12.9	31	1*	4	4	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	1.38*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1.88	4*	13*	50	2.25	2	1*	N/A	N/A	11.4	42	7.5	22	1.88	4*	5.63	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	0.75*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	21	2.13	14.3	60	14.8	68.8	5.13	N/A	N/A	12.5	18	10.3	31	0.875*	2.13	46	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1.88	2.38	13	48.3	26	3.5	0.75*	N/A	N/A	7.75	18.8	13	3	< 1.88	2.38	4.25	3.25	< 1.88	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/8/2021	N/A	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	N/A	N/A	N/A	N/A
	10/12/2021	< 1.88	11.3	17	49	32.3	3	7.33	21.8	1.5*	12.7	21	17	33.7	1.5*	11.3	5.75	13.9	72.6	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2*	N/A	N/A	N/A	N/A	N/A
	1/31/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.7	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	203	N/A	5.25	87	11	106	3*	16	0.75*	6.12	31	29	8.5	< 1.88	1.5*	3.25	7	19.5	2
	4/19/2022	N/A	N/A	N/A	N/A	N/A	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.37	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18.8	N/A
	10/4/2022	20	N/A	30	61	12.3	6.62	14.5	14.7	< 1.88	38	42	9.87	13.8	1.25*	18.3	5	3.25	2.5	1.13*
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.88	N/A	N/A	N/A	N/A	N/A	1*	N/A	N/A	N/A	N/A	N/A
	5/9/2023	2.38	N/A	14.5	118	23.3	2.75	5.5	16.5	0.875*	16	34	12.8	6.5	1.38*	2.13	1.88	12.4	N/A	35.3
	5/9/2023	N/A	N/A	8.25	N/A	N/A	3.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	4.88	N/A	35.5	66	22.3	5.5	N/A	35	< 1.88	28.8	40.5	N/A	31.5	1.38*	19.9	44	115	1.38*	3
	11/1/2023	N/A	N/A	N/A	N/A	N/A	3.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.13*	N/A	N/A	N/A	N/A	N/A

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

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

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

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.33	N/A	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	N/A	N/A	N/A	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.33	N/A	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	N/A	N/A	N/A	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.19	N/A	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.19	N/A	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.23	N/A	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.23	N/A	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 4	< 1	< 4	N/A	N/A	< 1	< 4	< 4	< 1	< 1	< 4	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.37	N/A	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.37	N/A	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.19	N/A	0.279	< 0.19	1.02	< 0.19	< 0.19	N/A	N/A	N/A	0.293	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.19	N/A	< 0.19	< 0.19	0.61	< 0.19	< 0.19	N/A	N/A	N/A	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	1.14	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.18	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.52	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	2.25	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.62	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	2.08	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	1.76	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	1.14	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	1.15	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	1.03	< 1	< 1	< 1	N/A	N/A	< 1	1.09	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	1.61	0.731*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	0.766*	0.562*	< 1	< 1	N/A	N/A	< 1	2.03	0.661*	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	2.23	0.445*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	0.373*	< 1	< 1	N/A	N/A	< 1	2.63	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.49	0.359*	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	0.276*	< 1	< 1	N/A	N/A	< 1	2.28	0.525*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.02	0.477*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	0.356*	< 1	< 1	N/A	N/A	< 1	2.45	0.51*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.36	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.531*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	0.591*	< 1	< 1	N/A	N/A	< 1	2.72	0.591*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.58	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.42	0.324*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	2.43	0.229*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	1.98	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	0.667*	< 1	< 1	N/A	N/A	< 1	2.68	0.241*	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	10/12/2021	< 1	N/A	< 1	< 1	0.679*	< 1	< 1	< 1	< 1	< 1	1.87	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	0.668*	< 1	< 1	< 1	< 1	< 1	2.11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	0.762*	< 1	< 1	< 1	< 1	< 1	2.28	0.249*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	0.601*	< 1	< 1	< 1	< 1	< 1	2.03	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	0.572*	< 1	N/A	< 1	< 1	< 1	2.04	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	1/28/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.37	N/A	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.37	N/A	< 0.37	< 0.37	< 0.37	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	4/13/2010	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	10/21/2010	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	3/22/2011	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	4/10/2012	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	9/29/2014	< 2	N/A	< 2	< 2	< 2	N/A	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	0.165*	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 20	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	3/8/2021	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	10/4/2022	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/9/2023	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.7	N/A	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	N/A	N/A	N/A	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.7	N/A	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	N/A	N/A	N/A	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.5	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 4	N/A	< 4	< 4	< 1	< 4	< 4	N/A	N/A	< 4	< 1	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.86	N/A	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.86	N/A	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.86	N/A	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.86	N/A	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.86	< 0.86	< 0.86	< 0.86	< 0.86	N/A	N/A	< 0.86	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.498	N/A	< 0.498	< 0.498	< 10	< 0.498	< 0.498	N/A	N/A	< 0.498	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A
	4/13/2010	< 0.498	N/A	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	< 0.498	< 0.498	< 0.498	< 0.498	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.498	N/A	N/A	N/A
	10/21/2010	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	1.2	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A
	3/22/2011	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	< 0.12	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	0.6	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	< 0.12	N/A
	4/10/2012	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A
	8/16/2012	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.12	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	< 0.12	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A
	9/29/2014	< 0.12	N/A	< 0.12	< 0.12	< 0.12	N/A	< 0.12	N/A	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 5	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	5/12/2020	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A
	10/4/2022	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	N/A	< 1.2
	5/9/2023	N/A	N/A	< 1.2	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	N/A	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.2	N/A	N/A	N/A	N/A	N/A
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	< 0.25	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.255	N/A	< 0.255	< 0.255	< 10	< 0.255	< 0.255	N/A	N/A	< 0.255	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A
	4/13/2010	< 0.255	N/A	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	< 0.255	< 0.255	< 0.255	< 0.255	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.255	N/A	N/A	N/A
	10/21/2010	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A
	3/22/2011	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A
	4/10/2012	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A
	8/16/2012	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.13	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A
	9/29/2014	< 0.13	N/A	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 1.3	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	9/19/2019	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A
	10/4/2022	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	N/A	< 0.34
	5/9/2023	N/A	N/A	< 0.34	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	N/A	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34	< 0.34
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.34	N/A	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.21	N/A	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.21	N/A	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 2	N/A	< 1	< 1	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.2	N/A	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.2	N/A	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.4	N/A	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.4	N/A	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	1.07	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	3.06	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	1.95	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	0.301*	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	0.322*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	0.367*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	0.339*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.16	N/A	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	N/A	N/A	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.16	N/A	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	N/A	N/A	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 4	< 1	< 4	N/A	N/A	< 1	< 4	< 4	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.59*	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	0.919*	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.474*	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.286*	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.696*	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.596*	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
2-Butanone, ug/L (CAS NO - 78-93-3)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.91	N/A	1.3	< 0.91	< 0.91	< 0.91	< 0.91	N/A	N/A	N/A	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.91	N/A	< 0.91	< 0.91	< 0.91	< 0.91	< 0.91	N/A	N/A	N/A	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	1.96*	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	3.33*	< 10	< 10	< 10	< 10	N/A	N/A	2*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2-Butanone, ug/L (CAS NO - 78-93-3)	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	2.4*	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	2.34*	2.7*	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	7.65*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
2-Hexanone, ug/L (CAS NO - 591-78-6)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 1.76	N/A	< 1.76	< 1.76	< 1.76	< 1.76	< 1.76	N/A	N/A	N/A	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 1.76	N/A	< 1.76	< 1.76	< 1.76	< 1.76	< 1.76	N/A	N/A	N/A	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 1.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2-Hexanone, ug/L (CAS NO - 591-78-6)	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	3.1*	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.906*	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Acetone, ug/L (CAS NO - 67-64-1)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 4.62	N/A	< 4.62	< 4.62	< 4.62	< 4.62	< 4.62	N/A	N/A	N/A	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 4.62	N/A	< 4.62	< 4.62	< 4.62	< 4.62	< 4.62	N/A	N/A	N/A	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 4.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	1.99*	< 10	< 10	< 10	N/A	N/A	< 10	2.59*	< 10	2.81*	< 10	< 10	4.74*	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	5.86*	< 10	< 10	< 10	1.88*	N/A	N/A	< 10	4.29*	< 10	2.86*	3.47*	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	2.39*	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	6.46*	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	7.33*	N/A	5.38*	5.73*	6.61*	3.77*	4*	N/A	N/A	< 10	9.4*	< 10	< 10	22.3	3.14*	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	6.22*	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	3.61*	N/A	< 10	< 10	< 10	1.82*	< 10	N/A	N/A	3.49*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	1.96*	N/A	< 10	< 10	< 10	2.52*	< 10	N/A	N/A	< 10	< 10	< 10	1.96*	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Acetone, ug/L (CAS NO - 67-64-1)	2/6/2017	6.54*	N/A	2.18*	2.13*	< 10	1.96*	< 10	N/A	N/A	2.39*	< 10	< 10	3.1*	2.11*	< 10	3.42*	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	2.77*	N/A	3.47*	< 10	< 10	2.76*	2.34*	N/A	N/A	2.98*	< 10	N/A	3.16*	< 10	2.66*	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.3*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.07*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	3.87*	8.8*	3.66*	< 10	2.11*	N/A	N/A	2.03*	2.41*	8.53*	4.26*	2.7*	4.57*	3.27*	N/A	N/A	N/A
	2/26/2018	N/A	N/A	5.72*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	40.6*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	3.87*	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	39.8	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	4.87*	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	4.89*	5.28*	< 10	< 10	< 10	5.8*	4.9*	5.31*	< 10	4.12*	4.3*	3.27*	3.28*	7.84*	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.26*	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10.7	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	20.6	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	4.18*	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	13.2	3.31*	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	3.1*	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Acrylonitrile, ug/L (CAS NO - 107-13-1)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 1.28	N/A	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	N/A	N/A	N/A	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 1.28	N/A	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	N/A	N/A	N/A	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Acrylonitrile, ug/L (CAS NO - 107-13-1)	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	0.728*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Benzene, ug/L (CAS NO - 71-43-2)	1/28/2008	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.16	N/A	0.449	< 0.16	< 0.16	< 0.16	< 0.16	N/A	N/A	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.16	N/A	0.44	< 0.16	0.2	< 0.16	0.43	N/A	N/A	N/A	0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	0.62	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	0.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.57	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.03	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	4/13/2010	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	1.83	N/A	N/A	< 0.5	0.78	1.81	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.78	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	10/21/2010	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	5.11	N/A	N/A	< 0.5	< 0.5	2.25	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	3/22/2011	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	1.48	N/A	N/A	< 0.5	< 0.5	2.11	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	2.41	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	1.14	N/A	N/A	< 0.5	< 0.5	N/A	0.67	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	0.75	2	0.64	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	4/10/2012	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/16/2012	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	0.91	N/A	N/A	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 0.5	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 0.5	N/A	< 0.5	2.09	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	0.702	1.9	0.663	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 0.5	N/A	0.15*	< 0.5	0.194*	< 0.5	< 0.5	N/A	N/A	< 0.5	1.18	1.87	0.549	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 0.5	N/A	< 0.5	2.65	< 0.5	< 0.5	0.207*	N/A	N/A	< 0.5	1.14	1.33	0.413*	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A
	9/29/2014	< 0.5	N/A	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	N/A	< 0.5	1.45	1.53	0.323*	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 0.5	N/A	< 0.5	< 0.5	0.168*	< 0.5	< 0.5	N/A	N/A	< 0.5	1.82	1.73	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	1.77	1.19	0.251*	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Benzene, ug/L (CAS NO - 71-43-2)	3/15/2016	< 0.5	N/A	< 0.5	< 0.5	0.174*	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.56**	**1.17**	0.305*	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 0.5	N/A	< 0.5	0.348*	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**0.946**	**1.09**	**0.586**	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 0.5	N/A	< 0.5	< 0.5	0.182*	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.42**	**1.37**	**0.719**	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.69**	N/A	**0.541**	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.927**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 0.5	N/A	< 0.5	< 0.5	0.233*	< 0.5	< 0.5	N/A	N/A	< 0.5	**2.01**	**1.5**	0.425*	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**2.07**	**1.26**	0.275*	< 0.5	< 0.5	< 0.5	N/A	< 5	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.84**	**1.7**	0.234*	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**0.997**	**1.29**	0.41*	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.97**	**1.88**	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.46**	**1.29**	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 0.5	N/A	< 0.5	< 0.5	0.236*	< 0.5	< 0.5	N/A	N/A	< 0.5	**1.89**	**1.43**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.46**	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.17**	**1.38**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 0.5	N/A	< 0.5	< 0.5	0.252*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.61**	**1.53**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.71**
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5
	10/4/2022	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.51**	**1.3**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.298*
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 0.5	N/A	< 0.5	< 0.5	0.288*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**2.02**	**0.973**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	0.388*
	5/9/2023	N/A	N/A	< 0.5	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5	**1.73**	N/A	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A
Bromochloromethane, ug/L (CAS NO - 74-97-5)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.76	N/A	< 0.76	< 0.76	< 0.76	< 0.76	< 0.76	N/A	N/A	N/A	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.76	N/A	< 0.76	< 0.76	< 0.76	< 0.76	< 0.76	N/A	N/A	N/A	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 50	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.2	N/A	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.2	N/A	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 10	< 5	< 5	< 5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Bromoform, ug/L (CAS NO - 75-25-2)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.43	N/A	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	N/A	N/A	N/A	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.43	N/A	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	N/A	N/A	N/A	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 50	N/A	< 50	< 50	< 50	< 50	< 50	N/A	N/A	< 50	< 50	< 50	< 50	< 50	< 50	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Bromoform, ug/L (CAS NO - 75-25-2)	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 50	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Bromomethane, ug/L (CAS NO - 74-83-9)	1/28/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.48	N/A	< 0.48	< 0.48	< 0.48	1	< 0.48	N/A	N/A	N/A	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.48	N/A	< 0.48	< 0.48	< 0.48	< 0.48	< 0.48	N/A	N/A	N/A	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/21/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	3/22/2011	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 4	N/A	< 4	< 4	< 20	< 4	< 4	N/A	N/A	< 4	< 20	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	4/10/2012	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/16/2012	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Bromomethane, ug/L (CAS NO - 74-83-9)	8/7/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	9/29/2014	< 4	N/A	< 4	< 4	< 4	N/A	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.278*	N/A	< 4	< 4	0.258*	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 4	N/A	0.465*	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 4	N/A	< 4	< 4	0.279*	< 4	< 4	N/A	N/A	< 4	< 4	0.266*	< 4	< 4	0.318*	< 4	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	N/A	0.569*	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 4	N/A	< 4	< 4	< 4	< 4	0.317*	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 40	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/4/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/9/2023	N/A	N/A	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.18	N/A	< 0.18	< 0.18	**0.398**	**0.233**	< 0.18	N/A	N/A	N/A	**0.768**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.18	N/A	**0.26**	**0.57**	**0.18**	< 0.18	< 0.18	N/A	N/A	N/A	**0.43**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 1	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 4	< 1	< 4	N/A	N/A	< 1	< 4	< 4	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	**2.6**	**1.52**	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.402*	0.946*	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.365*	< 1	< 1	0.208*	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	0.245*	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	0.405*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.682*	0.271*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	0.155*	< 1	< 1	< 1	< 1	N/A	N/A	0.366*	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	0.29*	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.631*	< 1	0.255*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	0.261*	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.276*	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.355*	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	1/28/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 4	< 5	< 5	< 5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	3/22/2011	< 2	N/A	< 2	< 2	< 4	< 2	< 4	N/A	N/A	< 2	< 4	< 4	< 2	< 2	< 4	< 2	N/A	< 2	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	4/10/2012	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	9/29/2014	< 2	N/A	< 2	< 2	< 2	N/A	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 20	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	10/4/2022	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2
	5/9/2023	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
Chlorobenzene, ug/L (CAS NO - 108-90-7)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.17	N/A	**0.709**	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.17	N/A	**0.78**	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	**1.13**	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	**1.19**	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	1.42	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.925*	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	1.43	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	1.14	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	0.269*	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	0.76*	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.44*	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.332*	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.357*	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.696*	1.15	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	1.06	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.648*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.689*	1.01	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	0.196*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.786*	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.876*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.78*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	1.03	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.897*	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.18	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.638*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.12	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	0.529*	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 20	N/A	< 20	< 20	< 20	< 20	< 20	N/A	N/A	< 20	< 20	< 20	< 20	< 20	< 20	< 20	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 50	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Chloroethane, ug/L (CAS NO - 75-00-3)	1/28/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	0.772	N/A	3.37	1.49	0.607	< 0.5	1.04	N/A	N/A	N/A	9.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	8.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.5	N/A	1.06	1.04	< 0.5	< 0.5	1	N/A	N/A	N/A	8.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	5.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	13.4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	9.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.74	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.93	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/13/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	10.9	9.06	< 4	< 4	< 4	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.12	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/21/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	6.94	8.98	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	3/22/2011	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	6.6	6.38	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	10/25/2011	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	8.37	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	9.06	4.78	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	4/10/2012	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/16/2012	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	10.6	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	8.23	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	7.85	3.67*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 4	N/A	< 4	2.2*	< 4	< 4	< 4	N/A	N/A	< 4	7.79	3.53*	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	9/29/2014	< 4	N/A	< 4	< 4	< 4	N/A	< 4	N/A	N/A	< 4	5.54	2.21*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	7.65	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	6.17	2.27*	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	6.65	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	5.28	2.32*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	4.56	4.34	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	6.4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.79*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	4.59	0.819*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	2.44*	< 4	< 4	< 4	< 4	N/A	< 40	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	4.53	2.48*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	2.04*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	2.36*	1.09*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	2.89*	1.11*	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	3.35*	1.4*	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.29*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.58*	1.12*	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.37*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.07*
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/4/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.87*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	3.31*	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/9/2023	N/A	N/A	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	1.78*	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Chloroform, ug/L (CAS NO - 67-66-3)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.17	N/A	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.17	N/A	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 2.5	N/A	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	N/A	N/A	N/A	< 2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 2	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chloroform, ug/L (CAS NO - 67-66-3)	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 30	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/4/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/9/2023	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
Chloromethane, ug/L (CAS NO - 74-87-3)	1/28/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.2	N/A	< 0.2	< 0.2	< 0.2	0.263	< 0.2	N/A	N/A	N/A	0.348	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.2	N/A	< 0.2	< 0.2	0.2	< 0.2	0.21	N/A	N/A	N/A	0.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	4/13/2010	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/21/2010	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	3/22/2011	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	4/10/2012	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/16/2012	< 3	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	1.05*	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	9/29/2014	< 3	N/A	< 3	< 3	< 3	N/A	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 3	N/A	0.47*	< 3	0.315*	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 30	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	3.99	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	6.34	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	2.02*	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/4/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/9/2023	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 3	N/A	< 3	0.646*	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	1/28/2008	< 1	N/A	< 1	< 1	5.72	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.37	N/A	< 0.37	< 0.37	5.07	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	4.36	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.37	N/A	< 0.37	< 0.37	4.66	< 0.37	< 0.37	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	6.12	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	3.69	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	4.75	< 1	< 1	N/A	N/A	< 1	1.01	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	4.38	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.6	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	4.38	< 1	< 1	N/A	N/A	< 1	1.16	14.4	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.39	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	10/21/2010	< 1	N/A	< 1	< 1	2.86	< 1	< 1	N/A	N/A	< 1	< 1	13.3	1.55	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	4.94	< 1	< 1	N/A	N/A	< 1	< 1	14.4	1.57	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	1.59	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	3.61	< 1	< 1	N/A	N/A	< 1	< 1	N/A	2.69	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	7.09	< 1	< 1	N/A	N/A	< 1	1.59	13.4	3.94	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	6.16	< 1	N/A	N/A	N/A	< 1	1.79	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	3.7	< 1	< 1	N/A	N/A	< 1	1.57	8.61	4	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	4.62	< 1	< 1	N/A	N/A	< 1	2.44	8.66	2.51	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	5.68	< 1	< 1	N/A	N/A	< 1	3.11	5.93	2.43	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	1.71	N/A	< 1	N/A	N/A	< 1	4.69	7.48	1.44	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	3.55	< 1	< 1	N/A	N/A	< 1	5.9	7.52	0.356*	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	1.39	< 1	< 1	N/A	N/A	< 1	7.36	4.73	0.548*	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	2.51	< 1	< 1	N/A	N/A	< 1	7.05	3.95	0.529*	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	2.54	< 1	< 1	N/A	N/A	< 1	3.82	3.9	1.57	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	2.87	< 1	< 1	N/A	N/A	< 1	5.22	4.07	2.36	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	0.229*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	6.01	N/A	2.19	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	4.23	< 1	< 1	N/A	N/A	< 1	8.66	4.05	1.93	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	3.13	< 1	< 1	N/A	N/A	< 1	12.2	3.47	0.704*	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	0.337*	< 1	< 1	N/A	N/A	< 1	11.4	3.91	0.444*	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	6.64	2.63	1.3	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	10.4	3.23	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	3.21	< 1	< 1	N/A	N/A	< 1	7.44	2	0.282*	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	4.3	< 1	< 1	N/A	N/A	< 1	11.4	2.83	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	4.62	< 1	< 1	< 1	< 1	< 1	7.44	2.09	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	5.13	< 1	< 1	< 1	< 1	< 1	10.2	2.32	< 1	< 1	< 1	< 1	< 1	< 1	0.986*
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	5.47	< 1	< 1	< 1	< 1	< 1	12	2.39	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	4.56	< 1	< 1	< 1	< 1	< 1	13.4	1.93	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	4.72	< 1	N/A	< 1	< 1	< 1	13.7	N/A	0.273*	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.23	N/A	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.23	N/A	< 0.23	< 0.23	< 0.23	< 0.23	< 0.23	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 20	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 50	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Ethylbenzene, ug/L (CAS NO - 100-41-4)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.25	N/A	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Ethylbenzene, ug/L (CAS NO - 100-41-4)	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.67*	< 1	< 1	< 1	< 1	< 1	< 1	2.38
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Iodomethane, ug/L (CAS NO - 74-88-4)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.4	N/A	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.4	N/A	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 20	< 20	< 20	< 20	< 20	N/A	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	< 20	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Iodomethane, ug/L (CAS NO - 74-88-4)	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 50	< 10	< 50	N/A	N/A	< 10	< 50	< 50	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 20	< 10	< 10	N/A	N/A	< 10	< 20	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	4/10/2012	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Methylene Bromide, ug/L (CAS NO - 74-95-3)	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Methylene Bromide, ug/L (CAS NO - 74-95-3)	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Methylene Chloride, ug/L (CAS NO - 75-09-2)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.45	N/A	< 0.45	< 0.45	< 0.45	7.06	< 0.45	N/A	N/A	N/A	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.45	N/A	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	N/A	N/A	N/A	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	0.17*	0.565*	< 5	< 5	< 5	N/A	N/A	0.241*	0.793*	0.351*	0.557*	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	0.701*	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	1.62*	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	1.44*	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	1.79*	0.231*	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	0.273*	N/A	< 5	< 5	0.249*	< 5	< 5	N/A	N/A	0.278*	1.3*	0.36*	0.208*	0.248*	0.27*	0.243*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	0.274*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	0.32*	< 5	0.29*	< 5	0.298*	N/A	N/A	0.185*	0.696*	0.38*	0.225*	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	0.917*	0.311*	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	0.295*	N/A	0.266*	0.195*	0.271*	0.361*	0.418*	N/A	N/A	< 5	1.6*	N/A	0.268*	0.252*	0.333*	0.231*	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.395*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.27*	N/A	< 5	0.232*	0.602*	< 5	0.306*	N/A	N/A	0.518*	4.07*	1.84*	< 5	0.178*	0.872*	0.432*	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	2.44*	< 5	< 5	< 5	< 5	< 5	N/A	31.4*	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	1.87*	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
Styrene, ug/L (CAS NO - 100-42-5)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.19	N/A	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.19	N/A	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 4	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Styrene, ug/L (CAS NO - 100-42-5)	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	0.11*	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.38	N/A	< 0.38	< 0.38	0.622	< 0.38	< 0.38	N/A	N/A	N/A	< 0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.38	N/A	< 0.38	< 0.38	0.44	< 0.38	< 0.38	N/A	N/A	N/A	0.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.385*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	0.183*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.278*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.42*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Toluene, ug/L (CAS NO - 108-88-3)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.14	N/A	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	N/A	N/A	N/A	< 0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.14	N/A	< 0.14	< 0.14	< 0.14	< 0.14	< 0.14	N/A	N/A	N/A	**0.14**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Toluene, ug/L (CAS NO - 108-88-3)	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	1.16	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	49.2	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	1.63	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	0.213*	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.478*	0.166*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	0.278*	< 1	< 1	< 1	0.325*	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	0.188*	< 1	< 1	N/A	N/A	< 1	< 1	0.151*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	67.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	44.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.31	N/A	< 0.31	< 0.31	< 0.31	< 0.31	< 0.31	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	0.239*	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.309*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.279*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.37*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	0.286*	< 1	< 1	N/A	N/A	< 1	0.431*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.368*	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.439*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.41*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.385*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	0.401*	< 1	< 1	N/A	N/A	< 1	0.647*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	0.415*	< 1	< 1	< 1	< 1	< 1	0.419*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	0.385*	< 1	< 1	< 1	< 1	< 1	0.725*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	0.424*	< 1	< 1	< 1	< 1	< 1	0.826*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.58*	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	0.835*	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	1/28/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.17	N/A	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.17	N/A	< 0.17	< 0.17	< 0.17	< 0.17	< 0.17	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 20	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	3/22/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	4/10/2012	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A	N/A	< 5	< 5	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A
	9/29/2014	< 5	N/A	< 5	< 5	< 5	N/A	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 50	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	10/4/2022	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5
	5/9/2023	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	1/28/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 1.8	N/A	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	N/A	N/A	N/A	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 1.8	N/A	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	N/A	N/A	N/A	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	< 50	< 50	< 50	< 50	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A
	4/13/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/21/2010	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	3/22/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 20	N/A	< 20	< 20	< 20	< 20	< 20	N/A	N/A	< 20	< 20	< 20	< 20	< 20	< 10	< 20	N/A	< 20	N/A
	4/10/2012	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	8/16/2012	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A	N/A	< 10	< 10	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	9/29/2014	< 10	N/A	< 10	< 10	< 10	N/A	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Trichloroethene, ug/L (CAS NO - 79-01-6)	1/28/2008	< 1	N/A	< 1	< 1	**1.75**	< 1	< 1	N/A	N/A	N/A	**4.48**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.24	N/A	< 0.24	< 0.24	**2.9**	< 0.24	< 0.24	N/A	N/A	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	**2.69**	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.24	N/A	< 0.24	< 0.24	**2.27**	< 0.24	< 0.24	N/A	N/A	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	**2.68**	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 1	< 1	**1.64**	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	**2.3**	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Trichloroethene, ug/L (CAS NO - 79-01-6)	11/19/2009	N/A	N/A	N/A	N/A	1.3	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.61	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.73	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	2.53	< 1	< 1	N/A	N/A	< 1	< 1	1.42	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.36	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	1.47	< 1	< 1	N/A	N/A	< 1	< 1	1.76	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	2.23	< 1	< 1	N/A	N/A	< 1	< 1	1.19	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	1.95	< 1	< 1	N/A	N/A	< 1	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	1.92	< 1	< 1	N/A	N/A	< 1	< 1	1.06	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	1.95	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	2.43	< 1	< 1	N/A	N/A	< 1	1.9	0.508*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	2.03	< 1	< 1	N/A	N/A	< 1	2.84	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	1.08	N/A	< 1	N/A	N/A	< 1	1.98	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	1.75	< 1	< 1	N/A	N/A	< 1	2.72	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	0.845*	< 1	< 1	N/A	N/A	< 1	0.75*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	1.83	< 1	< 1	N/A	N/A	< 1	1.24	0.228*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	1.09	< 1	< 1	N/A	N/A	< 1	1.14	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	1.17	0.255*	< 1	N/A	N/A	< 1	1.94	0.231*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	1.81	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	1.6	< 1	< 1	N/A	N/A	< 1	1.98	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	1.93	< 1	< 1	N/A	N/A	< 1	1.76	< 1	< 1	< 1	< 1	< 1	N/A	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.902*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	0.563*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	1.78	< 1	< 1	N/A	N/A	< 1	0.589*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	1.88	< 1	< 1	N/A	N/A	< 1	0.912*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	2.01	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	2.03	< 1	< 1	< 1	< 1	< 1	0.59*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/4/2022	< 1	N/A	< 1	< 1	1.89	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	1.67	< 1	< 1	< 1	< 1	< 1	0.538*	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	1.32	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	1/28/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	8/28/2009	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/13/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/21/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	3/22/2011	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	4/10/2012	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/16/2012	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A
	9/29/2014	< 4	N/A	< 4	< 4	< 4	N/A	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 40	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	10/4/2022	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4
	5/9/2023	N/A	N/A	< 4	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	1/28/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 1.36	N/A	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	N/A	N/A	N/A	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 1.36	N/A	< 1.36	< 1.36	< 1.36	< 1.36	< 1.36	N/A	N/A	N/A	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 1.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	4/15/2009	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/13/2010	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 2	< 4	< 4	< 4	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	10/21/2010	< 5	N/A	< 2	< 2	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	3/22/2011	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 50	N/A	< 50	< 50	< 2	< 50	< 50	N/A	N/A	< 50	< 2	N/A	< 50	< 50	< 50	< 50	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 20	N/A	< 20	< 20	< 20	< 20	< 20	N/A	N/A	< 20	< 20	< 20	< 20	< 20	< 2	< 20	N/A	< 20	N/A
	4/10/2012	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A	N/A	< 4	< 4	< 4	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A
	9/29/2014	< 2	N/A	< 2	< 2	< 2	N/A	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 100	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	10/4/2022	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10
	5/9/2023	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	1/28/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	< 0.26	N/A	N/A	N/A	**1.43**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	**1.17**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	< 0.26	N/A	< 0.26	< 0.26	< 0.26	< 0.26	**0.31**	N/A	N/A	N/A	**1.29**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	4/15/2009	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.66**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.88**	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	**1.54**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**1.63**	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.5	N/A	N/A	N/A
	4/13/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.75**	**1.82**	< 1	< 1	< 1	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/21/2010	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.2**	**1.21**	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	3/22/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.38**	**1.12**	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.64**	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.86**	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	4/10/2012	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	**2.2**	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.24**	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.66**	0.851*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.85**	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	9/29/2014	< 1	N/A	< 1	< 1	< 1	N/A	< 1	N/A	N/A	< 1	**2.25**	0.373*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.14**	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.29**	0.234*	< 1	< 1	< 1	< 1	N/A	< 1	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.74**	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.75**	0.324*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.04**	0.39*	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.47**	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.24*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.9**	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	2/26/2018	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**3.01**	< 1	< 1	< 1	< 1	< 1	< 1	< 10	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.265*	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.07**	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.91**	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**1.98**	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	**2.82**	0.22*	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.54**	0.186*	< 1	< 1	< 1	< 1	< 1	< 1	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	3/1/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.36**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.16**
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/30/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1
	10/4/2022	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.93**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**2.29**	0.484*	< 1	< 1	< 1	< 1	N/A	< 1	
	5/9/2023	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 1	N/A	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	**1.37**	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A
Xylenes, total, ug/L (CAS NO - 1330-20-7)	1/28/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/16/2008	< 0.3	N/A	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	N/A	N/A	N/A	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	9/5/2008	< 0.3	N/A	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	N/A	N/A	N/A	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/5/2008	N/A	N/A	N/A	N/A	N/A	< 0.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/4/2008	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/15/2009	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/28/2009	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/19/2009	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 6	< 6	< 6	< 6	< 6	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	N/A	N/A	N/A
	2/24/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 7.5	N/A	N/A	N/A
	4/13/2010	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 6	< 3	< 3	< 3	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	7/20/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/21/2010	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	3/22/2011	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	4/10/2012	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/13/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/16/2012	< 3	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	N/A	N/A	< 3	< 3	< 3	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	3/13/2014	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A
	9/29/2014	< 3	N/A	< 3	< 3	< 3	N/A	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/20/2015	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	0.484*	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	0.592*	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	3/15/2016	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	0.862*	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	3/15/2016	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	2/6/2017	< 3	N/A	0.132*	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	< 3	N/A	0.165*	< 3	< 3	< 3	< 3	N/A	N/A	0.132*	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	2/26/2018	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 30	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	5/12/2020	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	3/8/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	< 3	N/A	< 3	< 3	< 3	< 3	< 3	0.477*	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A
	10/12/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	4.81	< 3	< 3	< 3	< 3	< 3	< 3	0.657*
	4/19/2022	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	10/4/2022	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/4/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A
	5/9/2023	0.79*	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3
	5/9/2023	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/1/2023	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2023	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Appendix I VOC Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
M&P-Xylene, ug/L (CAS NO - 179601-23-1)	8/16/2012	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	N/A	N/A	< 2	< 2	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 2	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
O-Xylene, ug/L (CAS NO - 95-47-6)	8/16/2012	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

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

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	8/28/2009	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	8/28/2009	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.27	N/A	N/A	N/A	N/A	N/A	< 0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.43	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 104	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.06	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1.06	N/A	< 1.05	N/A	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.11	< 1.08	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	8/28/2009	N/A	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	< 0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.27	N/A	N/A	N/A	N/A	N/A	< 0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.24	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.29	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 104	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.06	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1.06	N/A	< 1.05	N/A	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.11	< 1.08	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,4-D [2C], ug/L (CAS NO - 94-75-7)	8/28/2009	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.51	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.45	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1.1	N/A	N/A	N/A	N/A	N/A	0.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.47	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.53	N/A	N/A	N/A	1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/3/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 104	N/A	N/A	N/A	N/A	N/A	N/A	< 101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.06	< 1.06	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1.06	N/A	< 1.05	N/A	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	< 1.08	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.11	< 1.08	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	0.559*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	8/28/2009	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	10/21/2010	N/A	N/A	N/A	N/A	< 22.2	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	< 20.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 20.8	N/A	< 20	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 20.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.1	< 21.1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 19.2	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 18.9	N/A	N/A	N/A
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Methylphenol, ug/L (CAS NO - 95-48-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
2-Methylphenol, ug/L (CAS NO - 95-48-7)	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Naphthylamine, ug/L (CAS NO - 91-59-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 51.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50.5	< 52.1	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 52.1	N/A	< 50	N/A	N/A	N/A	< 53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 51.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 53.2	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	1.95*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.291*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
3-Chloropropene, ug/L (CAS NO - 107-05-1)	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4,4`-DDD, ug/L (CAS NO - 72-54-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	0.00228*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	0.009*	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00263*	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.0194*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00984*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
4,4`-DDE, ug/L (CAS NO - 72-55-9)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	0.0054*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00664*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
4,4`-DDT, ug/L (CAS NO - 50-29-3)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.00985*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0068*	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.617*	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.411*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
4-Nitrophenol, ug/L (CAS NO - 100-02-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Acenaphthene, ug/L (CAS NO - 83-32-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Acenaphthylene, ug/L (CAS NO - 208-96-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.324*	N/A	0.297*	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Acetonitrile, ug/L (CAS NO - 75-05-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 22000	N/A	N/A	N/A	N/A	N/A	< 22000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	< 10000	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 10000	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10000	N/A	N/A	N/A
Acetophenone, ug/L (CAS NO - 98-86-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Acrolein, ug/L (CAS NO - 107-02-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Acrolein, ug/L (CAS NO - 107-02-8)	4/19/2022	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
Aldrin, ug/L (CAS NO - 309-00-2)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Anthracene, ug/L (CAS NO - 120-12-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	1.41*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.868*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	1.36*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.355*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.462*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Alpha-BHC, ug/L (CAS NO - 319-84-6)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	0.991*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00298*	0.00271*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.00673*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00459*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0114*	0.00325*	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Beta-BHC, ug/L (CAS NO - 319-85-7)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	**0.0811**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	< 3.2	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	**0.288**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	7/3/2013	N/A	N/A	N/A	**0.0808**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/13/2014	N/A	N/A	N/A	**0.902**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	0.0129*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	**0.0342**	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	0.011*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0286*	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2016	N/A	N/A	N/A	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	< 0.0333	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	< 0.0356	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	0.08*	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	N/A	N/A	N/A	**0.0377**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0306*	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0348	N/A	N/A	N/A
	10/8/2018	N/A	N/A	N/A	< 0.0356	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00677*	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	< 0.0333	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.033	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.00984*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	0.0204*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0259*	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.0103*	0.0138*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0121*	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	N/A	N/A	N/A	**0.0832**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	N/A	N/A	N/A	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	N/A	N/A	N/A	**0.0475**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	< 0.064	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2022	N/A	N/A	N/A	**0.418**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
	11/1/2023	N/A	N/A	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Delta-BHC, ug/L (CAS NO - 319-86-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00929*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0047*	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	0.839*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00409*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00593*	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	1.53*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33.3	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	1.39*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.676*	N/A	N/A	N/A
	11/8/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.791*	N/A	N/A	N/A
	12/9/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.7	N/A	N/A	N/A
	1/21/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.4	N/A	N/A	N/A
	3/13/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	N/A	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.43*	3.1*	N/A	N/A	0.835*	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.23*	N/A	N/A	N/A
	3/15/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.55*	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	1.92*	N/A	1.85*	N/A	N/A	N/A	1.93*	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	10/4/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.42*	N/A	N/A	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.08*	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Chlordane, ug/L (CAS NO - 57-74-9)	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.45	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 421	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 2.15	N/A	< 10	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.17	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 2.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.11	< 2.15	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.85	N/A	N/A	N/A
Alpha-Chlordane, ug/L (CAS NO - 5103-71-9)	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
Gamma-Chlordane, ug/L (CAS NO - 5566-34-7)	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Chloroprene, ug/L (CAS NO - 126-99-8)	8/28/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
Chrysene, ug/L (CAS NO - 218-01-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Cyanide, mg/L (CAS NO - 57-12-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	0.00328*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	0.00916*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.01	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dibenzofuran, ug/L (CAS NO - 132-64-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	8/28/2009	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
Dieldrin, ug/L (CAS NO - 60-57-1)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Dieldrin, ug/L (CAS NO - 60-57-1)	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	0.00229*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.00798*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	0.00267*	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dimethoate, ug/L (CAS NO - 60-51-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.681*	N/A	0.64*	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	0.851*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.873*	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	1.88*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	1.67*	N/A	1.59*	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 20.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.1	< 21.1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 19.2	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 18.9	N/A	N/A	N/A
Dinoseb, ug/L (CAS NO - 88-85-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Diphenylamine, ug/L (CAS NO - 122-39-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Diphenylamine, ug/L (CAS NO - 122-39-4)	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Disulfoton, ug/L (CAS NO - 298-04-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Endosulfan I, ug/L (CAS NO - 959-98-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00656*	0.00221*	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Endosulfan II, ug/L (CAS NO - 33213-65-9)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0025*	**0.0353**	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.033	N/A	N/A	N/A	N/A	N/A	N/A
	3/15/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0323	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	< 0.163	N/A	N/A	N/A	N/A	N/A	N/A
	8/16/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.028*	N/A	N/A	< 0.0348	N/A	N/A	N/A
	10/8/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.033	N/A	N/A	N/A	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00605*	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Endosulfan II, ug/L (CAS NO - 33213-65-9)	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	0.00445*	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.016*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Endrin, ug/L (CAS NO - 72-20-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.00411*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0113*	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.0122*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	5/12/2020	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Famphur, ug/L (CAS NO - 52-85-7)	8/28/2009	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 22.2	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	< 20.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 20.8	N/A	< 20	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Fluoranthene, ug/L (CAS NO - 206-44-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.493*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Fluorene, ug/L (CAS NO - 86-73-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Fluorene, ug/L (CAS NO - 86-73-7)	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Heptachlor, ug/L (CAS NO - 76-44-8)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1.6	N/A	N/A	N/A	N/A	N/A	< 0.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.00331*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.034	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.0352	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0337	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	8/28/2009	< 5	N/A	< 5	< 5	< 10	< 5	< 5	N/A	N/A	< 5	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	< 20.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 20.8	N/A	< 20	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 20.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 21.3	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Hexachloroethane, ug/L (CAS NO - 67-72-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	1.52*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Isobutanol, mg/L (CAS NO - 78-83-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	0.857*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
Isodrin, ug/L (CAS NO - 465-73-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Isophorone, ug/L (CAS NO - 78-59-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Isosafrole, ug/L (CAS NO - 120-58-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Isosafrole, ug/L (CAS NO - 120-58-1)	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Kepone, ug/L (CAS NO - 143-50-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Methacrylonitrile, ug/L (CAS NO - 126-98-7)	8/28/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
Methapyrilene, ug/L (CAS NO - 91-80-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	1.18*	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Methoxychlor, ug/L (CAS NO - 72-43-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0392	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 6.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Methoxychlor, ug/L (CAS NO - 72-43-5)	2/6/2017	N/A	N/A	N/A	N/A	< 0.0344	N/A	< 0.16	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.0337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0348	N/A	N/A	N/A
	7/11/2019	N/A	N/A	0.0233*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	0.011*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00251*	< 0.0344	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.064	N/A	< 0.064	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.0604	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	N/A	N/A	N/A
Methyl Methacrylate, ug/L (CAS NO - 80-62-6)	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Naphthalene, ug/L (CAS NO - 91-20-3)	8/28/2009	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	8/28/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
Nitrobenzene, ug/L (CAS NO - 98-95-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Nitrobenzene, ug/L (CAS NO - 98-95-3)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
O-Toluidine, ug/L (CAS NO - 95-53-4)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
PCB-1016, ug/L (CAS NO - 12674-11-2)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 16	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1221, ug/L (CAS NO - 11104-28-2)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 16	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1232, ug/L (CAS NO - 11141-16-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 16	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1242, ug/L (CAS NO - 53469-21-9)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 16	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
PCB-1242, ug/L (CAS NO - 53469-21-9)	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1248, ug/L (CAS NO - 12672-29-6)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 16	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1254, ug/L (CAS NO - 11097-69-1)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
PCB-1260, ug/L (CAS NO - 11096-82-5)	8/28/2009	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.808	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 0.816	N/A	< 0.842	N/A	N/A	N/A	< 1.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.851	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 0.879	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.842	< 0.86	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 0.8	N/A	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 0.755	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	N/A	N/A	N/A
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	1.37*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Phenacetin, ug/L (CAS NO - 62-44-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Phenanthrene, ug/L (CAS NO - 85-01-8)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Phenanthrene, ug/L (CAS NO - 85-01-8)	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Phenol, ug/L (CAS NO - 108-95-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Phorate, ug/L (CAS NO - 298-02-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Pronamide, ug/L (CAS NO - 23950-58-5)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Propionitrile, ug/L (CAS NO - 107-12-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Propionitrile, ug/L (CAS NO - 107-12-0)	8/7/2013	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/19/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
Pyrene, ug/L (CAS NO - 129-00-0)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	0.245*	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Safrole, ug/L (CAS NO - 94-59-7)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Sulfide, mg/L (CAS NO - 18496-25-8)	8/28/2009	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	2.1	N/A	N/A	N/A	N/A	N/A	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	1.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 0.23	0.53	N/A	N/A	N/A	N/A	N/A	< 0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	< 0.23	N/A	< 0.23	N/A	N/A	N/A	3.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	1.24	N/A	3.67	N/A	N/A	N/A	N/A	5.91	N/A	N/A	N/A
	6/14/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 1	< 1	N/A	N/A	< 1	3.23	N/A	1.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/8/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	12/9/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.94	N/A	N/A	N/A
	1/21/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/13/2014	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	3.98	N/A	N/A	N/A	N/A	59.9	N/A	N/A	N/A
	9/29/2014	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	1.58	N/A	N/A	N/A	N/A	1.82	N/A	N/A	N/A
	5/20/2015	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	< 1	N/A	N/A	N/A
	8/21/2015	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	3/15/2016	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	10/19/2016	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	0.237*	N/A	N/A	N/A
	8/16/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	2/26/2018	< 1	N/A	N/A	3.76	1.65	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/23/2018	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/8/2018	3.18	N/A	N/A	0.64*	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	1/15/2019	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/16/2019	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Other Constituents	Sample Date	MW-19 UPG	MW-28BGR UPG	MW-5 DNG	MW-7 DNG	MW-9R DNG	MW-13 DNG	MW-14 DNG	MW-20 DNG	MW-21 DNG	MW-23 DNG	MW-24 DNG	MW-25 DNG	MW-26 DNG	MW-27 DNG	MW-28 DNG	MW-29 DNG	MW-34 DNG	UD-2 DNG	UD-3 DNG
Sulfide, mg/L (CAS NO - 18496-25-8)	7/11/2019	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/19/2019	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	< 1	N/A	< 1	< 1	0.243*	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.31	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/2020	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/8/2021	< 10	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2021	0.335*	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	< 1	N/A	N/A	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	0.384*	N/A	N/A	N/A	N/A	N/A	N/A
	10/4/2022	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.92*	N/A	N/A	< 1	N/A	N/A	N/A
	11/1/2023	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
Thionazin, ug/L (CAS NO - 297-97-2)	8/28/2009	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 11.1	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 10.4	N/A	< 10	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.6	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 10.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.5	< 10.5	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 9.62	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.43	N/A	N/A	N/A
Toxaphene, ug/L (CAS NO - 8001-35-2)	8/28/2009	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/13/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/21/2010	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/22/2011	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/14/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.45	N/A	N/A	N/A	N/A	N/A	N/A
	10/25/2011	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/10/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	8/16/2012	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/29/2012	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	1/15/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	8/7/2013	N/A	N/A	N/A	< 421	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	8/21/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/6/2017	N/A	N/A	N/A	N/A	< 2.15	N/A	< 10	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/26/2018	N/A	N/A	N/A	< 2.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.17	N/A	N/A	N/A
	7/11/2019	N/A	N/A	< 2.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/12/2020	N/A	N/A	< 2.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2.11	< 2.15	N/A	N/A	N/A	N/A	N/A	N/A
	4/19/2022	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2023	N/A	N/A	N/A	< 1.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.85	N/A	N/A	N/A

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

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

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

Appendix C-2
Summary of Groundwater Chemistry – Natural Attenuation and Vinyl Chloride

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Natural_Attenuations Constituents	Sample Date	MW-24 DNG	MW-34 DNG	MW-35 DNG	MW-36 DNG
Iron, Total, mg/L (CAS NO - 7439-89-6)	5/20/2015	8.31	N/A	N/A	N/A
	8/21/2015	19.2	N/A	N/A	N/A
	3/15/2016	21.5	N/A	N/A	N/A
	3/8/2021	49.5	0.165	5.58	4.31
	5/9/2023	47.7	0.338	6.95	N/A
	11/1/2023	N/A	N/A	N/A	5.18
Manganese, mg/L (CAS NO - 7439-96-5)	5/20/2015	4.33	N/A	N/A	N/A
	8/21/2015	6.26	N/A	N/A	N/A
	3/15/2016	6.17	N/A	N/A	N/A
	3/8/2021	4.15	0.00631*	6.76	7.23
	5/9/2023	3.92	0.0737	6.68	N/A
	11/1/2023	N/A	N/A	N/A	6.57
Nitrate (NO3), mg/L (CAS NO - 14797-55-8)	5/20/2015	< 0.1	N/A	N/A	N/A
	3/15/2016	< 0.1	N/A	N/A	N/A
	3/8/2021	< 0.1	0.0722*	0.0856*	0.0482*
	5/9/2023	1.08	0.179*	< 0.2	N/A
	11/1/2023	N/A	N/A	N/A	< 0.2
Sulfate, mg/L (CAS NO - 14808-79-8)	1/15/2013	223	N/A	N/A	N/A
	8/7/2013	199	N/A	N/A	N/A
	3/13/2014	197	N/A	N/A	N/A
	5/20/2015	210	N/A	N/A	N/A
	8/21/2015	143	N/A	N/A	N/A
	3/15/2016	145	N/A	N/A	N/A
	3/8/2021	125	16	1740	2100
	5/9/2023	135	72.5	1820	N/A
	11/1/2023	N/A	N/A	N/A	2260
Total Suspended Solids, mg/L (CAS NO - TSS)	3/13/2014	830	N/A	N/A	N/A
	9/29/2014	4350	N/A	N/A	N/A
	5/20/2015	744	N/A	N/A	N/A
	8/21/2015	49.8	N/A	N/A	N/A
	3/15/2016	34.4	N/A	N/A	N/A
	10/19/2016	11.6	N/A	N/A	N/A
	2/6/2017	8.37	N/A	N/A	N/A
	8/16/2017	16	15.3	N/A	N/A
	2/26/2018	9.12	N/A	N/A	N/A
	10/8/2018	32.5	1.75*	5.37	5.13
	5/16/2019	52	N/A	N/A	N/A
	9/19/2019	44	N/A	N/A	N/A
	5/12/2020	42	N/A	N/A	N/A
	10/20/2020	18	N/A	N/A	N/A
	3/8/2021	18.8	3.25	N/A	N/A
	10/12/2021	21	13.9	N/A	N/A
	4/19/2022	31	7	N/A	N/A
	10/4/2022	42	3.25	N/A	N/A
	5/9/2023	34	12.4	N/A	N/A
	11/1/2023	40.5	115	N/A	N/A
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	1/15/2013	2.24	N/A	N/A	N/A
	8/7/2013	2.66	N/A	N/A	N/A
	3/13/2014	3.85	N/A	N/A	N/A
	9/29/2014	2.25	N/A	N/A	N/A
	5/20/2015	3.14	N/A	N/A	N/A
	8/21/2015	3.29	N/A	N/A	N/A
	3/15/2016	3.74	N/A	N/A	N/A
	10/19/2016	2.75	N/A	N/A	N/A
	2/6/2017	3.04	N/A	N/A	N/A
	8/16/2017	2.47	< 1	N/A	N/A
	2/26/2018	2.9	< 1	< 1	< 1
	10/8/2018	3.01	< 1	< 1	< 1

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Summary of Groundwater Chemistry
SEMCO Sanitary Landfill - 54-SDP-01-75P

Total Natural_Attenuations Constituents	Sample Date	MW-24 DNG	MW-34 DNG	MW-35 DNG	MW-36 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	5/16/2019	< 1	0.265*	< 1	< 1
	9/19/2019	**2.07**	< 1	< 1	< 1
	5/12/2020	**2.91**	< 1	< 1	< 1
	10/20/2020	**1.98**	< 1	< 1	< 1
	3/8/2021	**2.82**	< 1	< 1	< 1
	10/12/2021	**1.54**	< 1	N/A	N/A
	4/19/2022	**1.36**	< 1	< 1	< 1
	10/4/2022	**1.93**	< 1	N/A	N/A
	5/9/2023	**2.29**	< 1	< 1	N/A
	11/1/2023	**1.37**	< 1	N/A	< 1

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

Denotes Detection.
Denotes Confirmed Outlier. Statistically Excluded.

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

Appendix D
Statistical Method and Output

Statistical Method and Output

Purpose

The purpose of this document is to provide the statistical evaluation of analytical data collected from the groundwater monitoring network of the SEMCO Sanitary Landfill (Landfill).

Diagnostic and Exploratory Evaluations and Tests of Assumptions

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

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

Management of Non-Detect Data

Non-detect values in the dataset are managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data are non-detects, simple substitution is used, where non-detect values are assigned a concentration of one-half (½) of the practical quantification limit (PQL). If greater than 15% but less than 50% of the data are non-detects, the Kaplan-Meier estimator is used to define the distribution for the dataset. If non-detects comprise greater than 50% of the available data, non-parametric statistical methods are used.

Management of Outliers

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

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

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

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

Management of Data (ND data ≥ 75%)

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

- Single detection ≥ the PQL:
  - If ≥ 50% of the background dataset has detections ≥ the method detection limit (MDL), any value ≥ two times the PQL of background is considered an outlier.
  - If < 50% of the background dataset has detections ≥ the MDL, any value ≥ the PQL of background is considered an outlier.
- Two or more detections ≥ the PQL:
  - If ≥ 50% of the background dataset has detections ≥ the MDL, any value ≥ three times the PQL of background is considered an outlier.
  - If < 50% of the background dataset has detections ≥ the MDL, any value ≥ two times the PQL of background is considered an outlier.

Confirmed outliers, if any, are shown in the Summary of Groundwater Chemistry included in the Annual Water Quality Report.

Due to analytical improvements, vanadium data between and including the December 2009 and October 2010 events and nickel data between and including the January 2008 and January 2013 events are no longer considered representative of groundwater quality at the Landfill. Non-detect values of <0.25 mg/L for vanadium in background monitoring well MW-28 and non-detect values of between 0.25 and 0.05 mg/L for nickel in background monitoring wells MW-19 and MW-28 were removed from the statistical evaluation.

As directed by Iowa Department of Natural Resources (DNR) correspondence dated April 17, 2018 (Doc #92099), inorganic data collected prior to the 1st 2015 semi-annual sampling event was removed from the background dataset.

Inorganic data collected prior to the beginning of low-flow sampling during the 2nd 2015 semi-annual sampling event was removed from the datasets of the monitoring wells. Inorganic data for the groundwater underdrain discharge points were not modified as there was no change in sampling methodology.

Detection Monitoring Statistical Program

The detection monitoring statistical program for the Landfill is defined by Iowa Administrative Code (IAC) 567-113.10(4)"g". Interwell (monitoring wells) or intrawell (underdrains) prediction limits, as appropriate, with retesting were selected as the appropriate statistical method for the determination of statistically significant increases (SSIs) over background for inorganic constituents with historical detections in background. Prediction limits are established using the process below. Data from the most recent sampling event is compared to the prediction limits for the determination of SSIs.

Interwell Prediction Limits with Retesting

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric interwell prediction limits are calculated if at least five datasets have been collected from the background monitoring point(s).

- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-3 retesting scheme will be collected prior to the next semi-annual sampling event with temporal sample spacing consideration to provide samples with greater independence. If both retesting results are above the prediction limit, the SSI is confirmed, and the monitoring point will be placed into the assessment monitoring program. If any retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Intrawell Prediction Limits with Retesting

As of the date of this report, monitoring point UD-2 is the underdrain with sufficient data to perform statistical evaluations. Evaluation will be performed for monitoring point UD-3 upon the collection of six samples (four currently).

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-3 retesting scheme should be collected prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If both retesting results are above the prediction limit, the SSI is confirmed and the underdrain discharge will be treated with the leachate. If any retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Updating the Background Dataset for Intrawell Prediction Limits

Following the collection of four additional samples since the background was last updated, if no SSI is confirmed for any two-year period, the intrawell background dataset is updated using the following procedure:

- Test the new dataset for normal distribution either outright or through a transformation using Ladder of Powers using the Shapiro-Wilk test.
- Test the new dataset for statistically significant outliers using the Ohio EPA Method and remove the confirmed outliers as appropriate (see the “Management of Outliers” section).
- Test the new dataset for statistically significant trends using the Mann-Kendall/Sen’s Slope trend test.
- If the dataset has a normal distribution and no statistically significant increasing trend is present, a two-sample Welch’s t-test at a 0.01 significance level is used to compare the current background dataset to the most recent two years of data. If the Welch’s t-test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.
- If the dataset does not have a normal distribution and no statistically significant increasing trend is present, a two-sample non-parametric Wilcoxon rank-sum test (also known as the Mann-Whitney test) at a 0.01 significance level is used to compare the current background dataset to the most recent two years of data. If the Wilcoxon rank-sum test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.
- If the Welch’s t-test or the Wilcoxon rank-sum tests are not significant, the most recent two years of data will be added to the intrawell background dataset.

The process will repeat every two years in which an SSI is not confirmed. The background dataset for groundwater underdrain UD-2 was established during the 1st 2021 statistical evaluation.

Double Quantification Method

The quasi-statistical "double quantification" method was used for constituents not detected in the background dataset. If a constituent was detected in the compliance dataset that has not been historically detected in the background dataset, that constituent must be retested before the next regularly scheduled sampling event. If the retesting results confirm the original detection with a quantifiable detection, the SSI is confirmed, and the monitoring well must be placed into the assessment monitoring program, or the discharge treated with the leachate for the groundwater underdrain discharge points in lieu of assessment monitoring or corrective action.

Assessment Monitoring Statistical Program

Confidence intervals or confidence bands, as appropriate, were selected as the appropriate statistical methods for comparison of the groundwater analytical data against a fixed groundwater protection standard (GWPS). The assessment monitoring statistical evaluations are performed using the most recent eight samples or all samples if less than eight samples were available. The confidence intervals or confidence bands used for the assessment monitoring statistical evaluation are established using the process below. Transformation of the distribution is not considered.

Confidence Intervals or Confidence Bands

- A parametric confidence interval around a normal mean is calculated if the dataset has a normal distribution and no statistically significant trend is present.
- A non-parametric confidence interval around a median is calculated if the dataset does not have a normal distribution and no statistically significant trend is present.
- Non-parametric confidence bands around a Theil-Sen trend line are calculated if the dataset has a statistically significant trend.

If the lower confidence limit or any part of the lower confidence band, as appropriate, exceeds the GWPS, then the monitoring point is declared out of compliance, and an assessment of corrective measures (ACM) is required. An ACM was approved by the Iowa Department of Natural Resources correspondence dated April 20, 2017 (Doc #89172). The selected remedy of subsurface venting of landfill gas is installed and operational.

Statistical Software Output

Sanitas™ statistical software was used to perform the statistical evaluations. The statistical output for the 1st and 2nd 2023 statistical evaluations are included in Attachments A and B of this appendix, respectively.

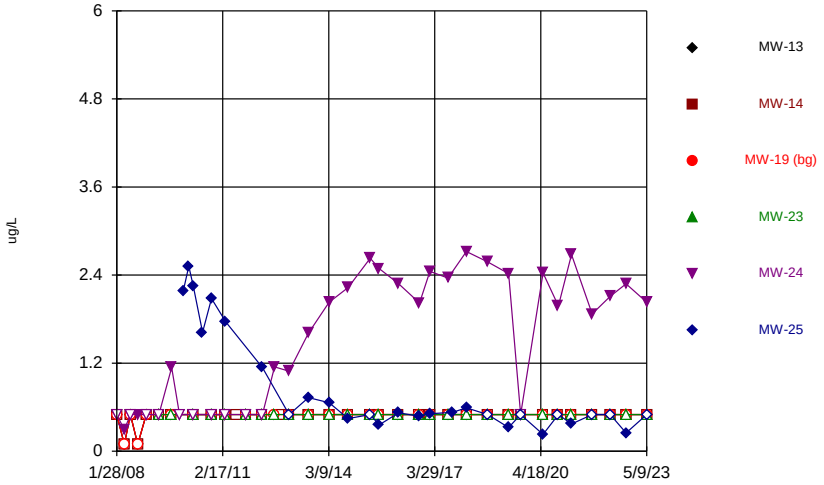
Attachment A

1st 2023 Statistical Evaluation Output

Time Series Plots

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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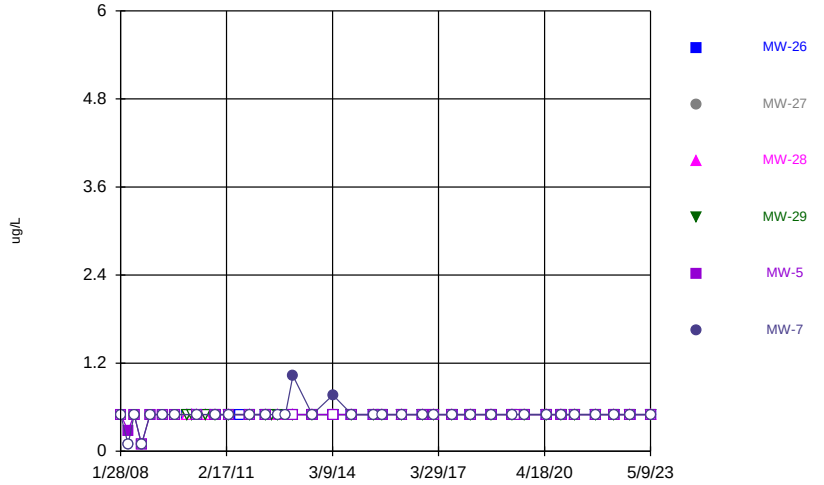

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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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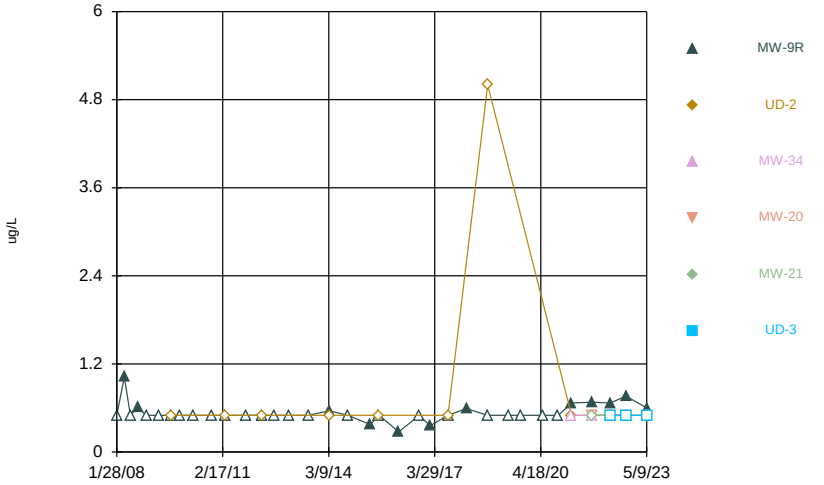

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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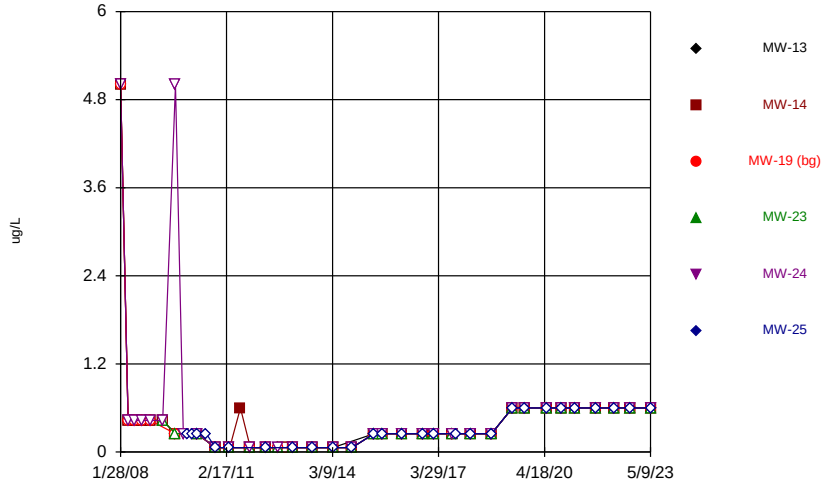

Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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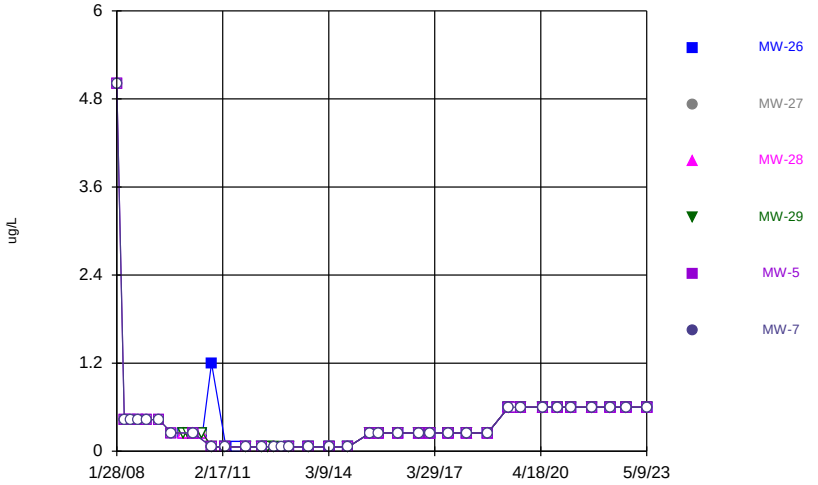

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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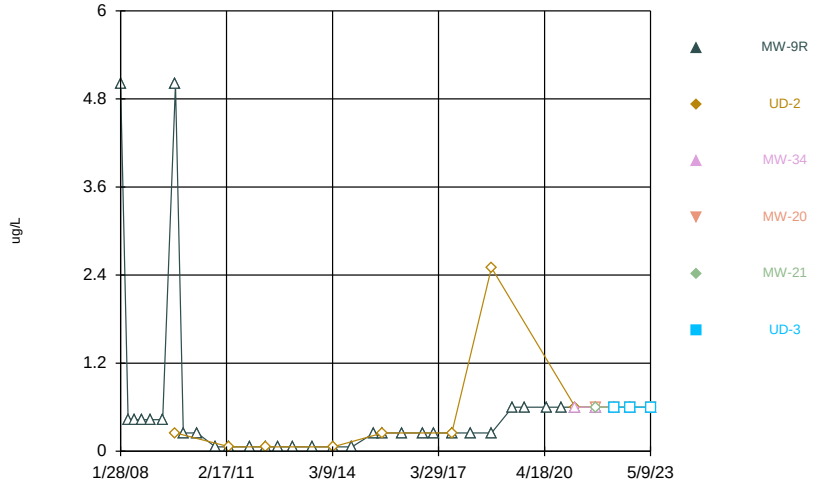

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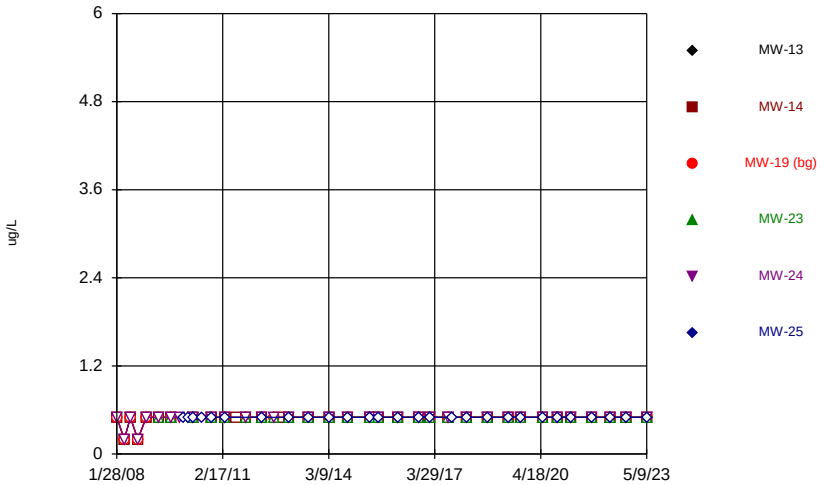

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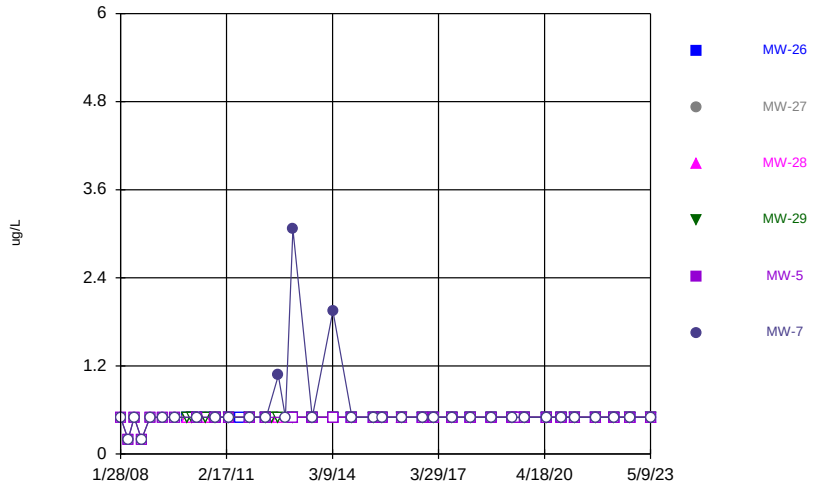

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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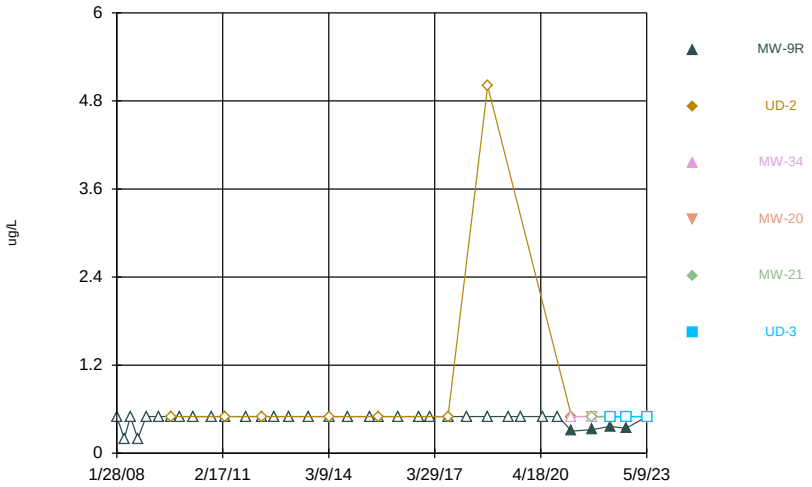

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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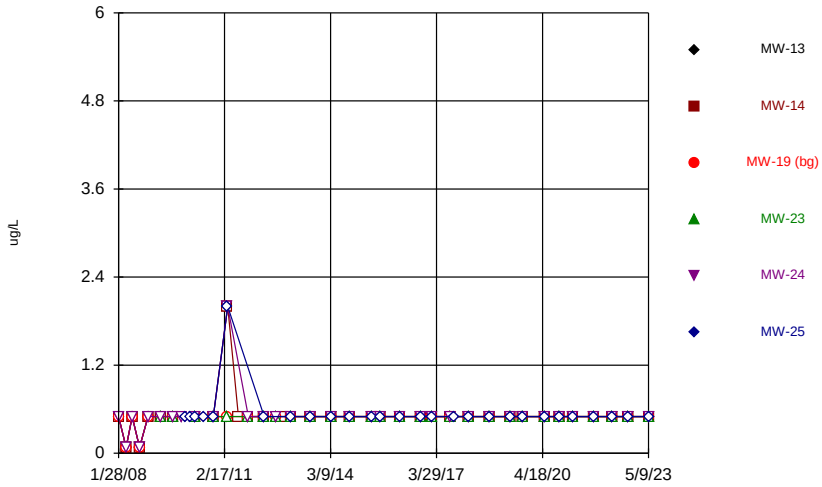
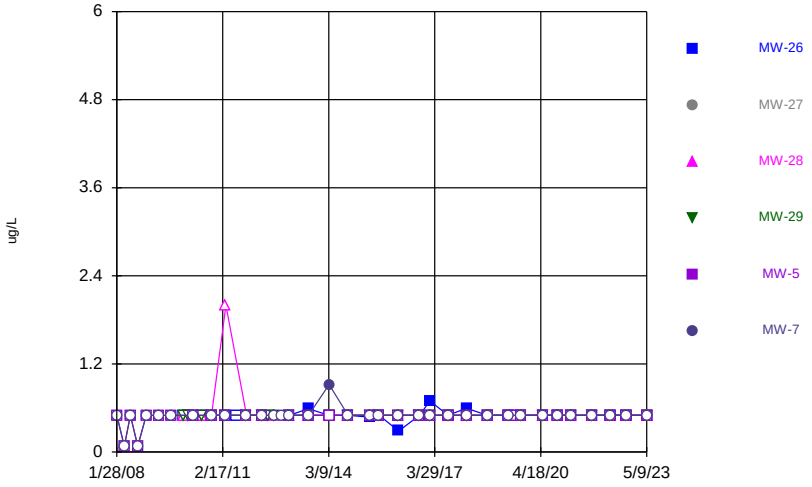


Constituent: 1,4-Dichlorobenzene Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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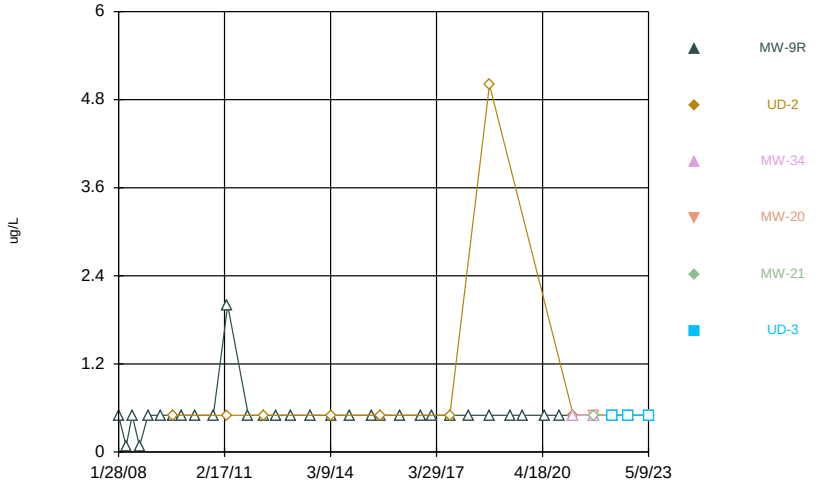

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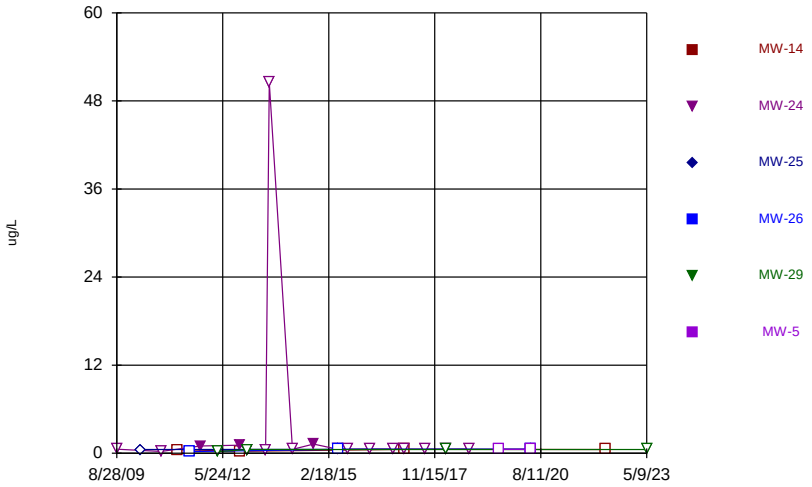

Constituent: 2,4-D [2C] Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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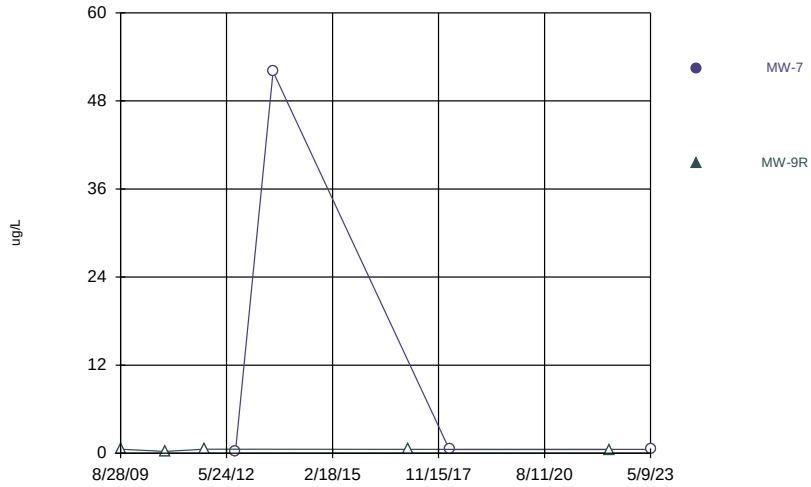
Time Series



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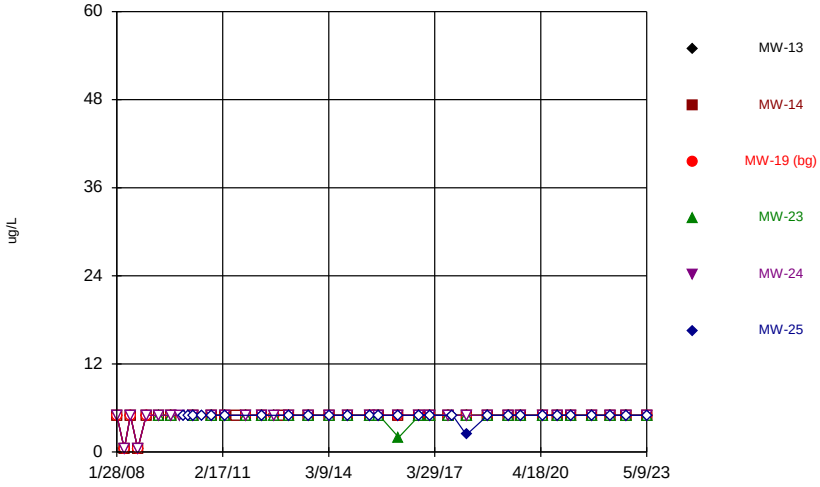
Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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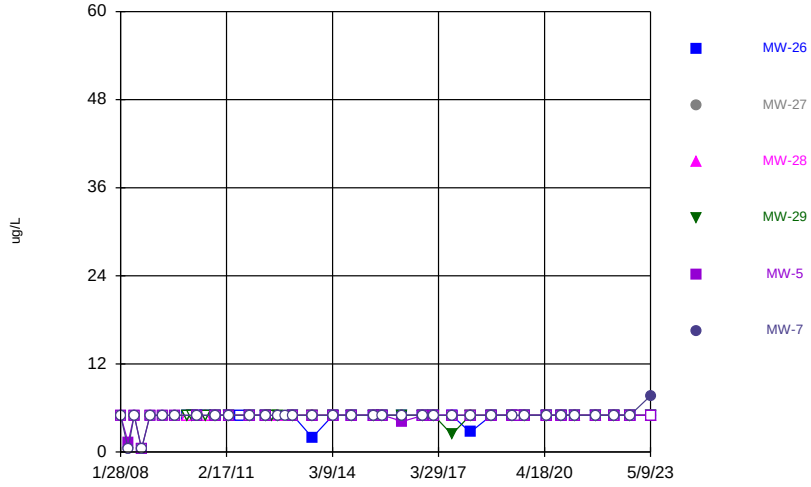
Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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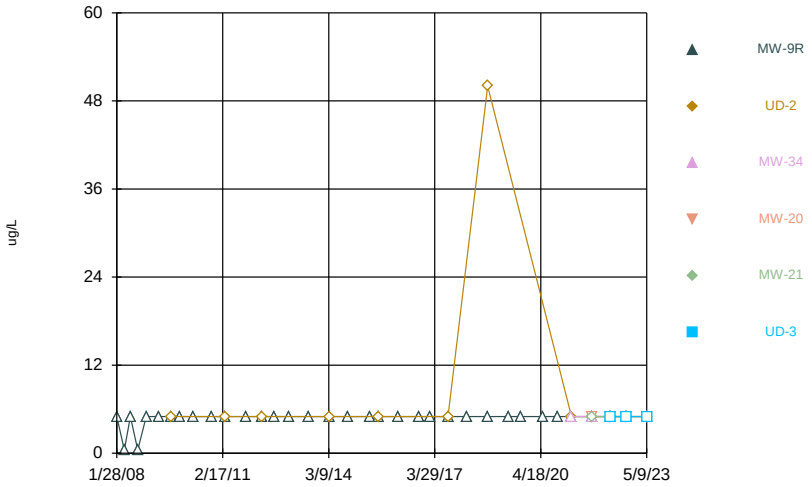

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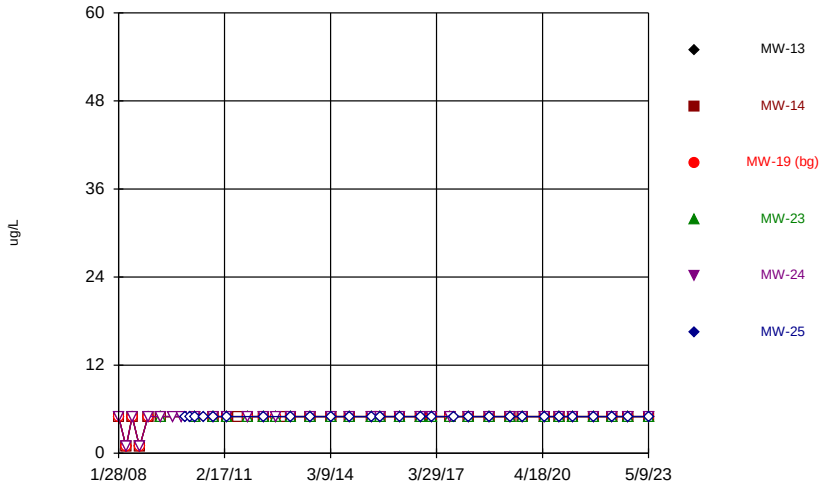

Constituent: 2-Hexanone Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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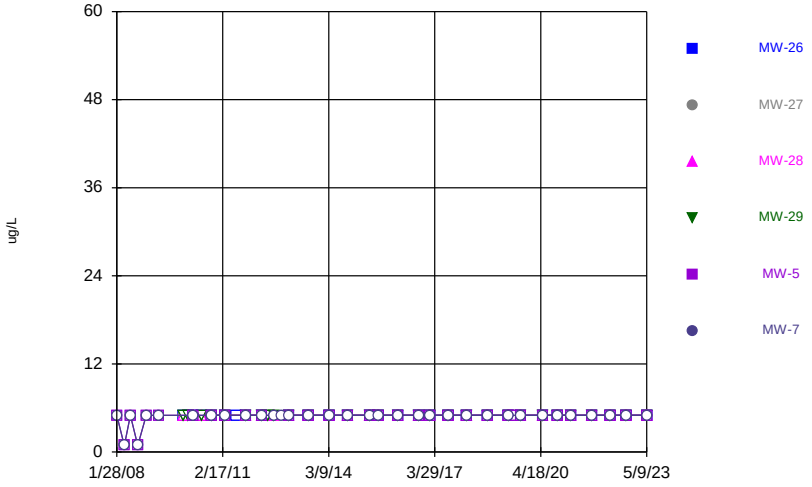

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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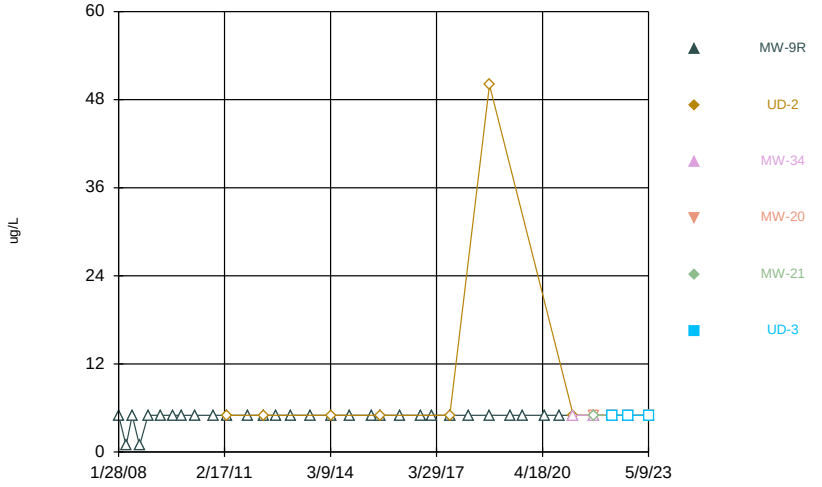

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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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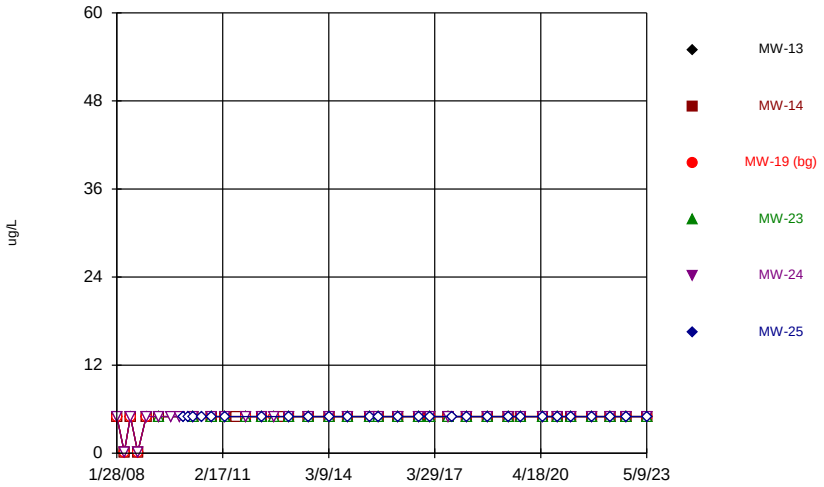

Constituent: 4-Methyl-2-pentanone Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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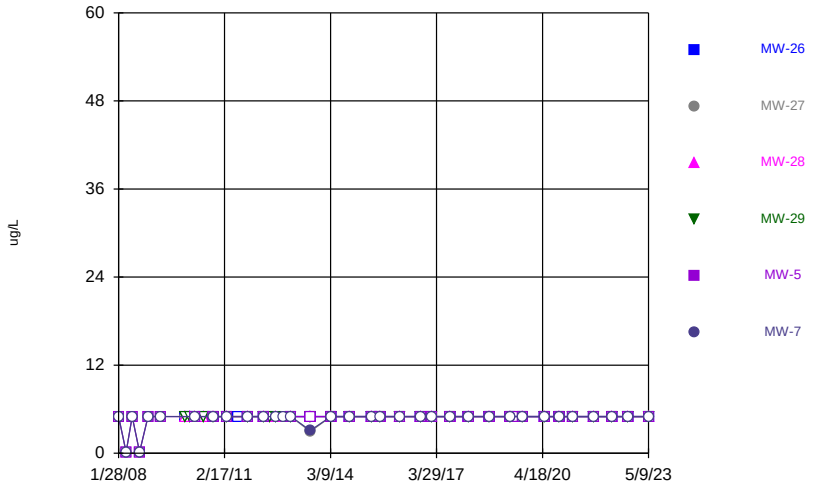

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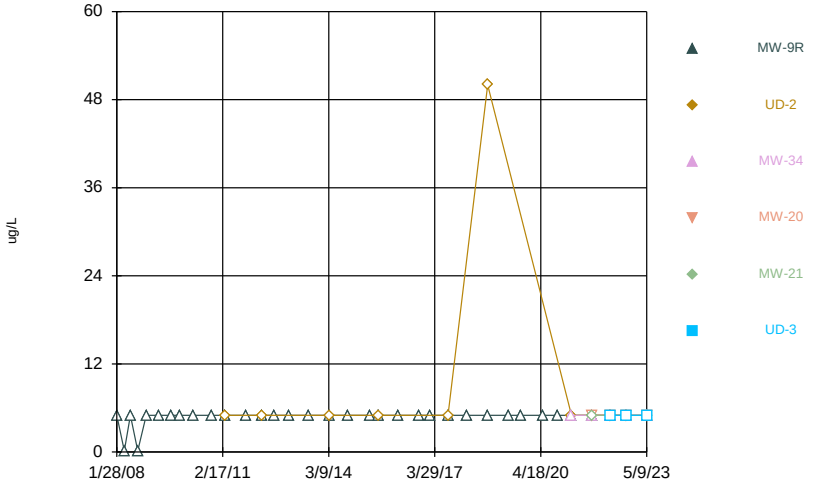
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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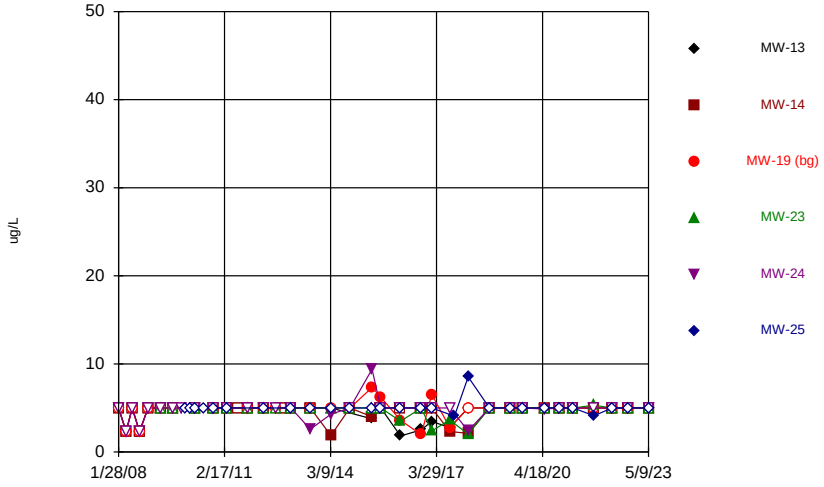
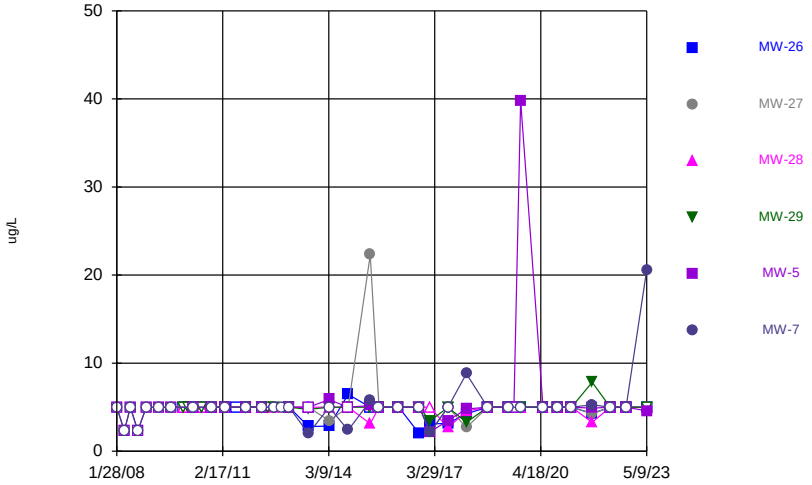


Constituent: Acetone Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Acetone Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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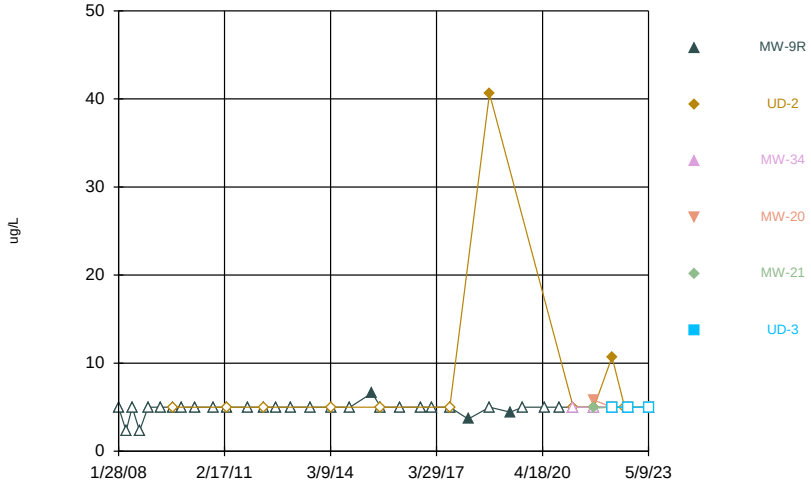

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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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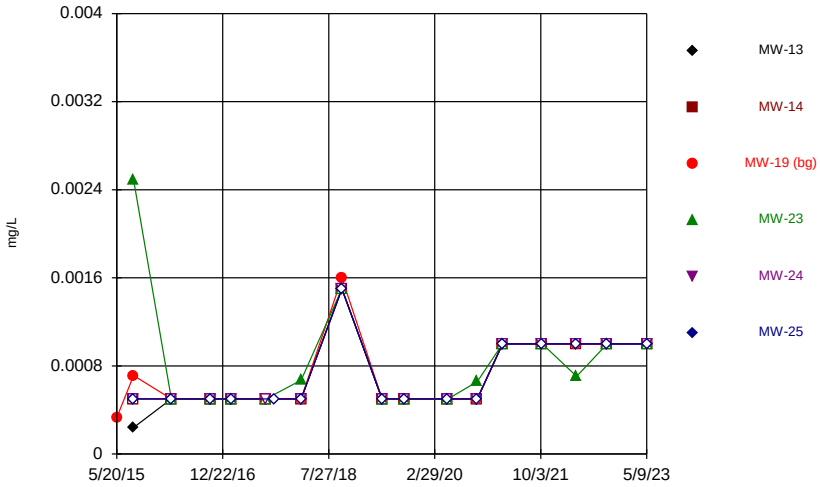
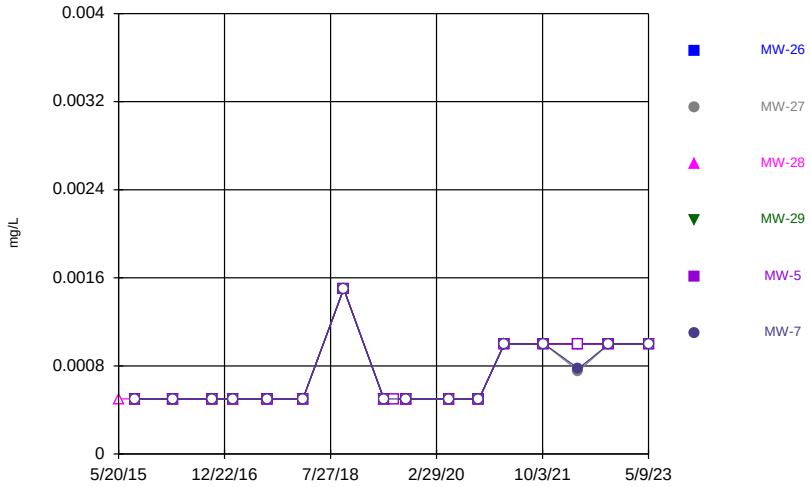


Constituent: Antimony Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

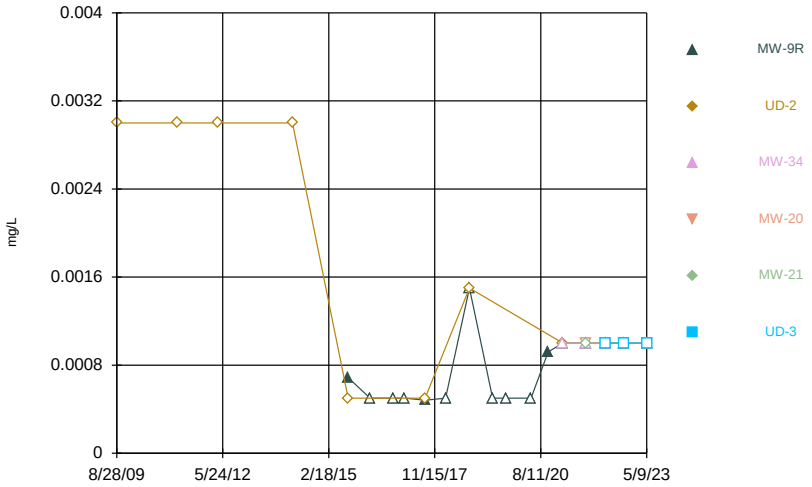
Time Series



Constituent: Antimony Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

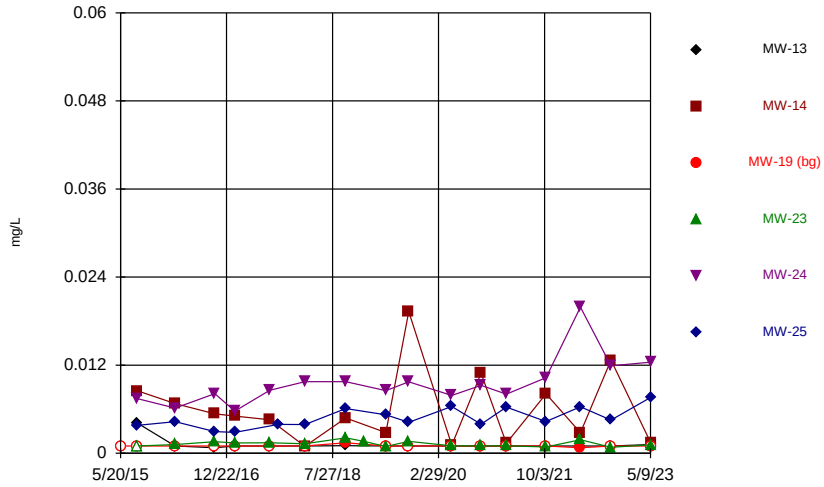
Time Series



Constituent: Antimony Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

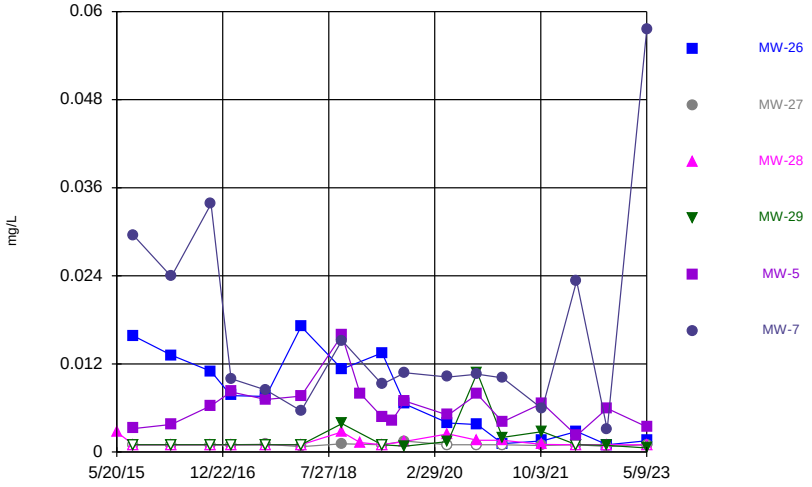
Time Series



Constituent: Arsenic Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

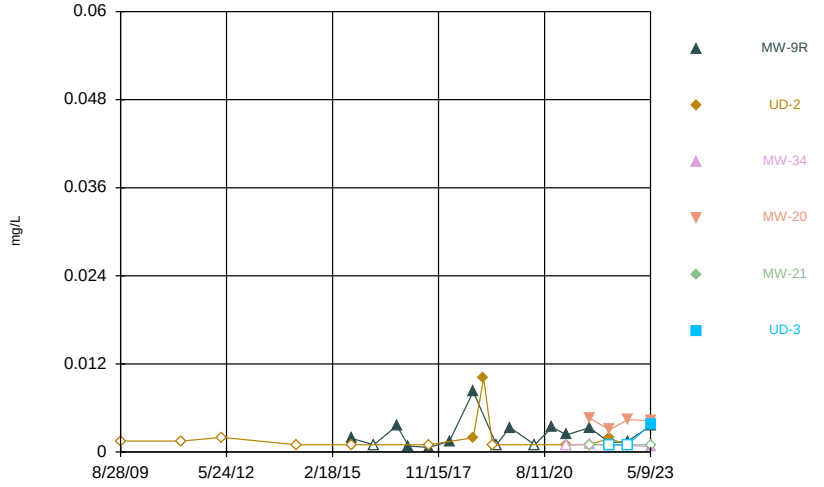
Time Series



Constituent: Arsenic Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

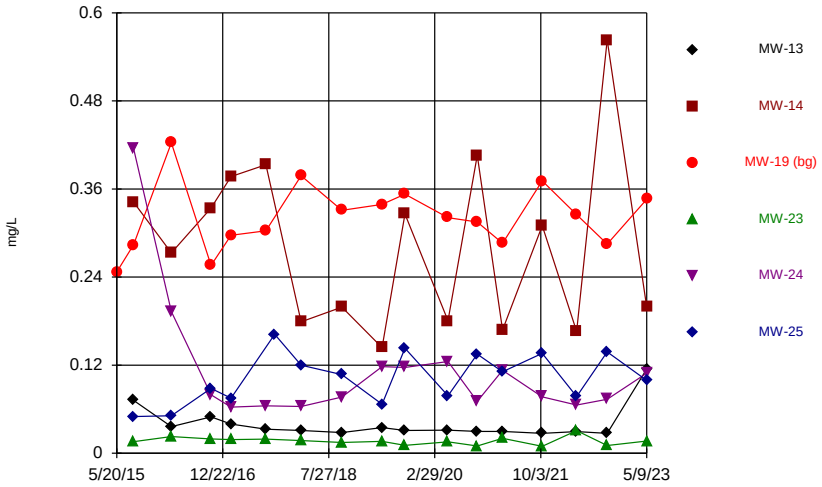
Time Series



Constituent: Arsenic Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

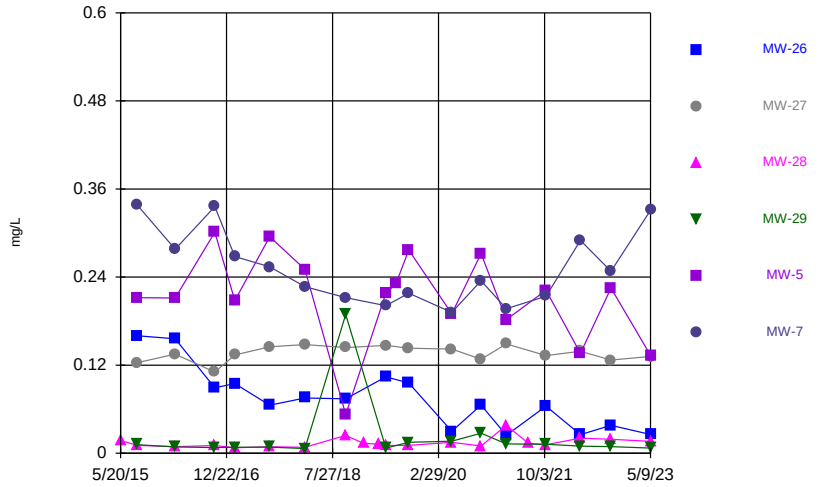
Time Series



Constituent: Barium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

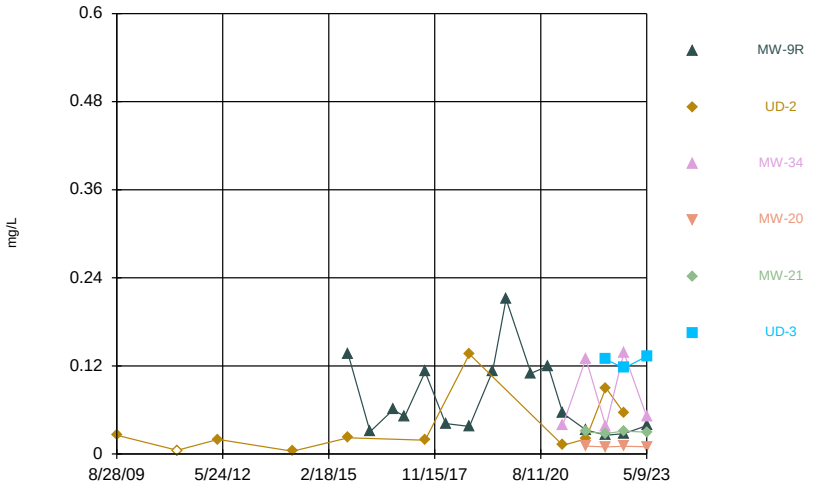
Time Series



Constituent: Barium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Barium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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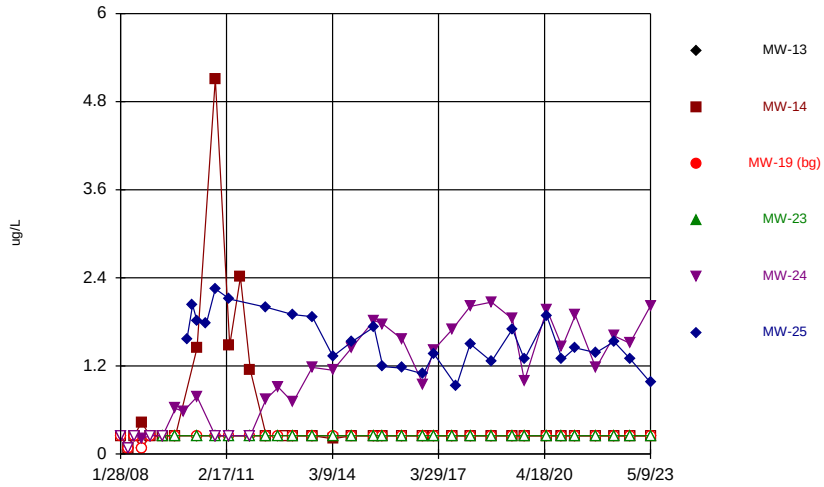
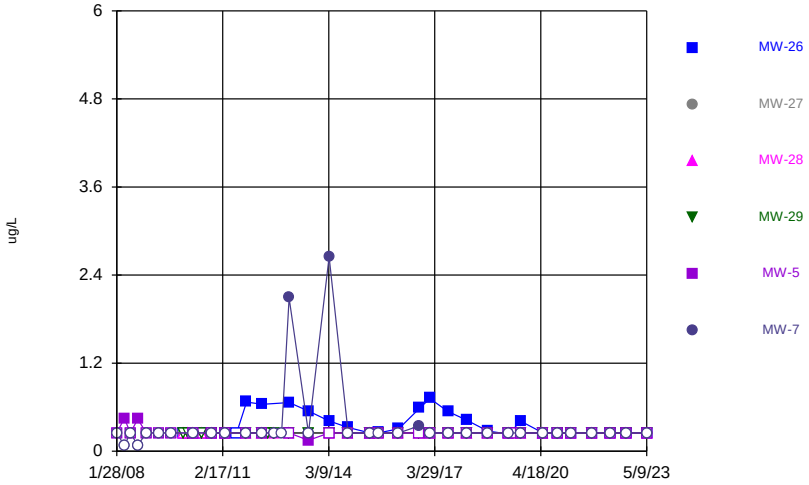
Time Series



Constituent: Benzene Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

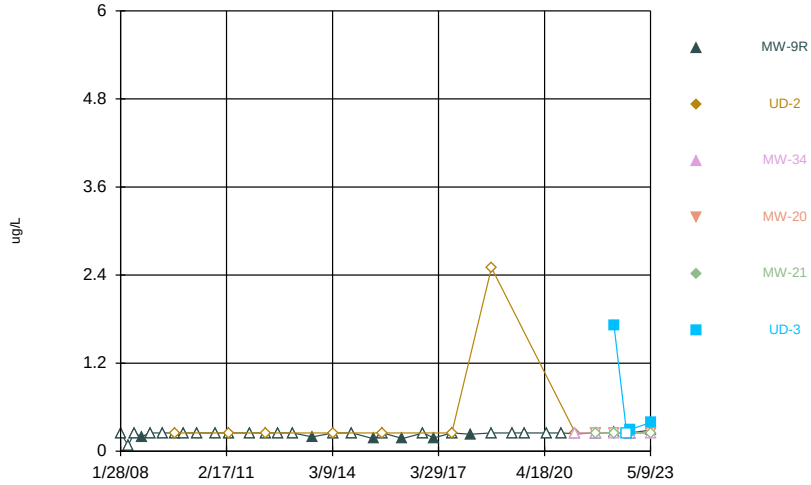
Time Series



Constituent: Benzene Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

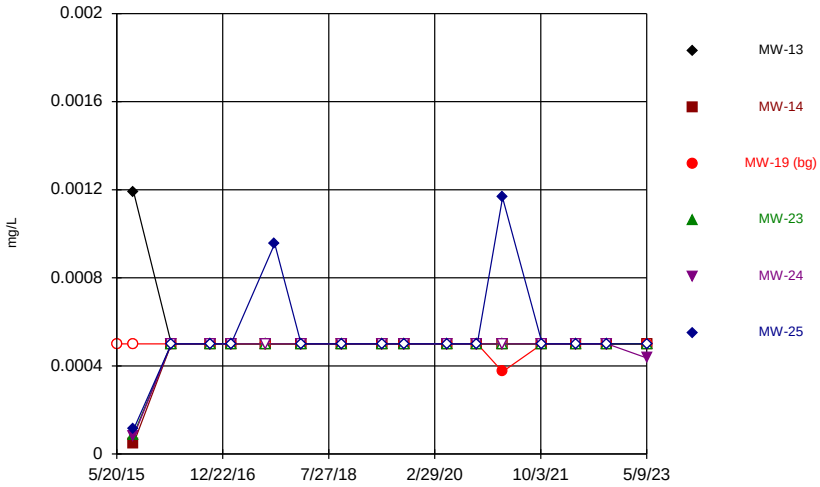
Time Series



Constituent: Benzene Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

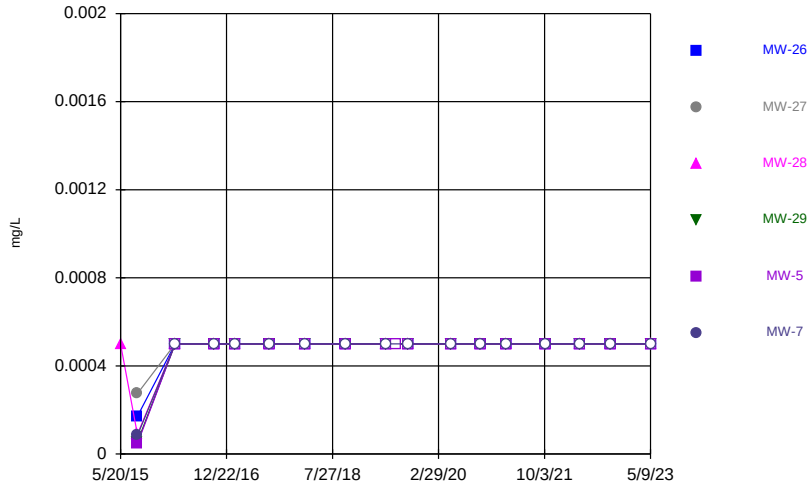
Time Series



Constituent: Beryllium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

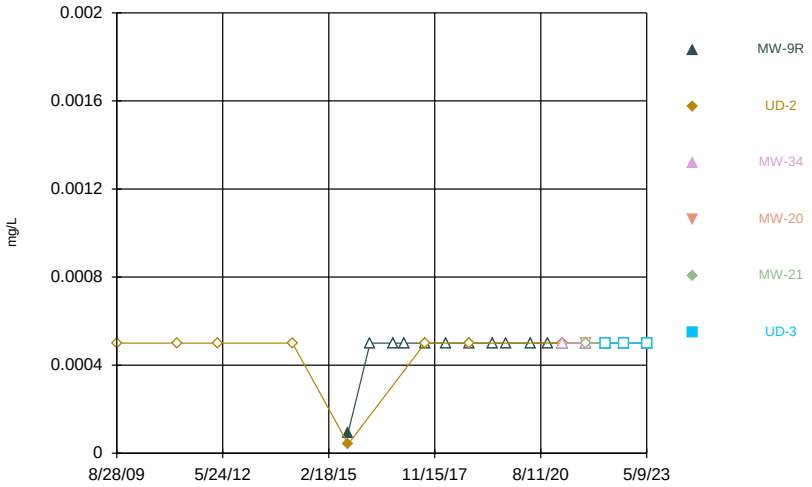
Time Series



Constituent: Beryllium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

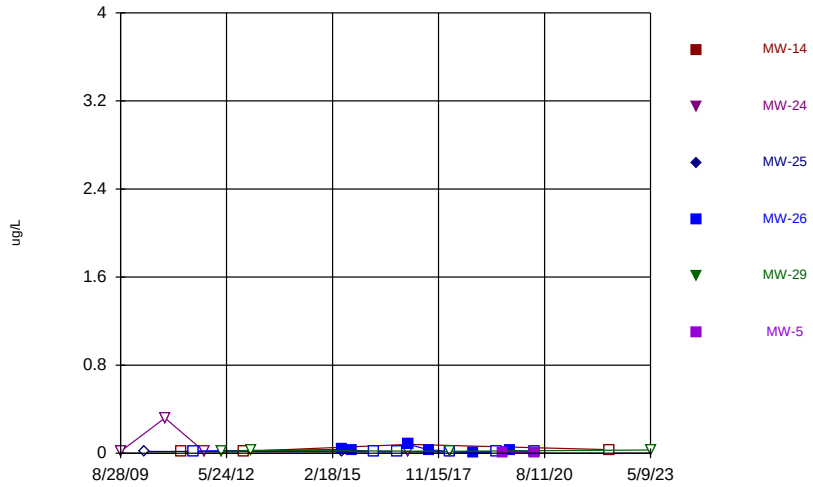
Time Series



Constituent: Beryllium Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

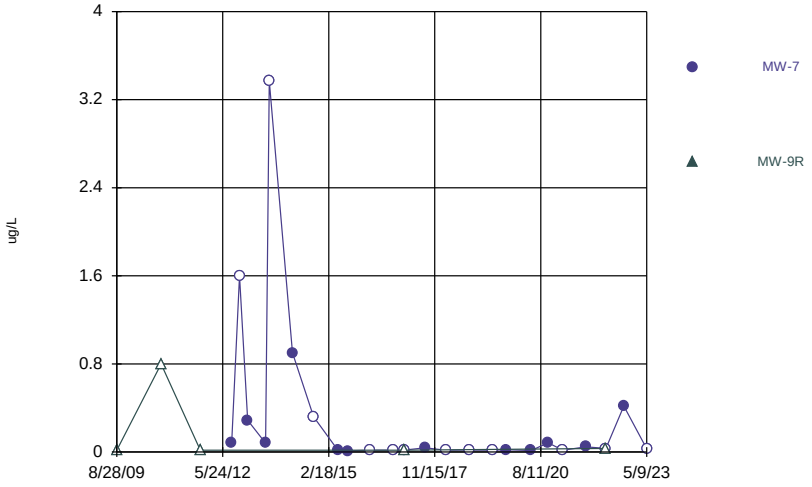
Time Series



Constituent: beta-BHC Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

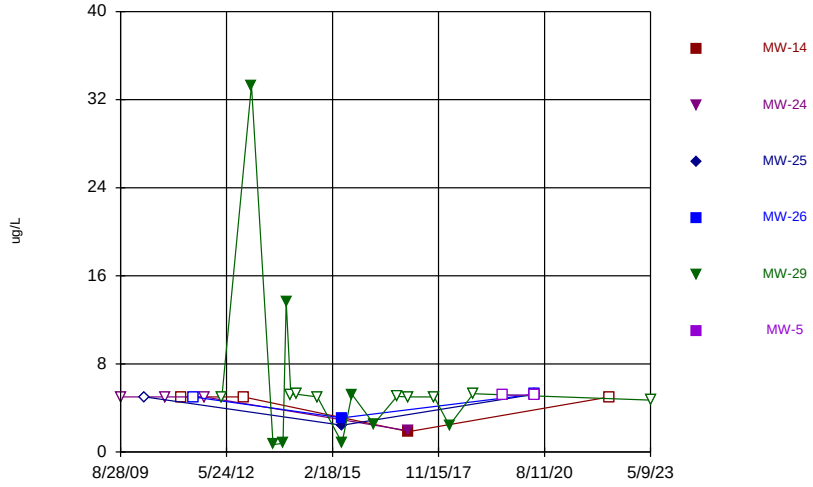
Time Series



Constituent: beta-BHC Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

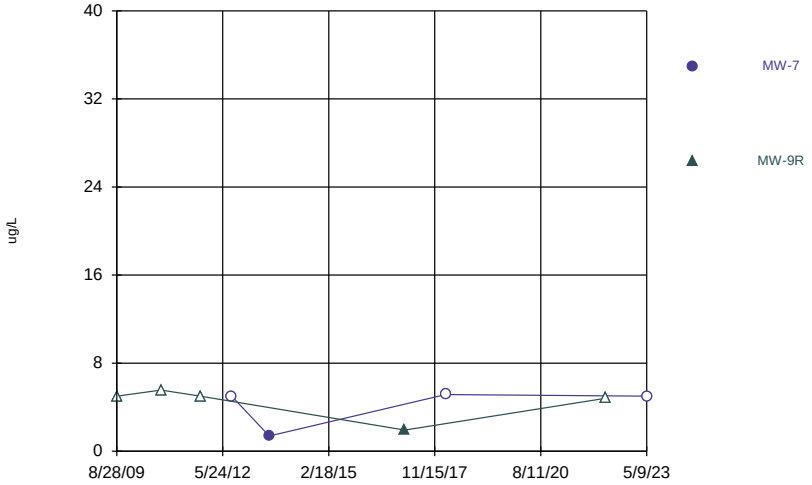
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

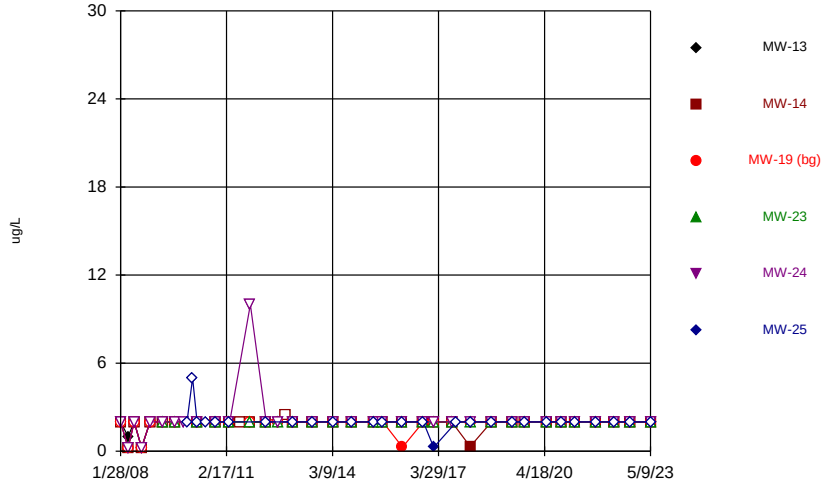
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

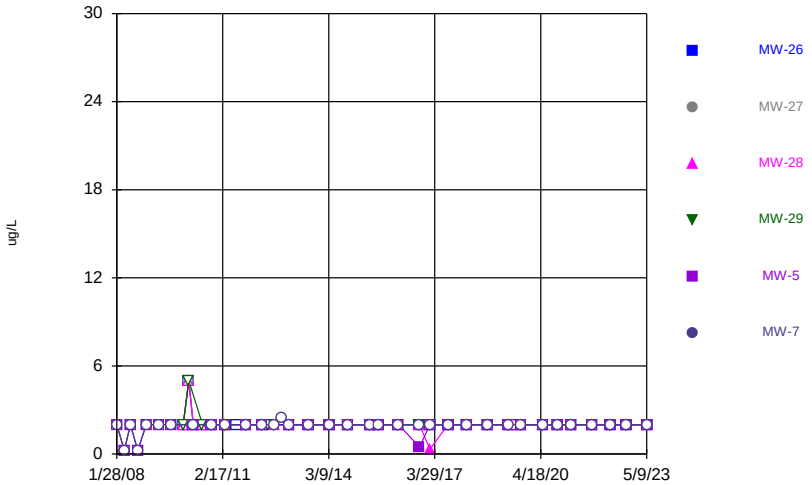
Time Series



Constituent: Bromomethane Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

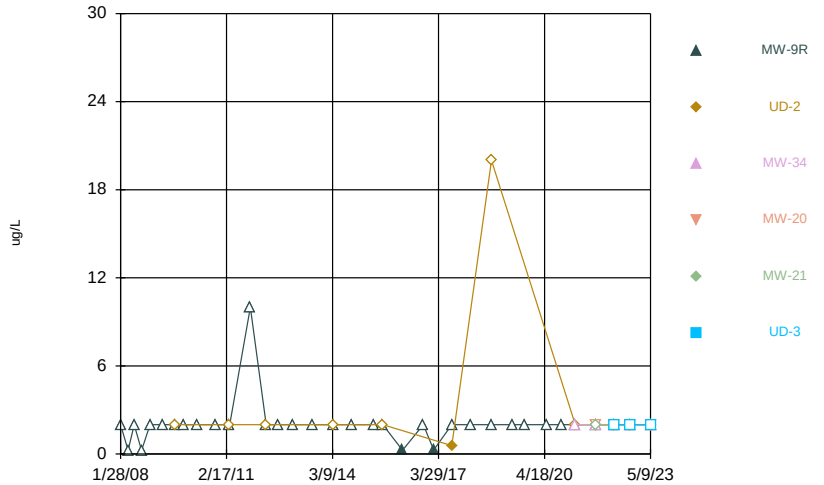
Time Series



Constituent: Bromomethane Analysis Run 6/2/2023 5:21 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

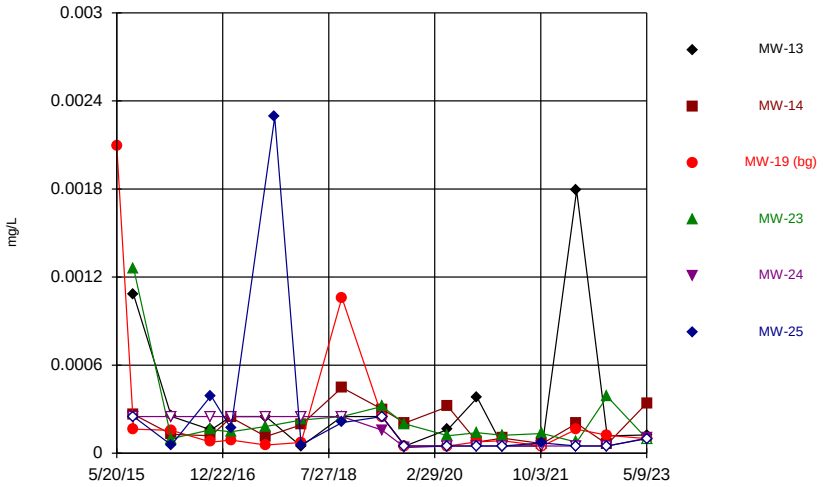
Time Series



Constituent: Bromomethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

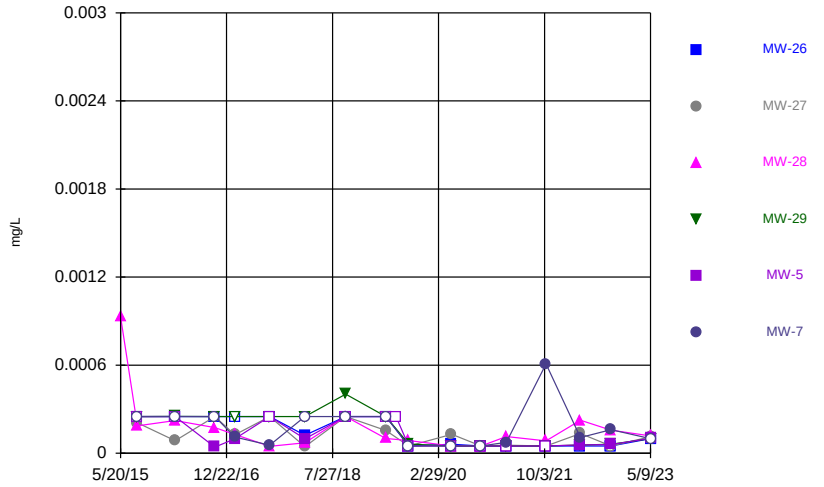
Time Series



Constituent: Cadmium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

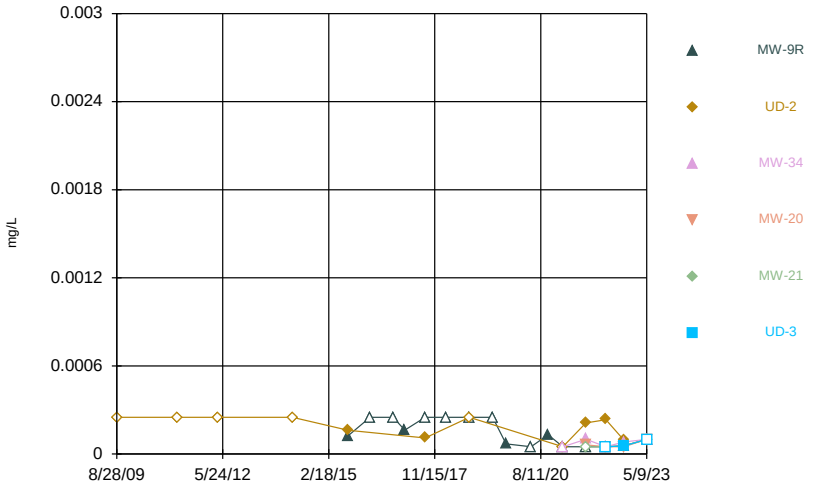
Time Series



Constituent: Cadmium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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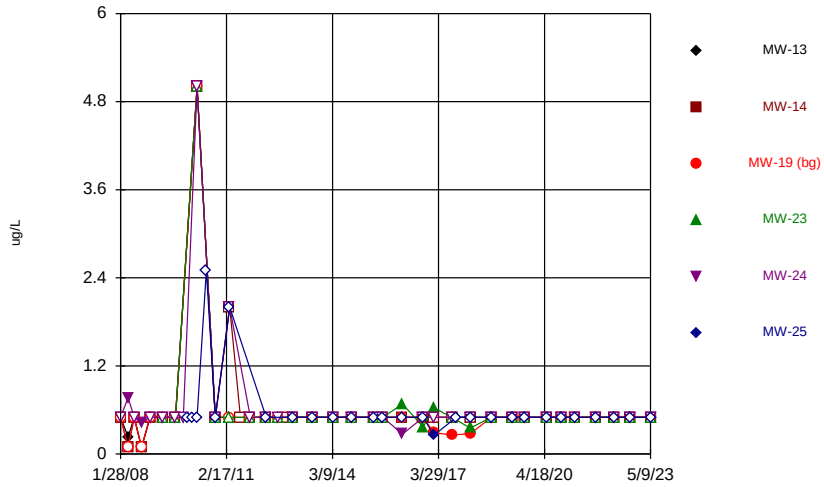
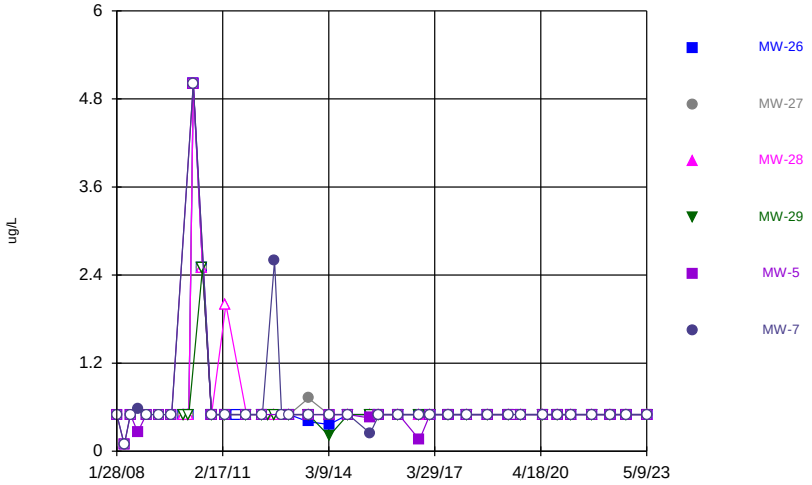
Time Series



Constituent: Carbon disulfide Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Carbon disulfide Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
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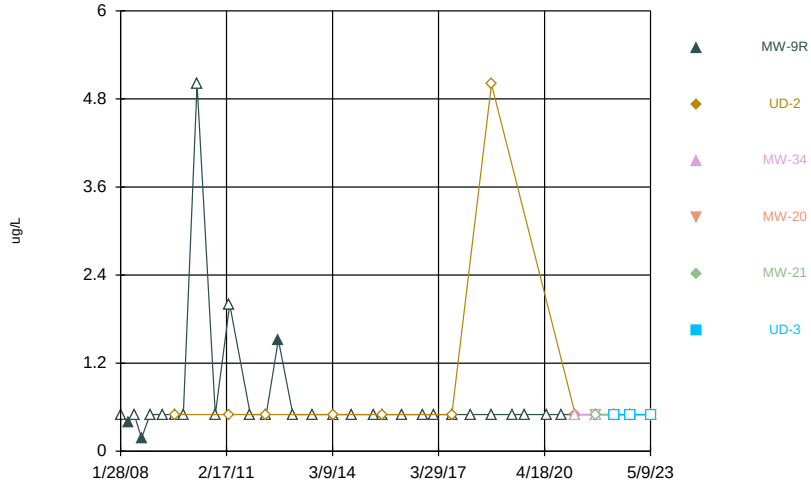
Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

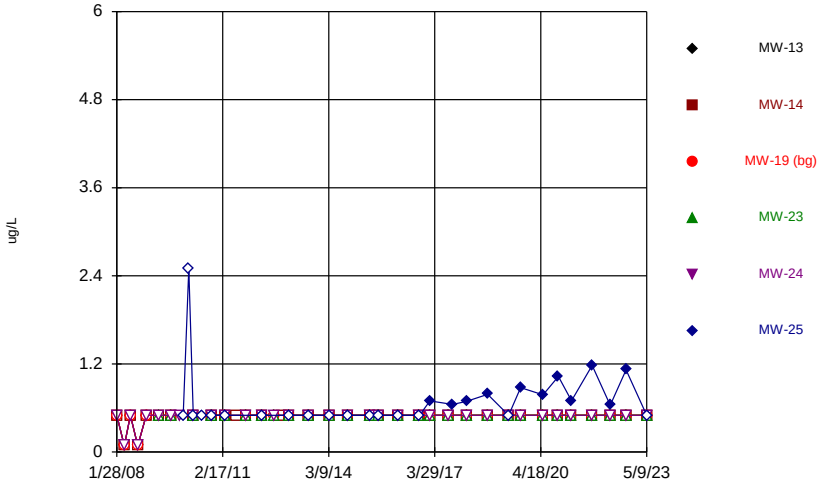
Time Series



Constituent: Carbon disulfide Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

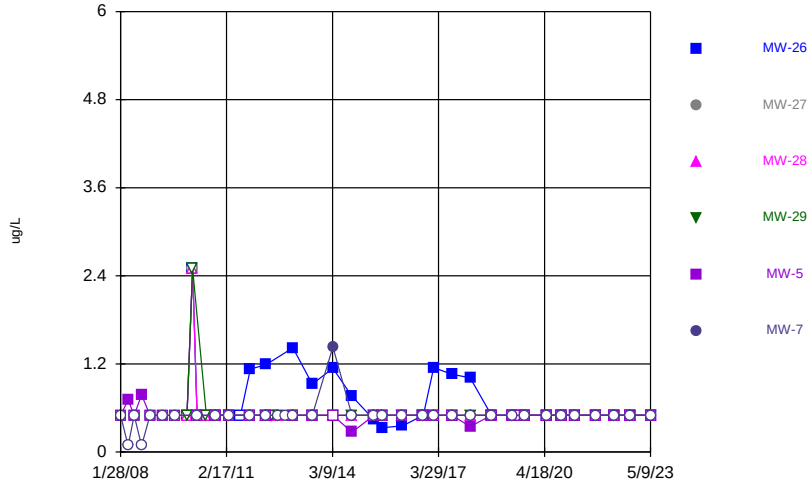
Time Series



Constituent: Chlorobenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

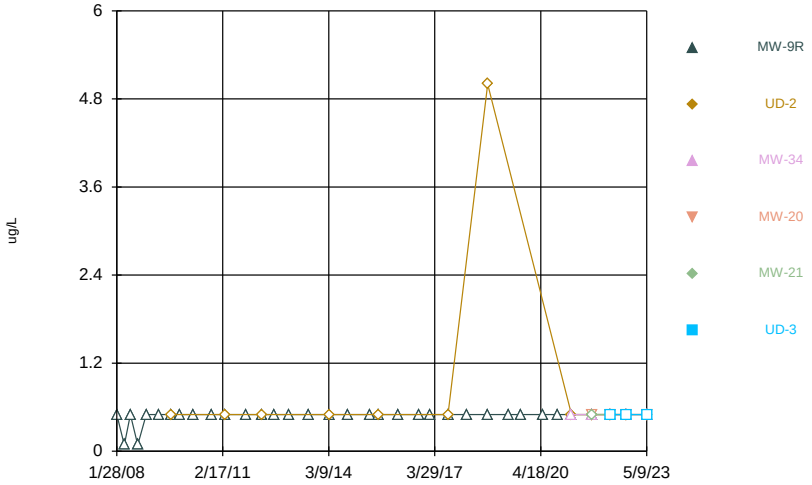
Time Series



Constituent: Chlorobenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

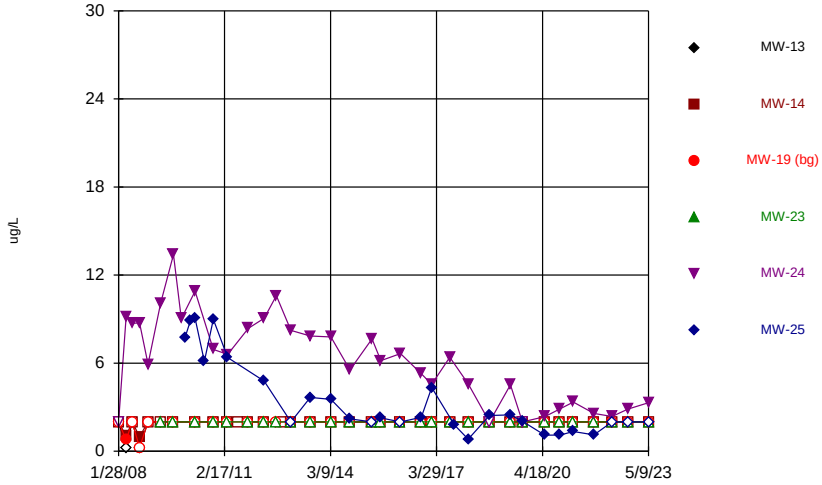
Time Series



Constituent: Chlorobenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

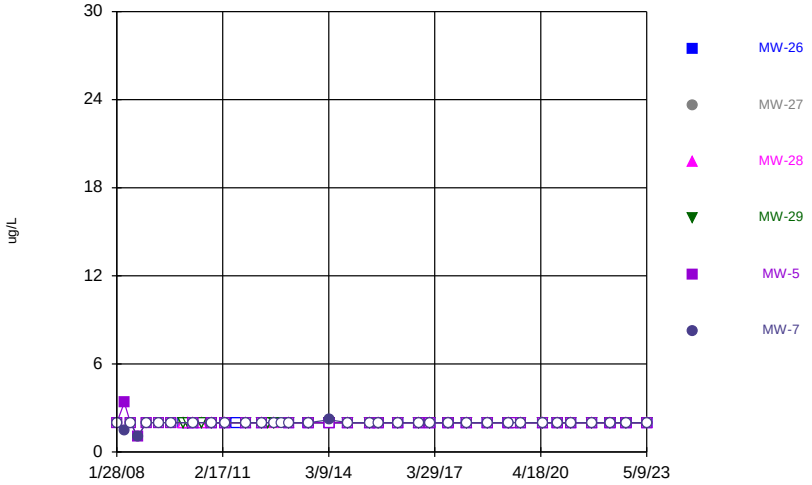
Time Series



Constituent: Chloroethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

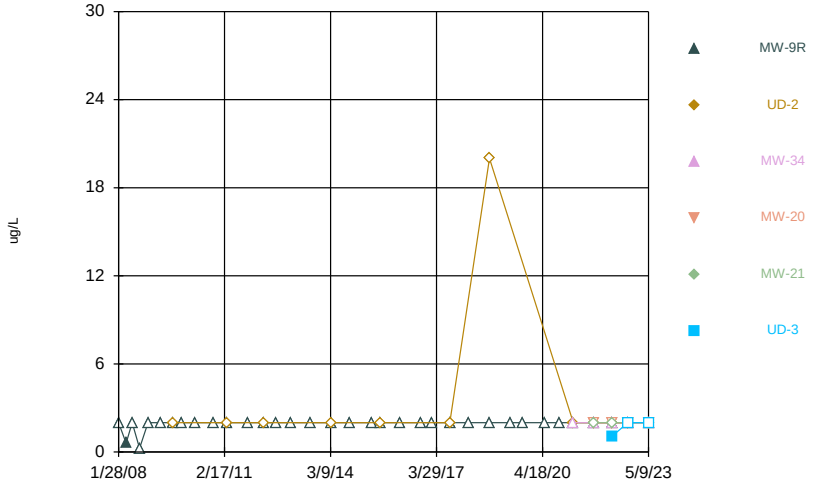
Time Series



Constituent: Chloroethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

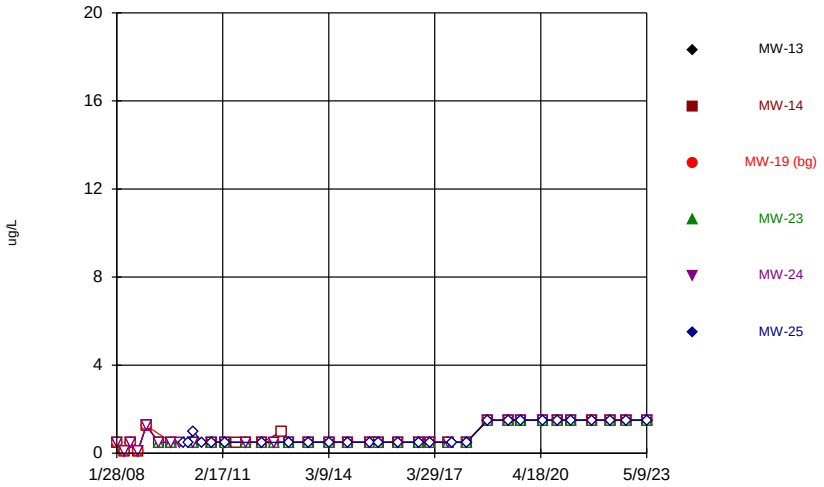
Time Series



Constituent: Chloroethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

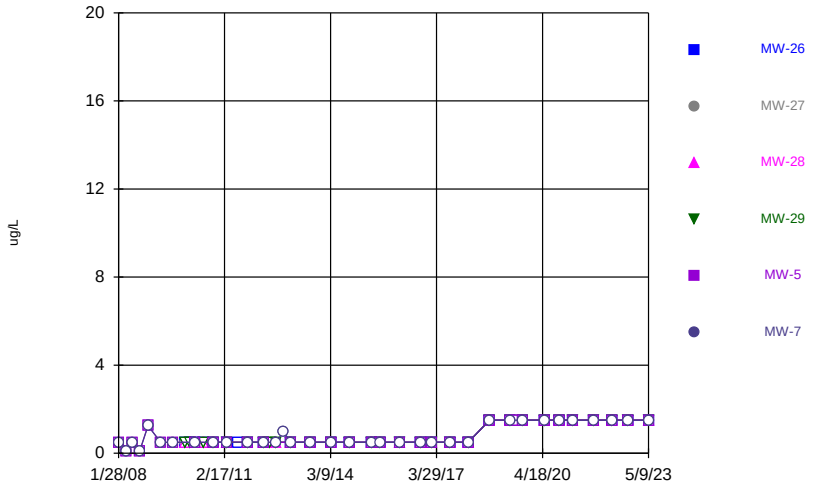
Time Series



Constituent: Chloroform Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

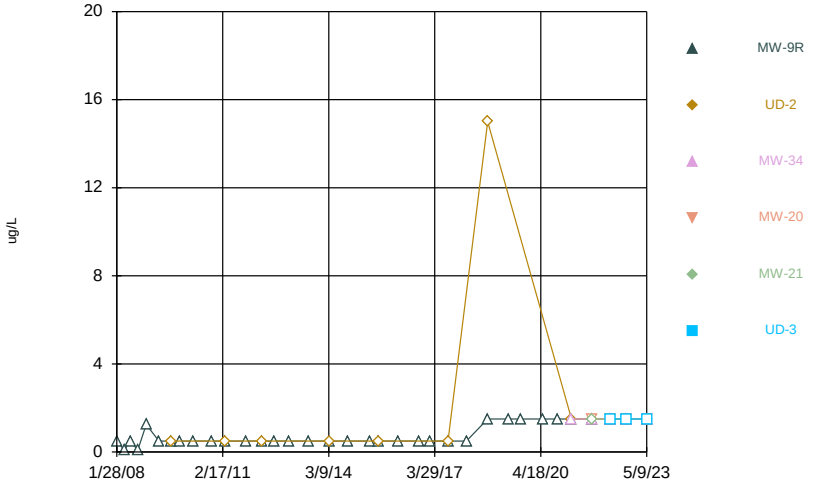
Time Series



Constituent: Chloroform Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chloroform Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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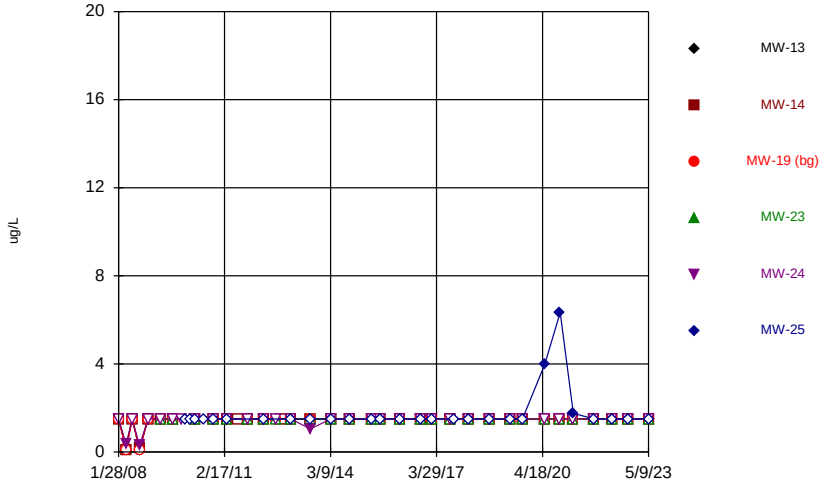
Hollow symbols indicate censored values.

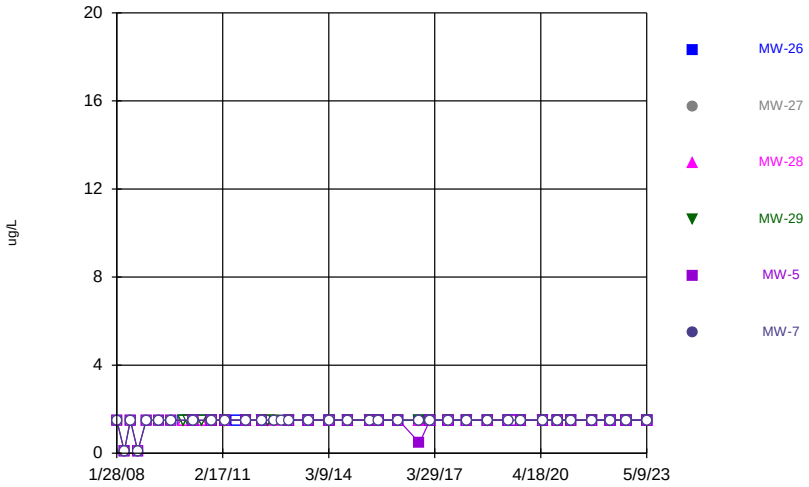
Time Series



Constituent: Chloromethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

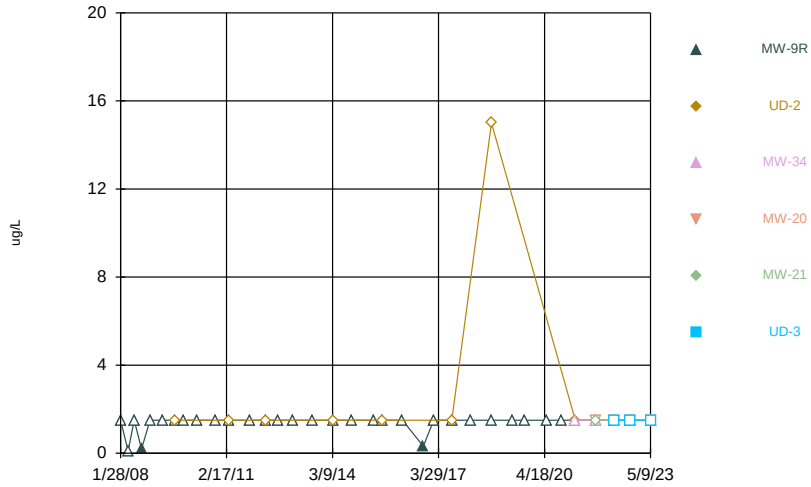
Time Series



Constituent: Chloromethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

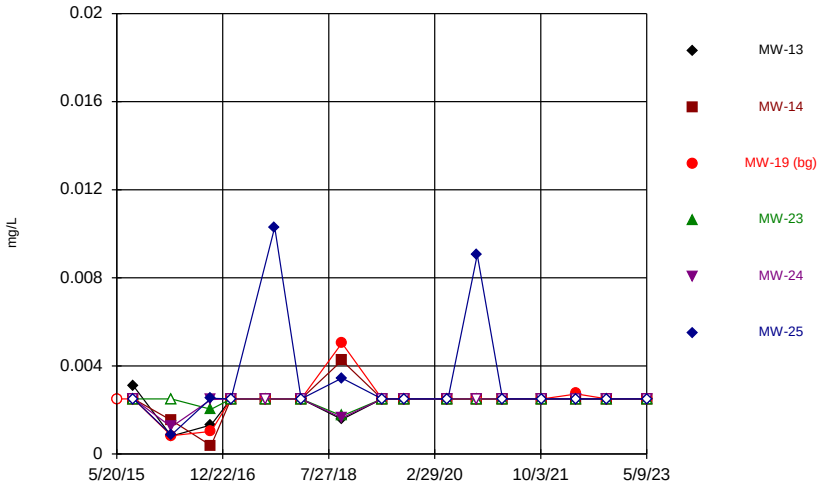
Time Series



Constituent: Chloromethane Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

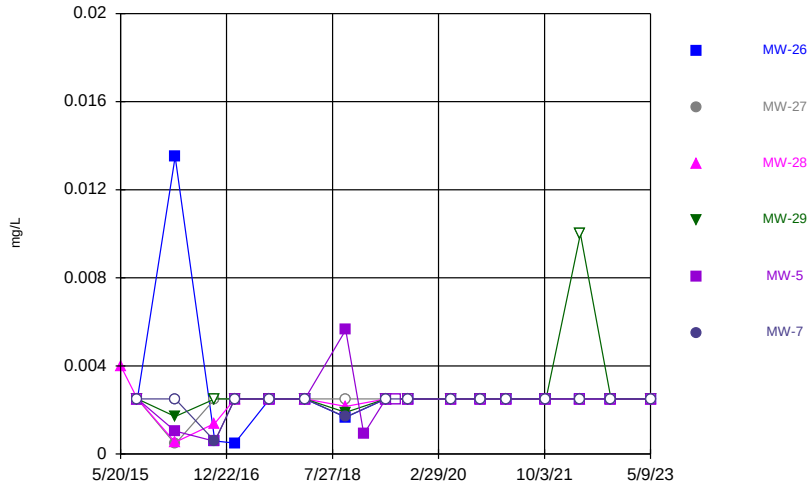
Time Series



Constituent: Chromium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

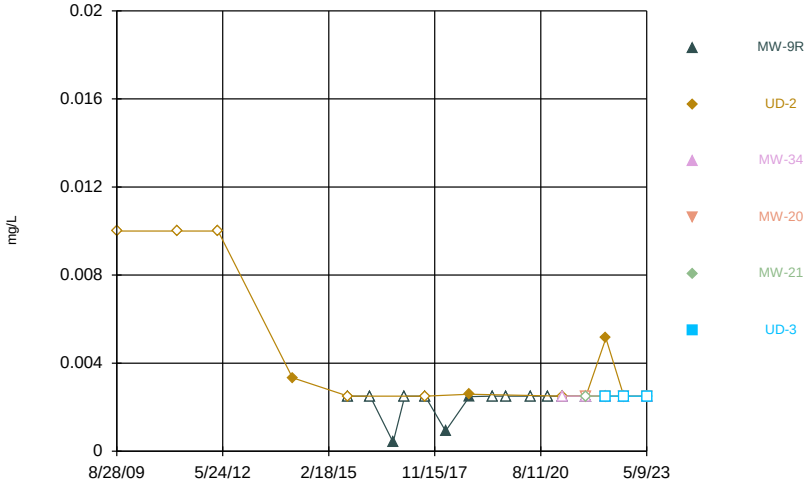
Time Series



Constituent: Chromium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

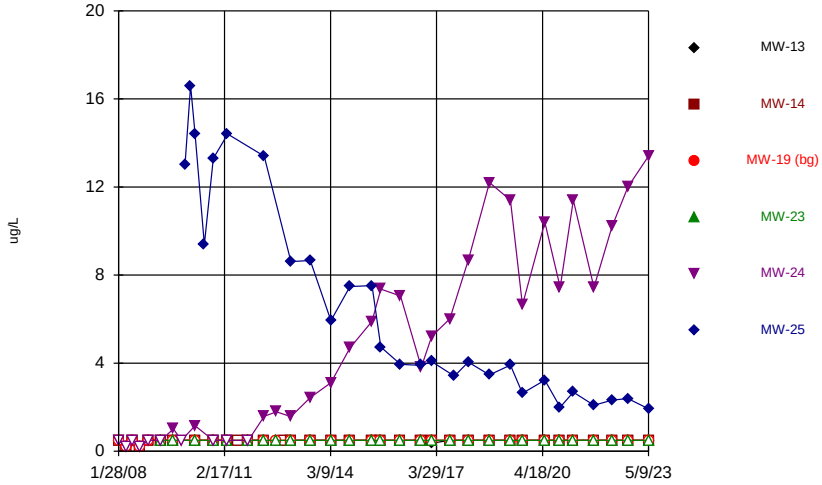
Time Series



Constituent: Chromium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

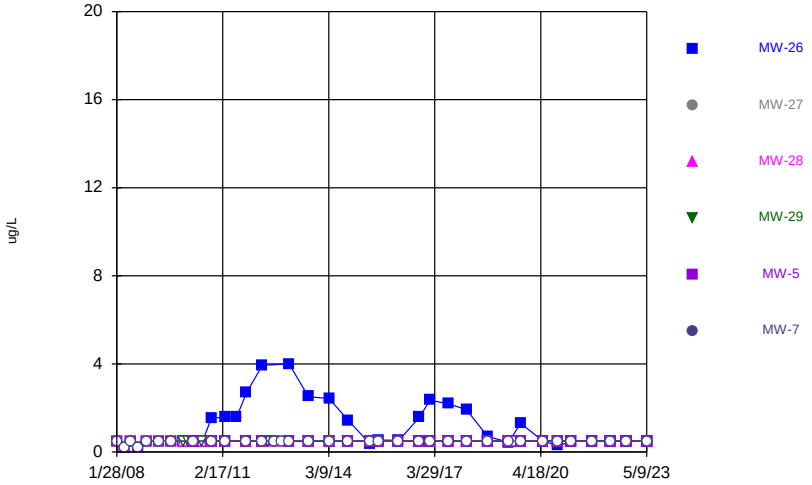
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

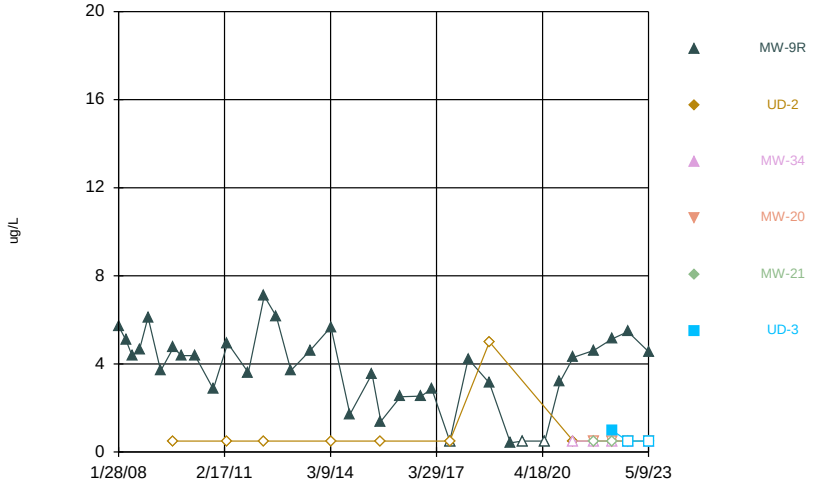
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

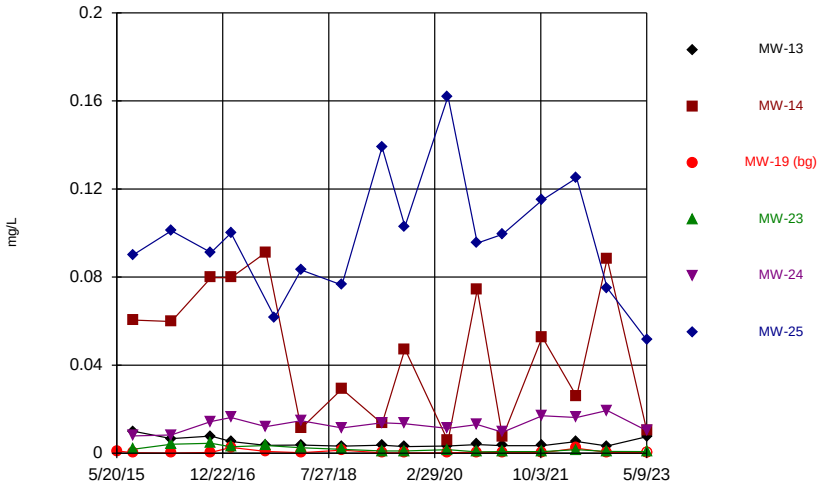
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

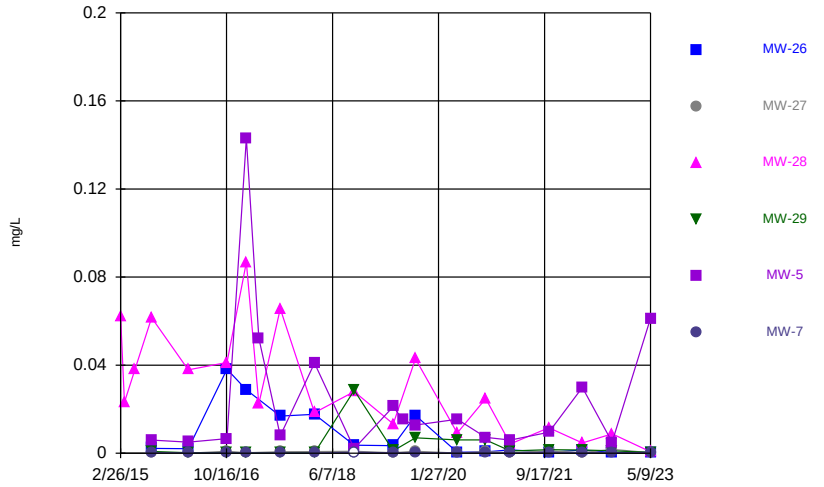
Time Series



Constituent: Cobalt Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

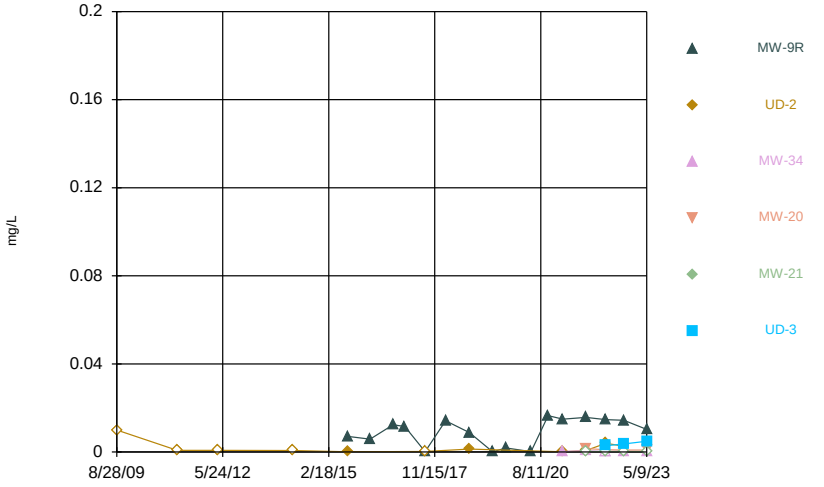
Time Series



Constituent: Cobalt Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

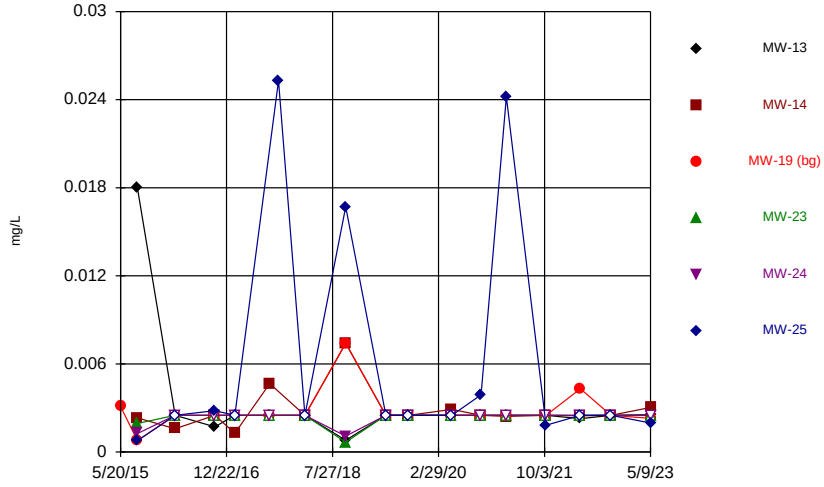
Time Series



Constituent: Cobalt Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

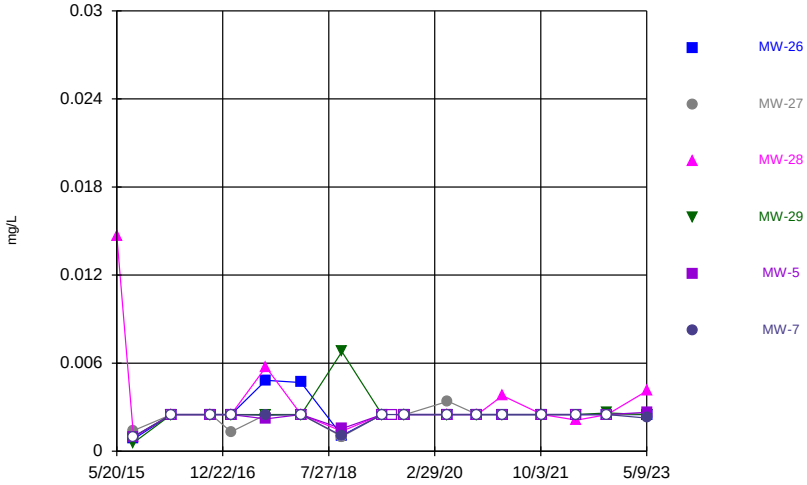
Time Series



Constituent: Copper Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

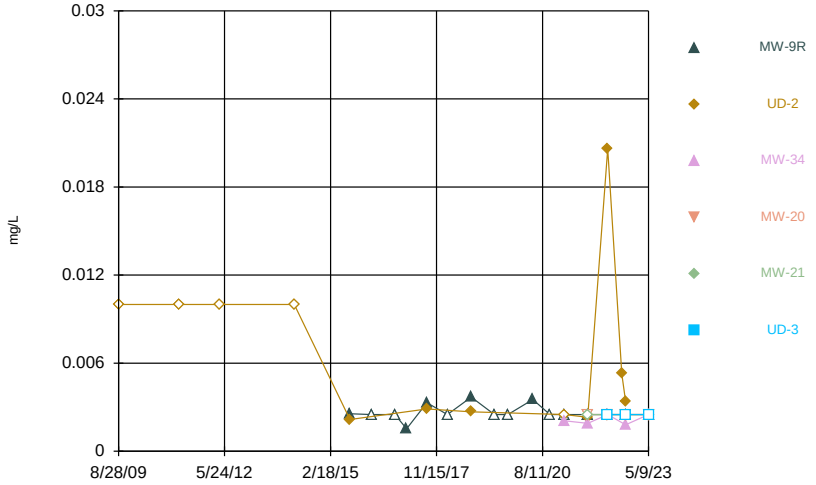
Time Series



Constituent: Copper Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

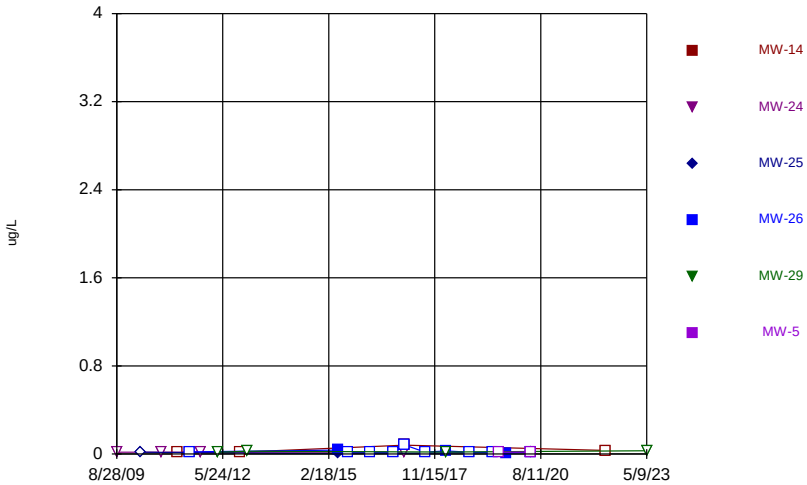
Time Series



Constituent: Copper Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

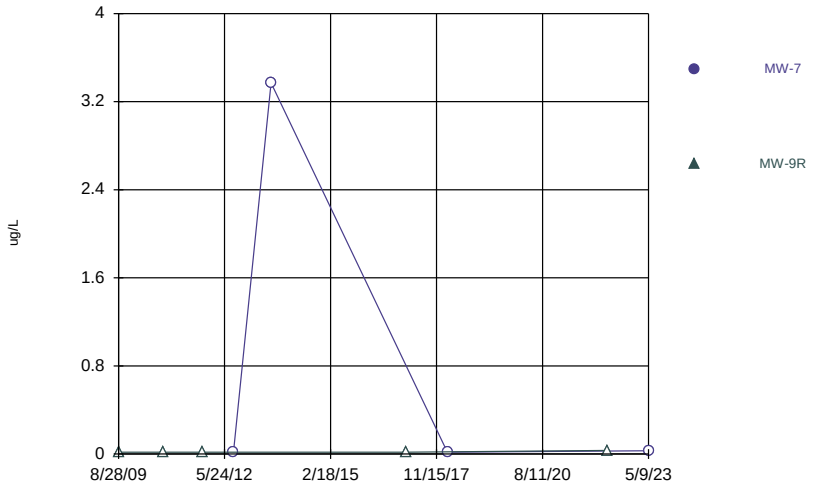
Time Series



Constituent: Endosulfan II Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

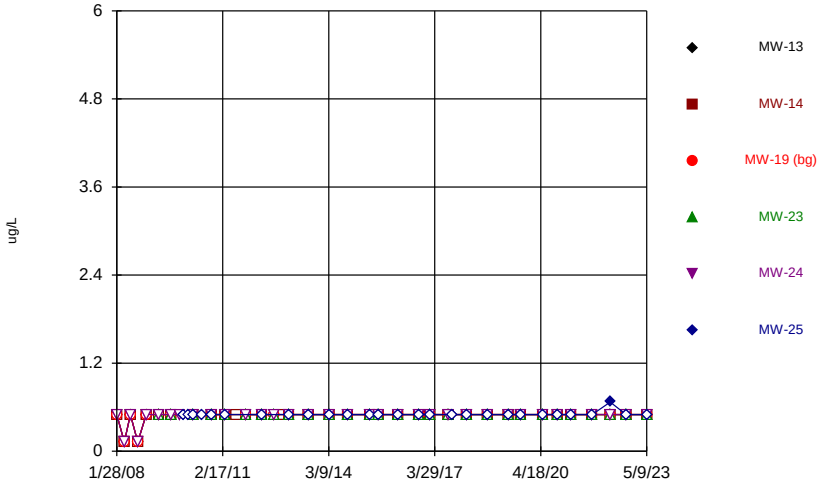
Time Series



Constituent: Endosulfan II Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

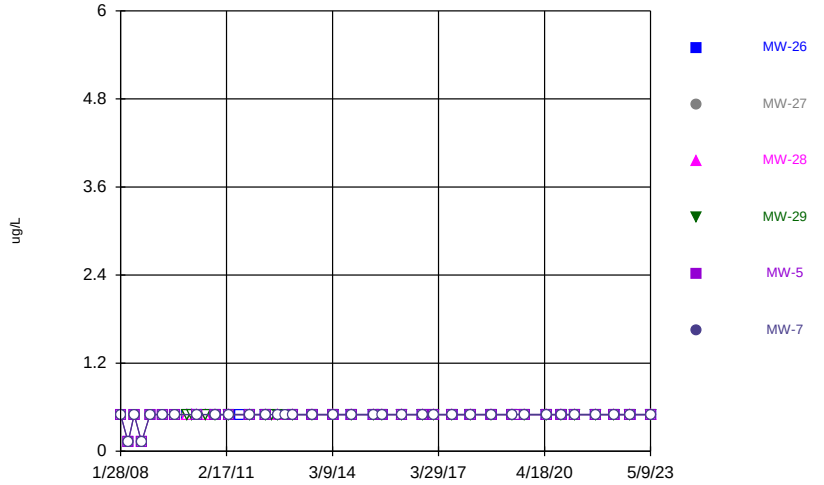
Time Series



Constituent: Ethylbenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

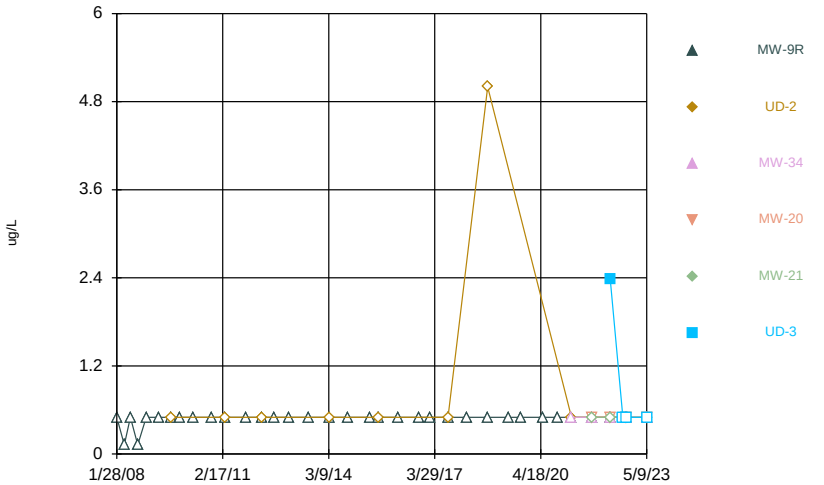
Time Series



Constituent: Ethylbenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

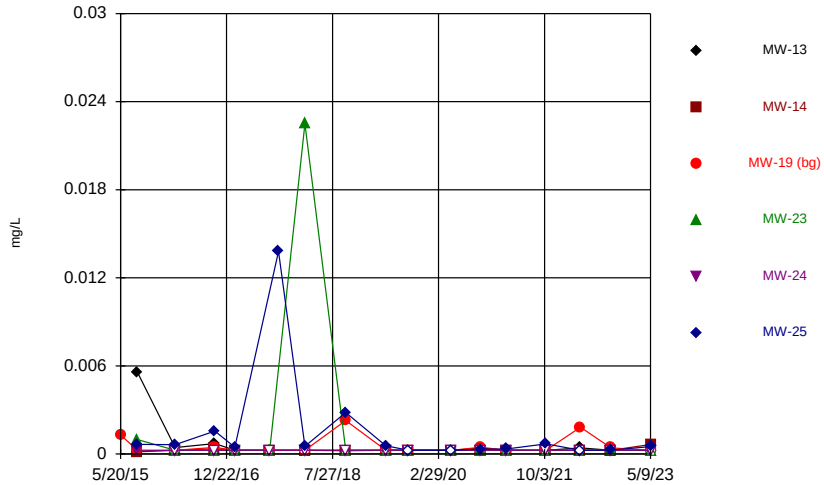
Time Series



Constituent: Ethylbenzene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

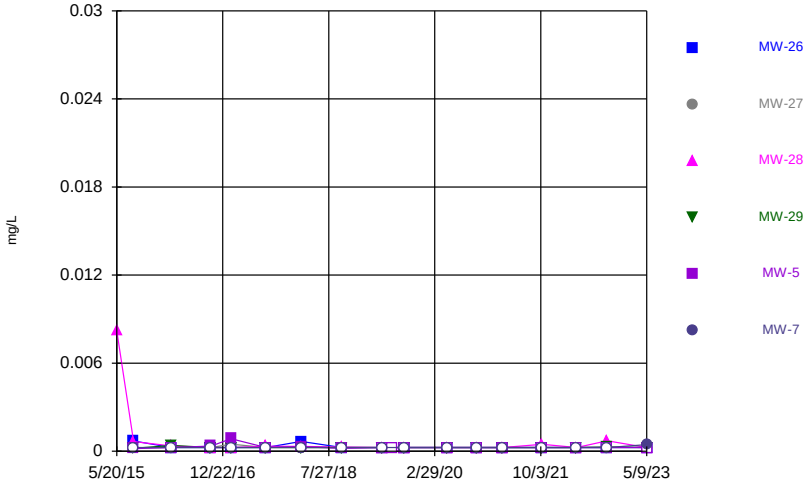
Time Series



Constituent: Lead Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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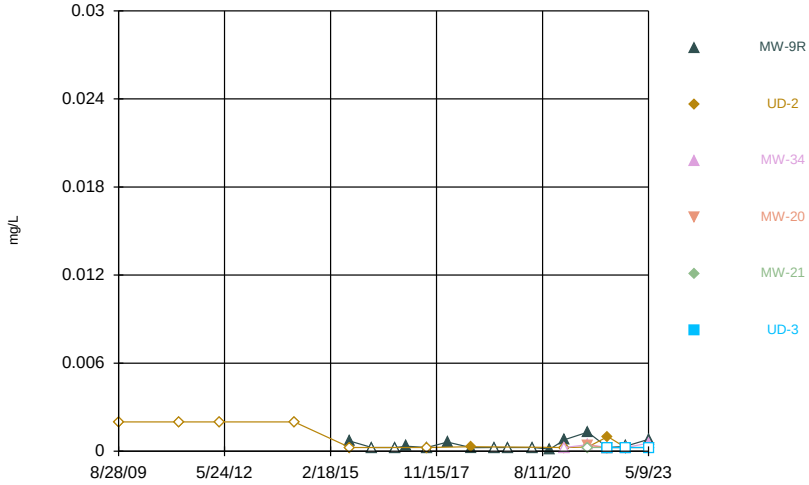
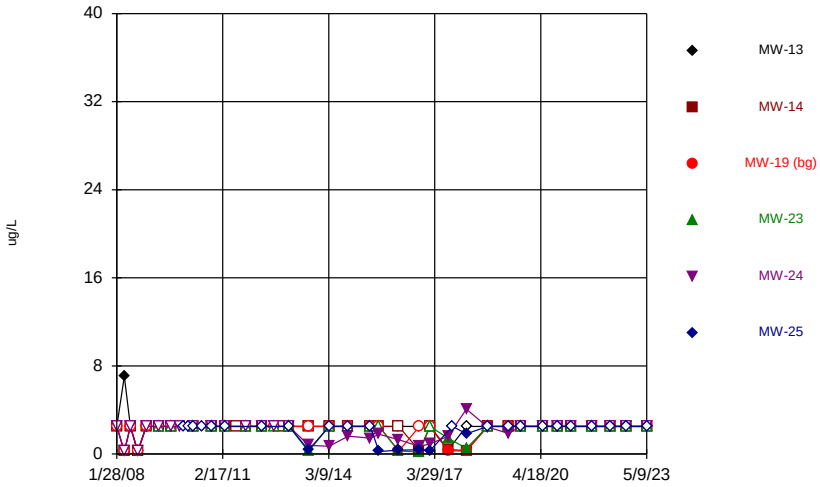
Time Series



Constituent: Lead Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

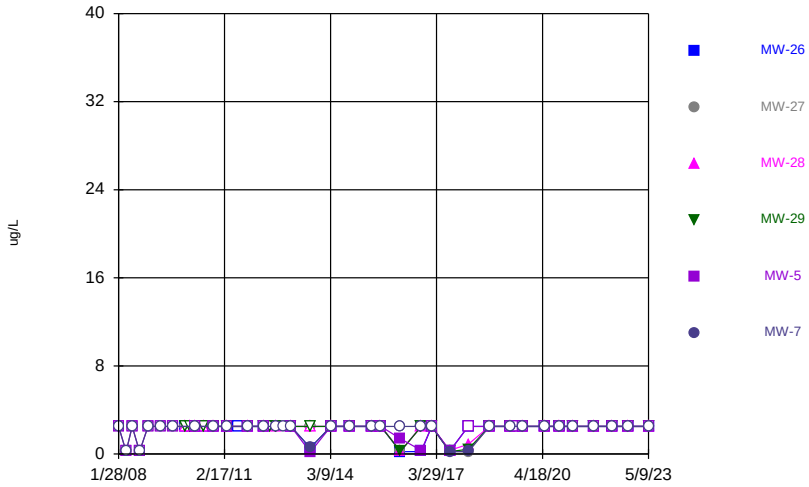
Time Series



Constituent: Methylene Chloride Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

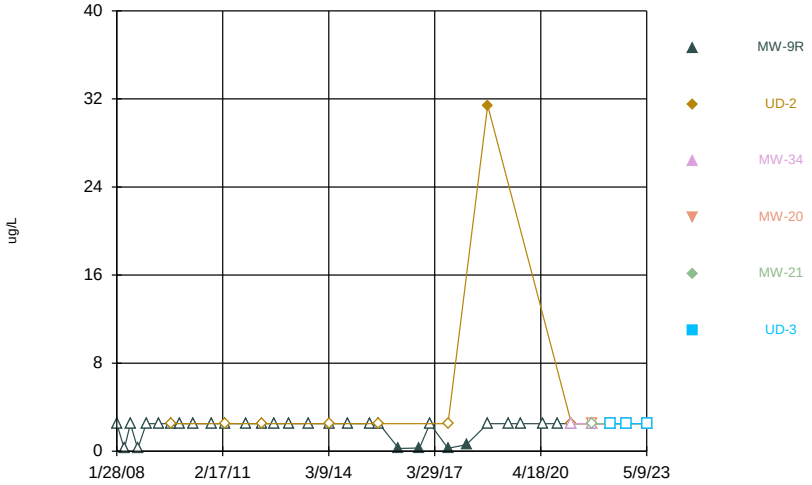
Time Series



Constituent: Methylene Chloride Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

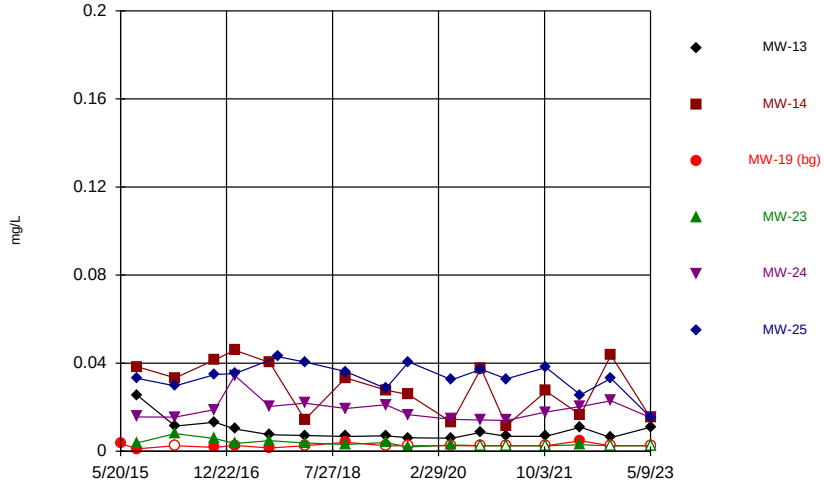
Time Series



Constituent: Methylene Chloride Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

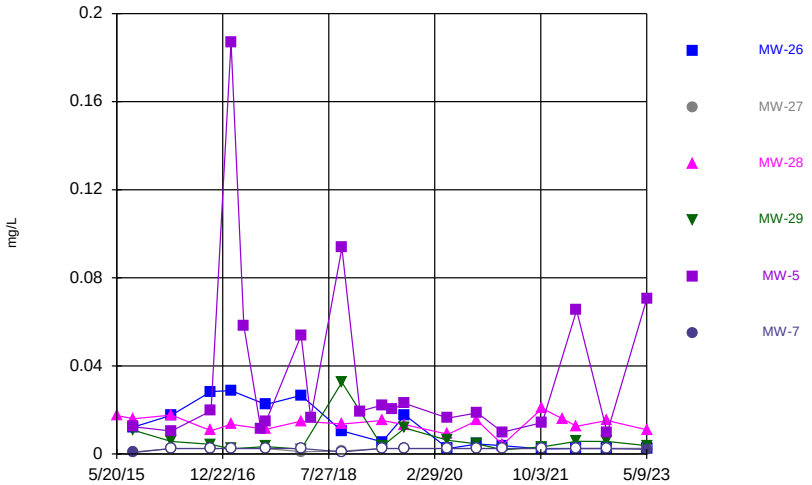
Time Series



Constituent: Nickel Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

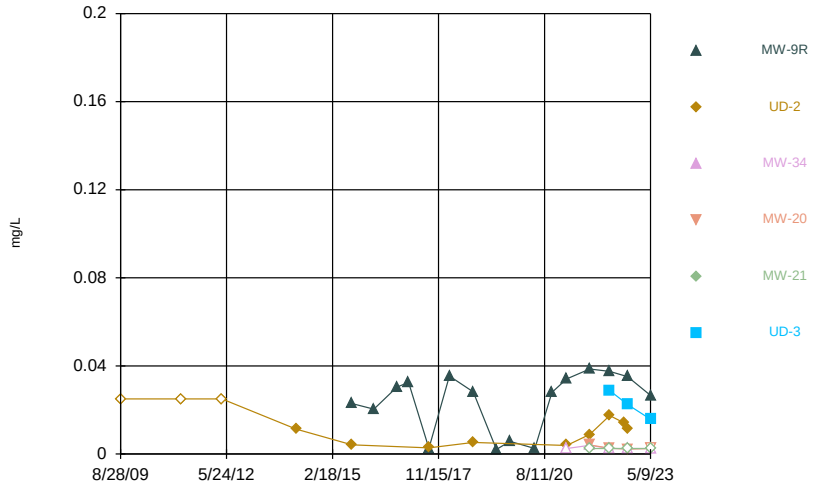
Time Series



Constituent: Nickel Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

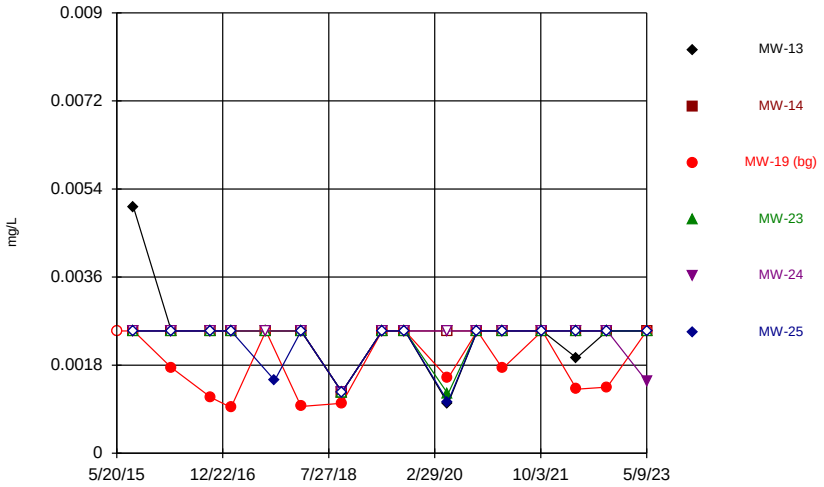
Time Series



Constituent: Nickel Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

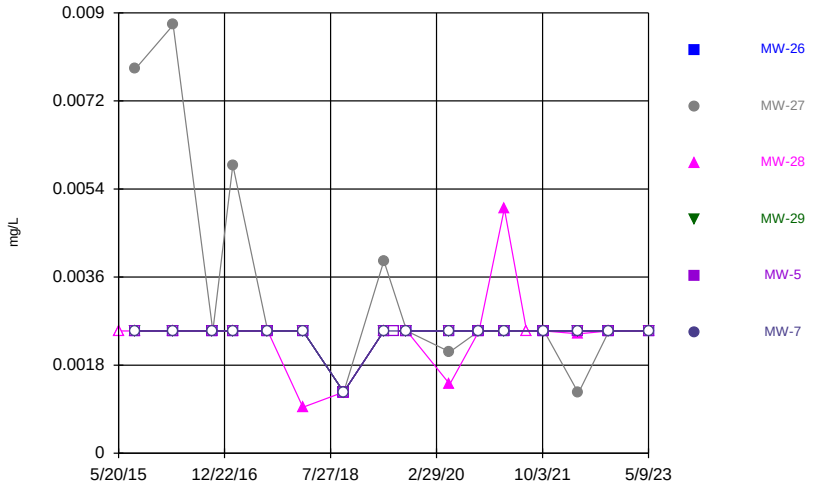
Time Series



Constituent: Selenium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

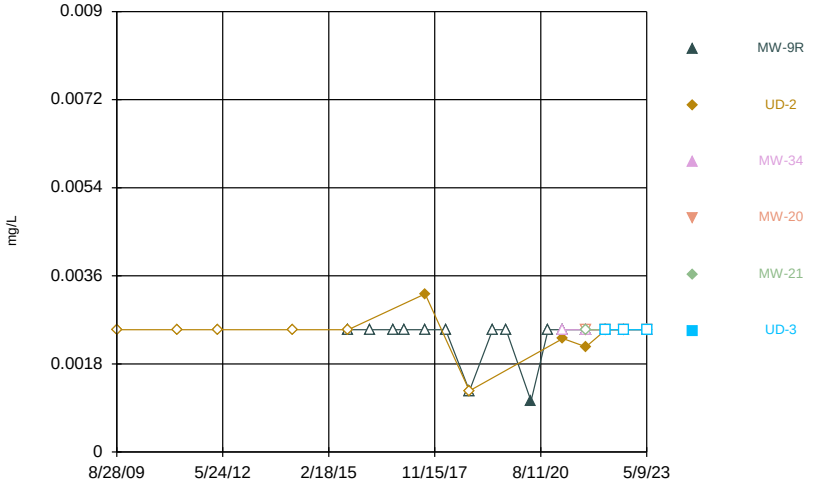
Time Series



Constituent: Selenium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

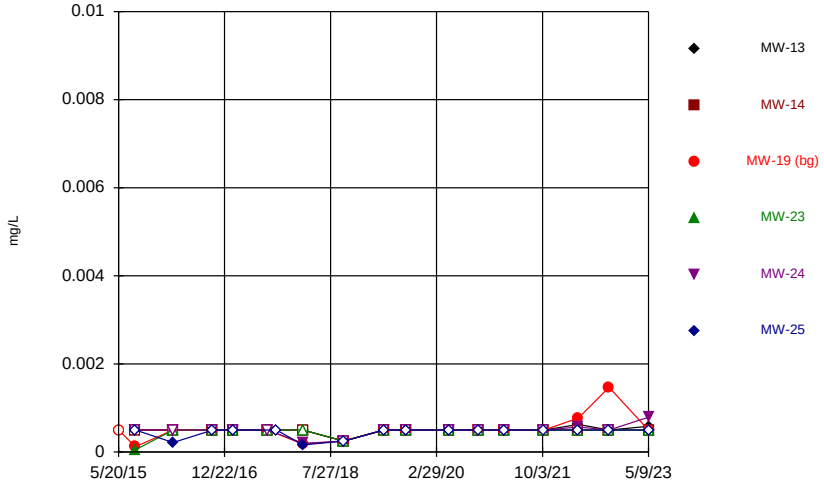
Time Series



Constituent: Selenium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

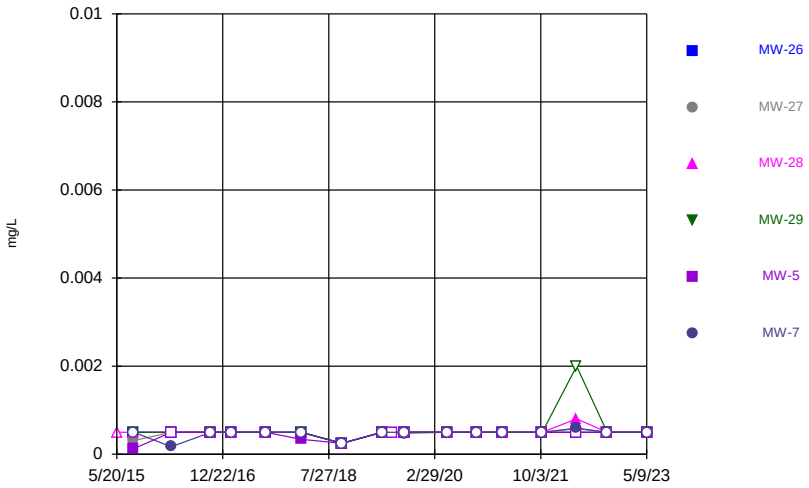
Time Series



Constituent: Silver Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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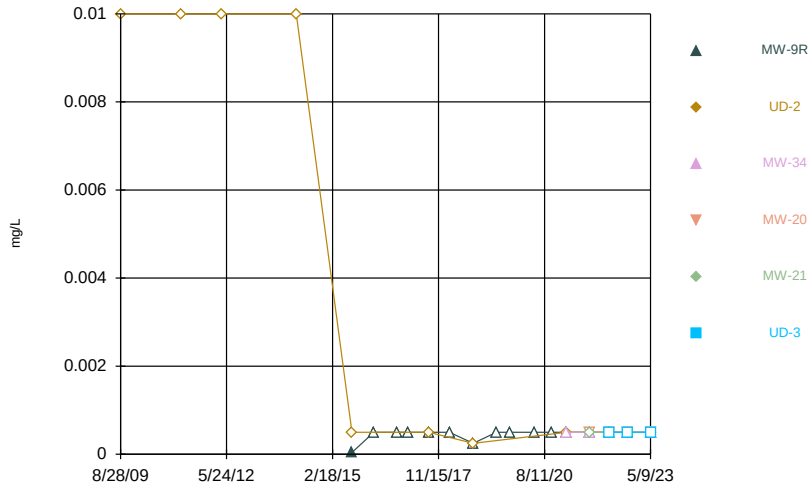
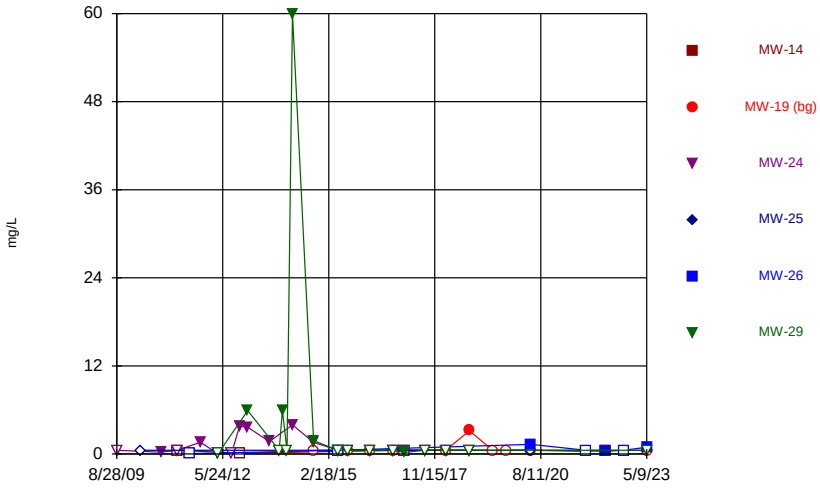
Time Series



Constituent: Silver Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

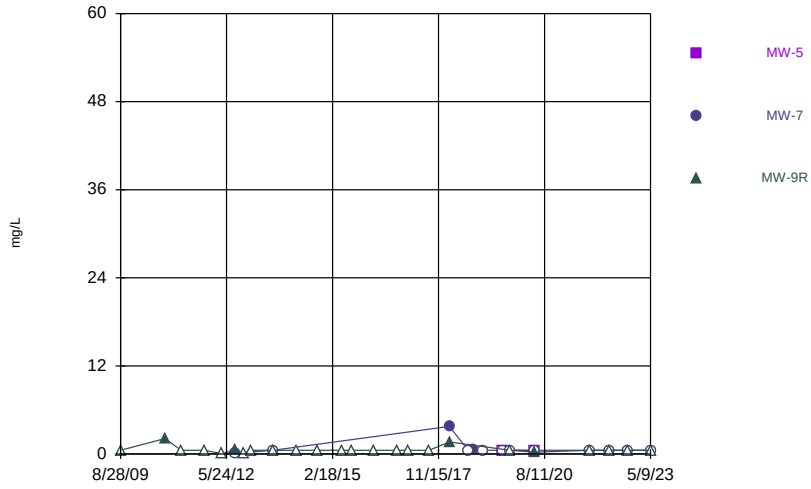
Time Series



Constituent: Sulfide Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfide Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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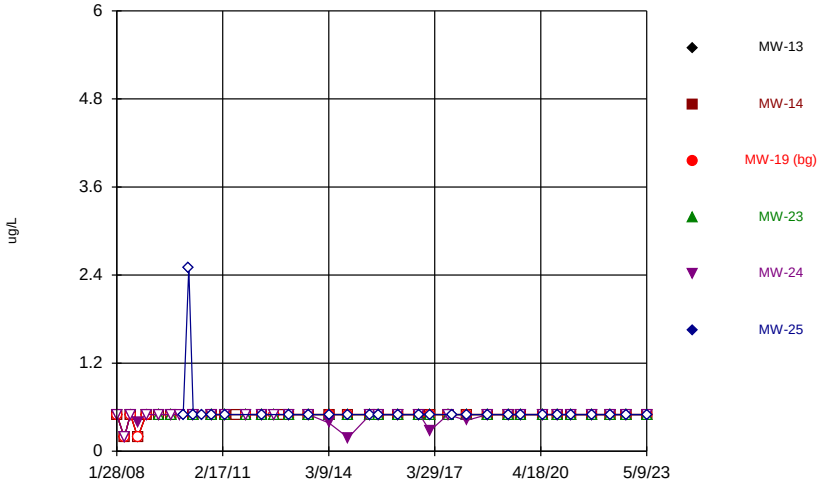
Hollow symbols indicate censored values.

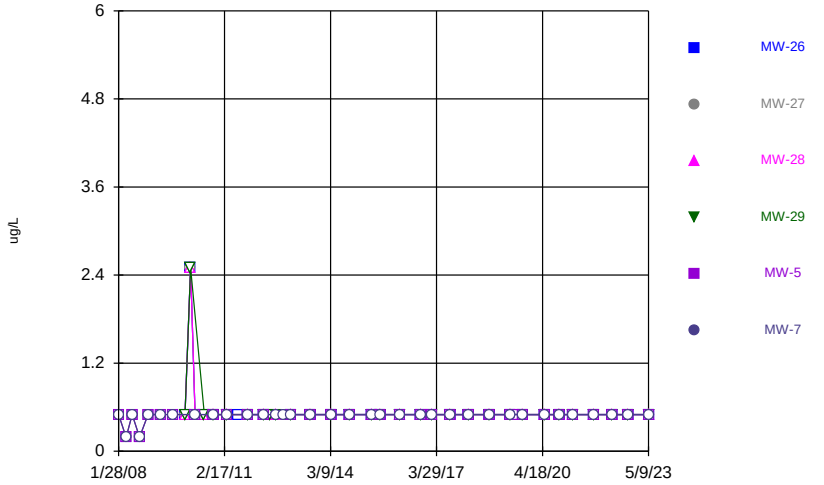
Time Series



Constituent: Tetrachloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

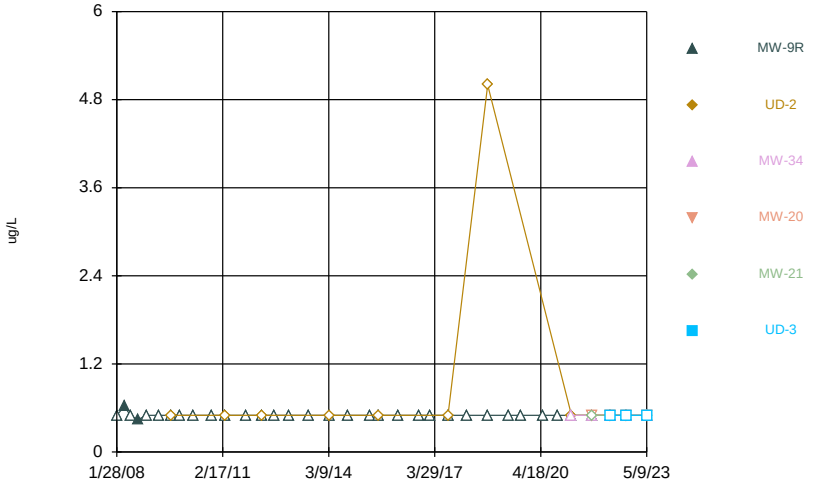
Time Series



Constituent: Tetrachloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

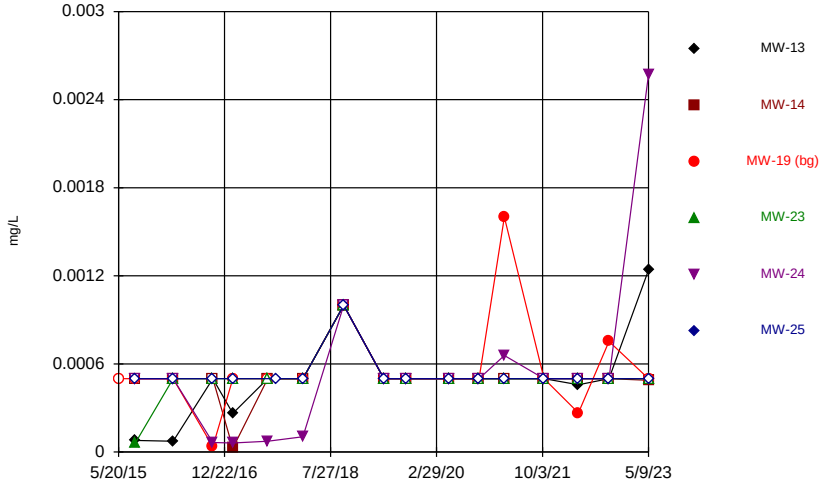
Time Series



Constituent: Tetrachloroethene Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

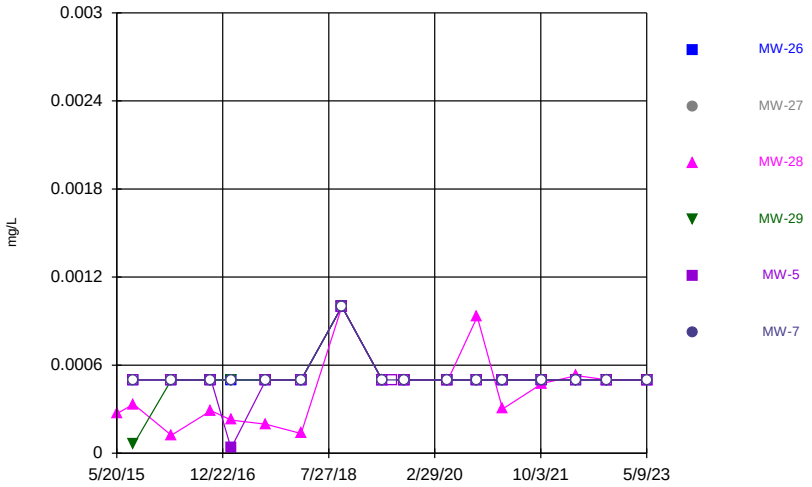
Time Series



Constituent: Thallium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

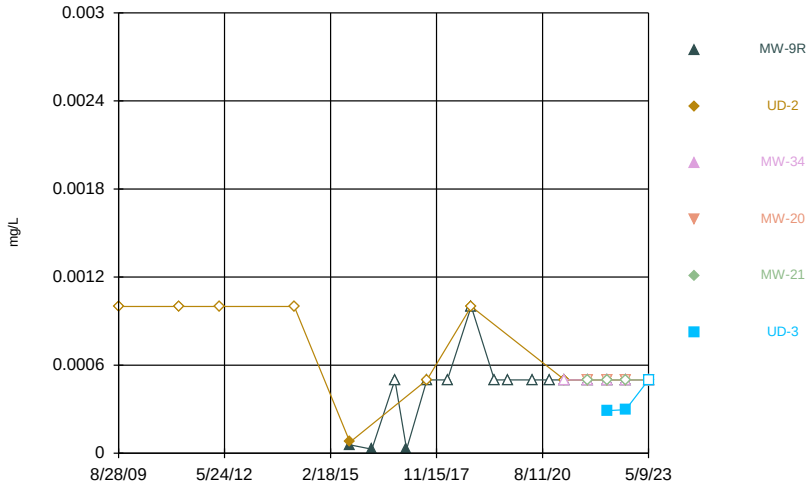
Time Series



Constituent: Thallium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

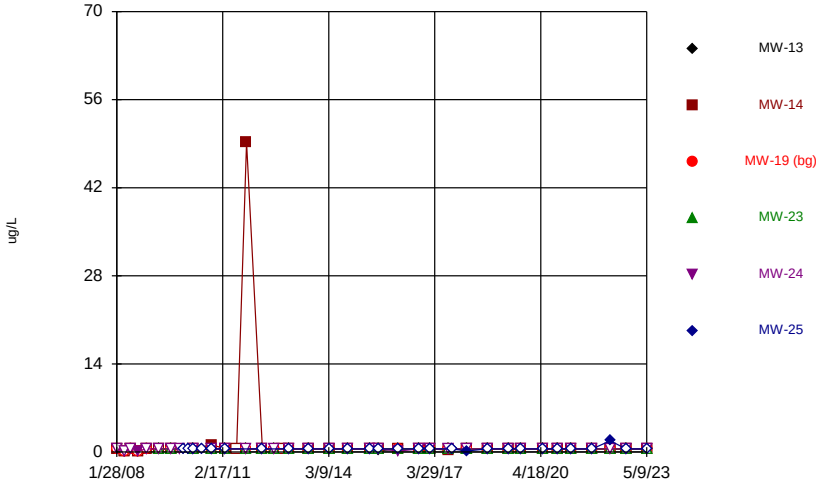
Time Series



Constituent: Thallium Analysis Run 6/2/2023 5:22 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

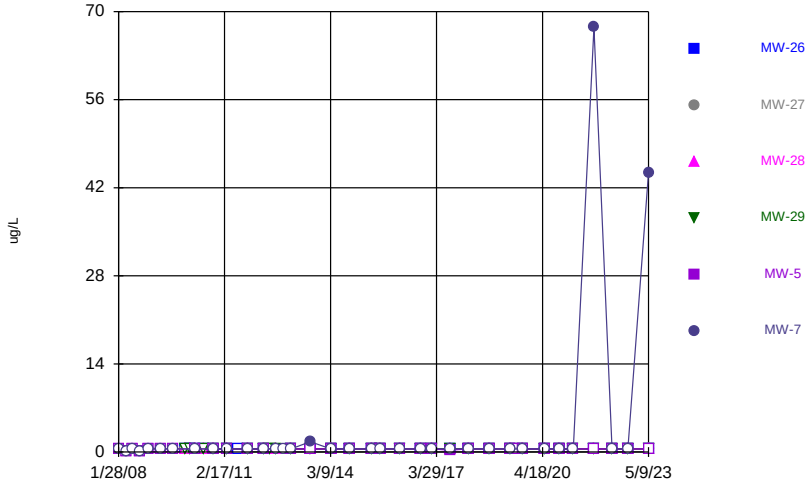
Time Series



Constituent: Toluene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

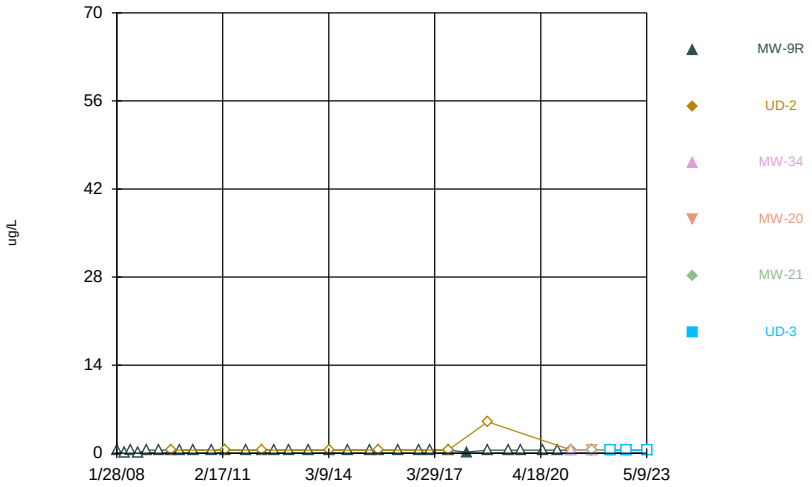
Time Series



Constituent: Toluene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

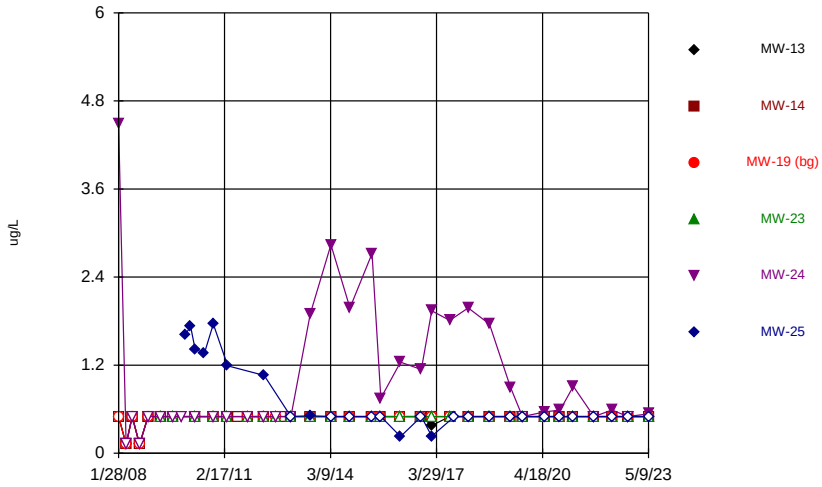
Time Series



Constituent: Toluene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

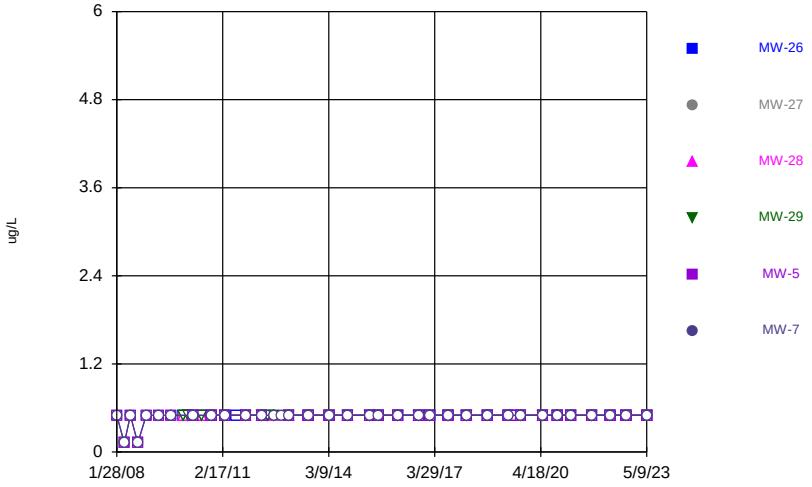
Time Series



Constituent: Trichloroethene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

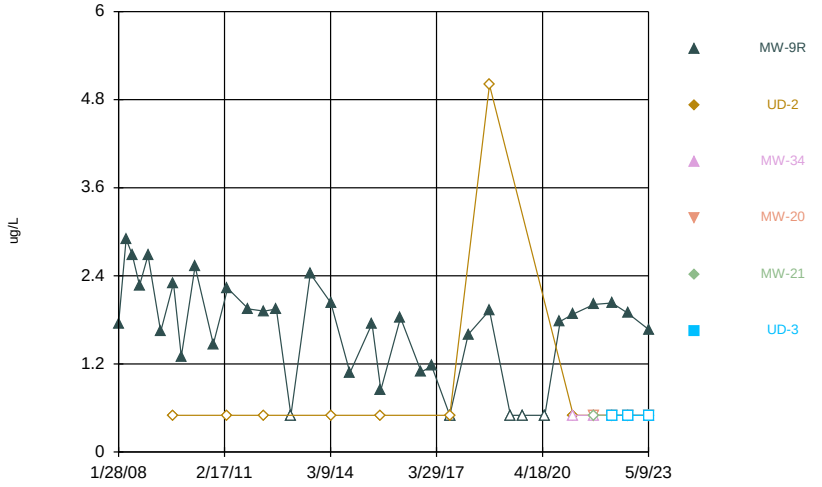
Time Series



Constituent: Trichloroethene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

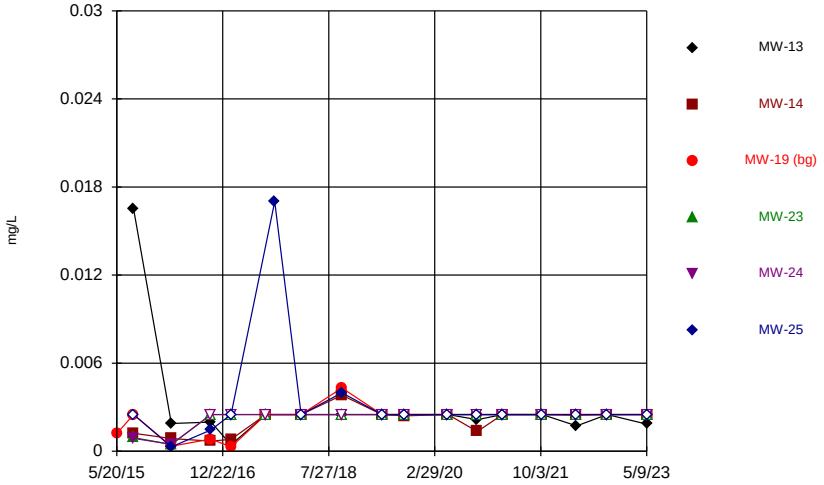
Time Series



Constituent: Trichloroethene Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

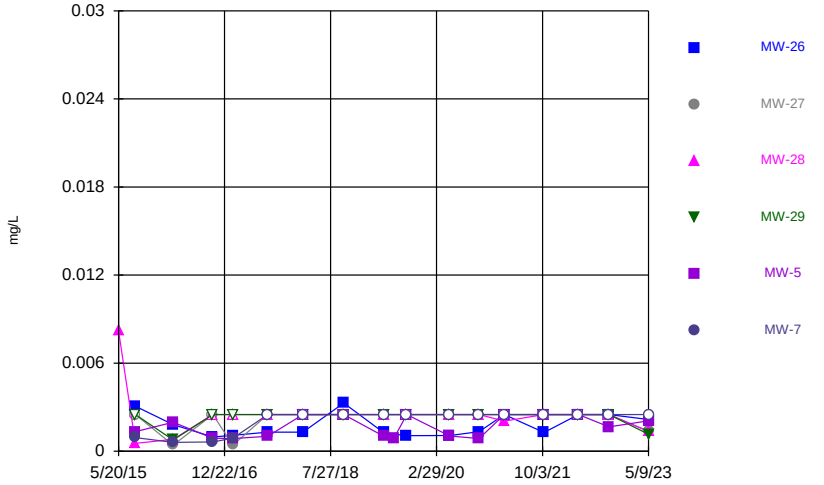
Time Series



Constituent: Vanadium Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

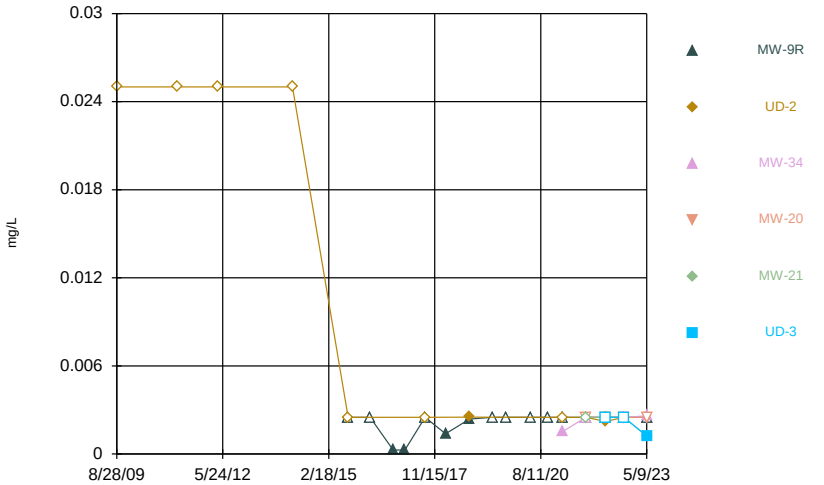
Time Series



Constituent: Vanadium Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

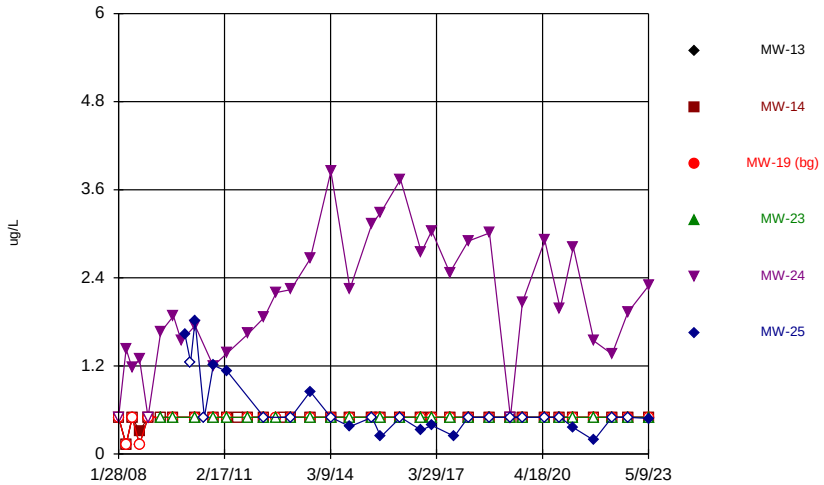
Time Series



Constituent: Vanadium Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

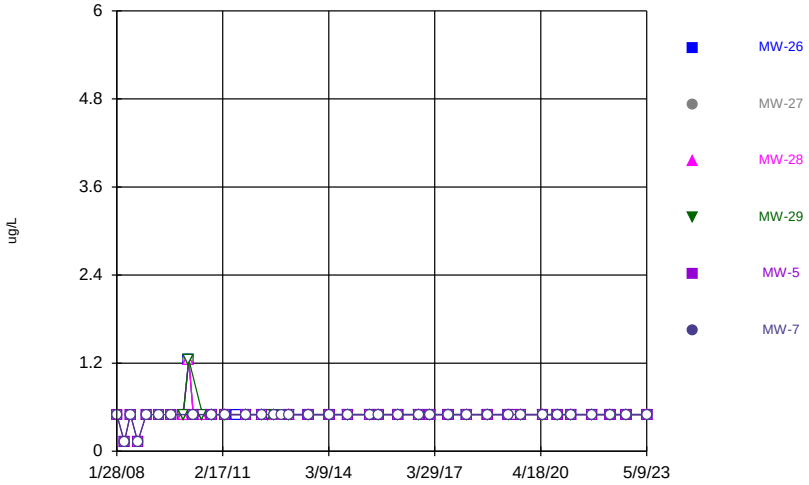
Time Series



Constituent: Vinyl chloride Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

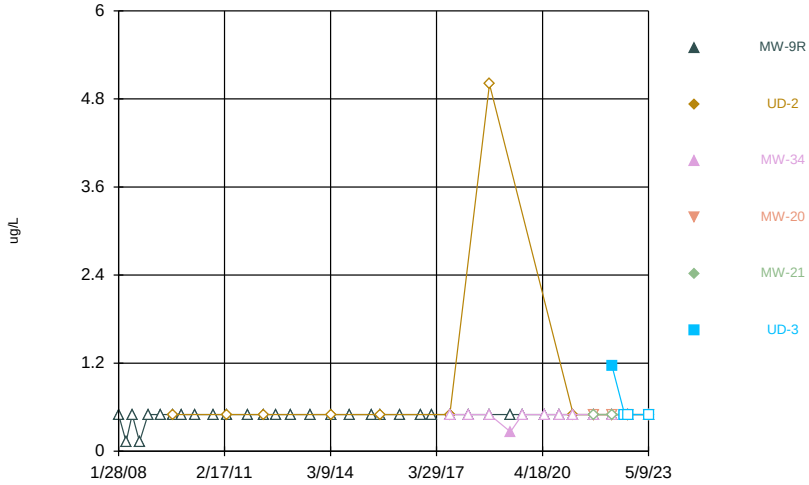
Time Series



Constituent: Vinyl chloride Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Vinyl chloride Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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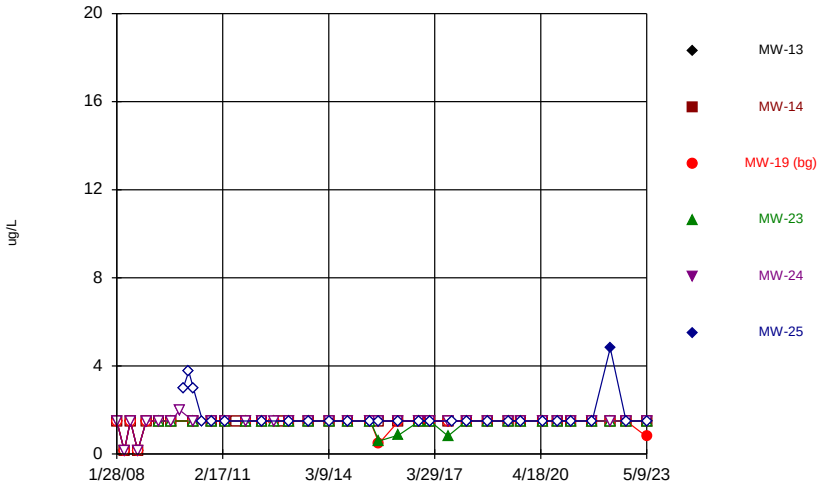
Hollow symbols indicate censored values.

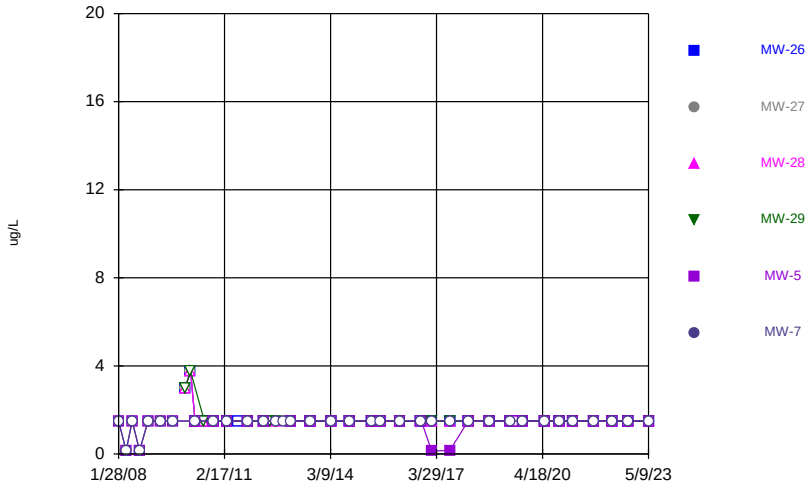
Time Series



Constituent: Xylenes, total Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

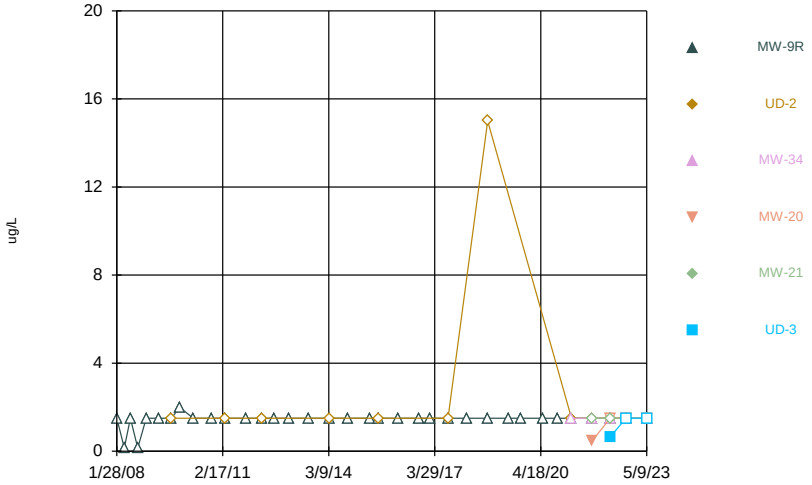
Time Series



Constituent: Xylenes, total Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

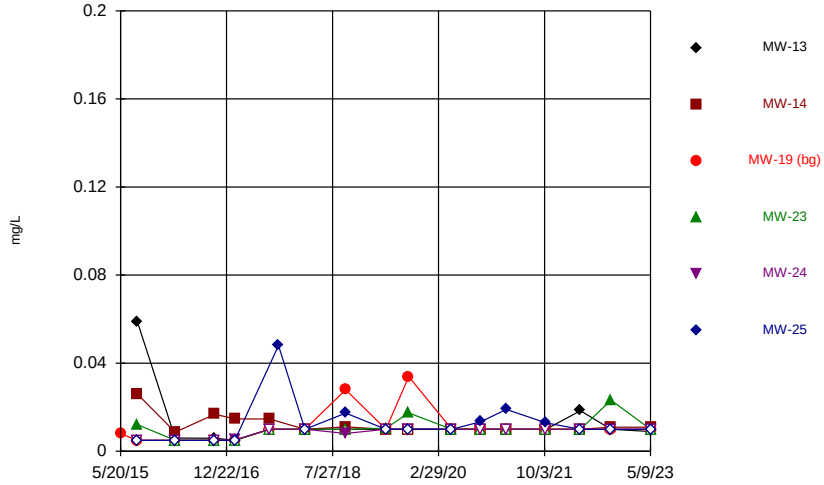
Time Series



Constituent: Xylenes, total Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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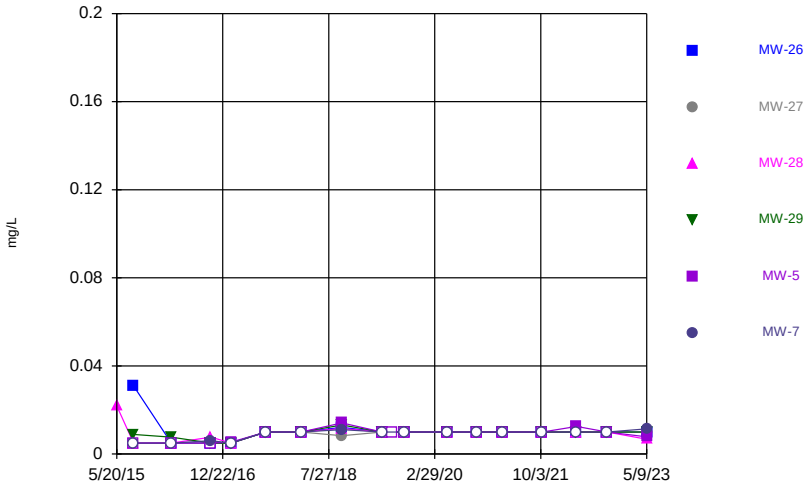
Hollow symbols indicate censored values.

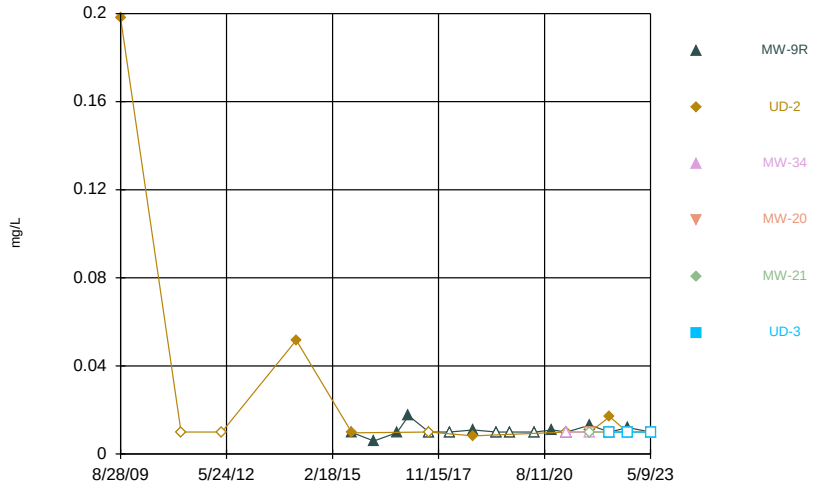
Time Series



Constituent: Zinc Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 6/2/2023 5:23 PM View: 2023SSN - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Outlier Tests Summary Table and Graphs

Outlier Analysis

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 6/7/2023, 11:55 AM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Normality Test
Antimony (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	31	0.0006821	0.0003165	n/a
Arsenic (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00271,0.00274,0.00247**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**32**	**0.001222**	**0.0005019**	**ShapiroWilk**
Barium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	34	0.1674	0.1593	ShapiroWilk
Beryllium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	31	0.0004827	0.00007631	n/a
Cadmium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00209,0.00106,0.000929**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**31**	**0.0002326**	**0.0004136**	**ShapiroWilk**
Chromium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	31	0.002427	0.0007909	ShapiroWilk
Cobalt (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	34	0.01773	0.02365	ShapiroWilk
Copper (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	31	0.003127	0.002472	ShapiroWilk
Lead (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00129,0.00228,0.00182,0.0082**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**31**	**0.0007062**	**0.001469**	**ShapiroWilk**
Nickel (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	31	0.007643	0.006286	ShapiroWilk
Selenium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	32	0.002119	0.0008134	ShapiroWilk
Silver (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	31	0.0005014	0.0002147	n/a
Thallium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.0016**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**31**	**0.000498**	**0.0003075**	**ShapiroWilk**
Vanadium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.0012,0.000347,0.000831,0.00029,0.00431,0.0082,0**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**31**	**0.002372**	**0.001368**	**ShapiroWilk**
Zinc (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	31	0.01051	0.00635	n/a

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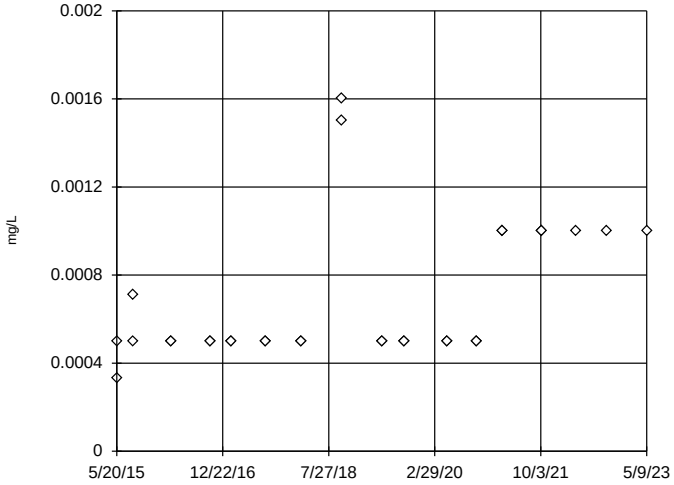
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

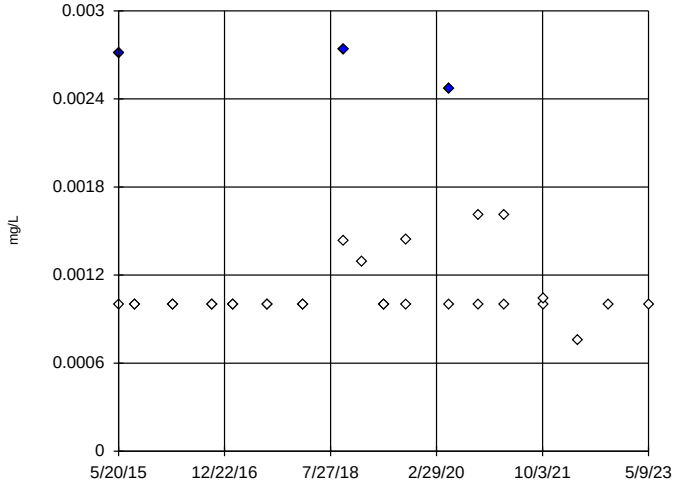
No statistical outliers.

Constituent: Antimony Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.00166, low cutoff = 0.000505, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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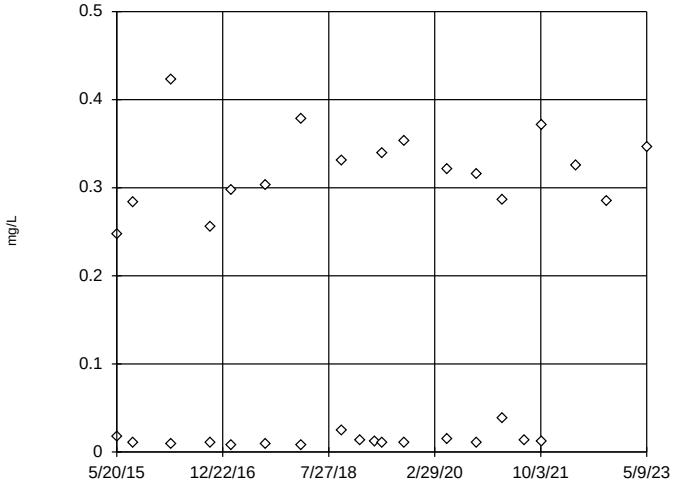
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 34

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

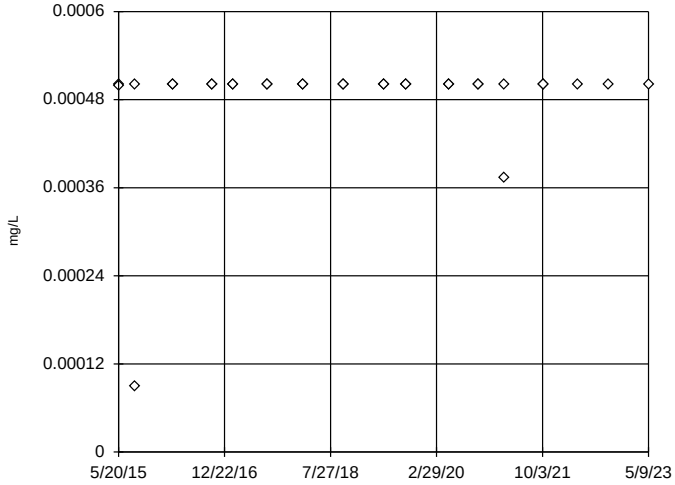
High cutoff = 1.26, low cutoff = -0.9258, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

No statistical outliers.

Constituent: Beryllium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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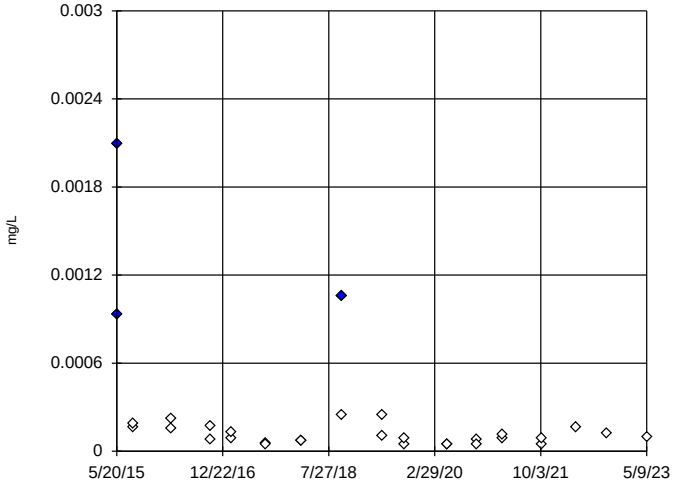
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

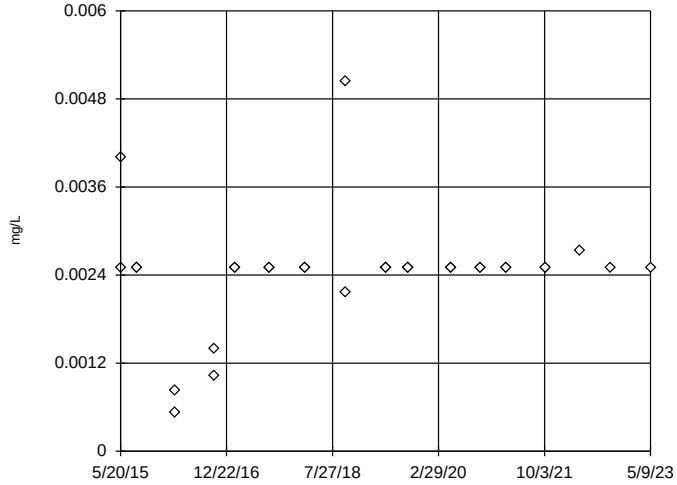
High cutoff = 0.000487, low cutoff = -0.000241, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

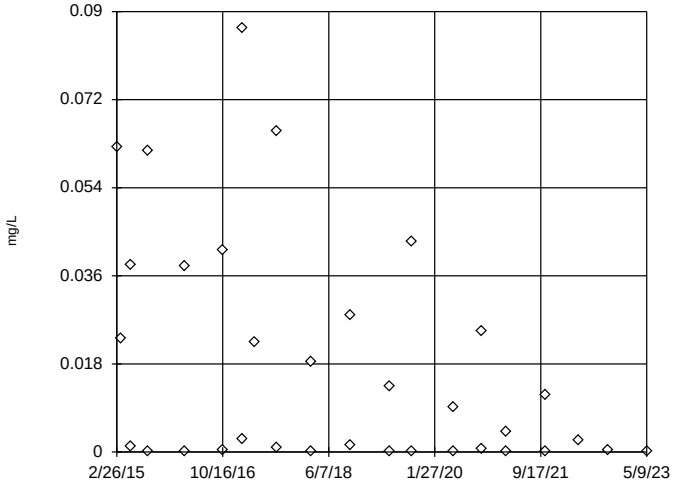
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Chromium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 34

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

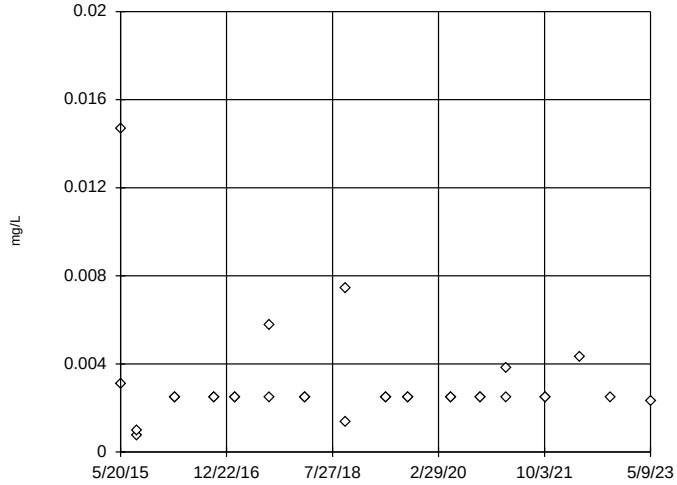
High cutoff = 0.1311, low cutoff = -0.09787, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

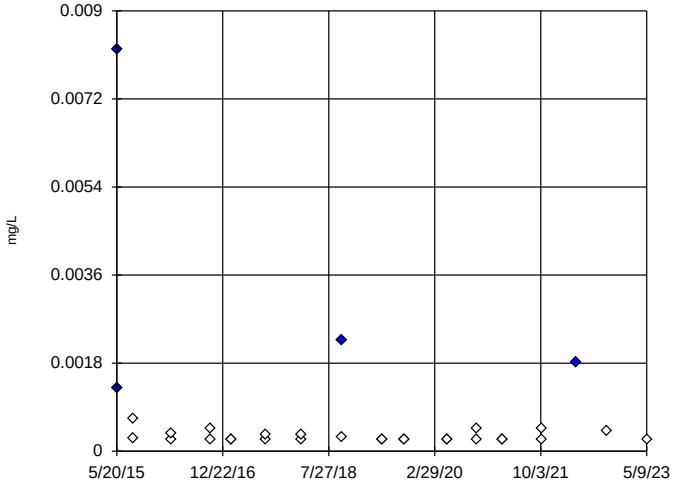
No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Copper Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

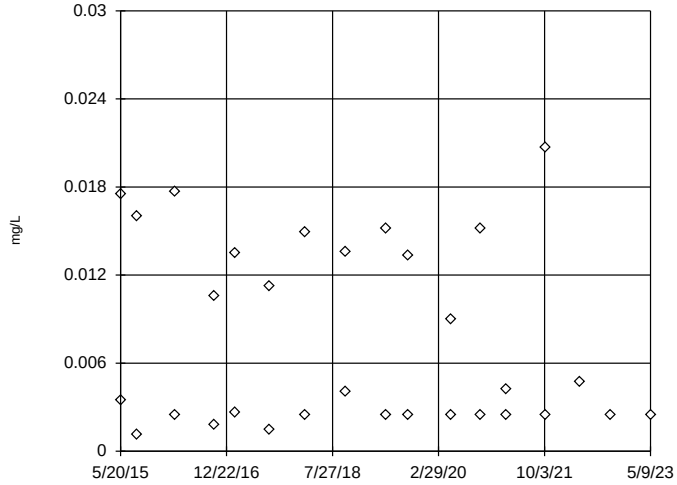
High cutoff = 0.001066, low cutoff = -0.000362, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

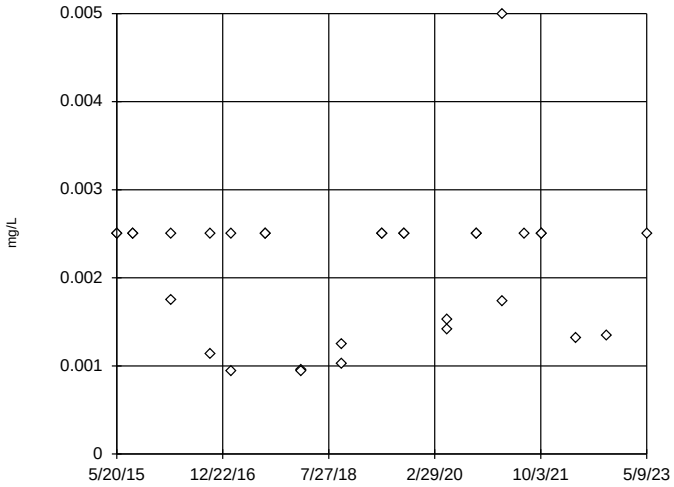
High cutoff = 0.0469, low cutoff = -0.0308, based on IQR multiplier of 3.

Constituent: Nickel Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.00586, low cutoff = -0.00198, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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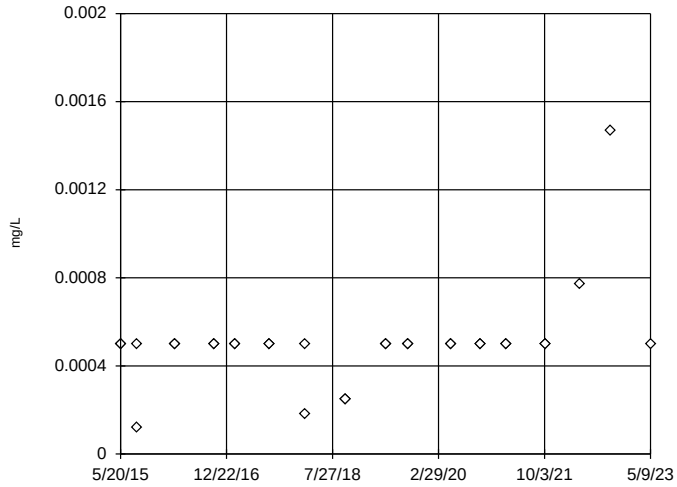
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

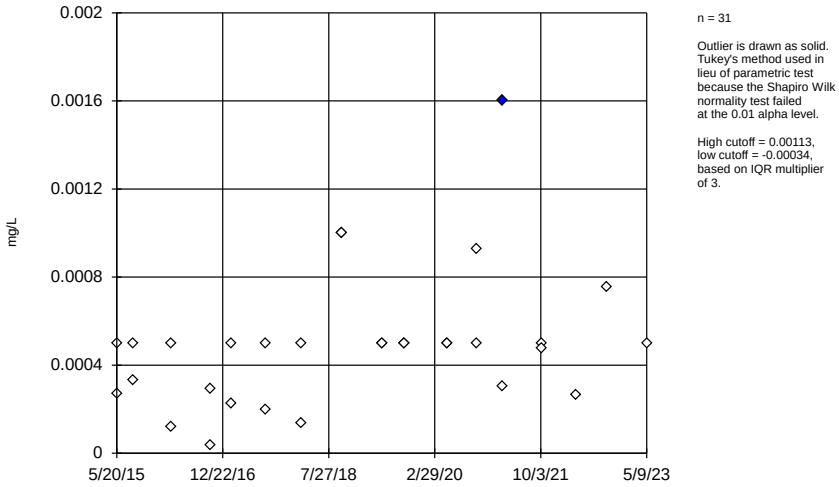
No statistical outliers.

Constituent: Silver Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.00113, low cutoff = -0.00034, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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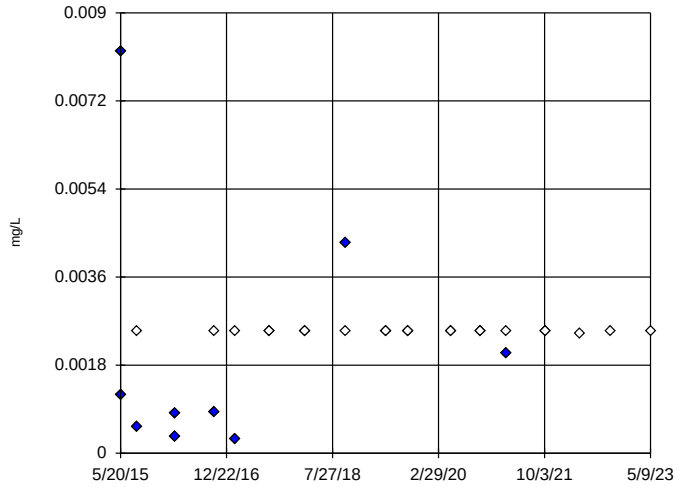
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

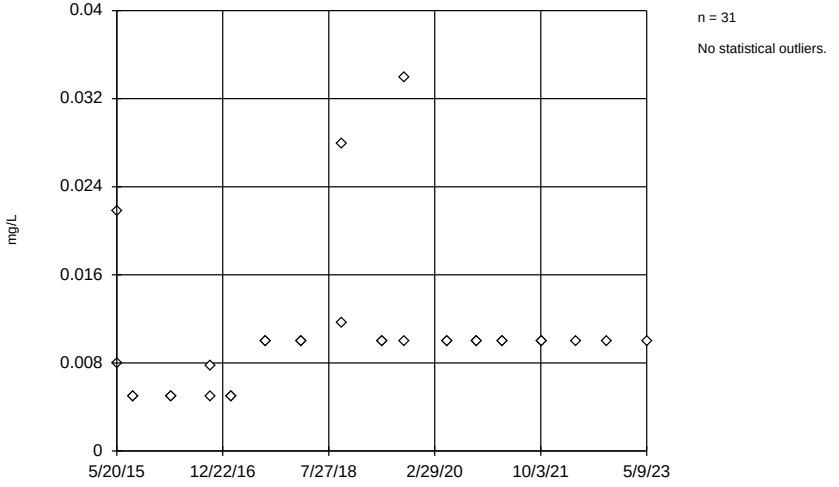
High cutoff = 0.00265, low cutoff = 0.0023, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 31

No statistical outliers.

Constituent: Zinc Analysis Run 6/7/2023 11:52 AM View: 2023SSN - Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Interwell Prediction Limit Summary Table and Graphs

Prediction Limit

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 6/13/2023, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Trans...	Alpha	Method
Arsenic (mg/L)	**MW-25**	**0.00274**	**n/a**	**5/9/2023**	**0.0076**	**Yes**	**32**	**68.75**	**n/a**	**0.000152**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-5**	**0.00274**	**n/a**	**5/9/2023**	**0.003435**	**Yes**	**32**	**68.75**	**n/a**	**0.000152**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-7**	**0.00274**	**n/a**	**5/9/2023**	**0.0575**	**Yes**	**32**	**68.75**	**n/a**	**0.000152**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-9R**	**0.00274**	**n/a**	**5/9/2023**	**0.00355**	**Yes**	**32**	**68.75**	**n/a**	**0.000152**	**NP Inter (NDs) 1 of 3**
Barium (mg/L)	MW-13	0.423	n/a	5/9/2023	0.1147	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-14	0.423	n/a	5/9/2023	0.199	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-23	0.423	n/a	5/9/2023	0.0167	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-25	0.423	n/a	5/9/2023	0.0993	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-26	0.423	n/a	5/9/2023	0.0255	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-27	0.423	n/a	5/9/2023	0.132	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-28	0.423	n/a	5/9/2023	0.0162	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-29	0.423	n/a	5/9/2023	0.00714	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-5	0.423	n/a	5/9/2023	0.1335	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-7	0.423	n/a	5/9/2023	0.331	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-9R	0.423	n/a	5/9/2023	0.0387	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-34	0.423	n/a	5/9/2023	0.0508	No	34	0	n/a	0.0001277	NP Inter (normality) 1 of 3
Cadmium (mg/L)	MW-14	0.00209	n/a	5/9/2023	0.000341	No	31	25.81	n/a	0.0001642	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-13	0.0867	n/a	5/9/2023	0.00748	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-14	0.0867	n/a	5/9/2023	0.0104	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-23	0.0867	n/a	5/9/2023	0.000744	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-25	0.0867	n/a	5/9/2023	0.0515	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-26	0.0867	n/a	5/9/2023	0.000525	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-28	0.0867	n/a	5/9/2023	0.000715	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-5	0.0867	n/a	5/9/2023	0.06125	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-9R	0.0867	n/a	5/9/2023	0.0103	No	34	2.941	n/a	0.0001277	NP Inter (normality) 1 of 3
Lead (mg/L)	MW-14	0.0082	n/a	5/9/2023	0.000645	No	31	54.84	n/a	0.0001642	NP Inter (NDs) 1 of 3
Lead (mg/L)	MW-25	0.0082	n/a	5/9/2023	0.000506	No	31	54.84	n/a	0.0001642	NP Inter (NDs) 1 of 3
Lead (mg/L)	MW-9R	0.0082	n/a	5/9/2023	0.00081	No	31	54.84	n/a	0.0001642	NP Inter (NDs) 1 of 3
Lead (mg/L)	MW-34	0.0082	n/a	5/9/2023	0.000546	No	31	54.84	n/a	0.0001642	NP Inter (NDs) 1 of 3
Nickel (mg/L)	MW-13	0.0207	n/a	5/9/2023	0.0109	No	31	32.26	n/a	0.0001642	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-14	0.0207	n/a	5/9/2023	0.0152	No	31	32.26	n/a	0.0001642	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-25	0.0207	n/a	5/9/2023	0.0154	No	31	32.26	n/a	0.0001642	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-28	0.0207	n/a	5/9/2023	0.011	No	31	32.26	n/a	0.0001642	NP Inter (normality) 1 of 3
Nickel (mg/L)	**MW-5**	**0.0207**	**n/a**	**5/9/2023**	**0.07025**	**Yes**	**31**	**32.26**	**n/a**	**0.0001642**	**NP Inter (normality) 1 of 3**
Nickel (mg/L)	**MW-9R**	**0.0207**	**n/a**	**5/9/2023**	**0.0266**	**Yes**	**31**	**32.26**	**n/a**	**0.0001642**	**NP Inter (normality) 1 of 3**
Thallium (mg/L)	MW-13	0.0016	n/a	5/9/2023	0.00124	No	31	54.84	n/a	0.0001642	NP Inter (NDs) 1 of 3

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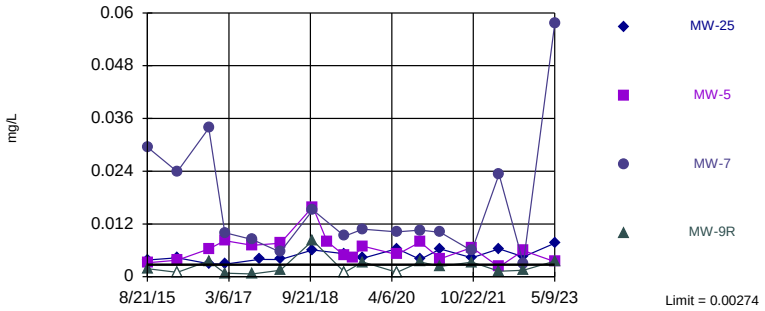
Hollow symbols indicate censored values.

Exceeds Limit: MW-25, MW-5, MW-7, MW-9R

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Comparing 4 points to limit. Assumes 12 future values.

Constituent: Arsenic Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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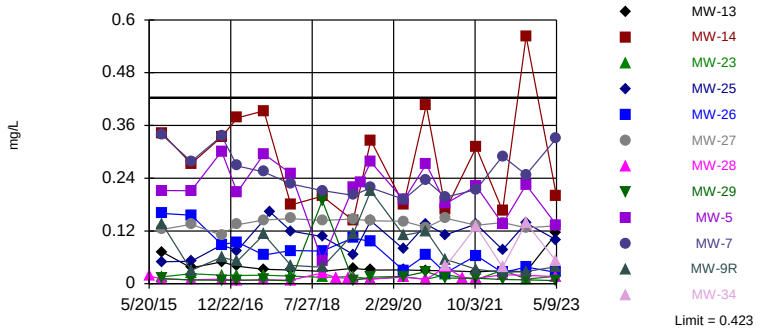
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. Annual per-constituent alpha = 0.004077. Individual comparison alpha = 0.0001277 (1 of 3). Comparing 12 points to limit. Assumes 4 future values.

Constituent: Barium Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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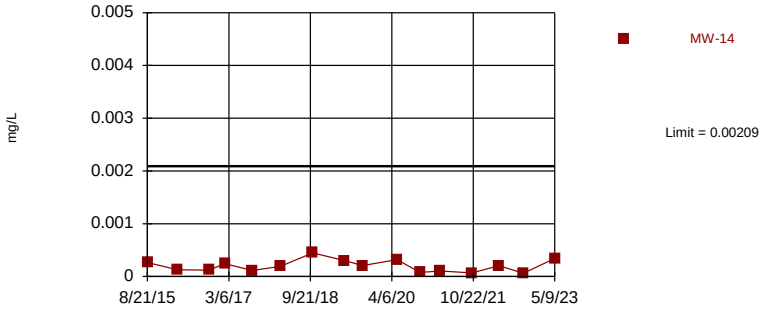
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 25.81% NDs. Annual per-constituent alpha = 0.005241. Individual comparison alpha = 0.0001642 (1 of 3). Assumes 15 future values.

Constituent: Cadmium Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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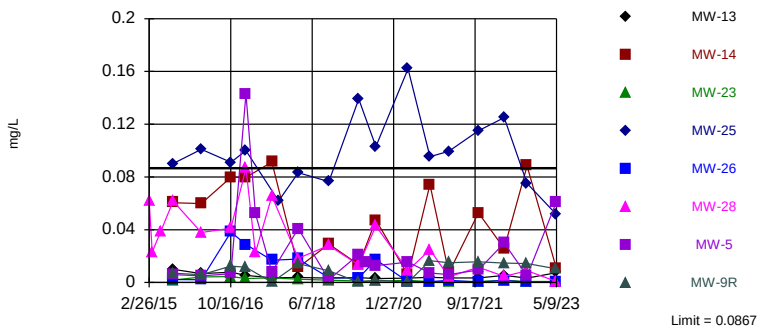
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 34 background values. 2.941% NDs. Annual per-constituent alpha = 0.004077. Individual comparison alpha = 0.0001277 (1 of 3). Comparing 8 points to limit. Assumes 8 future values.

Constituent: Cobalt Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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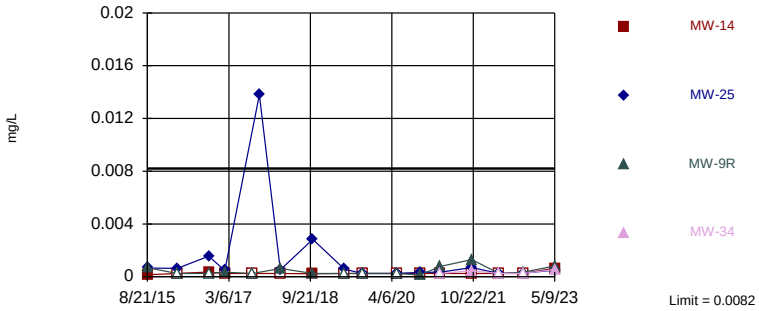
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 54.84% NDs. Annual per-constituent alpha = 0.005241. Individual comparison alpha = 0.0001642 (1 of 3). Comparing 4 points to limit. Assumes 12 future values.

Constituent: Lead Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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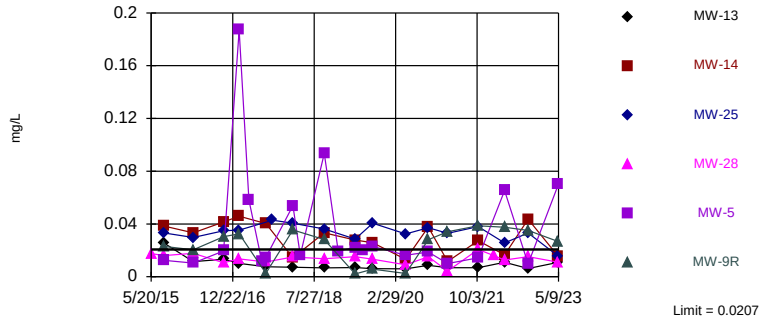
Exceeds Limit: MW-5, MW-9R

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 32.26% NDs. Annual per-constituent alpha = 0.005241. Individual comparison alpha = 0.0001642 (1 of 3). Comparing 6 points to limit. Assumes 10 future values.

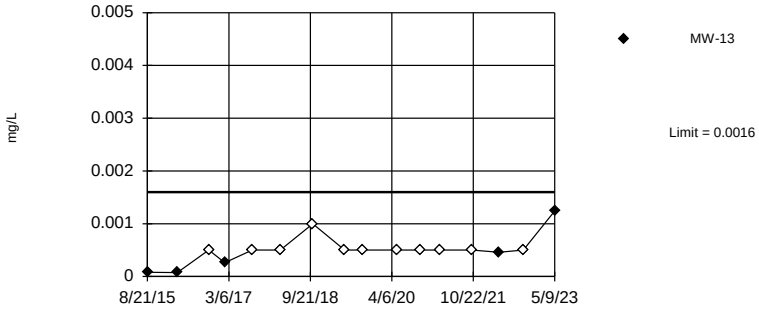
Constituent: Nickel Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 54.84% NDs. Annual per-constituent alpha = 0.005241. Individual comparison alpha = 0.0001642 (1 of 3). Assumes 15 future values.

Constituent: Thallium Analysis Run 6/13/2023 9:59 AM View: 2023SSN - Prediction Limits
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Mann-Kendall/Sen's Slope Trend Test Summary Table and Graphs

Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM Printed 6/7/2023, 10:13 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Acetone (ug/L)	MW-5	-0.1248	-14	-21	No	8	62.5	0.01	NP
Acetone (ug/L)	MW-7	0	9	21	No	8	75	0.01	NP
Arsenic (mg/L)	MW-14	-0.001705	-2	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-25	0.0003348	10	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-26	-0.001213	-16	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-29	-0.0002559	-8	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-5	-0.0009815	-12	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-7	-0.0001528	-2	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-9R	0.00003805	2	21	No	8	12.5	0.01	NP
Barium (mg/L)	MW-14	-0.00464	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-25	-0.002516	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-26	-0.01478	-10	-21	No	8	0	0.01	NP
Barium (mg/L)	**MW-29**	**-0.002838**	**-22**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**
Barium (mg/L)	MW-5	-0.02533	-14	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-7	0.02976	16	21	No	8	0	0.01	NP
Barium (mg/L)	MW-9R	-0.04079	-18	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-25	-0.08959	-5	-21	No	8	0	0.01	NP
Beryllium (mg/L)	MW-25	0	-1	-21	No	8	87.5	0.01	NP
beta-BHC (ug/L)	MW-7	0.005736	8	21	No	8	37.5	0.01	NP
Cadmium (mg/L)	MW-14	-0.000005879	-4	-21	No	8	0	0.01	NP
Cadmium (mg/L)	MW-7	0.00002538	15	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-9R	0	2	21	No	8	62.5	0.01	NP
Chlorobenzene (ug/L)	MW-25	-0.0824	-6	-21	No	8	12.5	0.01	NP
Chloromethane (ug/L)	MW-25	-0.05991	-10	-21	No	8	62.5	0.01	NP
Chromium (mg/L)	MW-25	0	-3	-21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-25	-0.1898	-10	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-26	0	-3	-21	No	8	75	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-9R	1.219	21	21	No	8	25	0.01	NP
Cobalt (mg/L)	MW-14	0.001866	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-25	-0.01481	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-26	-0.000134	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	**MW-29**	**-0.001858**	**-22**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**
Cobalt (mg/L)	MW-5	0.003181	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-9R	-0.0002484	-2	-21	No	8	0	0.01	NP
Copper (mg/L)	MW-25	-0.00007146	-6	-21	No	8	50	0.01	NP
Lead (mg/L)	MW-14	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-25	0.0000486	11	21	No	8	37.5	0.01	NP
Lead (mg/L)	MW-9R	0.00008653	11	21	No	8	37.5	0.01	NP
Nickel (mg/L)	MW-14	0.0007382	2	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-25	-0.005144	-12	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-26	-0.0008086	-12	-21	No	8	50	0.01	NP
Nickel (mg/L)	MW-29	-0.001101	-10	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-5	0.002283	0	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-9R	0.006943	10	21	No	8	0	0.01	NP
Sulfide (mg/L)	MW-26	0.03917	6	18	No	7	57.14	0.01	NP
Sulfide (mg/L)	MW-9R	0	-3	-21	No	8	75	0.01	NP
Toluene (ug/L)	MW-25	0	3	21	No	8	87.5	0.01	NP
Toluene (ug/L)	MW-7	0	7	21	No	8	75	0.01	NP
Trichloroethene (ug/L)	MW-9R	0.2264	13	21	No	8	25	0.01	NP
Xylenes, total (ug/L)	MW-25	0	3	21	No	8	87.5	0.01	NP

Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM Printed 6/7/2023, 10:13 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Zinc (mg/L)	MW-25	0	-4	-21	No	8	62.5	0.01	NP

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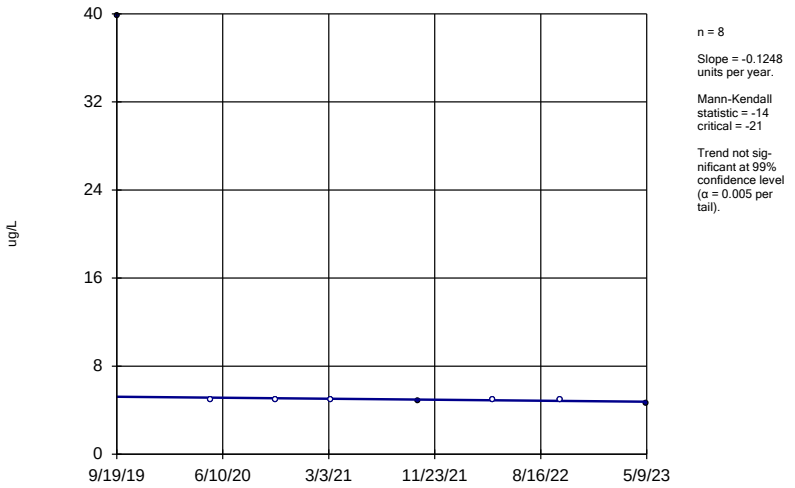
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5



Constituent: Acetone Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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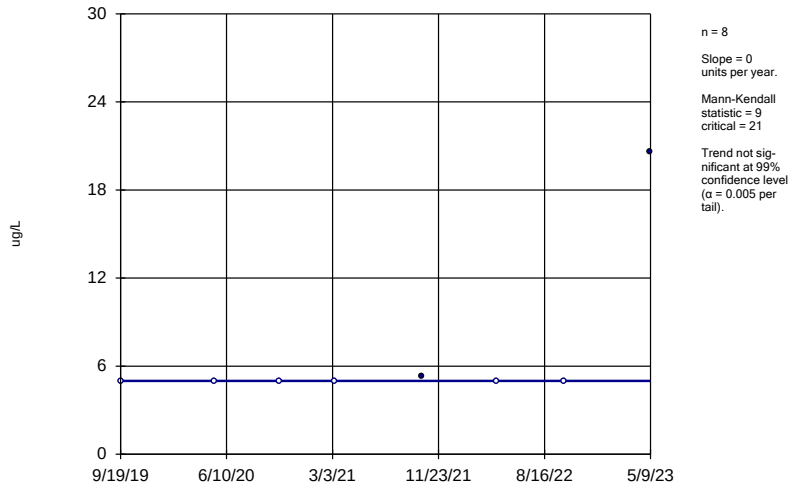
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



Constituent: Acetone Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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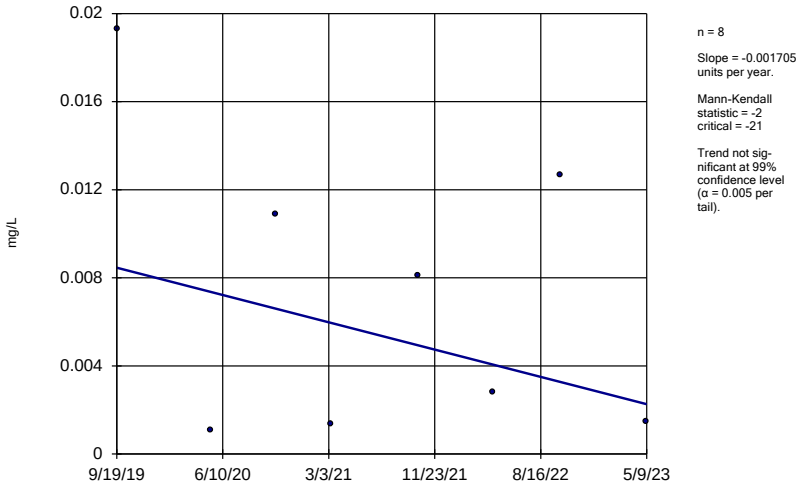
Sen's Slope Estimator

MW-14



Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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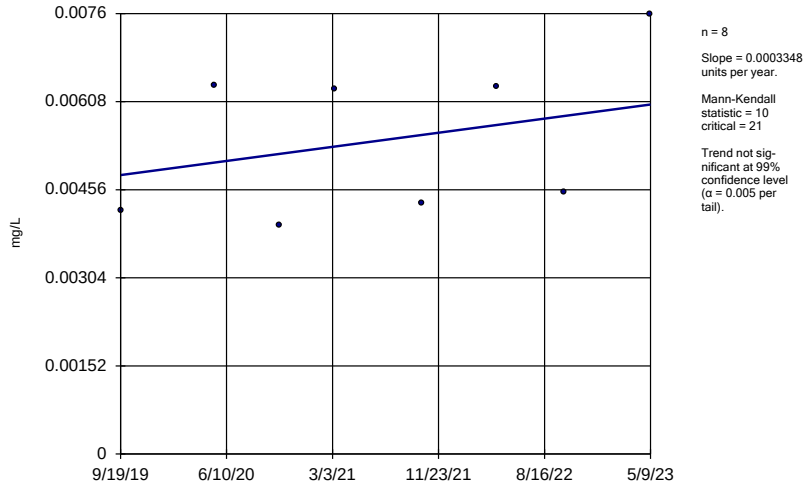
Sen's Slope Estimator

MW-25



Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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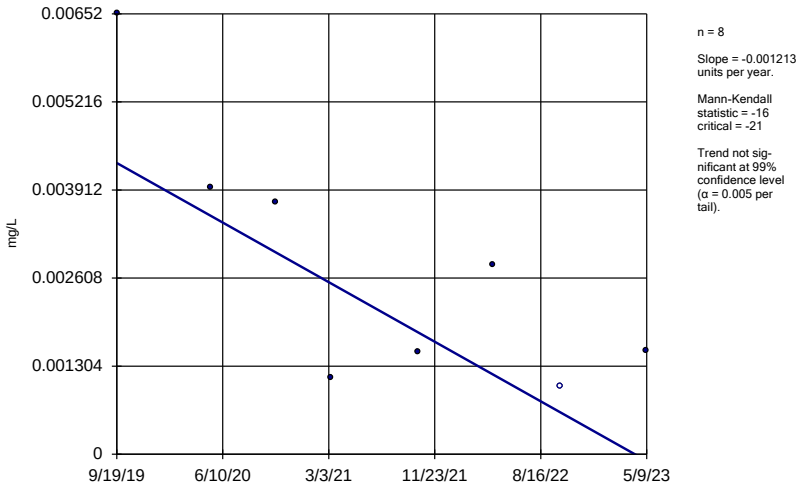
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



n = 8

Slope = -0.001213 units per year.

Mann-Kendall statistic = -16
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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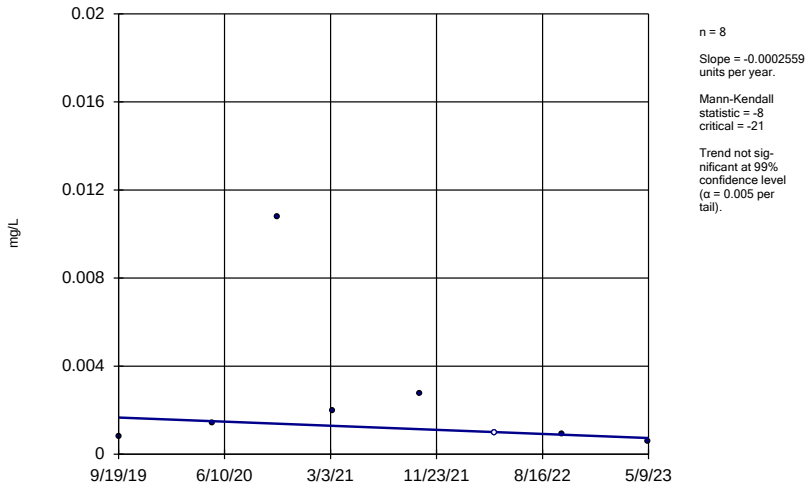
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-29



n = 8

Slope = -0.0002559 units per year.

Mann-Kendall statistic = -8
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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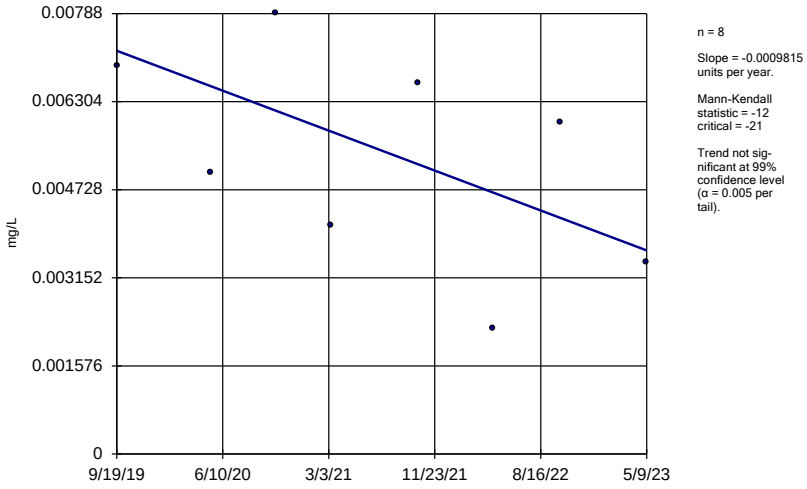
Sen's Slope Estimator

MW-5



n = 8

Slope = -0.0009815 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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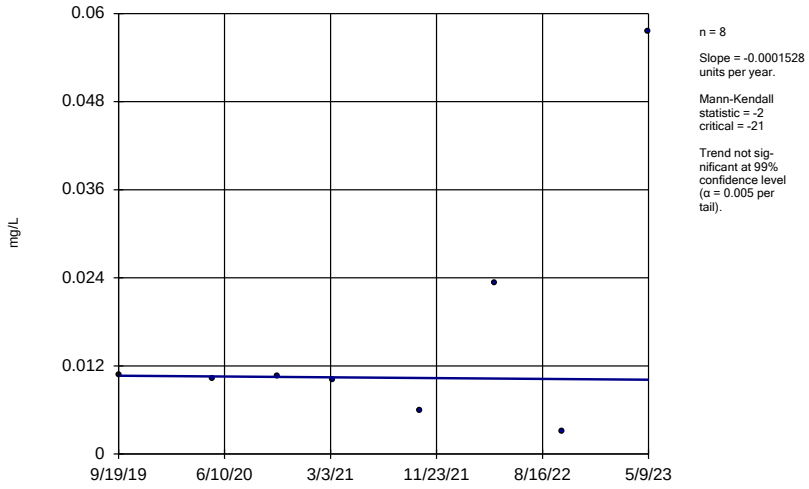
Sen's Slope Estimator

MW-7



n = 8

Slope = -0.0001528 units per year.

Mann-Kendall statistic = -2
critical = -21

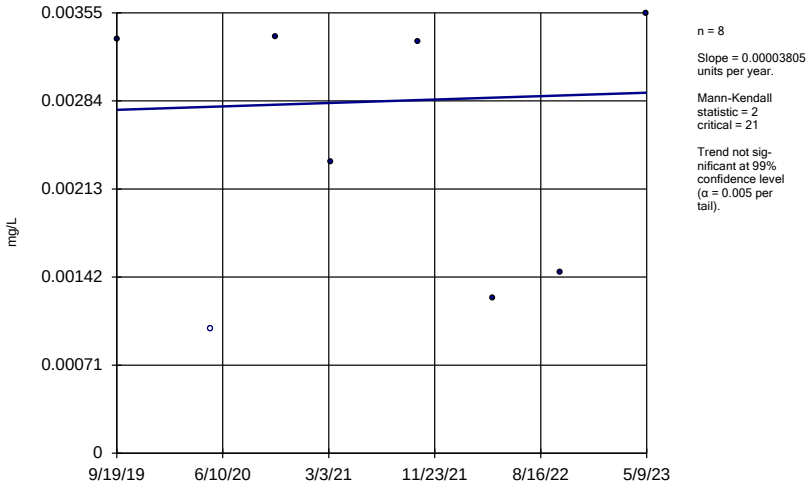
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Hollow symbols indicate censored values.

Sen's Slope Estimator

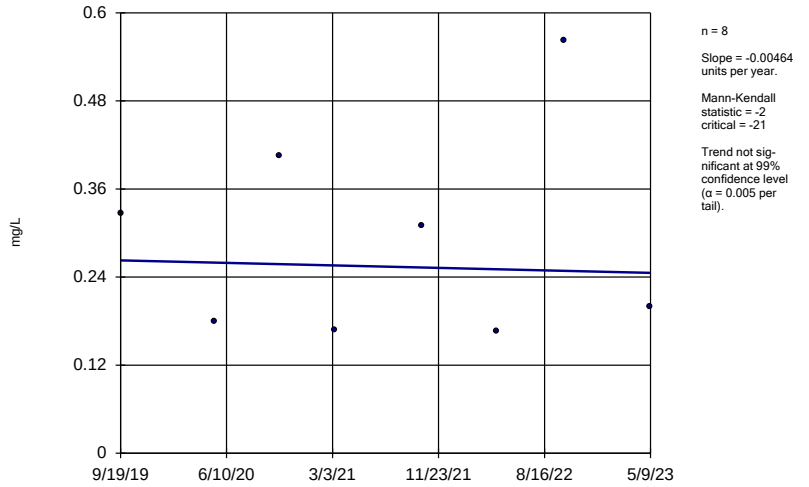
MW-9R



Constituent: Arsenic Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sen's Slope Estimator

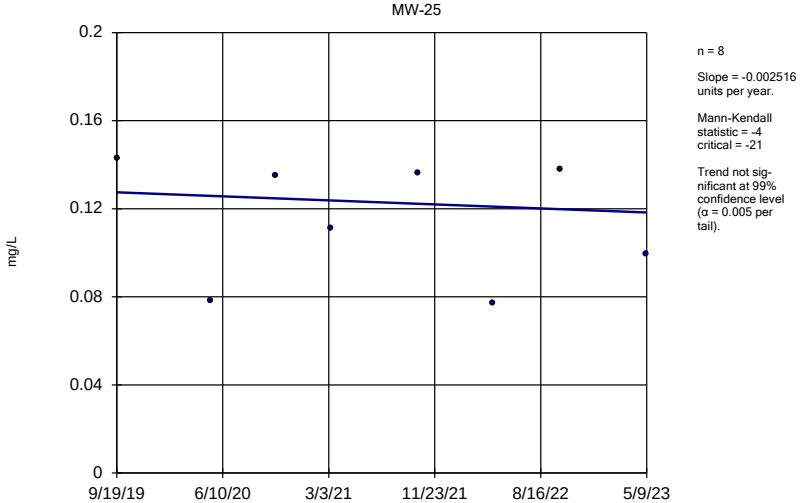
MW-14



Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sen's Slope Estimator

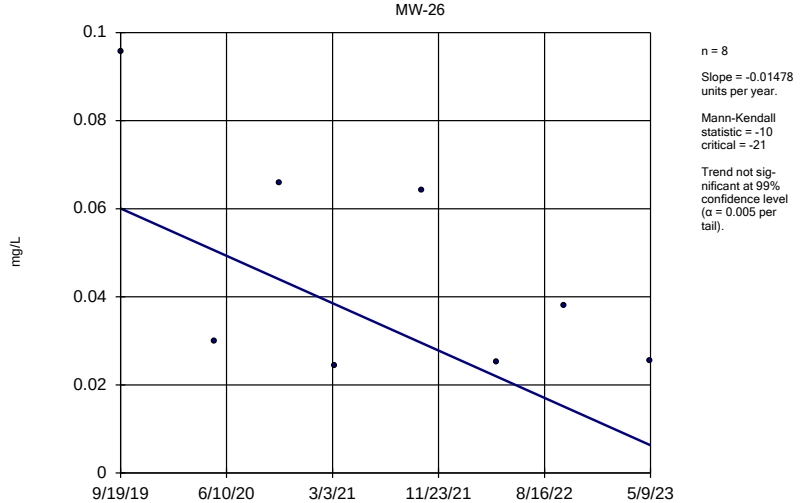
MW-25



Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sen's Slope Estimator

MW-26



Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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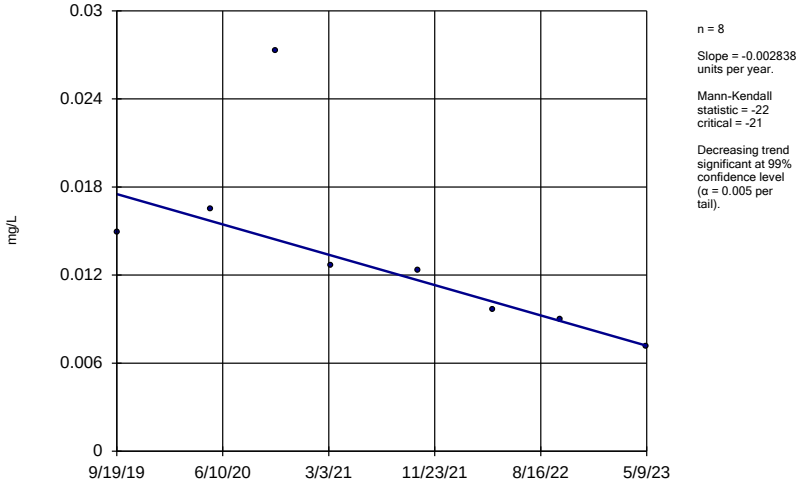
Sen's Slope Estimator

MW-29



n = 8

Slope = -0.002838 units per year.

Mann-Kendall statistic = -22
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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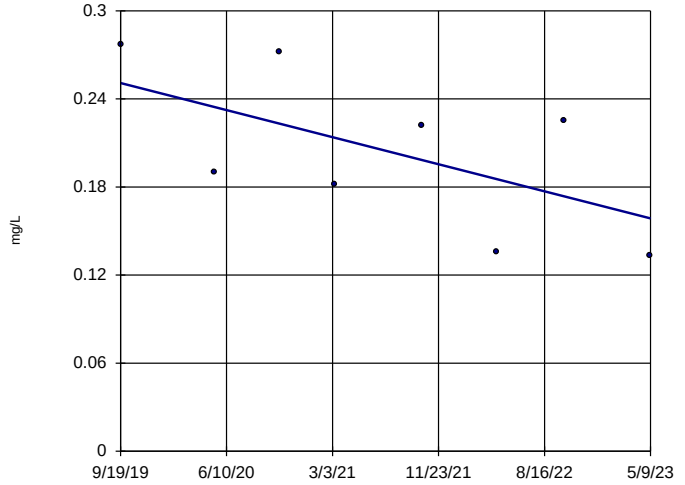
Sen's Slope Estimator

MW-5



n = 8

Slope = -0.02533 units per year.

Mann-Kendall statistic = -14
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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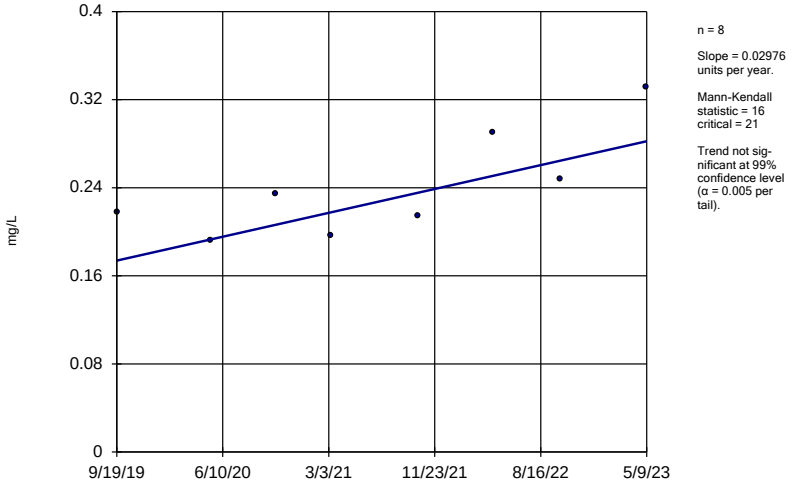
Sen's Slope Estimator

MW-7



n = 8

Slope = 0.02976 units per year.

Mann-Kendall statistic = 16
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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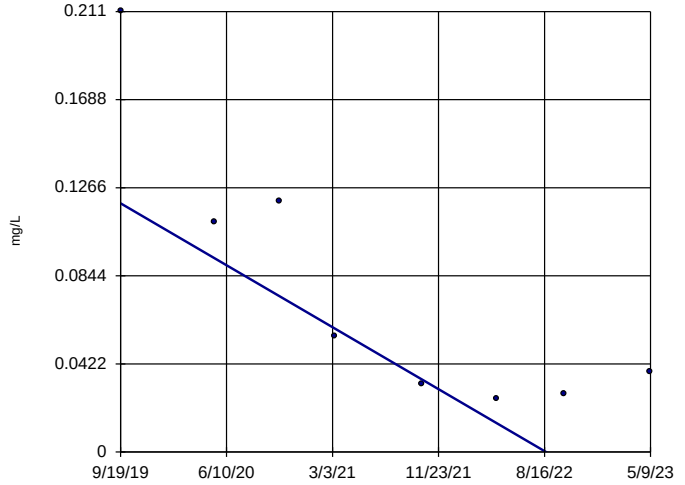
Sen's Slope Estimator

MW-9R



n = 8

Slope = -0.04079 units per year.

Mann-Kendall statistic = -18
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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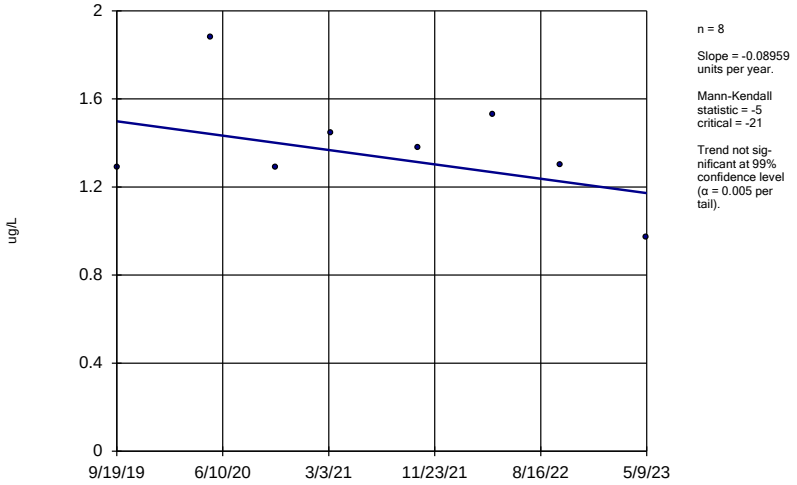
Sen's Slope Estimator

MW-25



Constituent: Benzene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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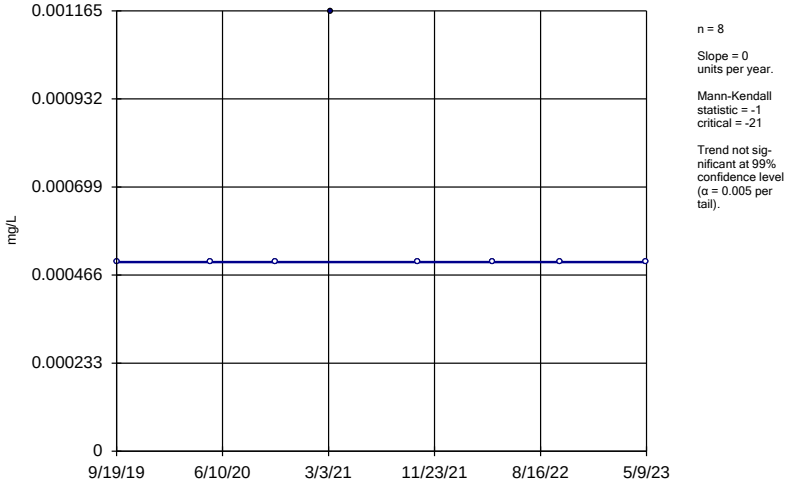
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Beryllium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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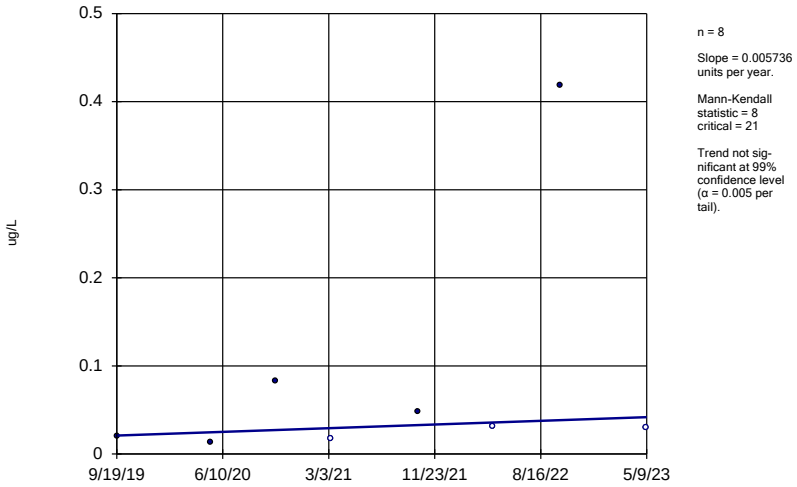
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



Constituent: beta-BHC Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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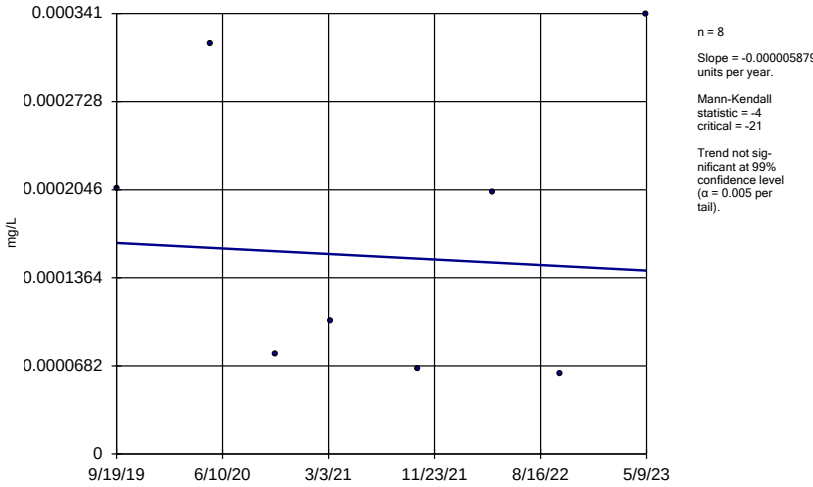
Sen's Slope Estimator

MW-14



Constituent: Cadmium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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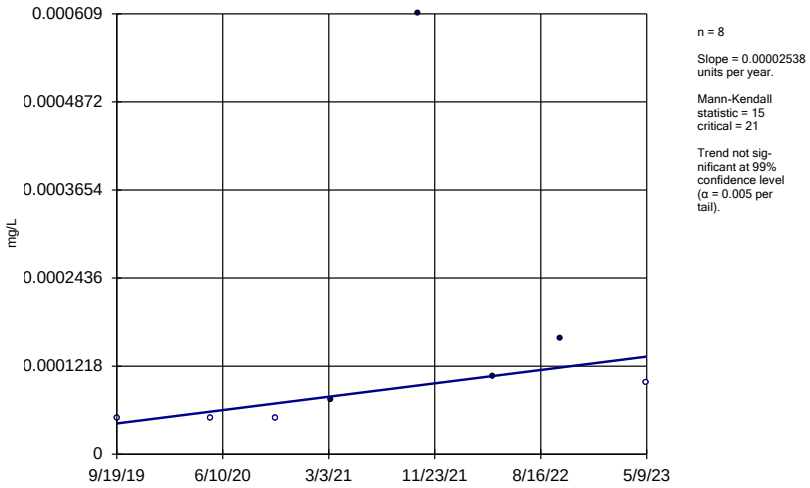
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 8

Slope = 0.00002538 units per year.

Mann-Kendall statistic = 15
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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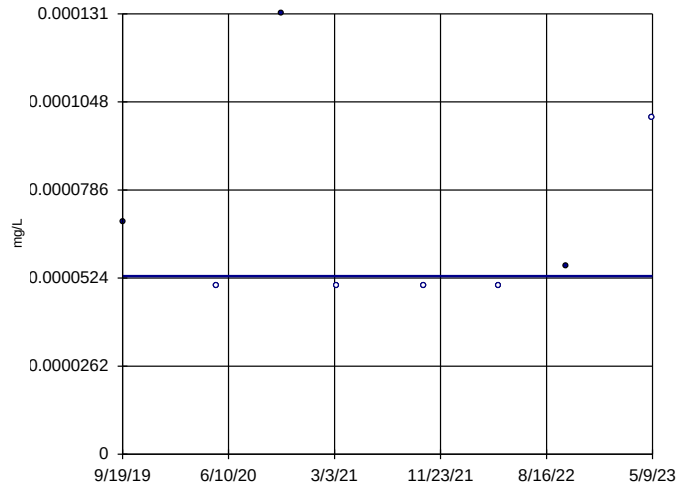
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 21

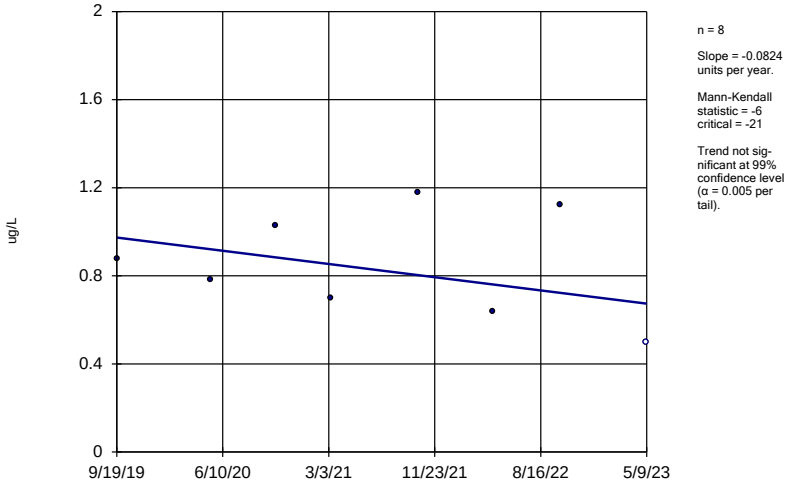
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.0824 units per year.

Mann-Kendall statistic = -6
critical = -21

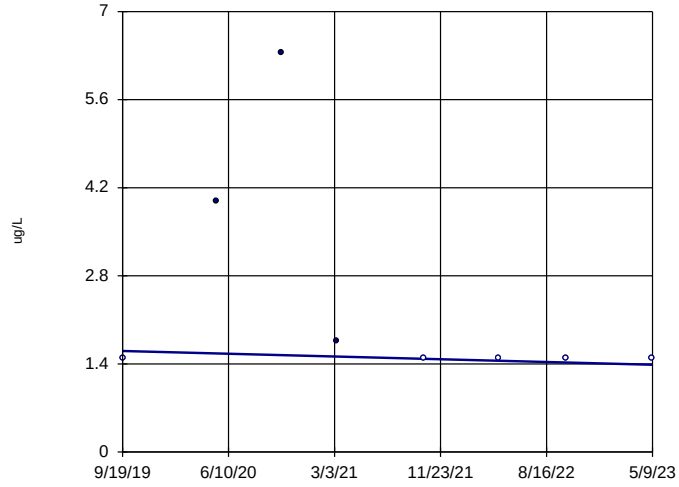
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chlorobenzene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.05991 units per year.

Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloromethane Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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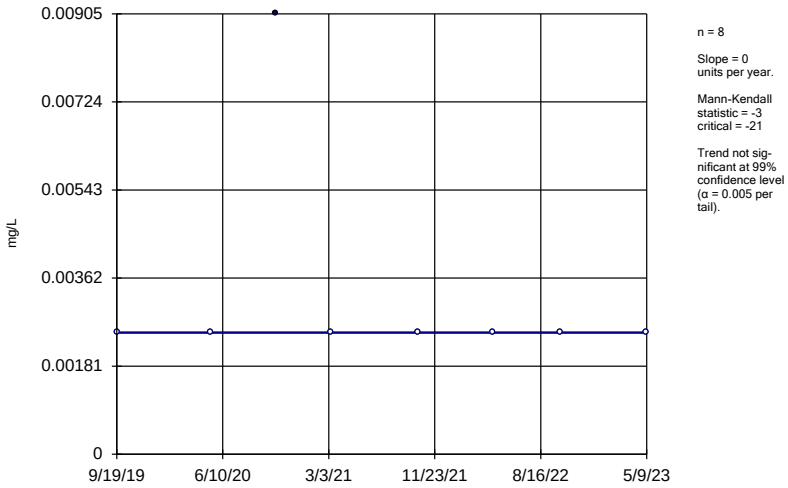
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -21

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chromium Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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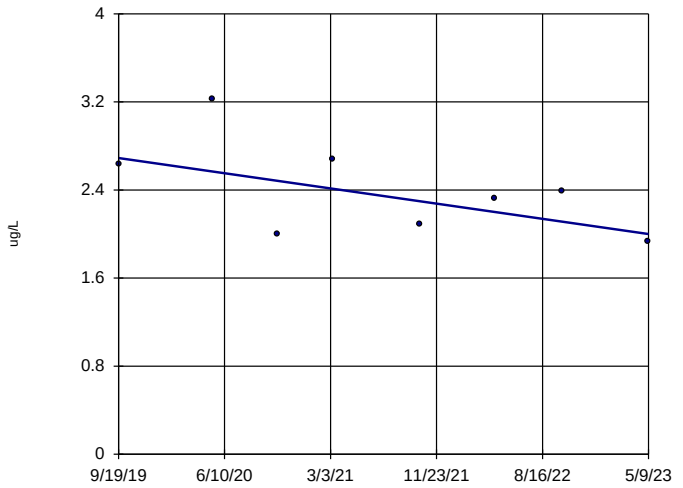
Sen's Slope Estimator

MW-25



n = 8

Slope = -0.1898
units per year.

Mann-Kendall
statistic = -10
critical = -21

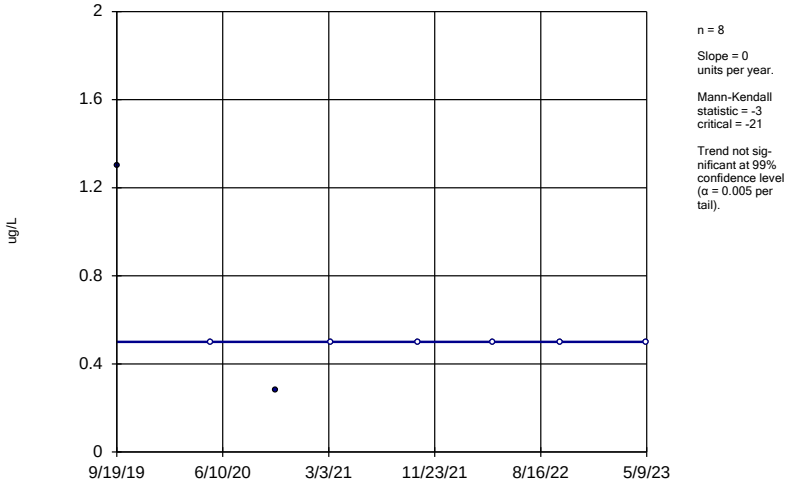
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -21

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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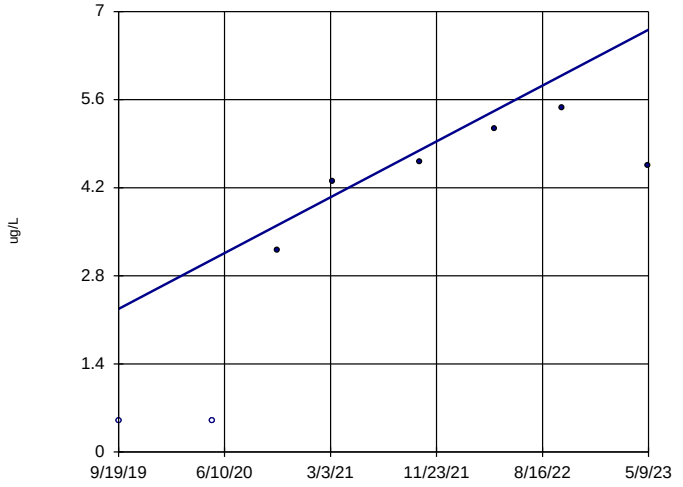
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



n = 8

Slope = 1.219
units per year.

Mann-Kendall
statistic = 21
critical = 21

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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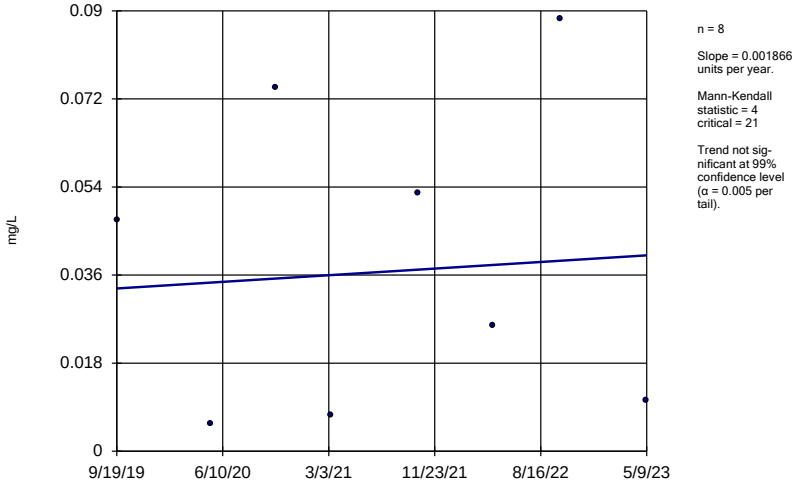
Sen's Slope Estimator

MW-14



n = 8

Slope = 0.001866 units per year.

Mann-Kendall statistic = 4
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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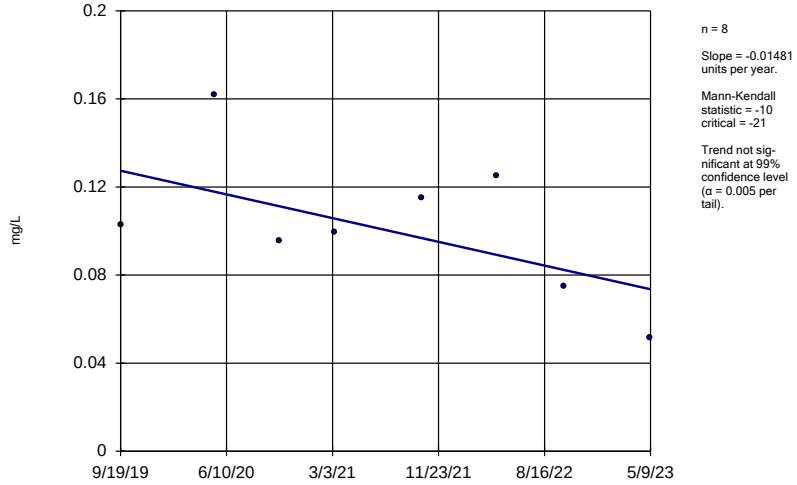
Sen's Slope Estimator

MW-25



n = 8

Slope = -0.01481 units per year.

Mann-Kendall statistic = -10
critical = -21

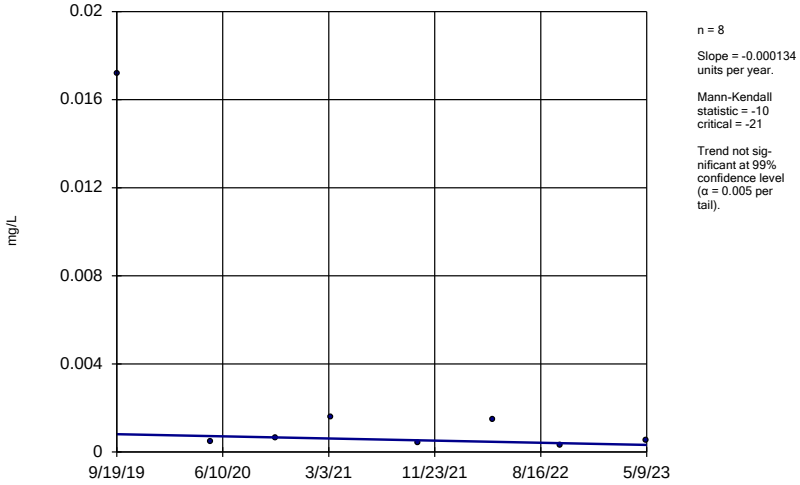
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-26



n = 8

Slope = -0.000134 units per year.

Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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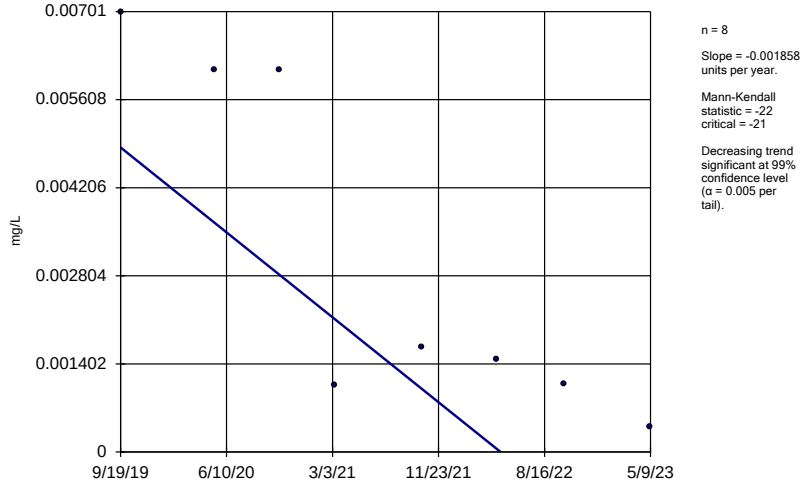
Sen's Slope Estimator

MW-29



n = 8

Slope = -0.001858 units per year.

Mann-Kendall statistic = -22
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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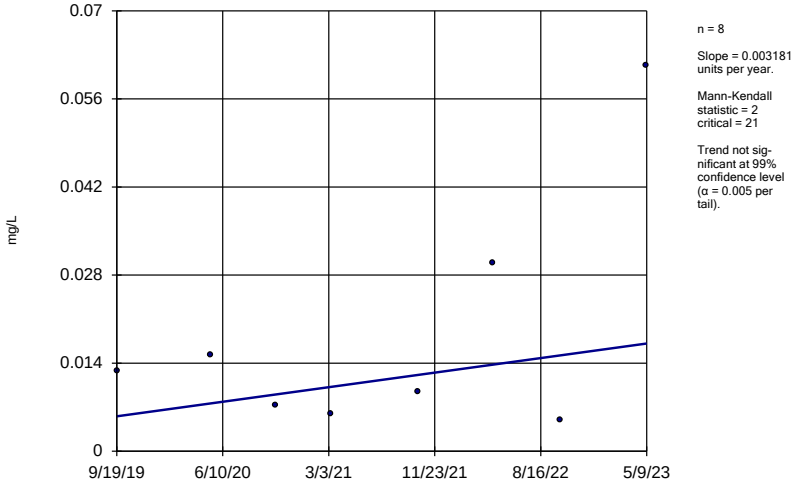
Sen's Slope Estimator

MW-5



n = 8

Slope = 0.003181 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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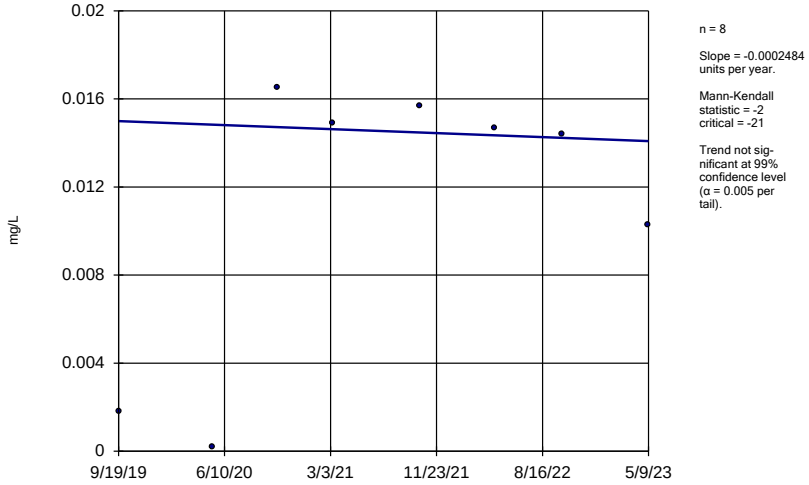
Sen's Slope Estimator

MW-9R



n = 8

Slope = -0.0002484 units per year.

Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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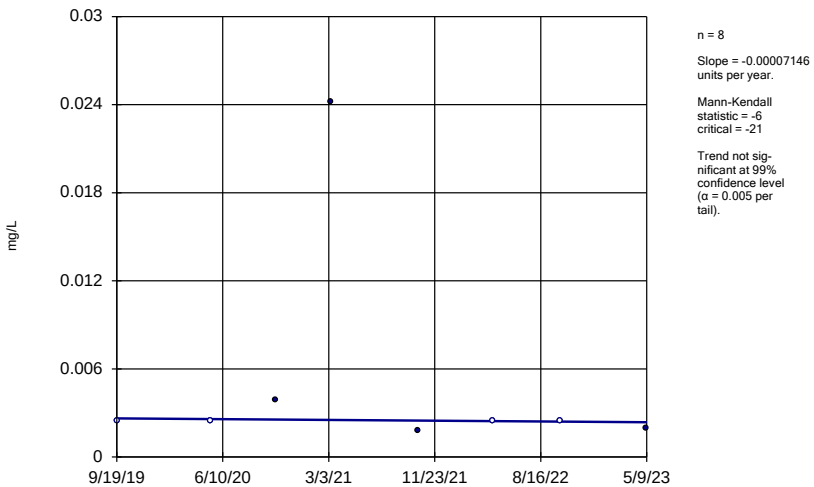
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.00007146 units per year.

Mann-Kendall statistic = -6
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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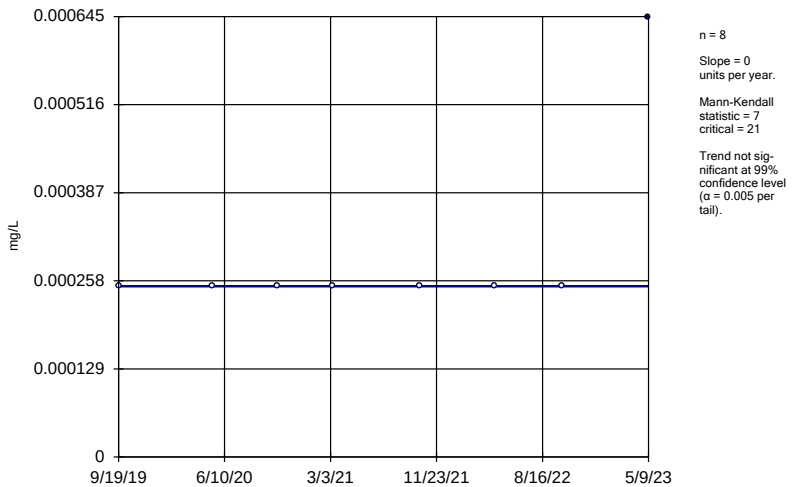
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-14



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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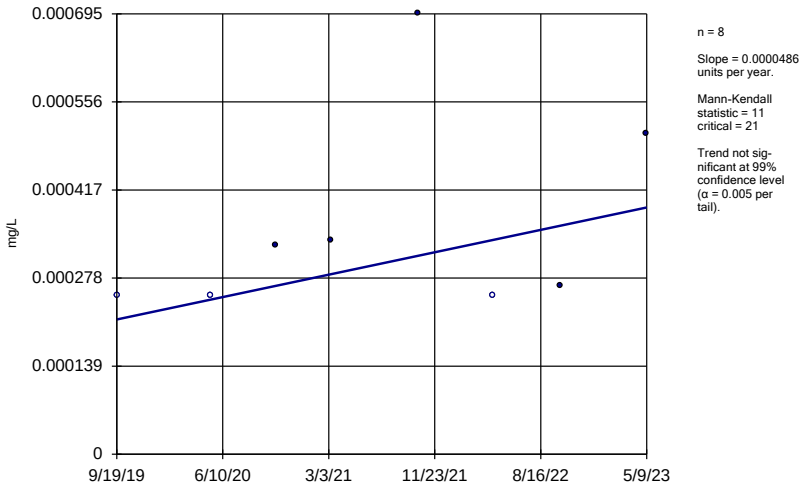
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = 0.0000486 units per year.

Mann-Kendall statistic = 11
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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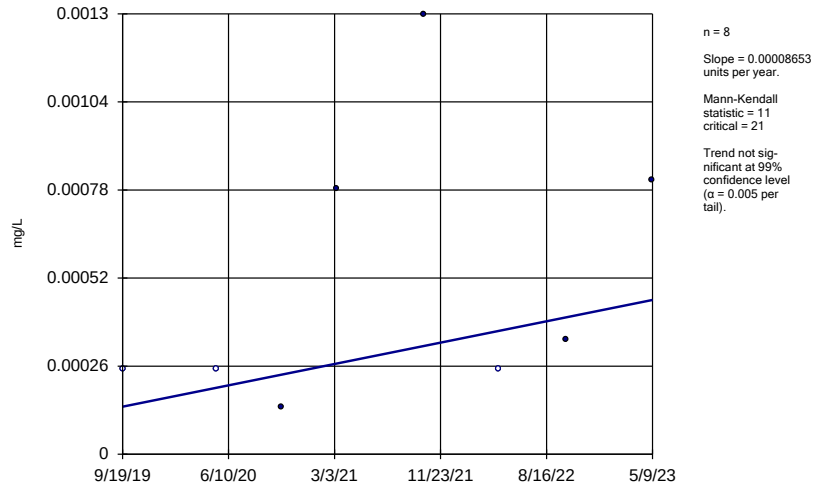
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



n = 8

Slope = 0.00008653 units per year.

Mann-Kendall statistic = 11
critical = 21

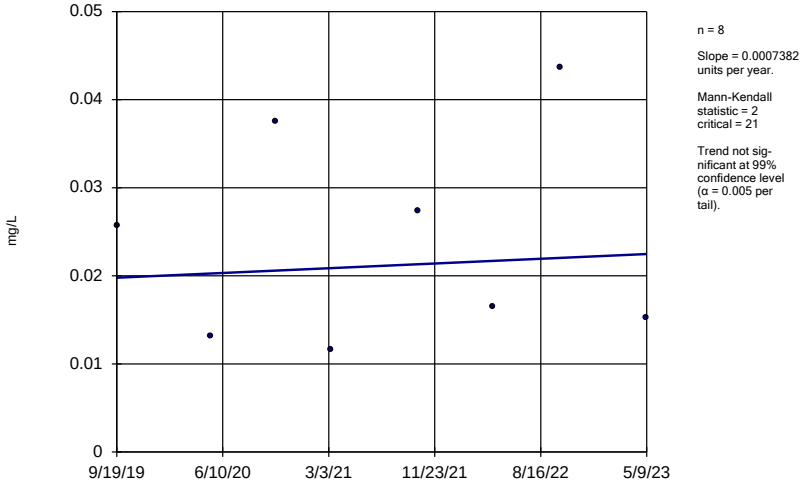
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-14



n = 8

Slope = 0.0007382 units per year.

Mann-Kendall statistic = 2
critical = 21

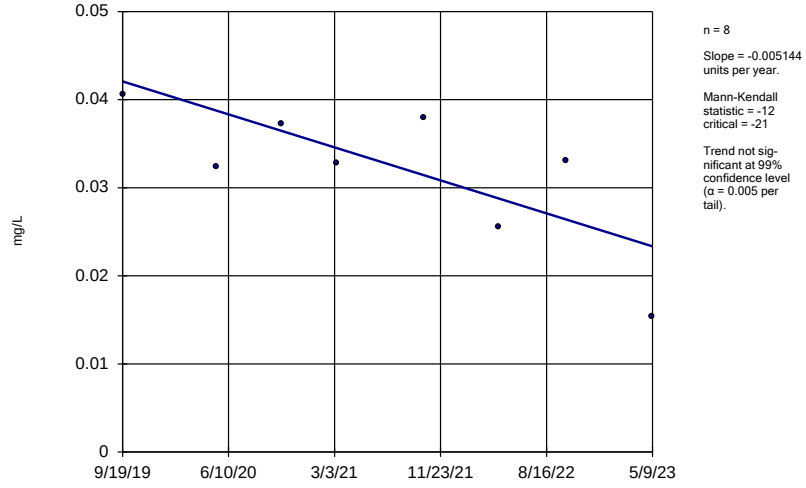
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.005144 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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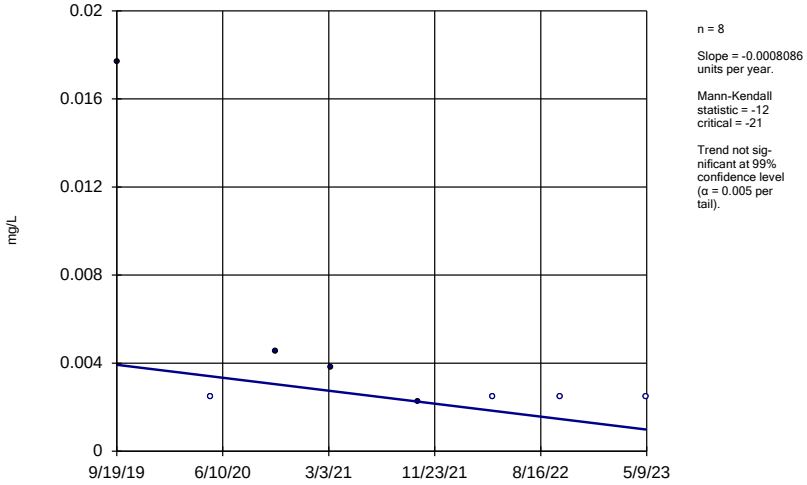
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



n = 8

Slope = -0.0008086 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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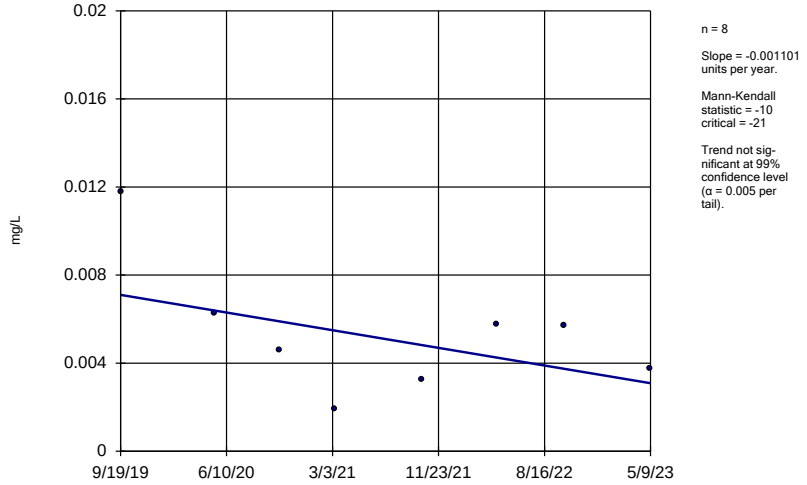
Sen's Slope Estimator

MW-29



n = 8

Slope = -0.001101 units per year.

Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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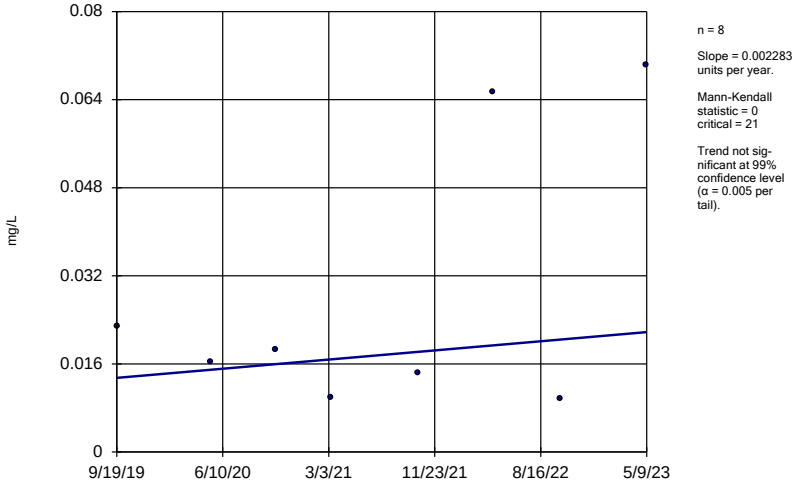
Sen's Slope Estimator

MW-5



n = 8

Slope = 0.002283 units per year.

Mann-Kendall statistic = 0
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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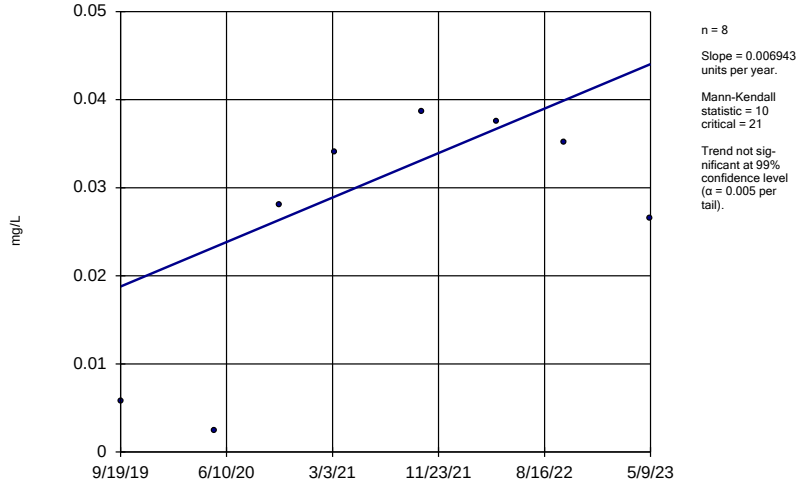
Sen's Slope Estimator

MW-9R



n = 8

Slope = 0.006943 units per year.

Mann-Kendall statistic = 10
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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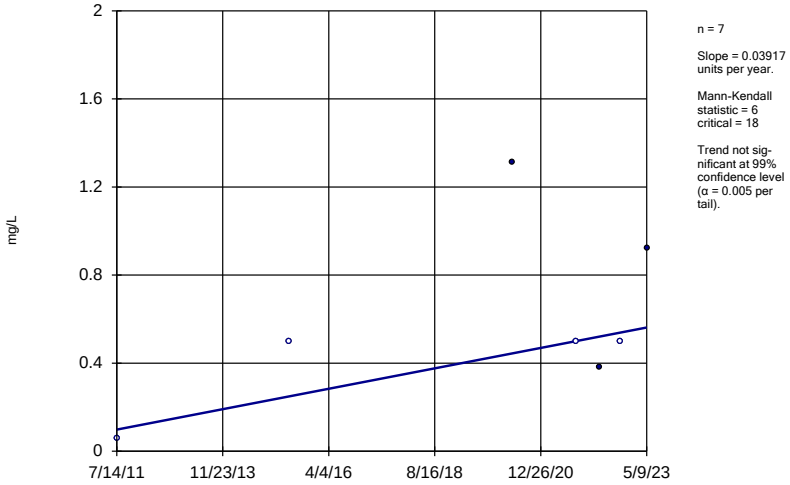
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26

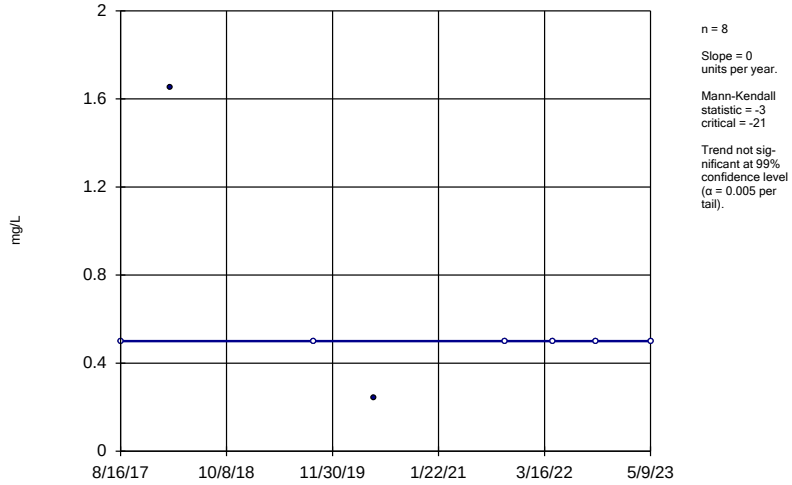


Constituent: Sulfide Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R

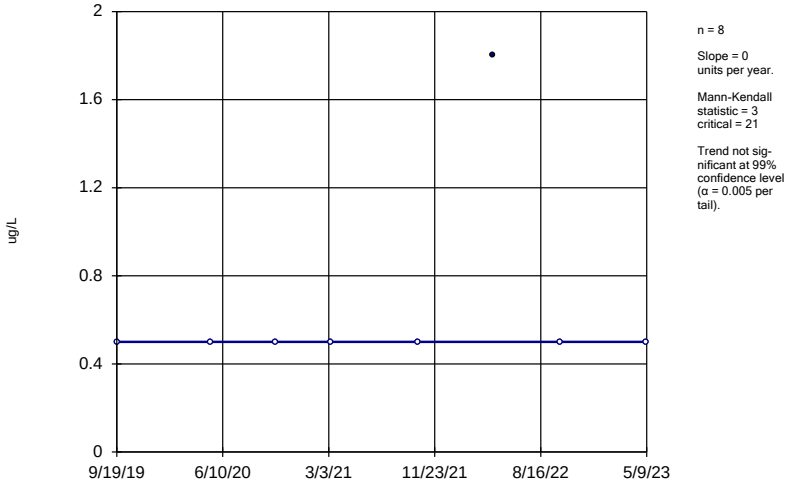


Constituent: Sulfide Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25

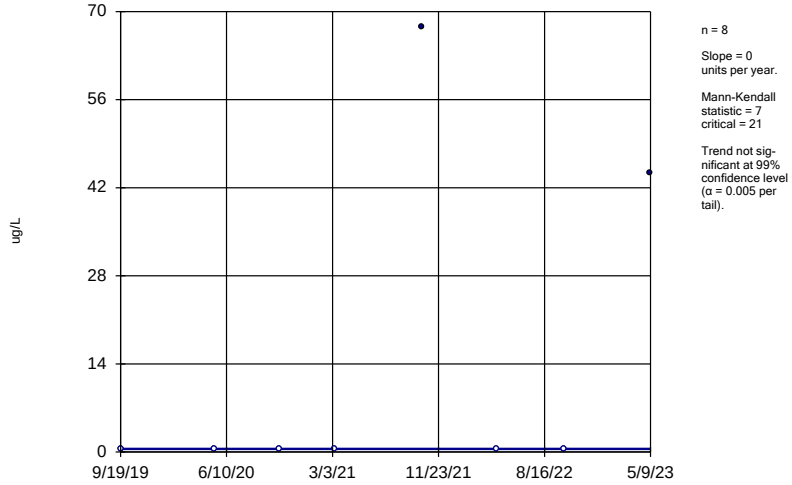


Constituent: Toluene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7

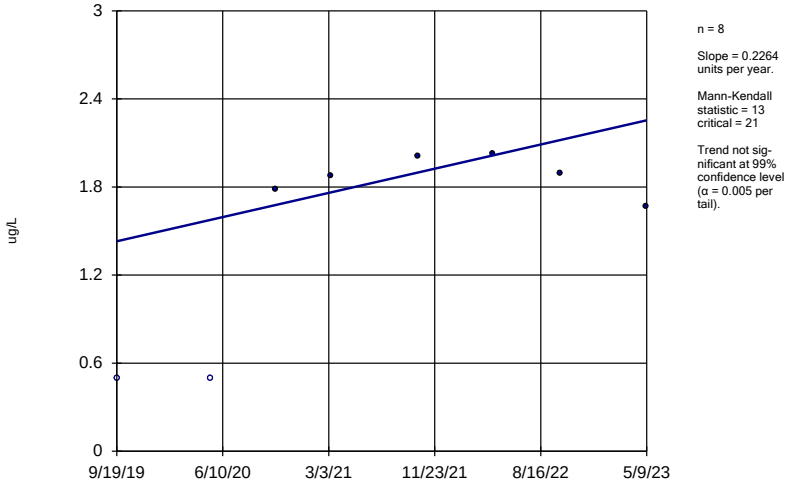


Constituent: Toluene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R

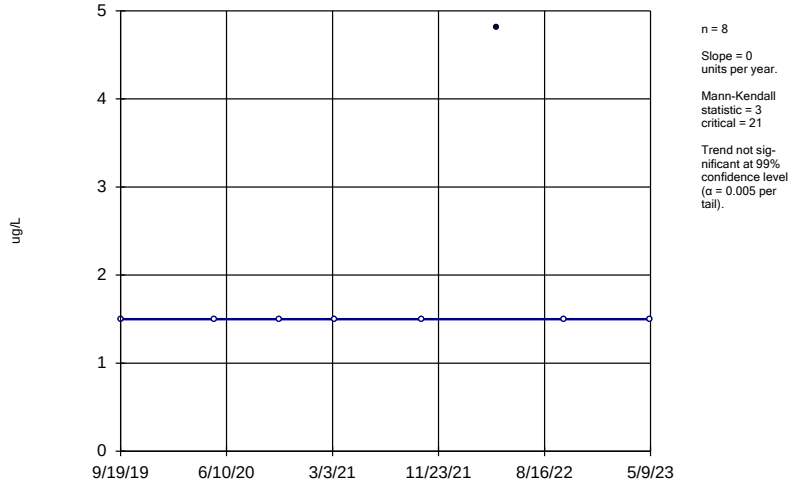


Constituent: Trichloroethene Analysis Run 6/7/2023 10:08 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Xylenes, total Analysis Run 6/7/2023 10:09 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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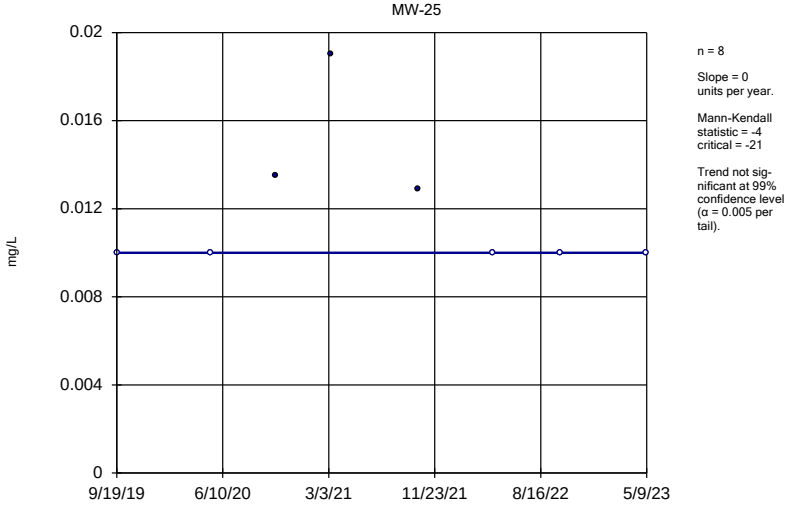
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Zinc Analysis Run 6/7/2023 10:09 AM View: 2023SSN - Mann Kendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Confidence Interval Summary Table and Graphs

Confidence Interval

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM Printed 6/7/2023, 3:58 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Acetone (ug/L)	MW-5	39.8	4.59	6300	No	8	62.5	No	0.004	NP (NDs)
Acetone (ug/L)	MW-7	20.6	5	6300	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-14	0.01432	0.0001161	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-25	0.006889	0.004011	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-26	0.00479	0.0007627	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	MW-29	0.0108	0.000563	0.01	No	8	12.5	No	0.004	NP (normality)
Arsenic (mg/L)	MW-5	0.007315	0.003236	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.0575	0.00306	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	MW-9R	0.003595	0.001312	0.01	No	8	12.5	No	0.01	Param.
Barium (mg/L)	MW-14	0.4398	0.1398	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-25	0.1436	0.08586	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-26	0.07397	0.01826	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-5	0.2627	0.1466	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-7	0.2916	0.1897	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-9R	0.1469	0.008452	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-25	1.659	1.113	5	No	8	0	No	0.01	Param.
Beryllium (mg/L)	MW-25	0.001165	0.0005	0.004	No	8	87.5	No	0.004	NP (NDs)
beta-BHC (ug/L)	MW-7	0.418	0.0138	0.042	No	8	37.5	No	0.004	NP (normality)
Cadmium (mg/L)	MW-14	0.0002916	0.00005241	0.005	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-7	0.000609	0.00005	0.005	No	8	50	No	0.004	NP (normality)
Cadmium (mg/L)	MW-9R	0.000131	0.00005	0.005	No	8	62.5	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	MW-25	1.109	0.5963	100	No	8	12.5	No	0.01	Param.
Chloromethane (ug/L)	MW-25	6.34	1.5	3	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25	0.00905	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-25	2.867	1.952	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-26	1.3	0.282	70	No	8	75	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-9R	5.416	1.906	70	No	8	25	No	0.01	Param.
Cobalt (mg/L)	MW-14	0.07265	0.005334	0.0867	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-25	0.1383	0.06836	0.0867	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-26	0.0172	0.000321	0.0867	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW-5	0.06125	0.00501	0.0867	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW-9R	0.01794	0.004182	0.0867	No	8	0	No	0.01	Param.
Copper (mg/L)	MW-25	0.0242	0.00182	1.3	No	8	50	No	0.004	NP (normality)
Lead (mg/L)	MW-14	0.000645	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-25	0.0005286	0.0002394	0.015	No	8	37.5	No	0.01	Param.
Lead (mg/L)	MW-9R	0.0009224	0.00009986	0.015	No	8	37.5	No	0.01	Param.
Nickel (mg/L)	MW-14	0.03642	0.01123	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-25	0.04044	0.02334	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-26	0.0177	0.00228	0.1	No	8	50	No	0.004	NP (normality)
Nickel (mg/L)	MW-29	0.008536	0.002222	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-5	0.07025	0.00972	0.1	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	MW-9R	0.04104	0.01101	0.1	No	8	0	No	0.01	Param.
Sulfide (mg/L)	MW-26	1.31	0.06	1	No	7	57.14	No	0.008	NP (NDs)
Sulfide (mg/L)	MW-9R	1.65	0.243	1	No	8	75	No	0.004	NP (NDs)
Toluene (ug/L)	MW-25	1.8	0.5	1000	No	8	87.5	No	0.004	NP (NDs)
Toluene (ug/L)	MW-7	67.5	0.5	1000	No	8	75	No	0.004	NP (NDs)
Trichloroethene (ug/L)	MW-9R	2.03	0.5	5	No	8	25	No	0.004	NP (normality)
Xylenes, total (ug/L)	MW-25	4.81	1.5	10000	No	8	87.5	No	0.004	NP (NDs)
Zinc (mg/L)	MW-25	0.019	0.01	2	No	8	62.5	No	0.004	NP (NDs)

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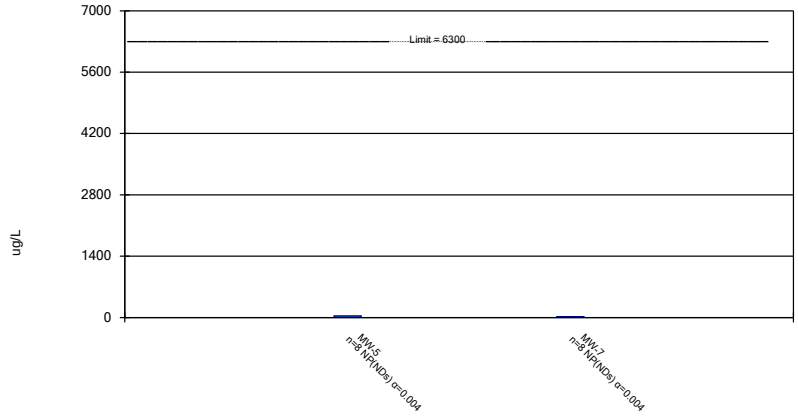
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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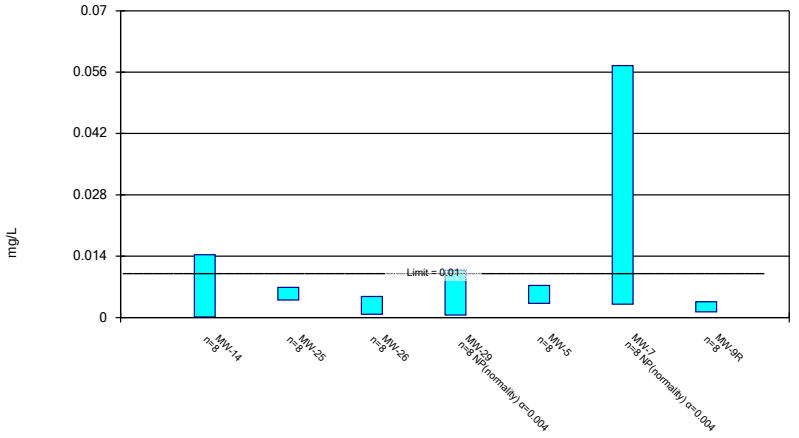
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Arsenic Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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Parametric Confidence Interval

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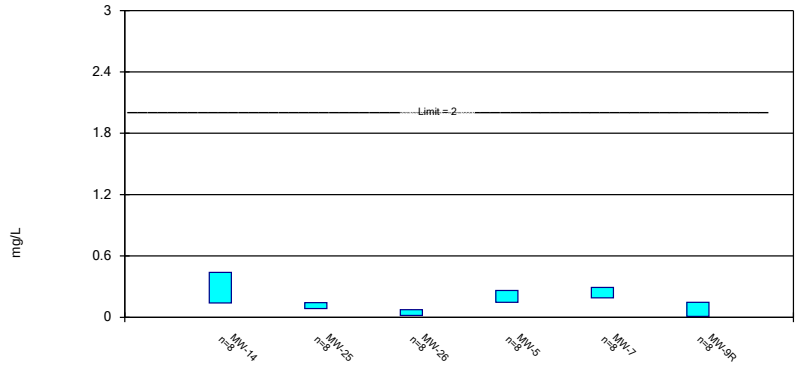

Constituent: Barium Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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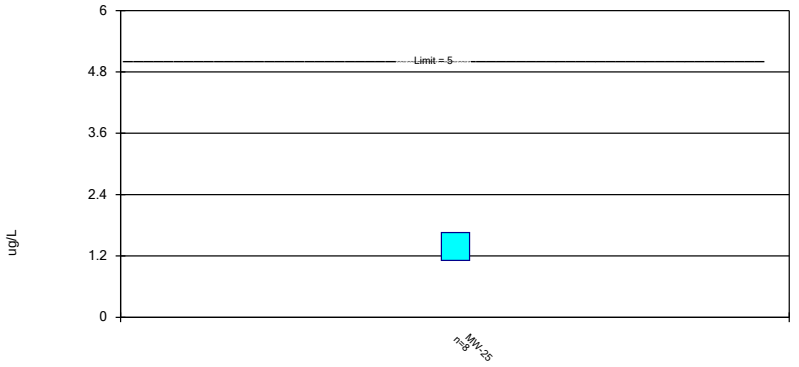
Parametric Confidence Interval

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



Constituent: Benzene Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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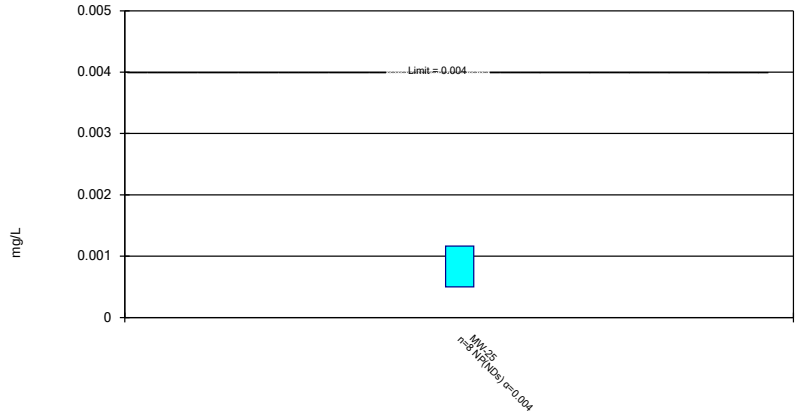
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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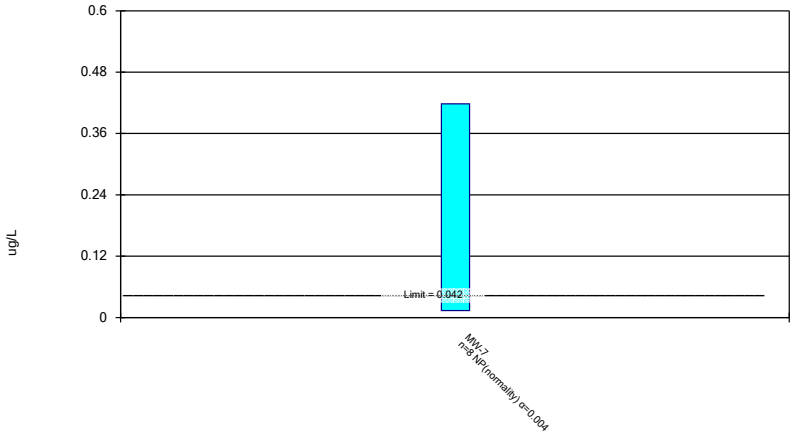
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: beta-BHC Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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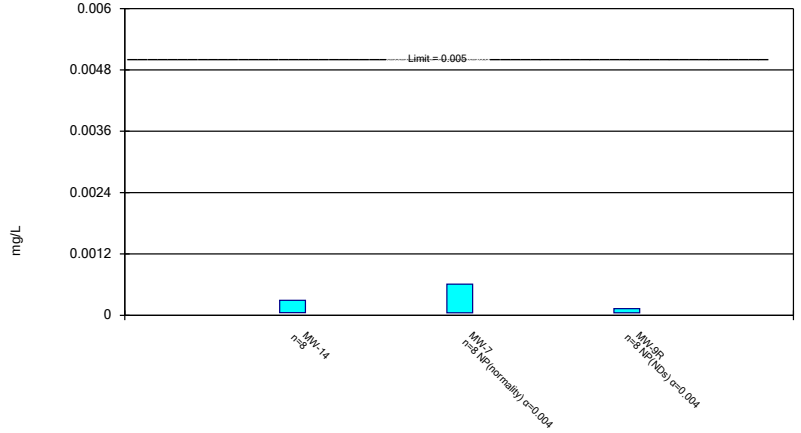
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Cadmium Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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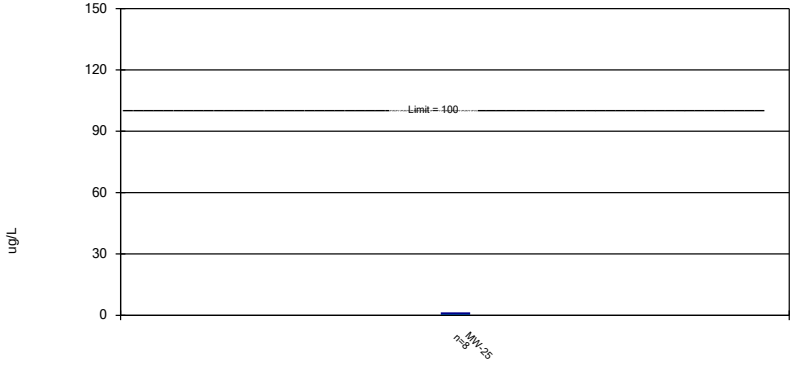
Parametric Confidence Interval

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



Constituent: Chlorobenzene Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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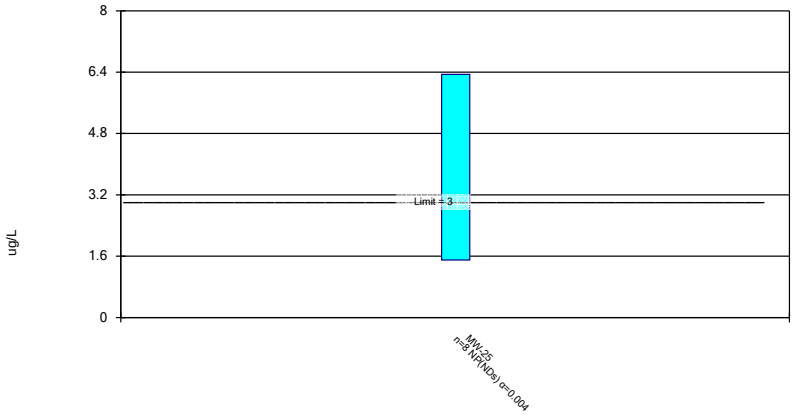
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Chloromethane Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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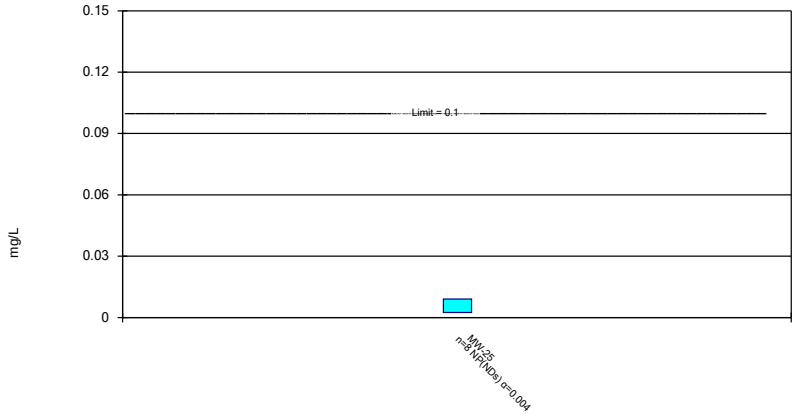
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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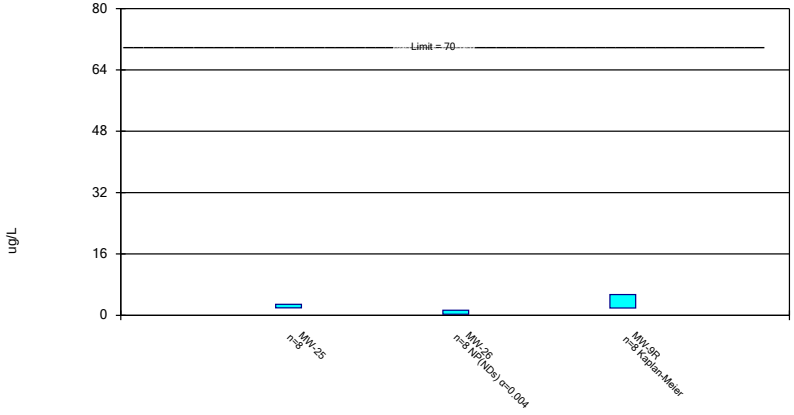
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: cis-1,2-Dichloroethene Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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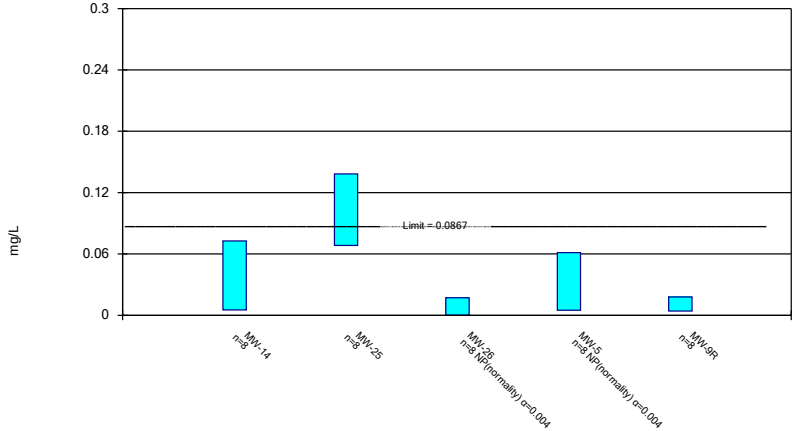
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Cobalt Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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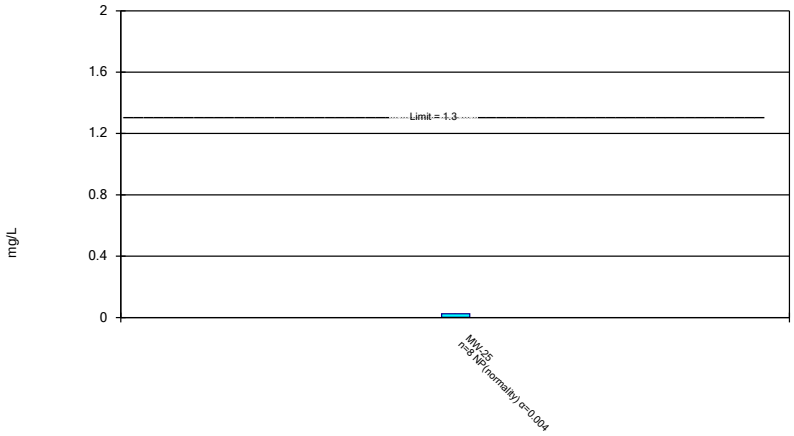
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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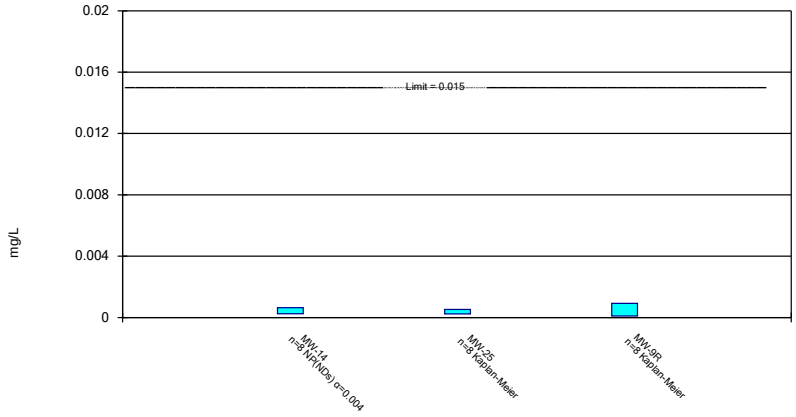
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Lead Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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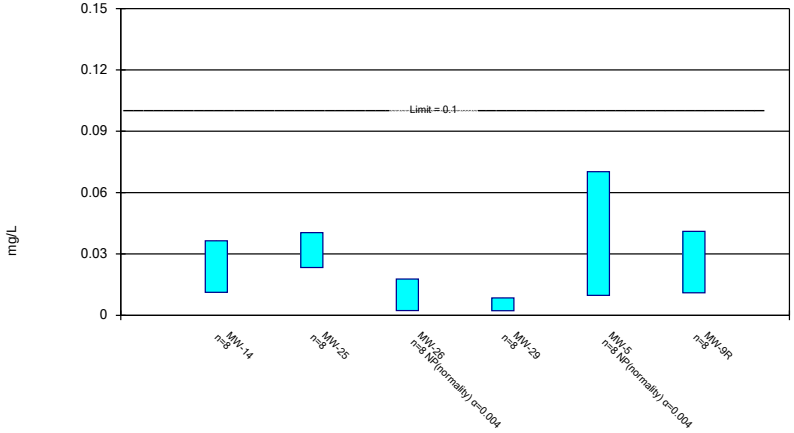
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Nickel Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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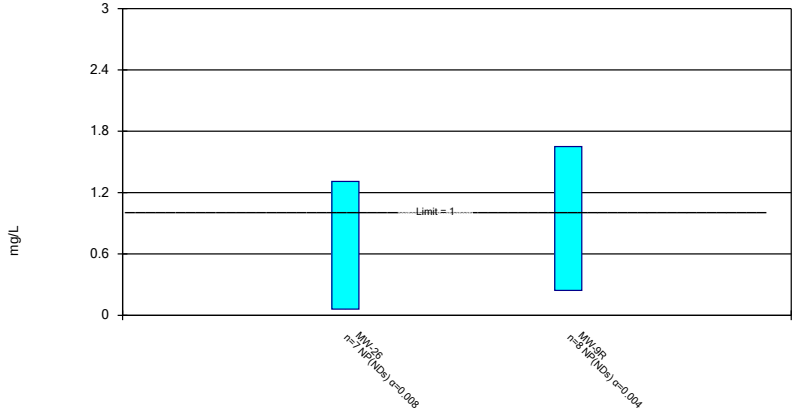
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Sulfide Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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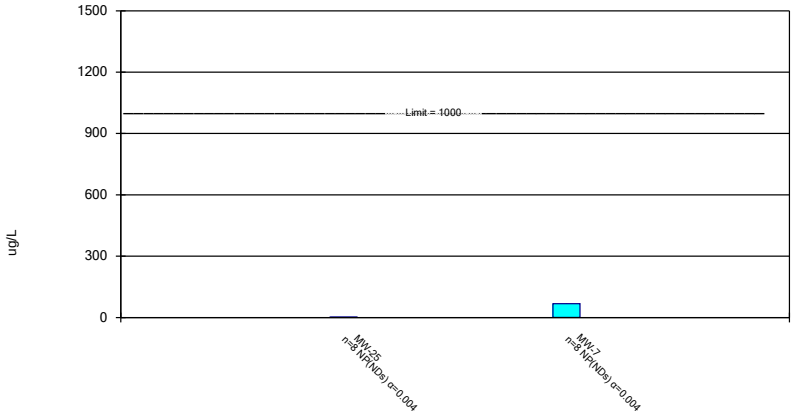
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Toluene Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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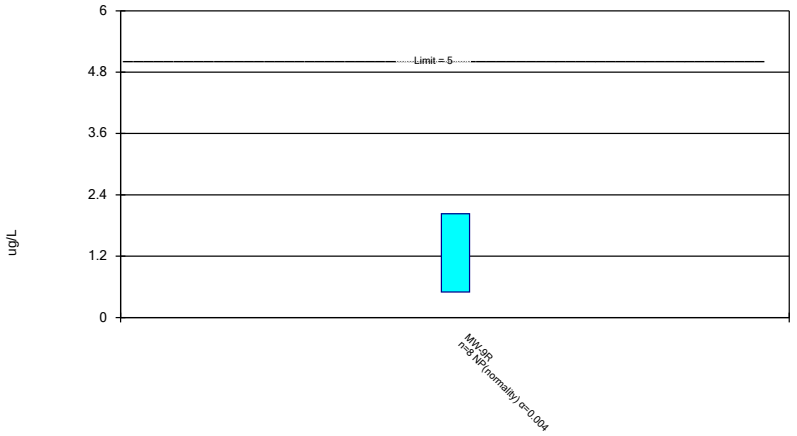
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Trichloroethene Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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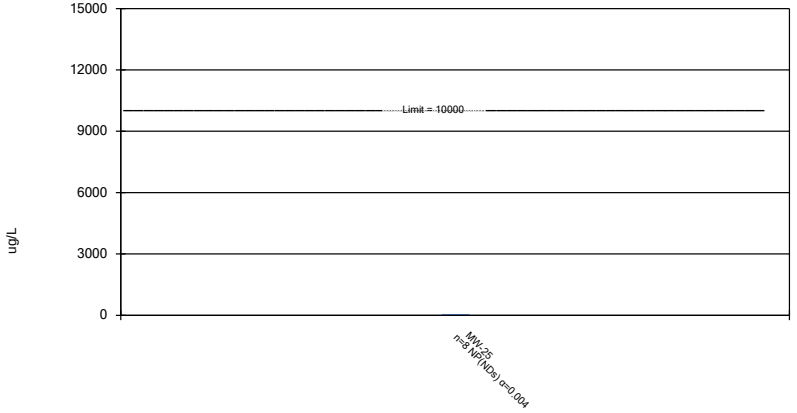
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Xylenes, total Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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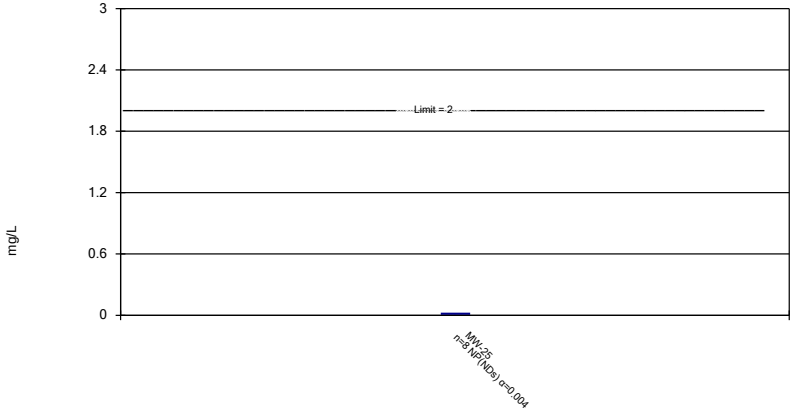
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 6/7/2023 3:57 PM View: 2023SSN - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Theil-Sen Confidence Bands Summary Table and Graphs

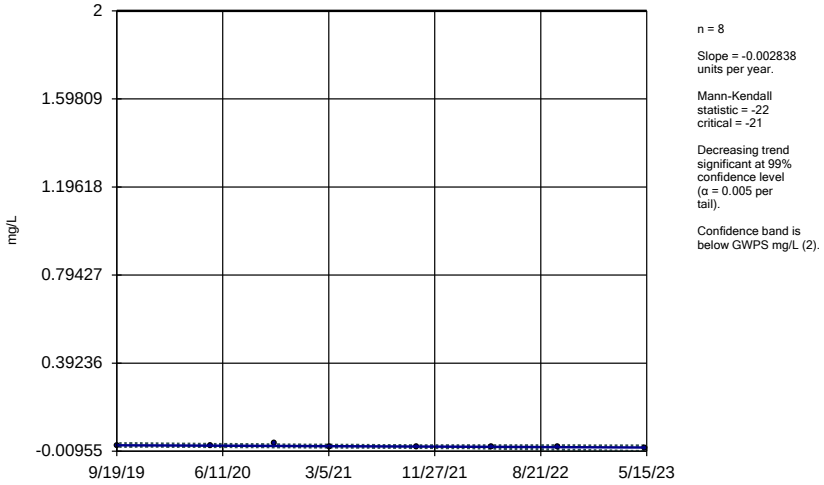
Theil Sen\Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM Printed 6/7/2023, 4:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Barium (mg/L)	**MW-29**	**-0.002838**	**-22**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**
Cobalt (mg/L)	**MW-29**	**-0.001858**	**-22**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**

Sen's Slope and 99% Confidence Band

MW-29



n = 8

Slope = -0.002838 units per year.

Mann-Kendall statistic = -22
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below GWPS mg/L (2).

Constituent: Barium Analysis Run 6/7/2023 4:07 PM View: 2023SSN - Theil Sen

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

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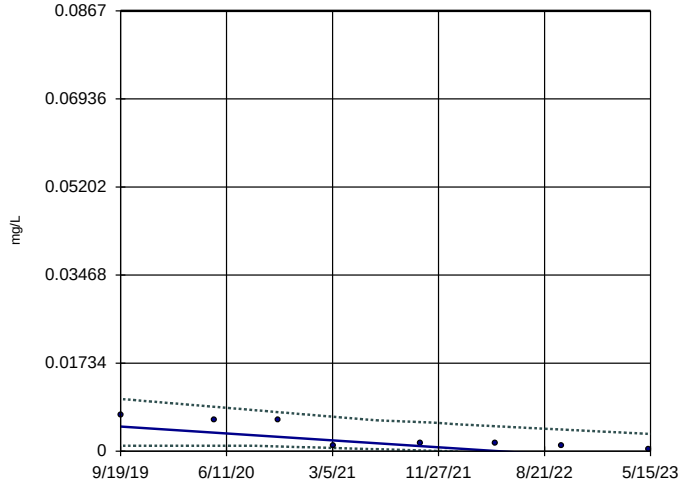
Sen's Slope and 99% Confidence Band

MW-29



n = 8

Slope = -0.001858 units per year.

Mann-Kendall statistic = -22
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below SSGWPS mg/L (0.0867).

Constituent: Cobalt Analysis Run 6/7/2023 4:07 PM View: 2023SSN - Theil Sen

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO 2023SSN-AM

Attachment B

2nd 2023 Statistical Evaluation Output

Time Series Plots

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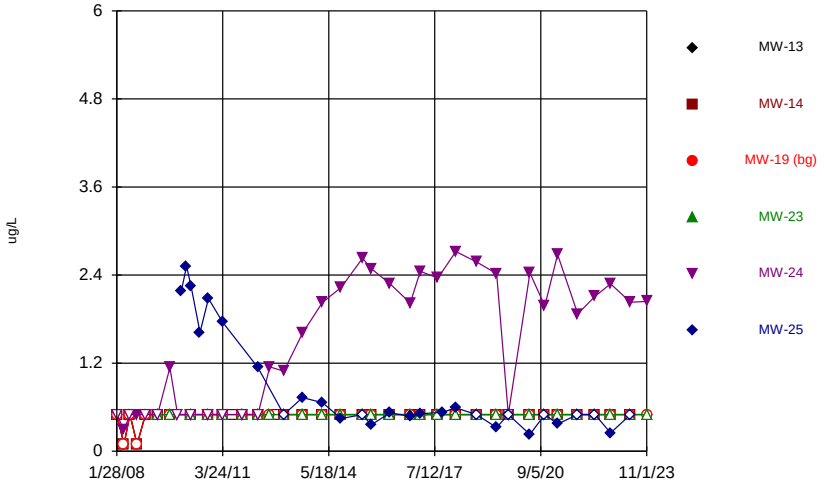
Hollow symbols indicate censored values.

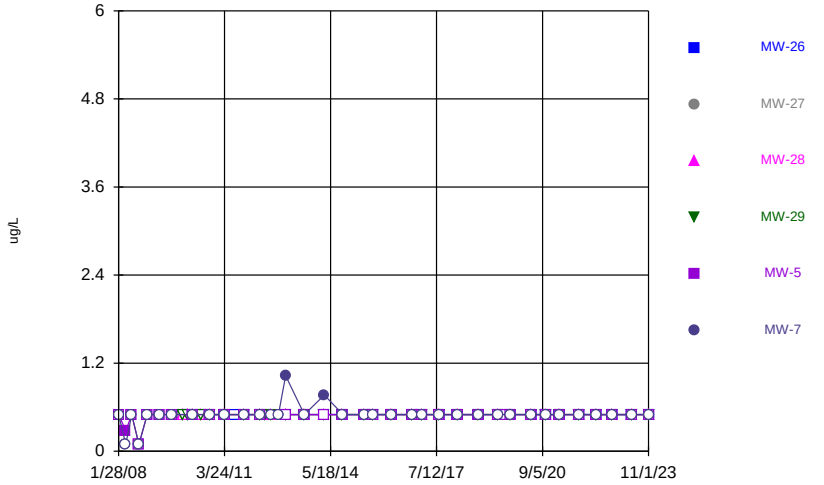
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

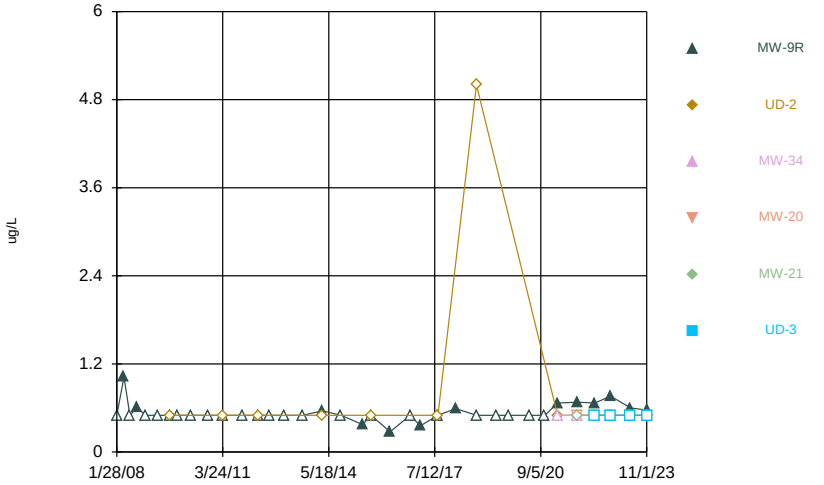
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

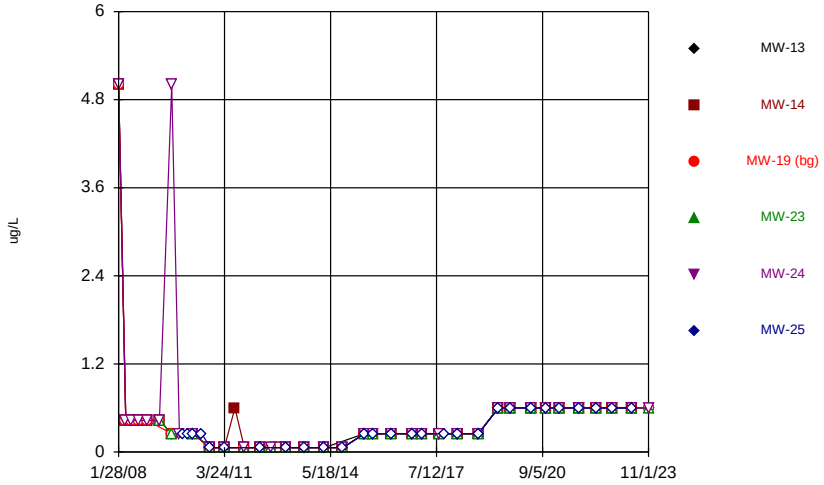
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time S
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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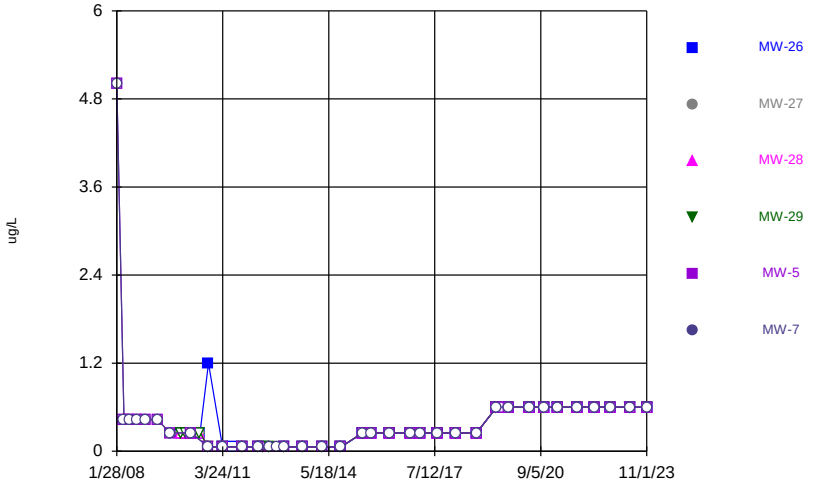
Hollow symbols indicate censored values.

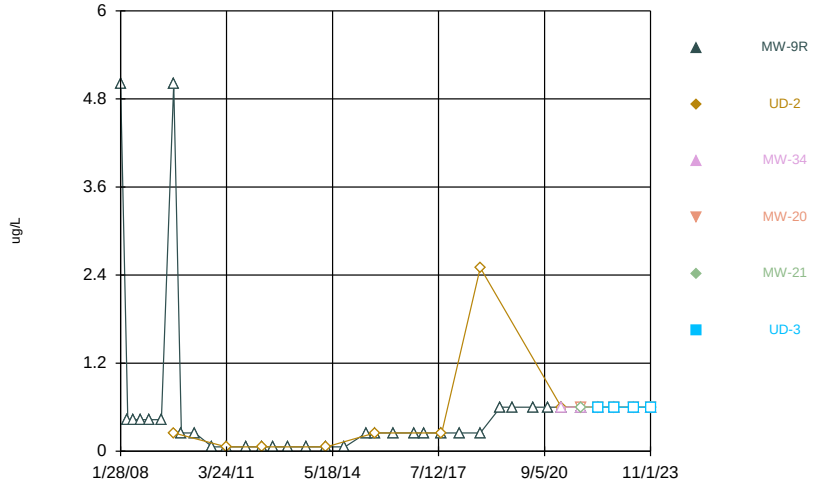
Time Series



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time S
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

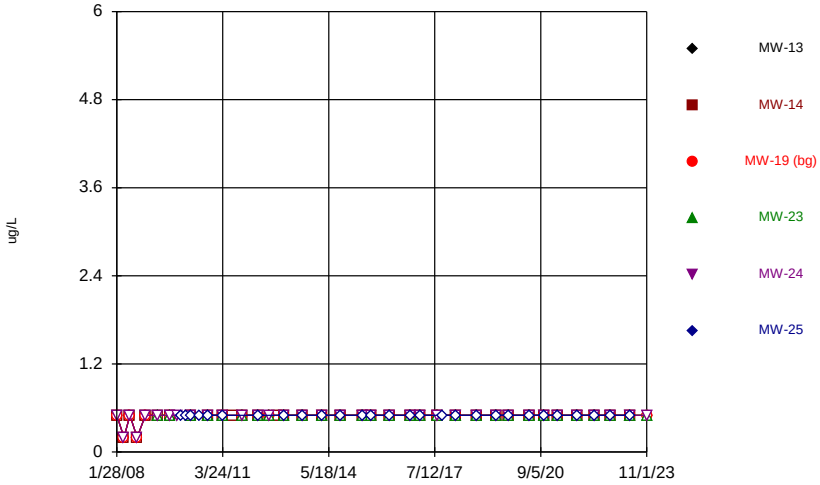
Time Series



Constituent: 1,2-Dibromo-3-chloropropane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time S
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

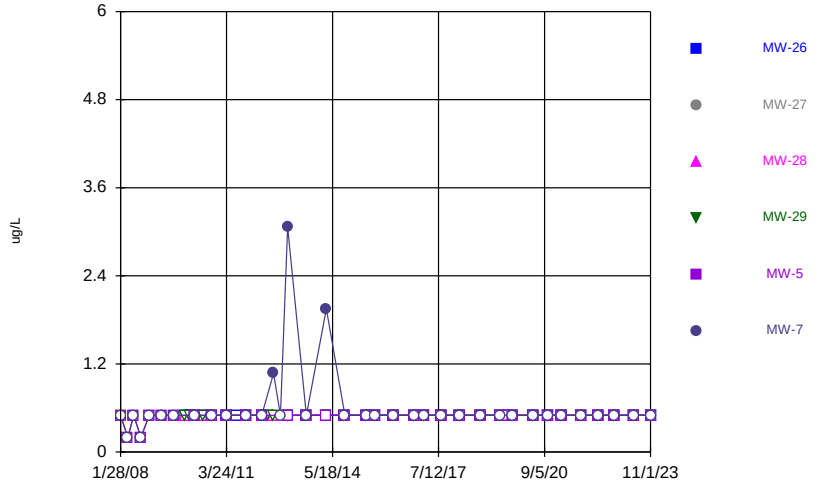
Time Series



Constituent: 1,2-Dichloropropane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: 1,2-Dichloropropane Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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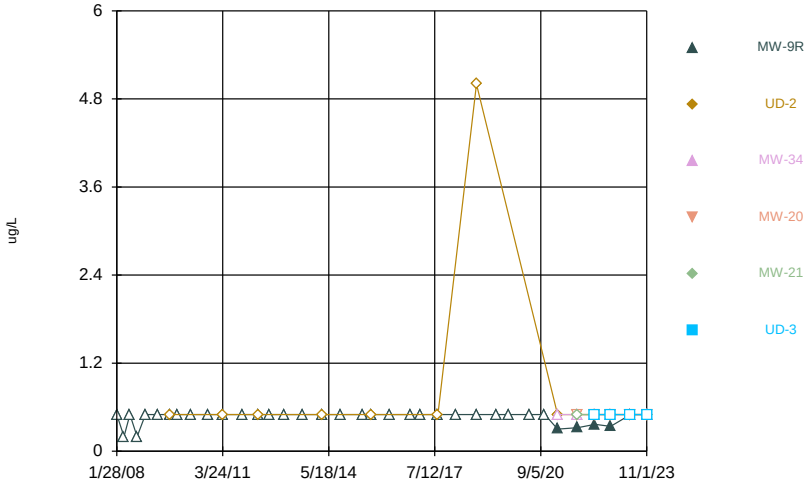

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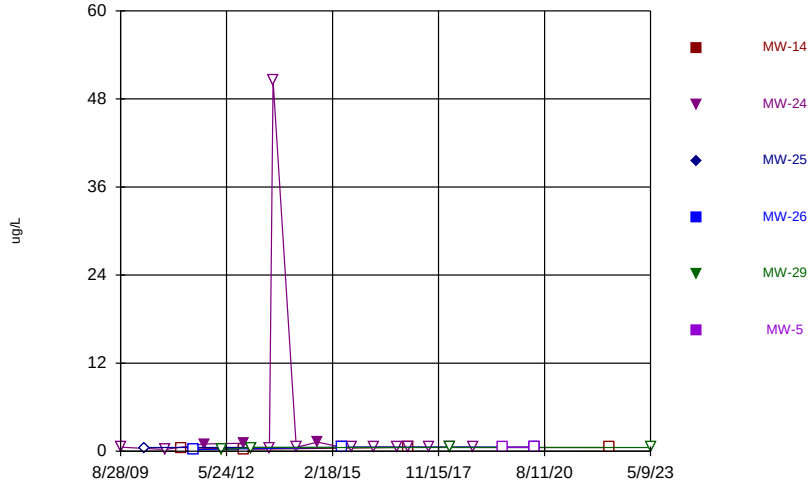
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

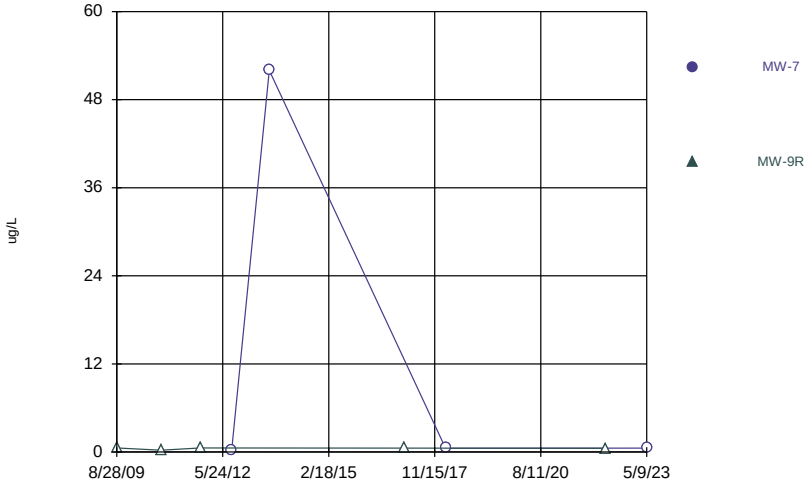
Time Series



Constituent: 2,4-D [2C] Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

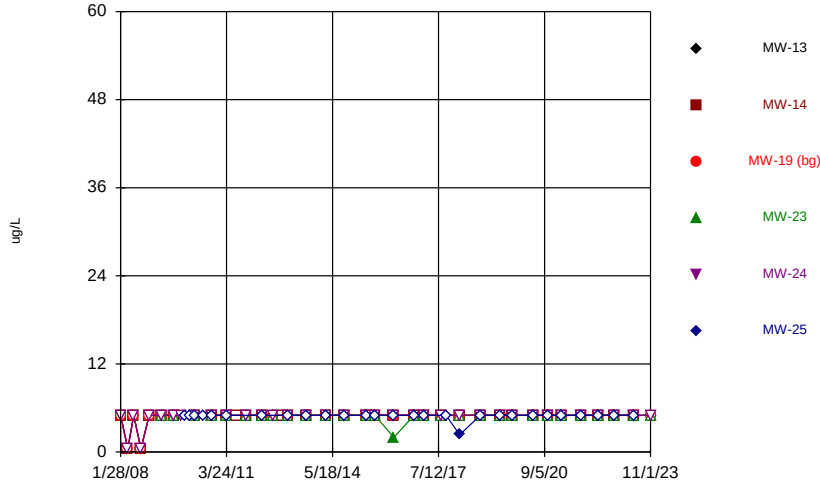
Time Series



Constituent: 2,4-D [2C] Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

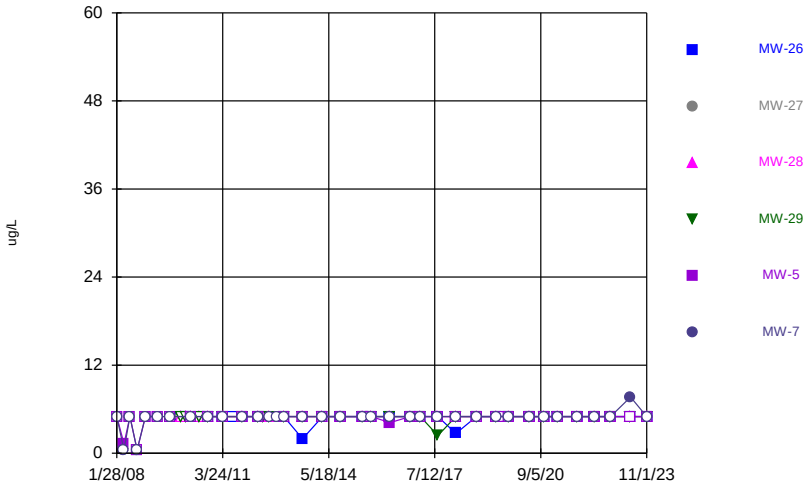
Time Series



Constituent: 2-Butanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

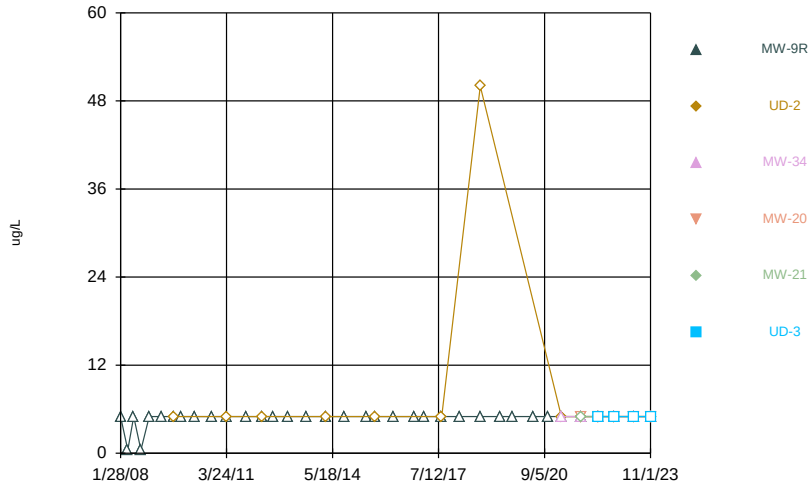
Time Series



Constituent: 2-Butanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

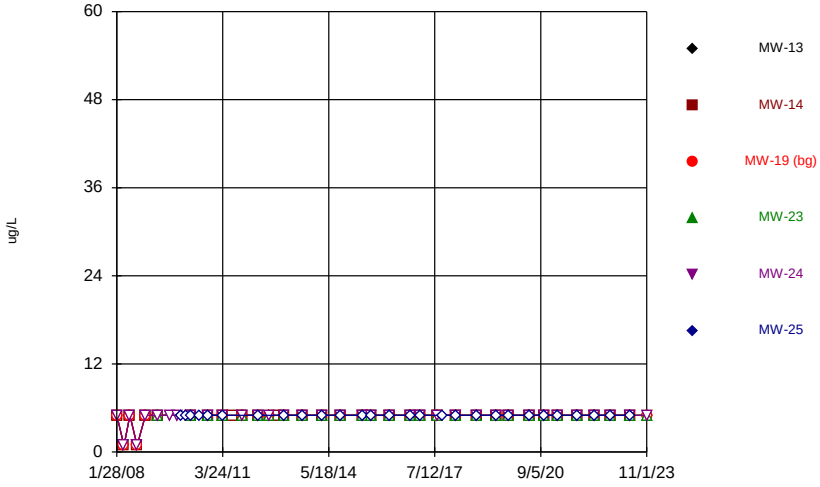
Time Series



Constituent: 2-Butanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: 2-Hexanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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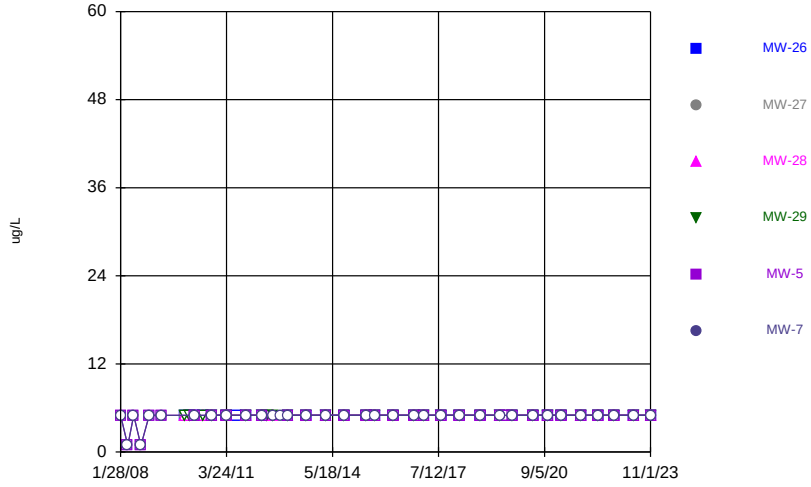

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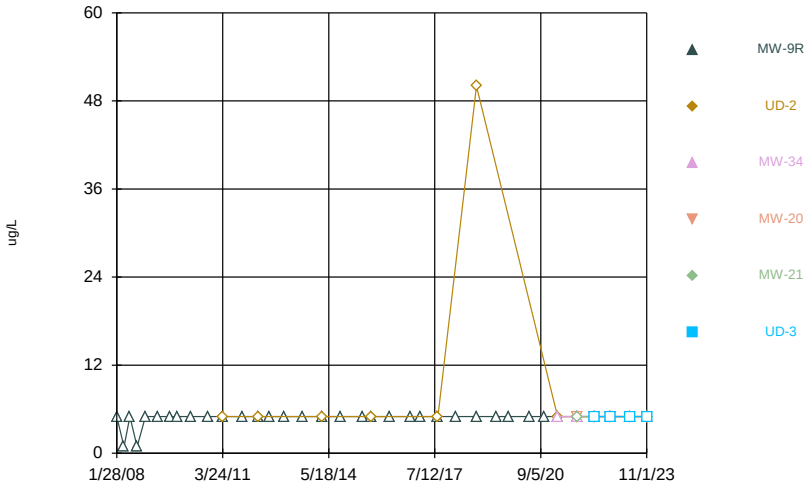
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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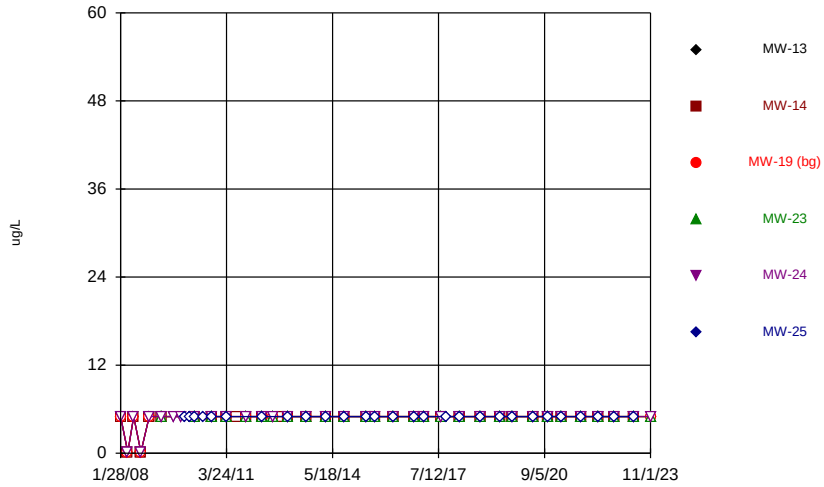

Constituent: 4-Methyl-2-pentanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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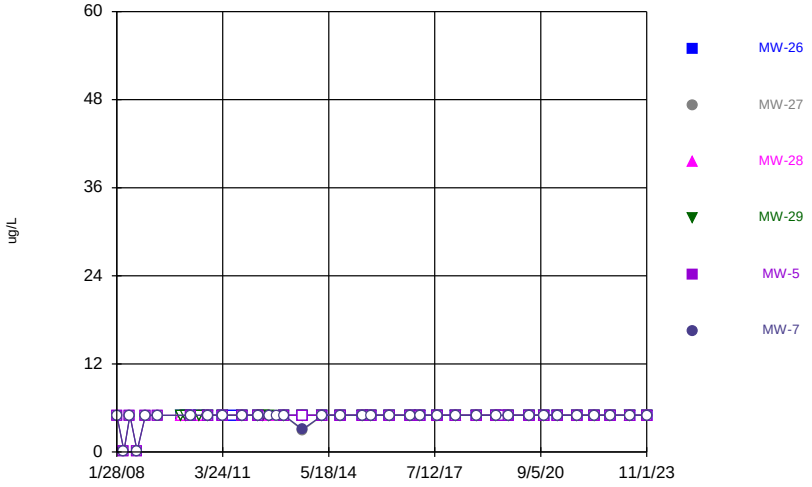

Constituent: 4-Methyl-2-pentanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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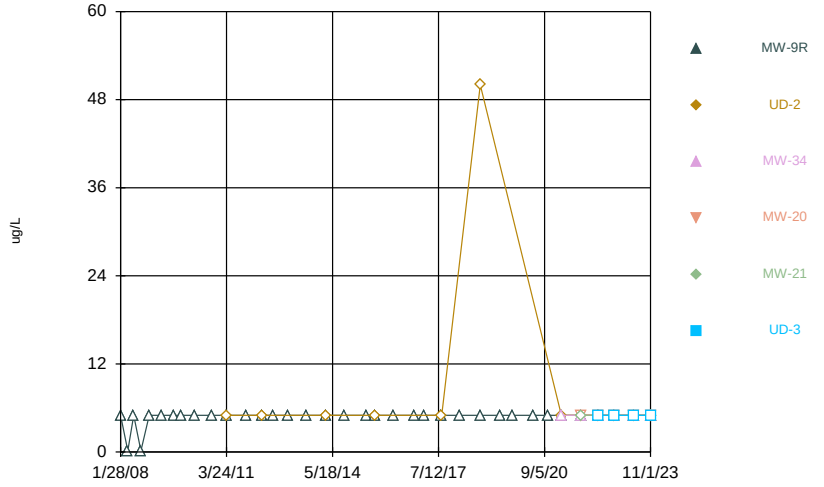

Constituent: 4-Methyl-2-pentanone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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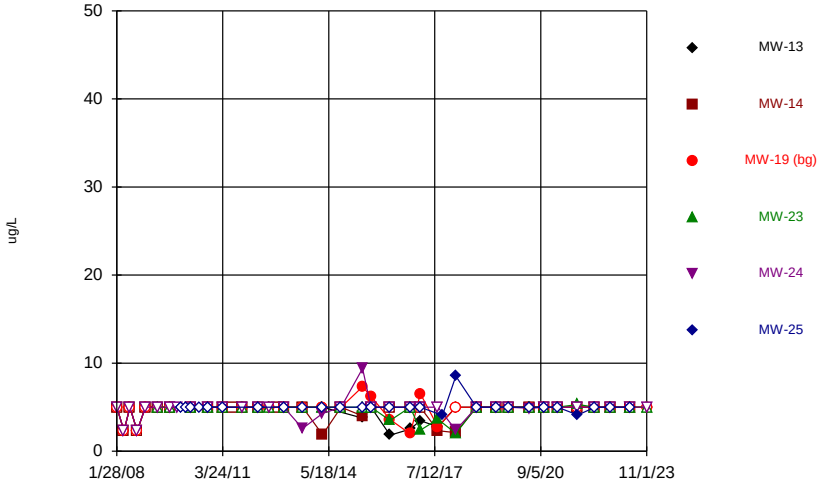
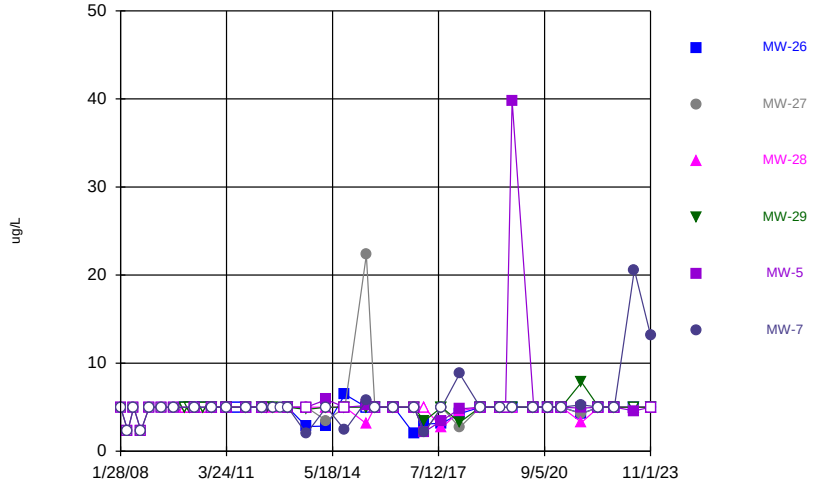


Constituent: Acetone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Acetone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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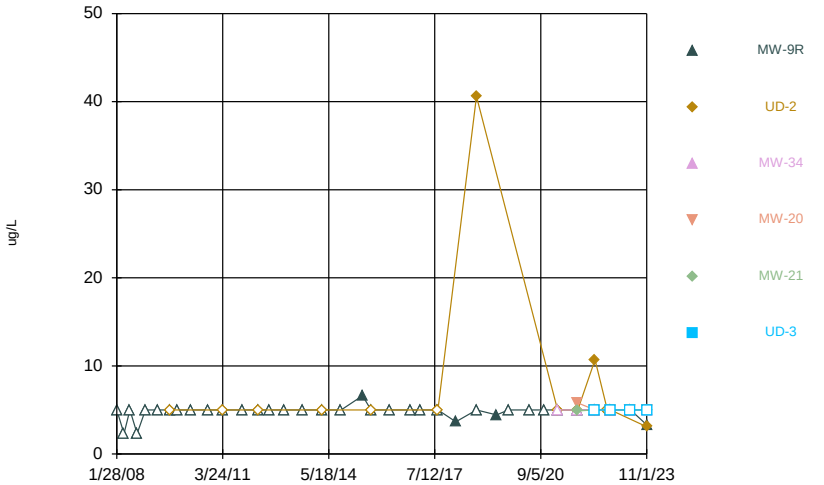
Time Series



Constituent: Acetone Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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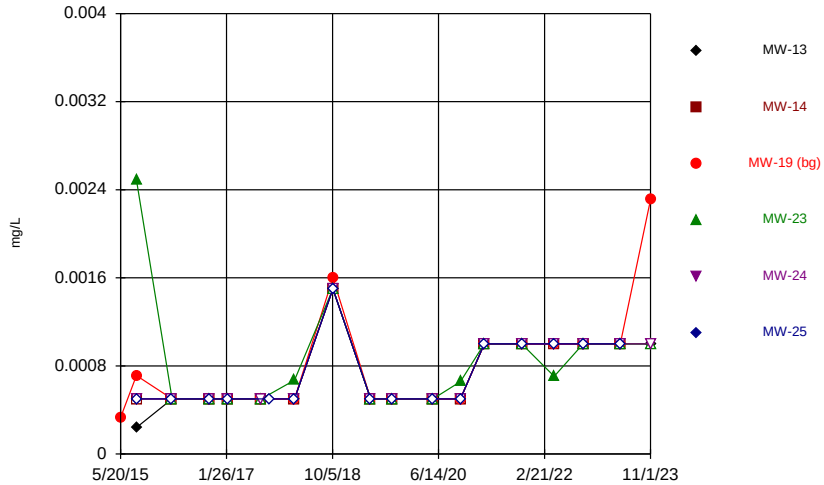
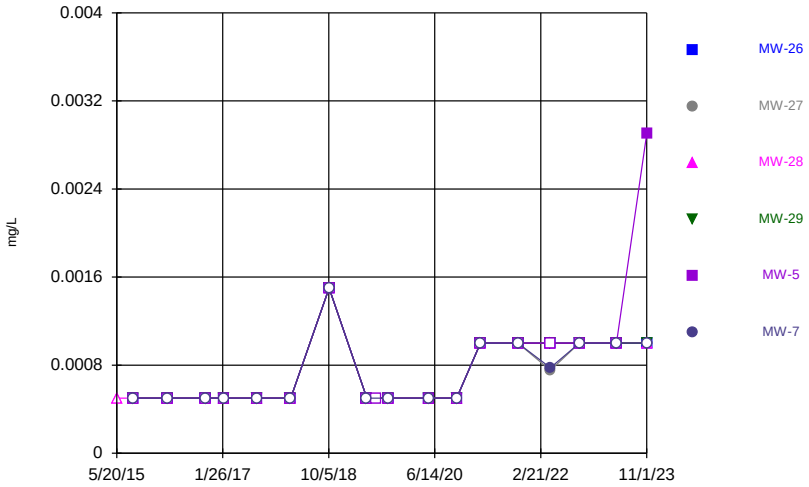


Constituent: Antimony Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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Hollow symbols indicate censored values.

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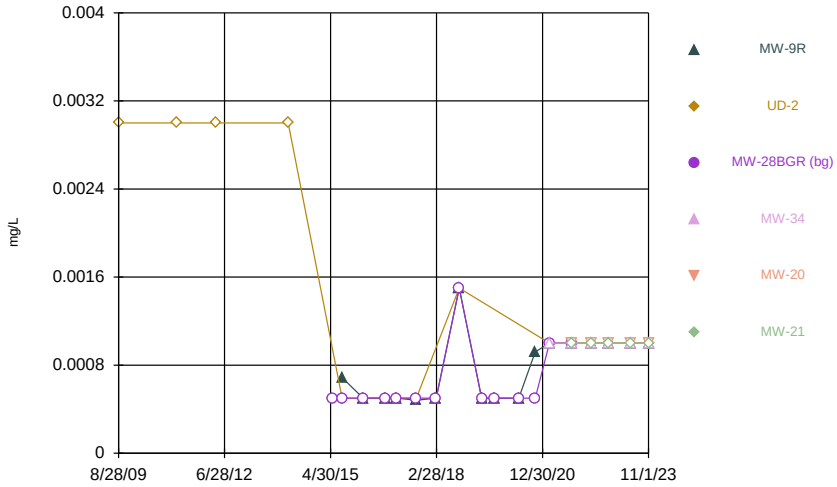

Constituent: Antimony Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
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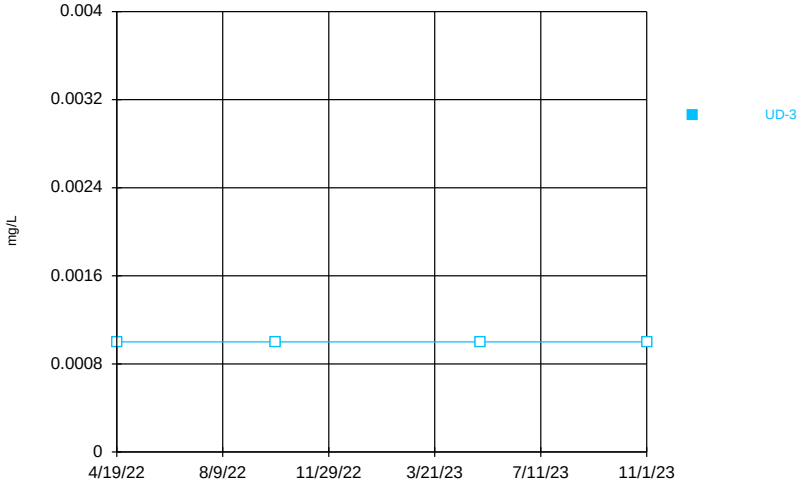

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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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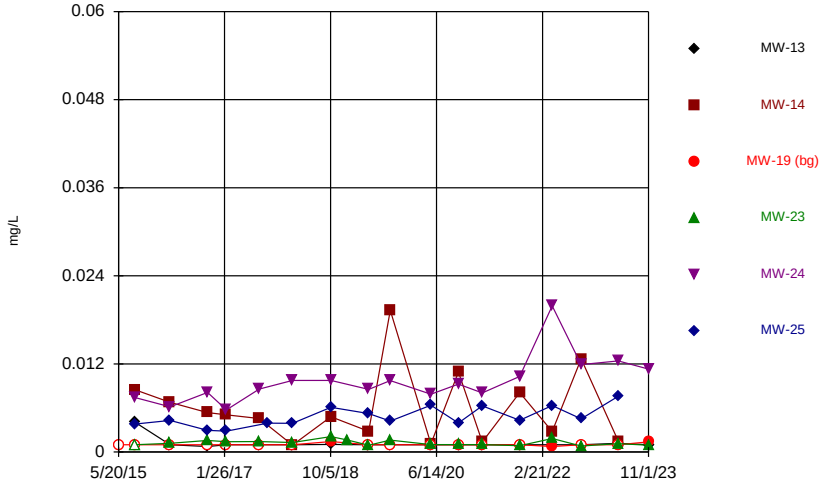
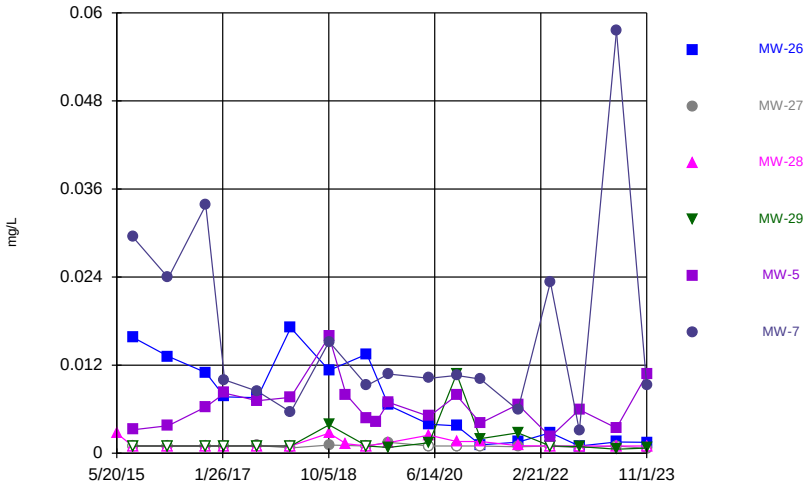


Constituent: Arsenic Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Arsenic Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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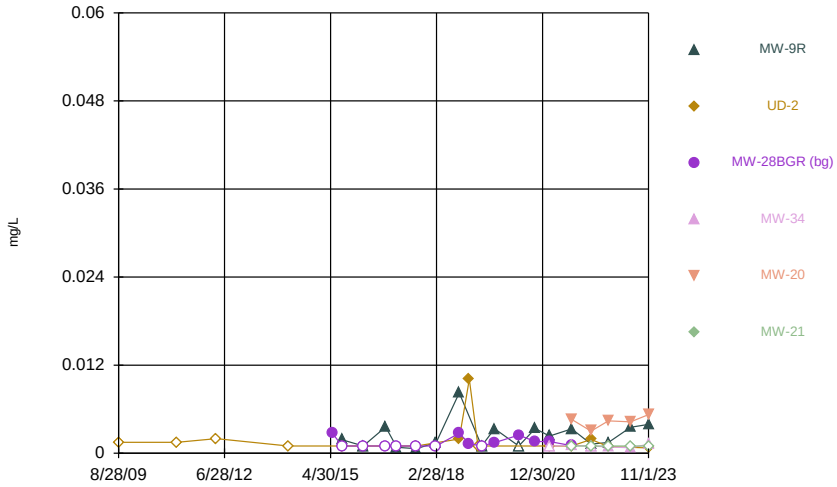
Time Series



Constituent: Arsenic Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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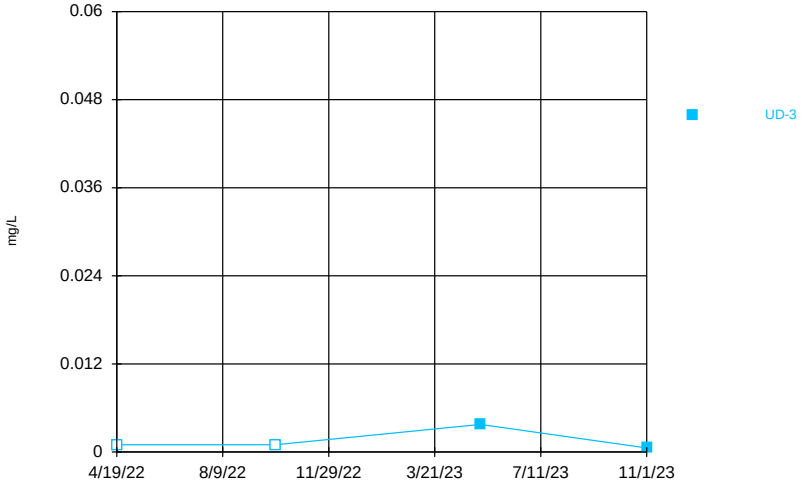
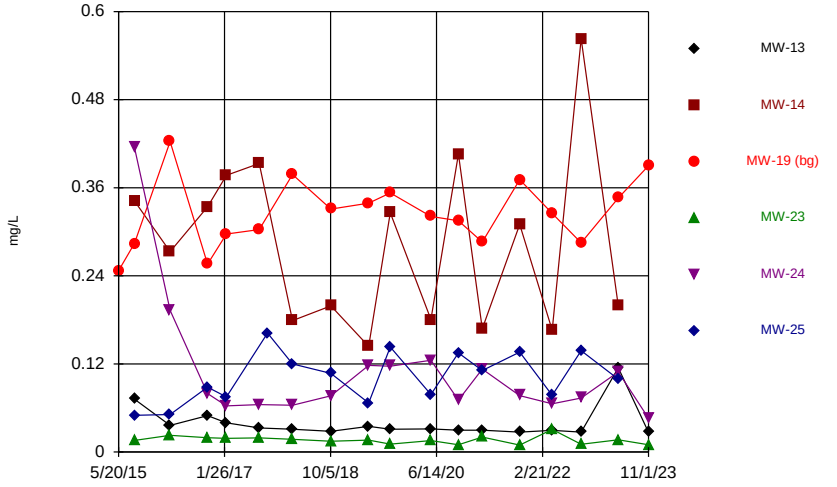


Constituent: Arsenic Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

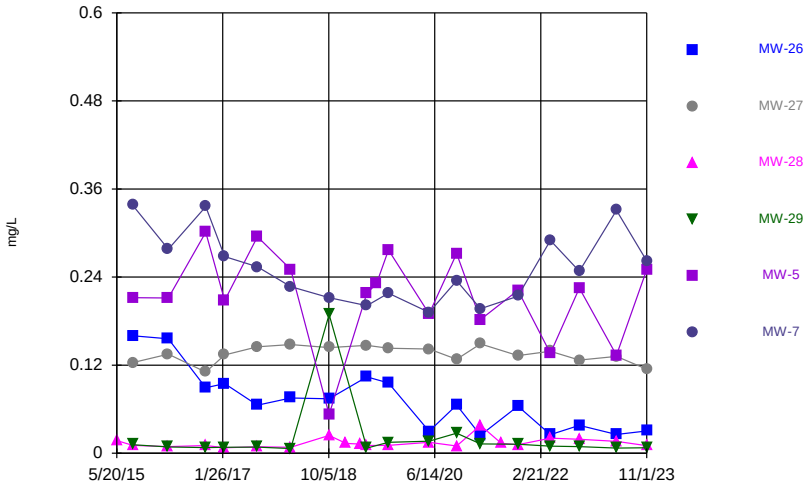
Time Series



Constituent: Barium Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Time Series



Constituent: Barium Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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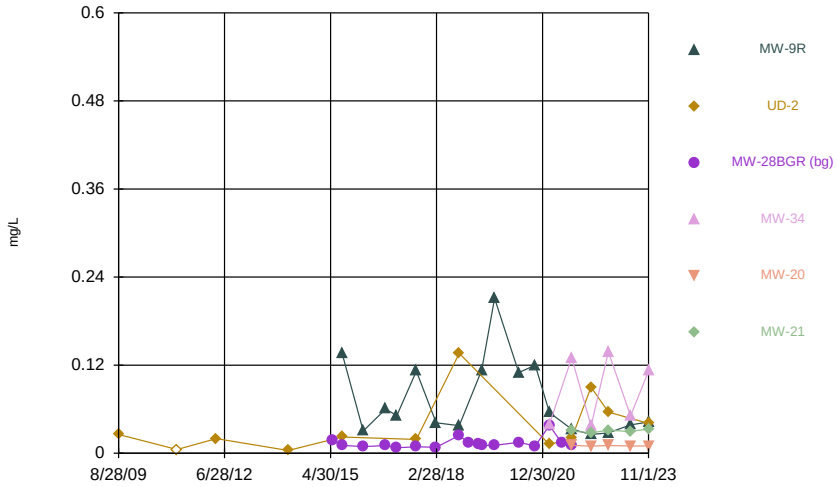
Time Series



Constituent: Barium Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
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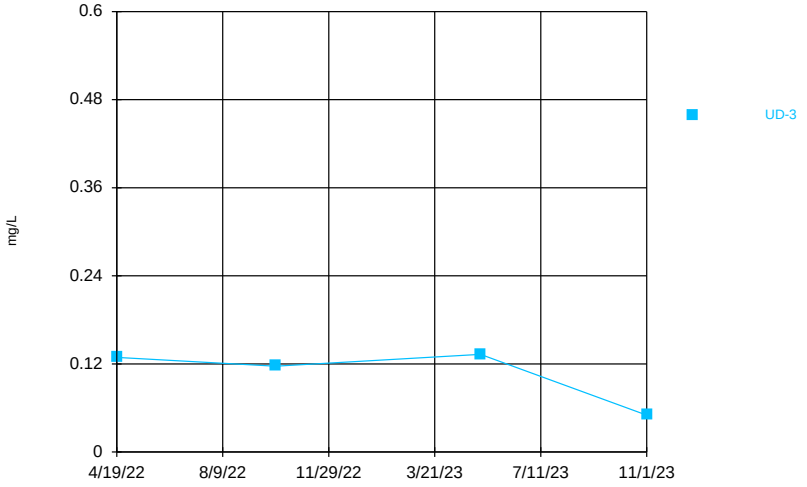
Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Time Series



Constituent: Barium Analysis Run 12/18/2023 5:56 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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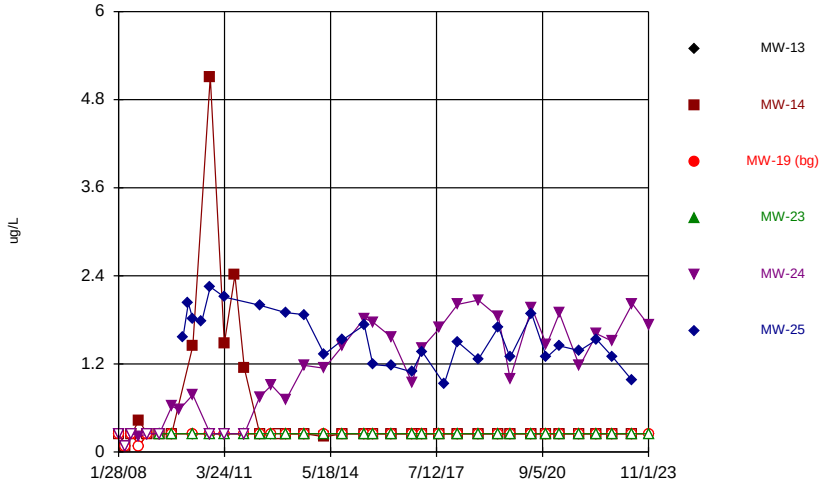

Constituent: Benzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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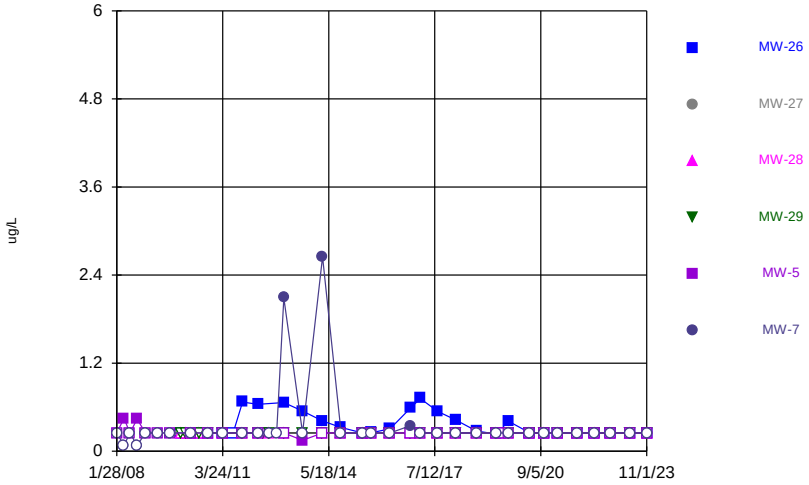
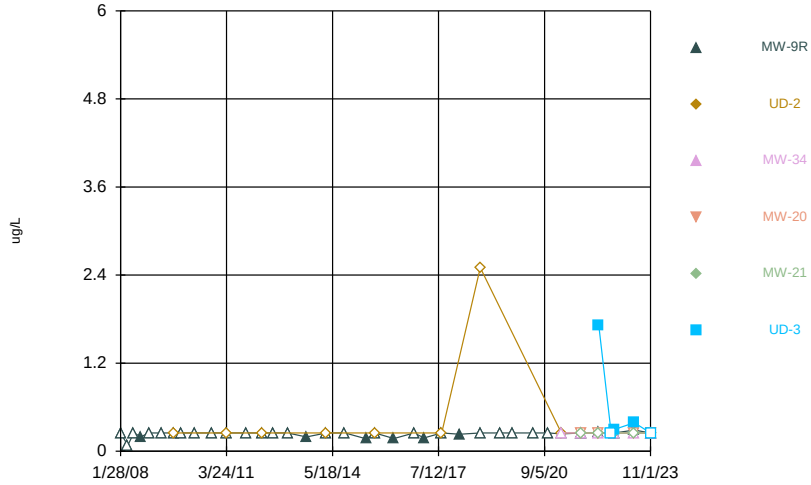


Constituent: Benzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Benzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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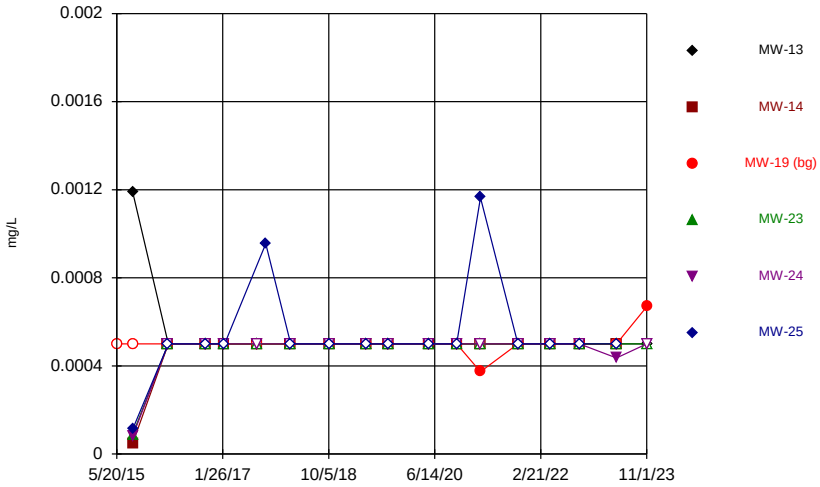
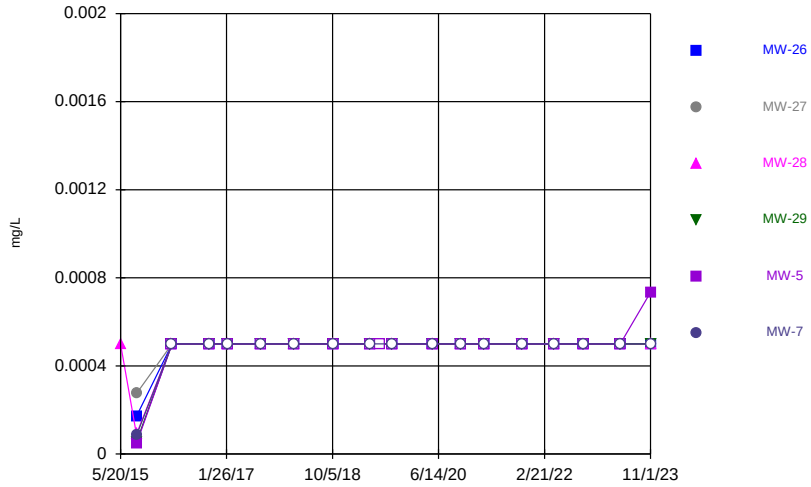


Constituent: Beryllium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

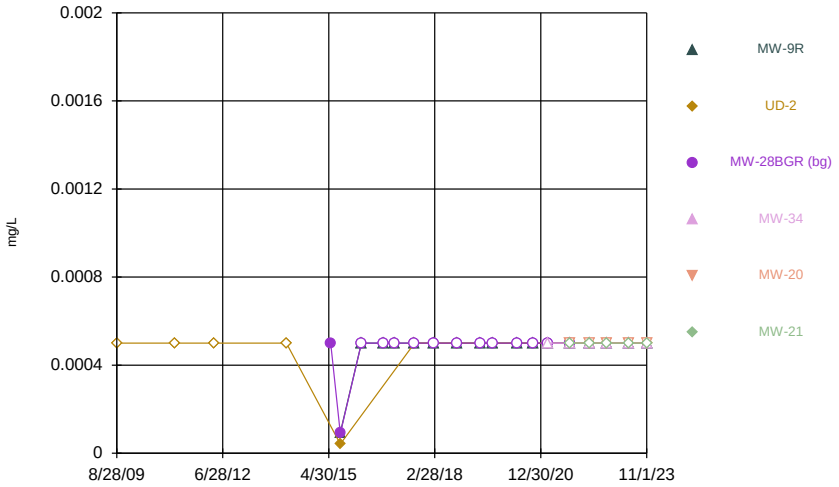
Time Series



Constituent: Beryllium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

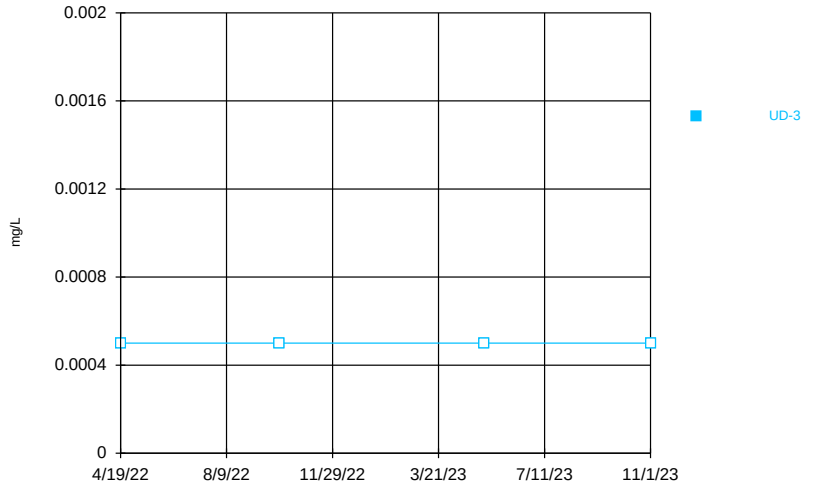
Time Series



Constituent: Beryllium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

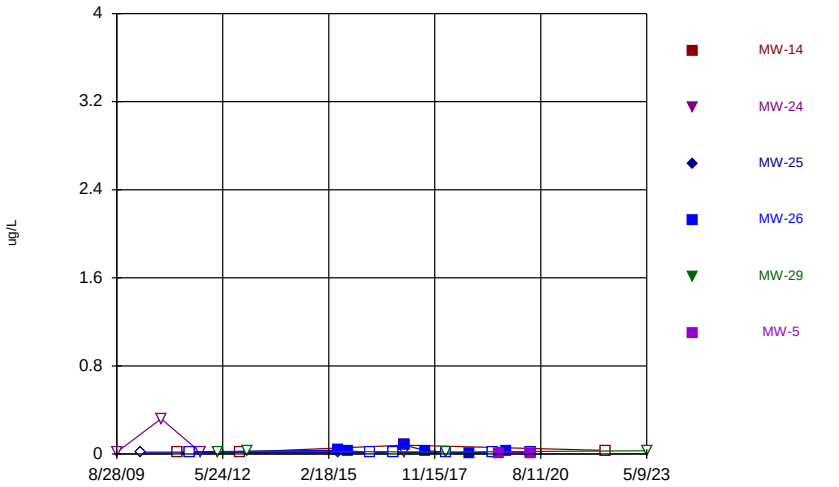
Time Series



Constituent: Beryllium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

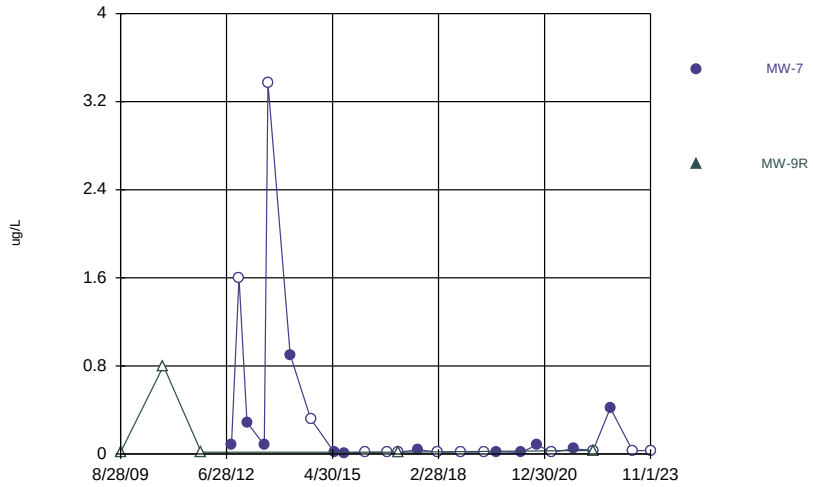
Time Series



Constituent: beta-BHC Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

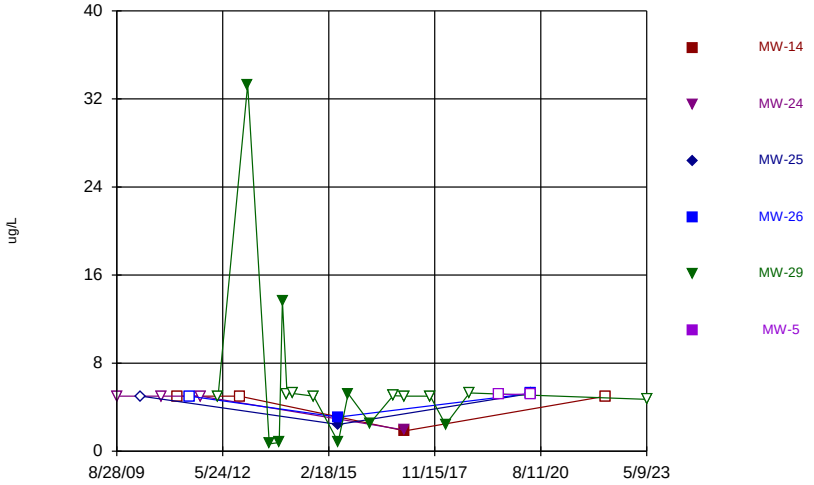
Time Series



Constituent: beta-BHC Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

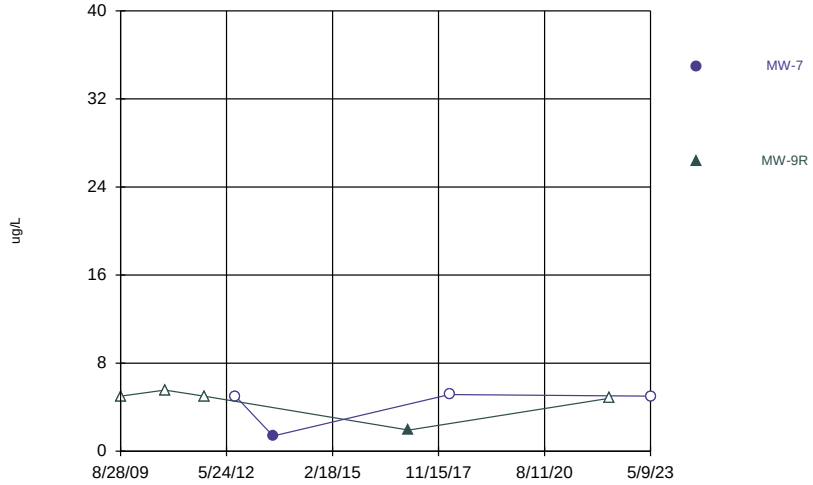
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

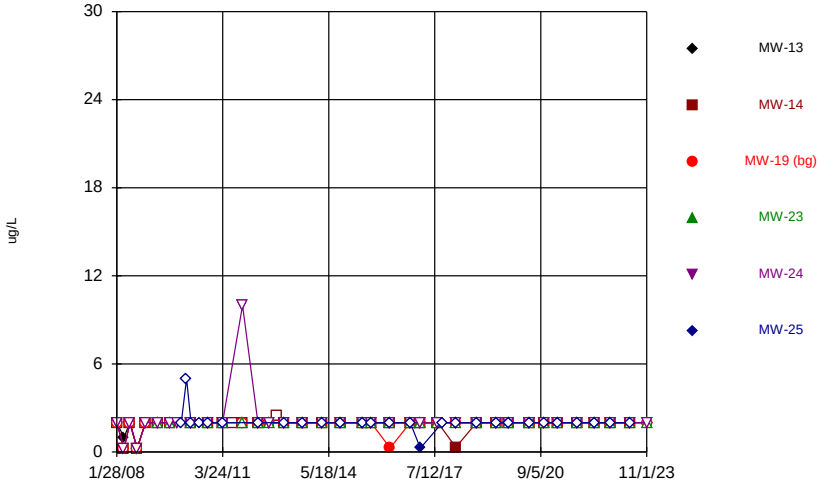
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

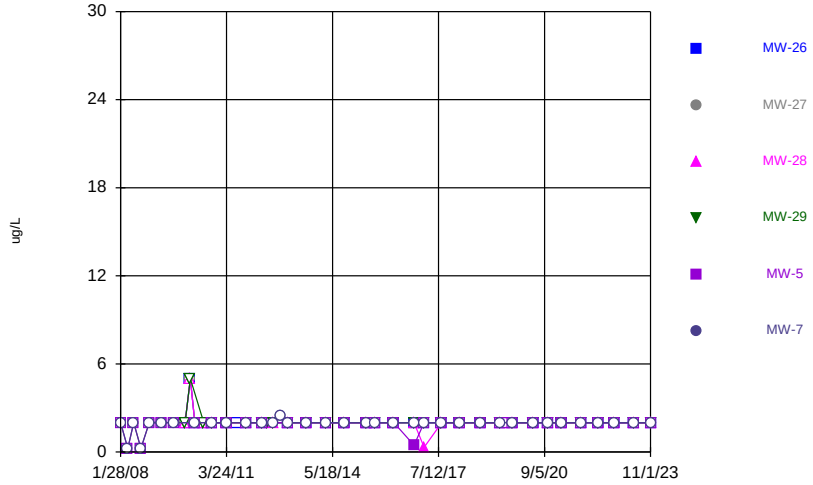
Time Series



Constituent: Bromomethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

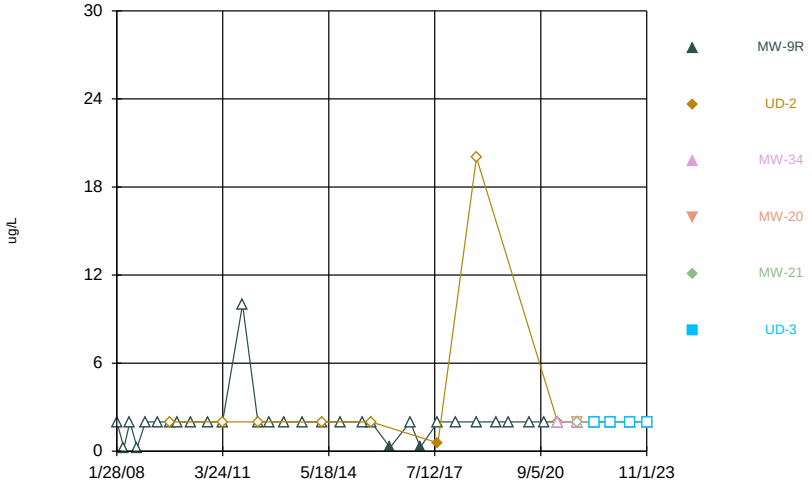
Time Series



Constituent: Bromomethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

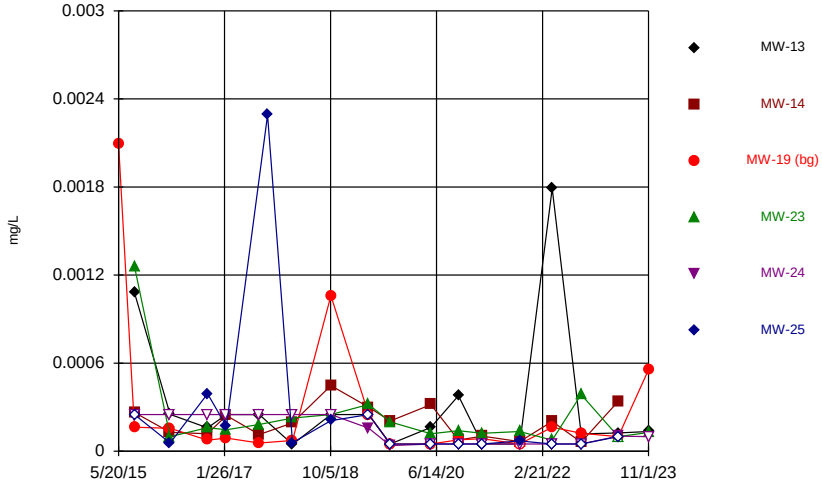
Time Series



Constituent: Bromomethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

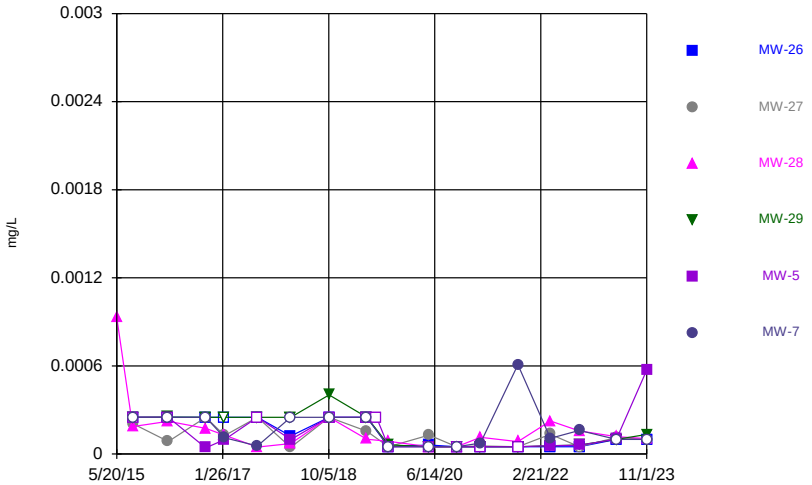
Time Series



Constituent: Cadmium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

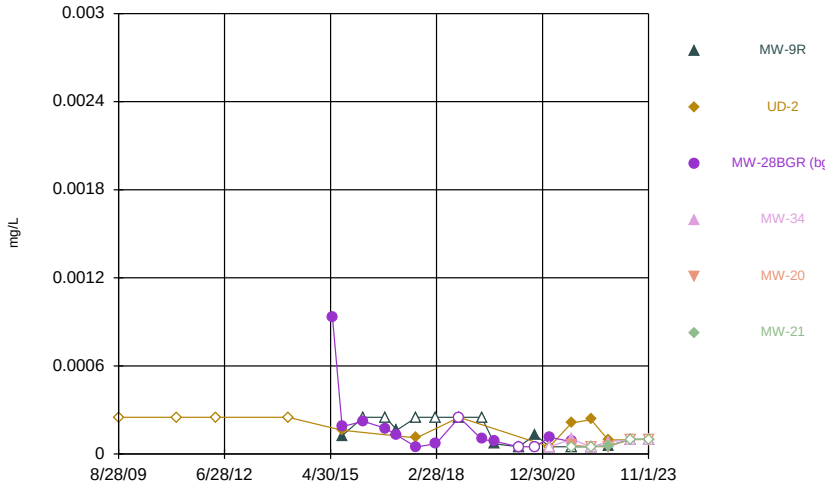
Time Series



Constituent: Cadmium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

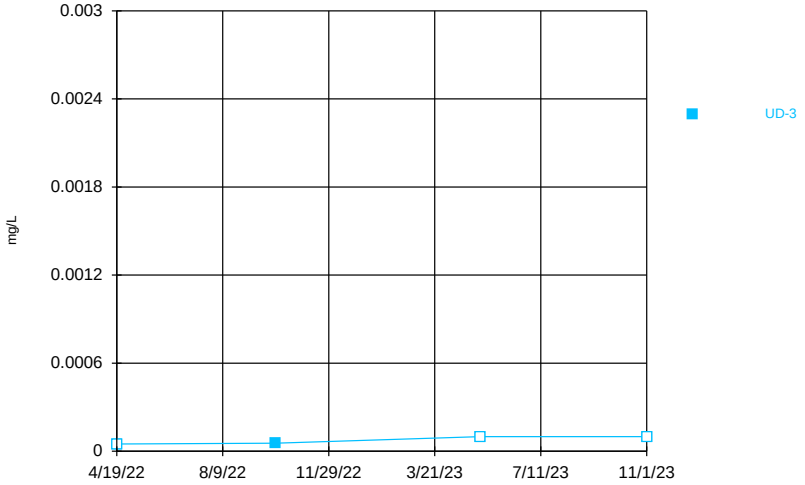
Time Series



Constituent: Cadmium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

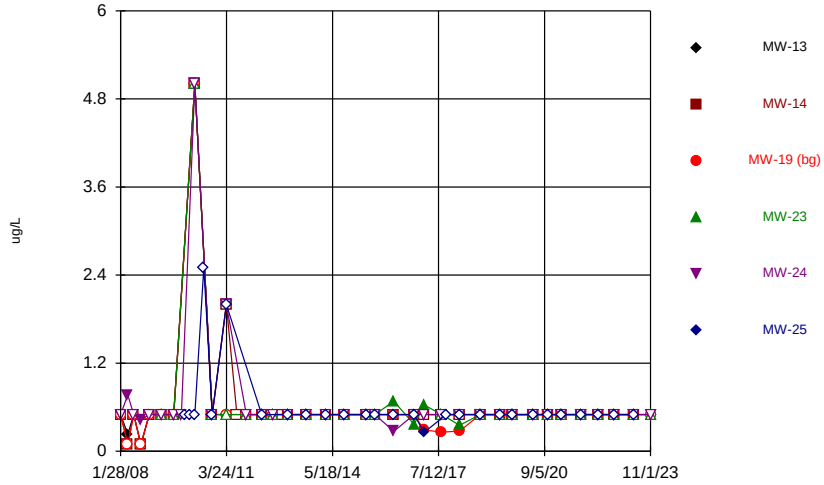
Time Series



Constituent: Cadmium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

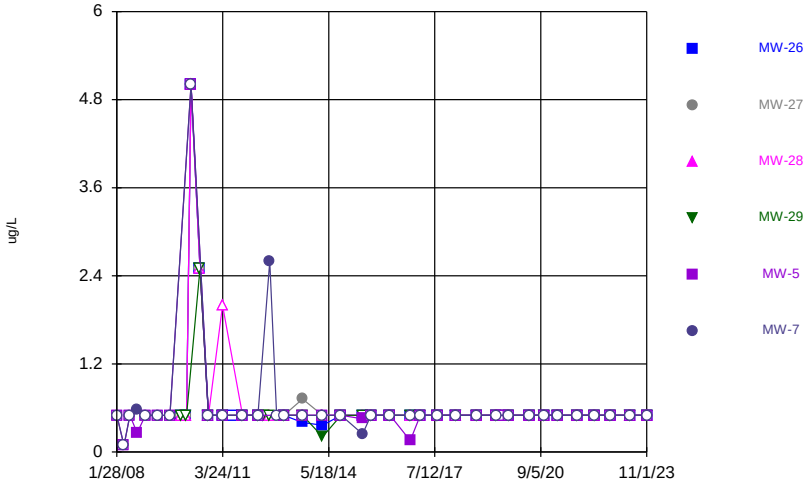
Time Series



Constituent: Carbon disulfide Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Carbon disulfide Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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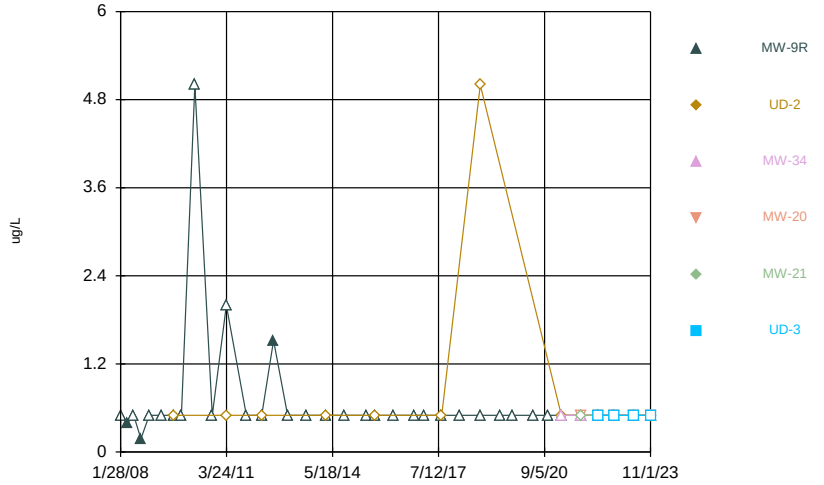

Constituent: Carbon disulfide Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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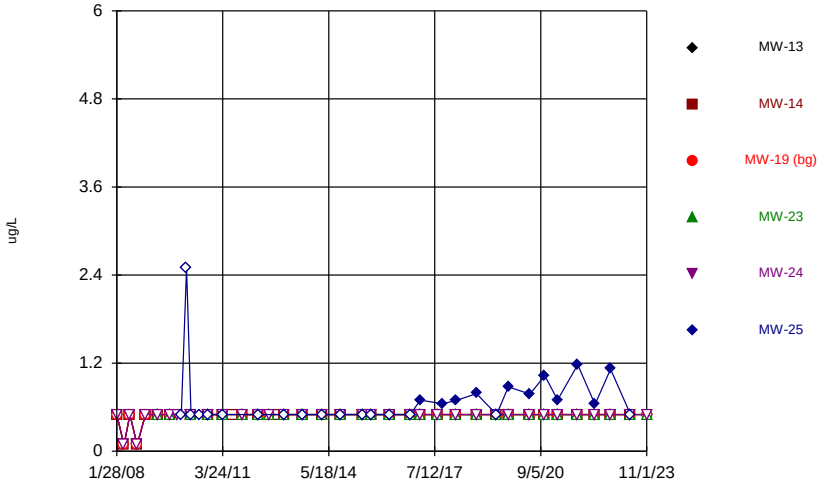
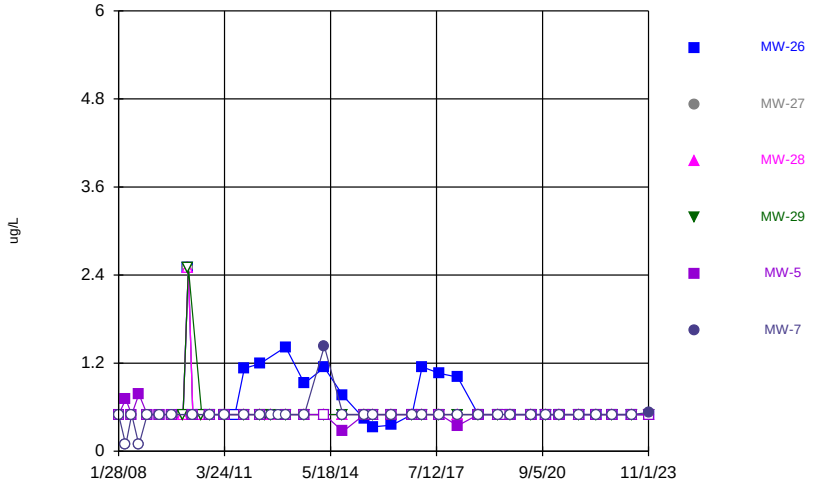


Constituent: Chlorobenzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

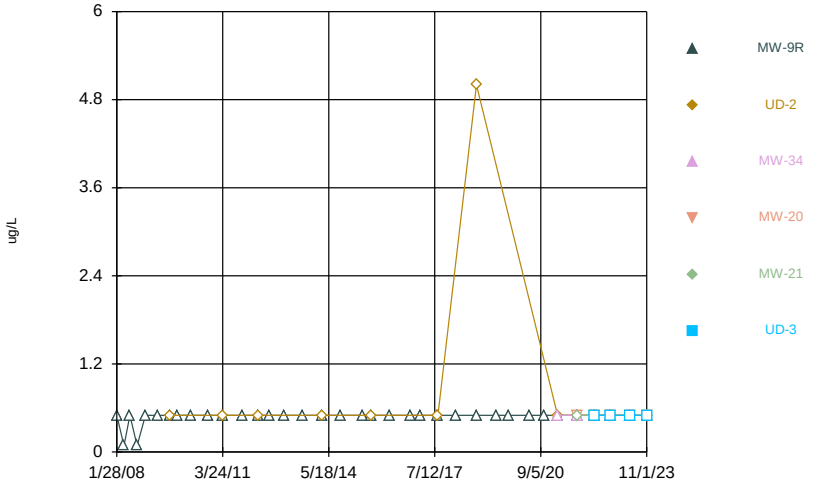
Time Series



Constituent: Chlorobenzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chlorobenzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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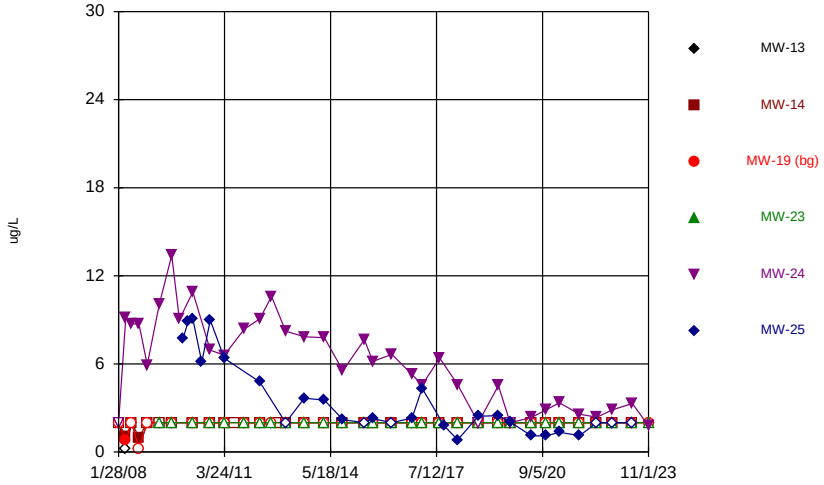
Time Series



Constituent: Chloroethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
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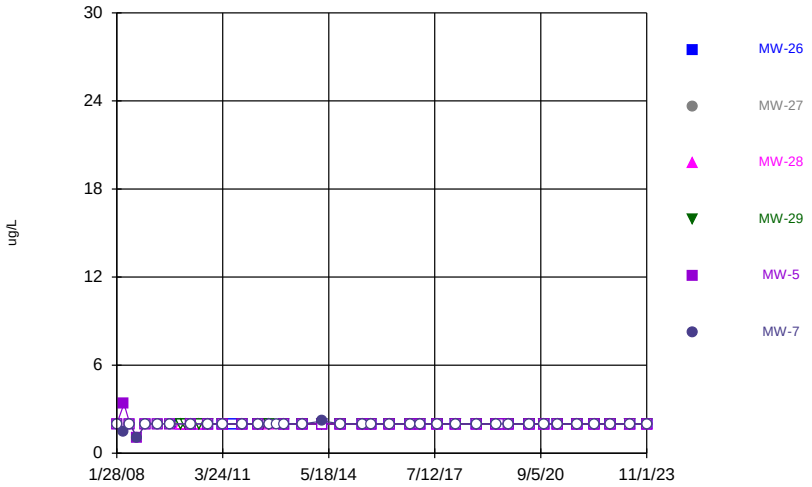
Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

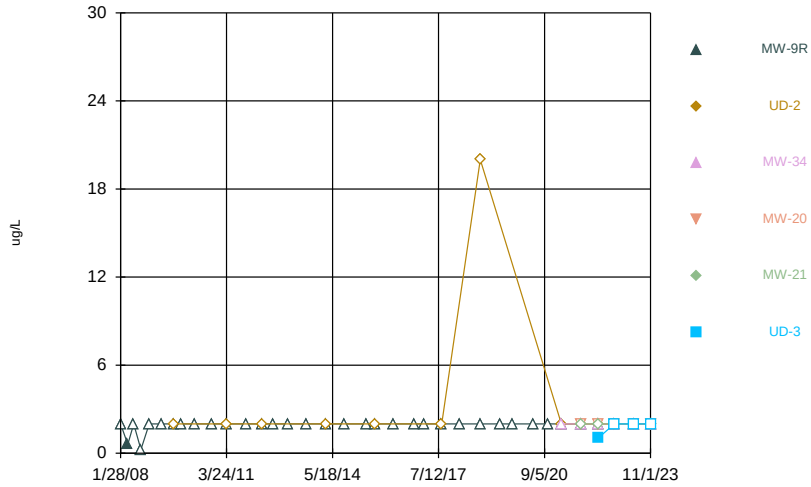
Time Series



Constituent: Chloroethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

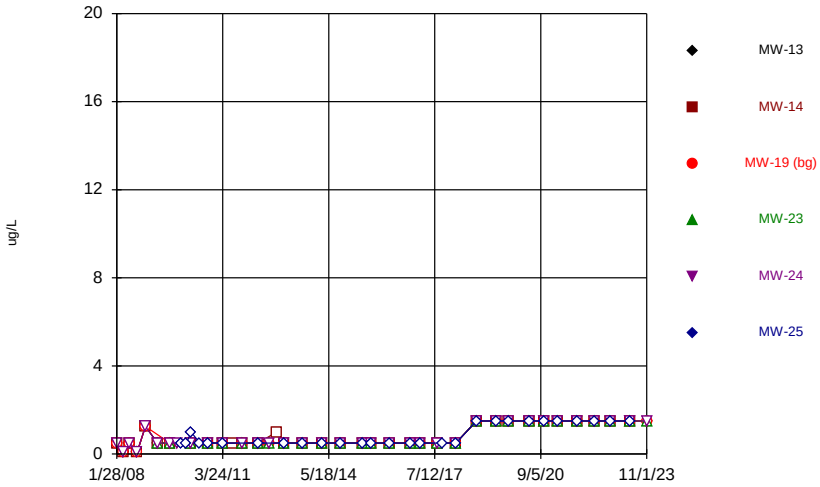
Time Series



Constituent: Chloroethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

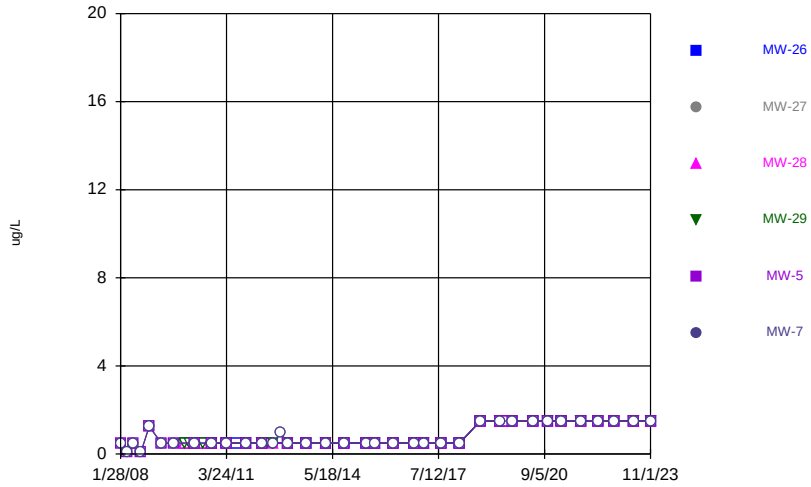
Time Series



Constituent: Chloroform Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

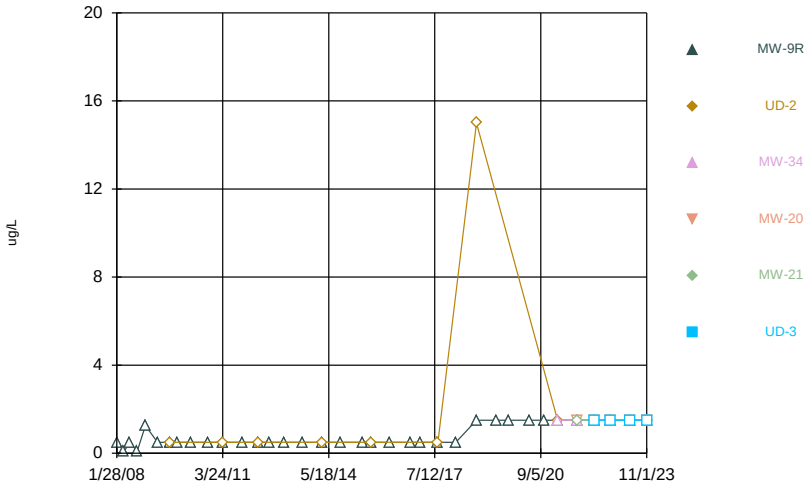
Time Series



Constituent: Chloroform Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

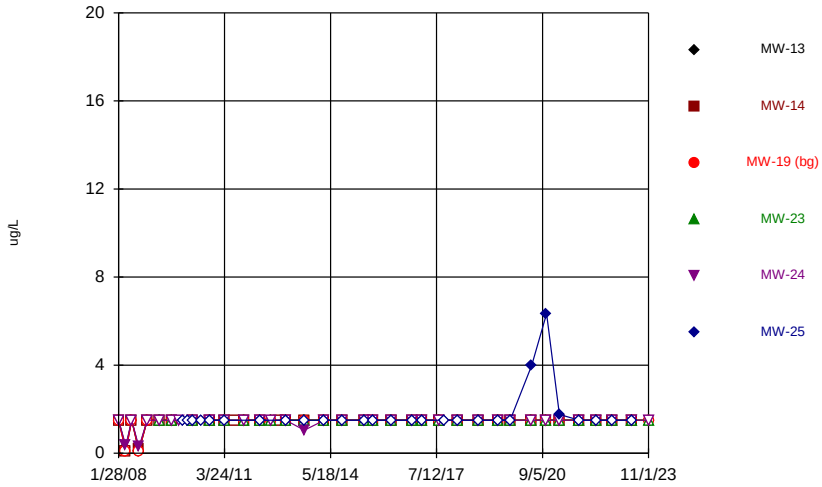
Time Series



Constituent: Chloroform Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

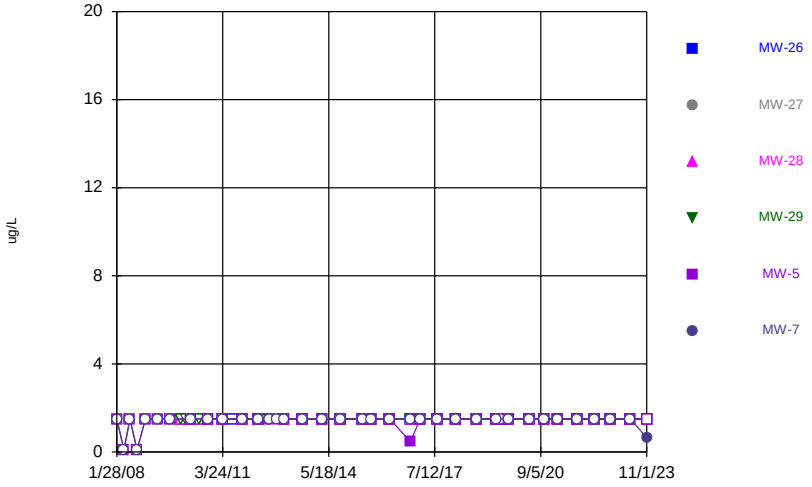
Time Series



Constituent: Chloromethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chloromethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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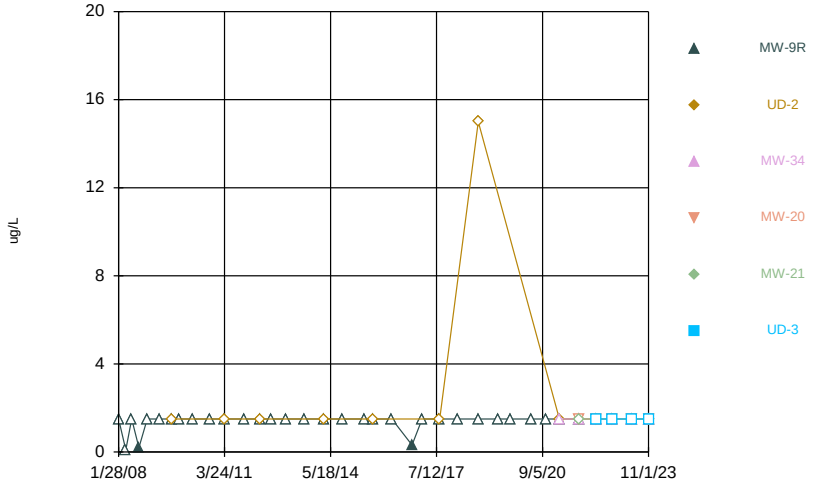
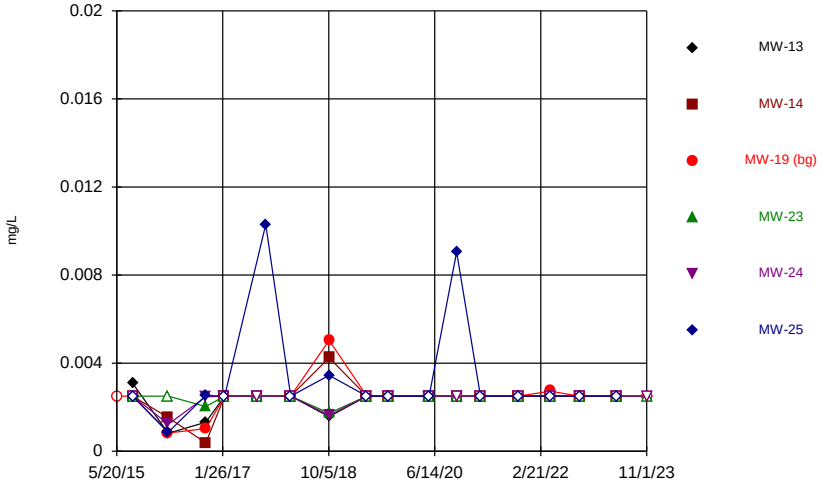


Constituent: Chloromethane Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

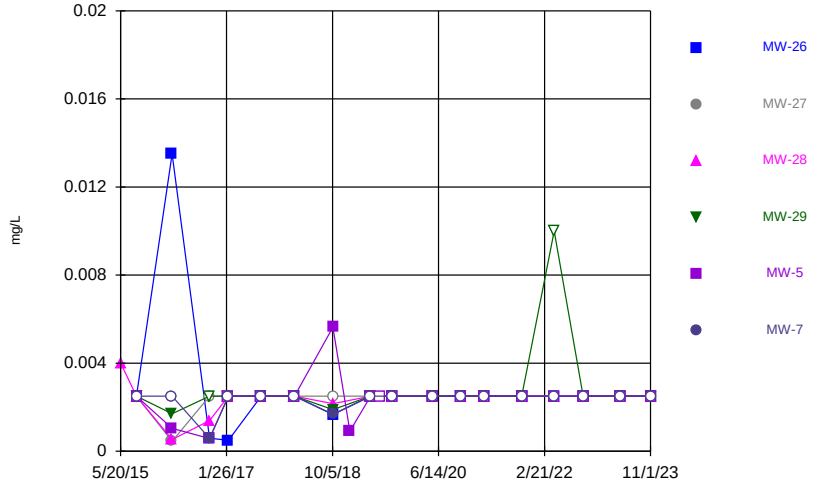
Time Series



Constituent: Chromium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

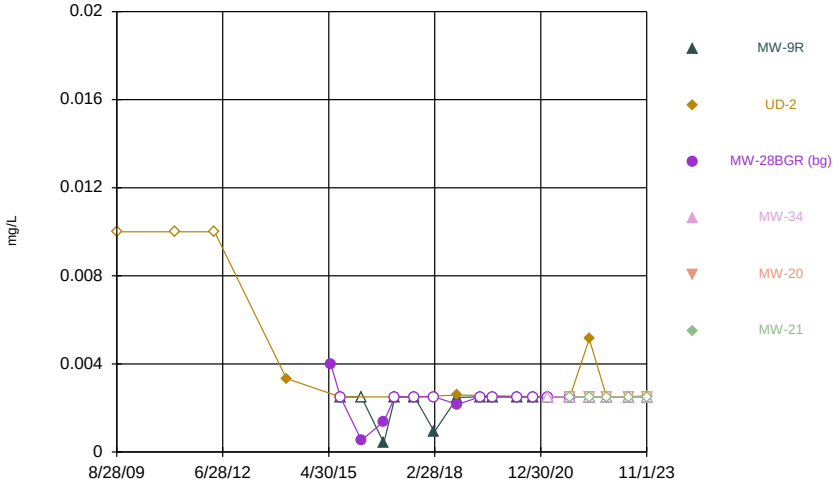
Time Series



Constituent: Chromium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

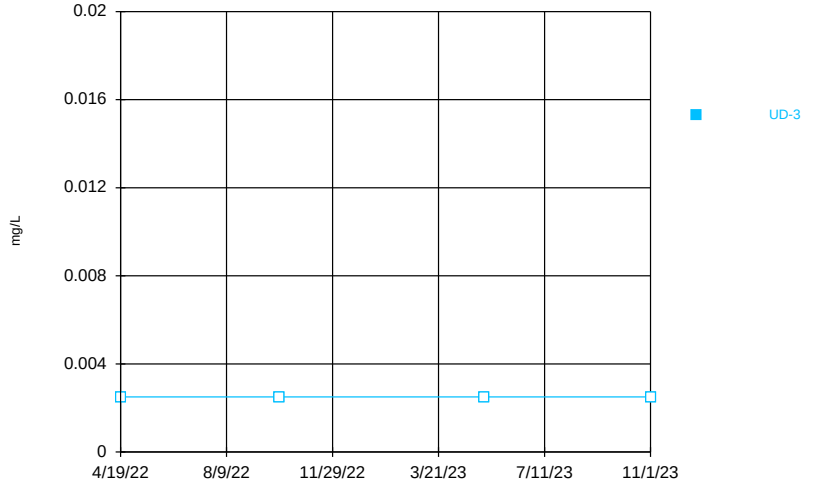
Time Series



Constituent: Chromium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

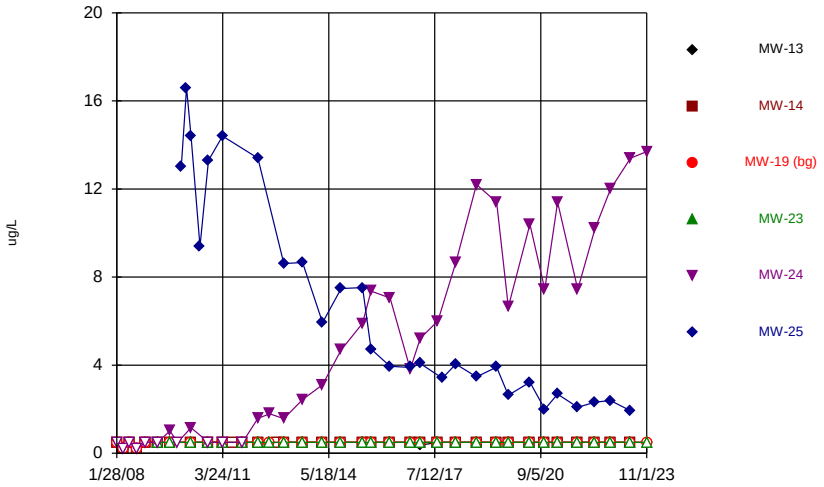
Time Series



Constituent: Chromium Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

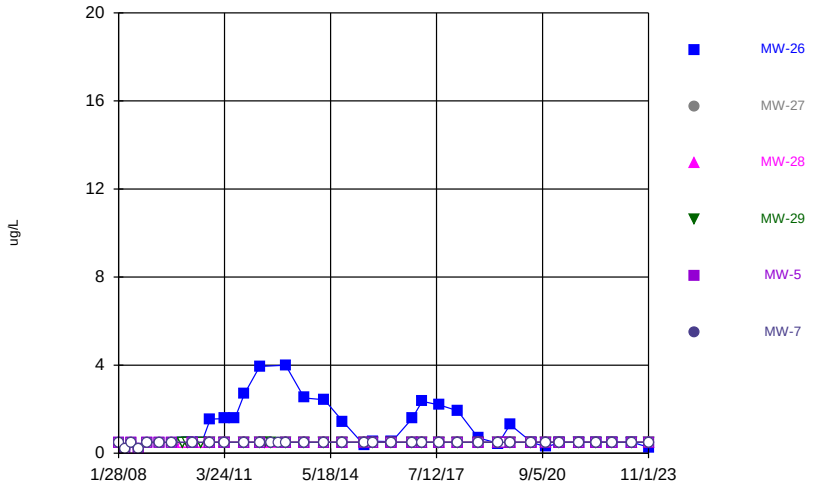
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

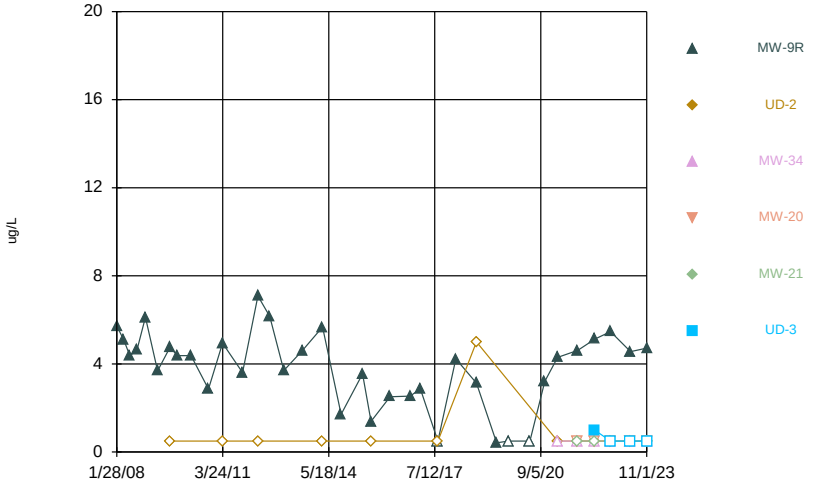
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

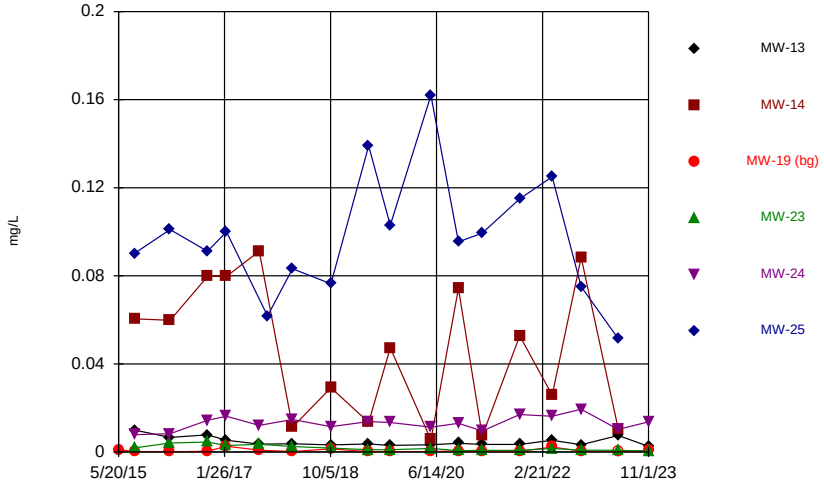
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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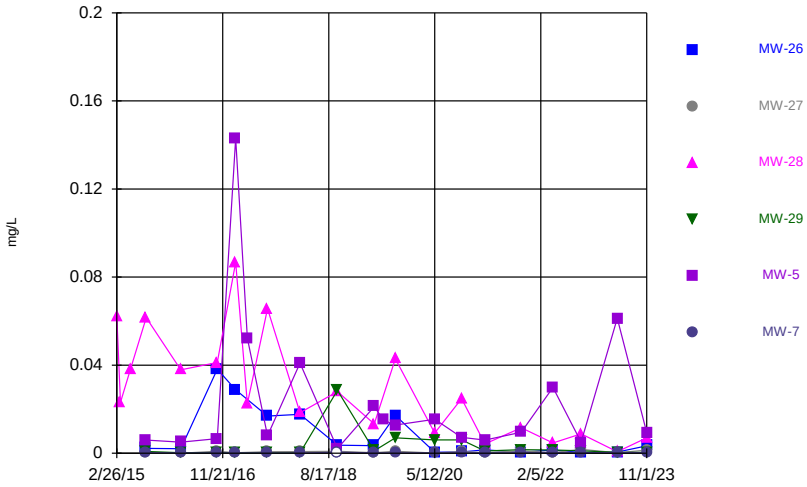
Hollow symbols indicate censored values.

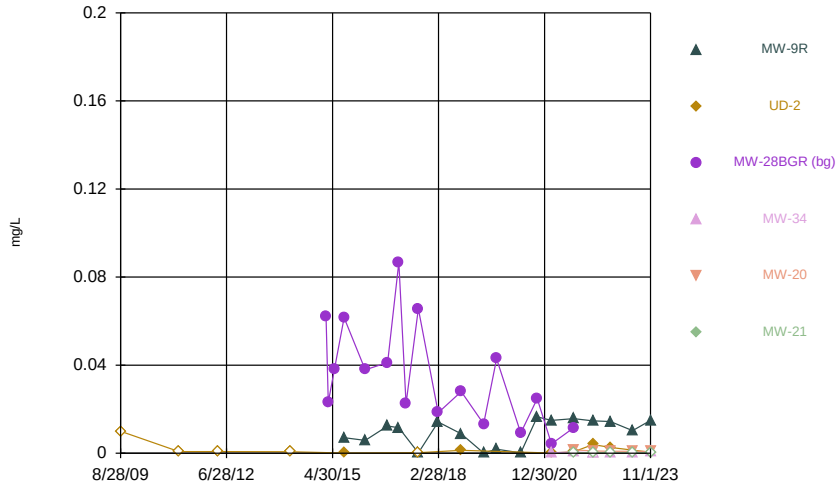
Time Series



Constituent: Cobalt Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

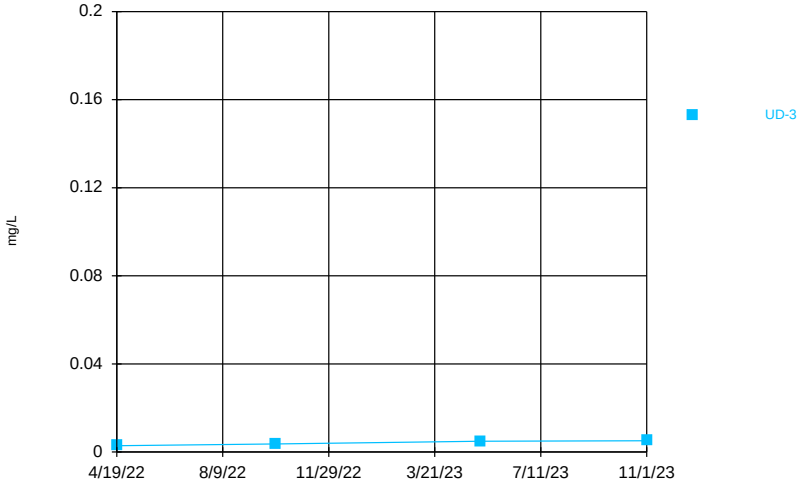
Time Series



Constituent: Cobalt Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Time Series



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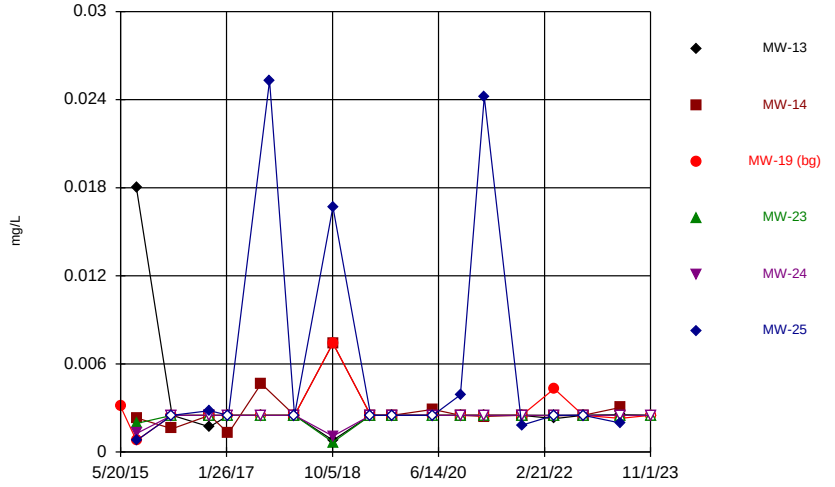
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

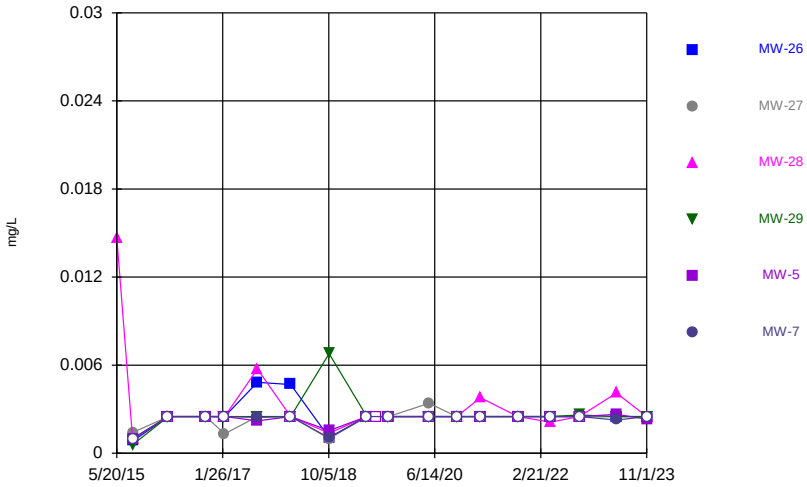
Time Series



Constituent: Copper Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Copper Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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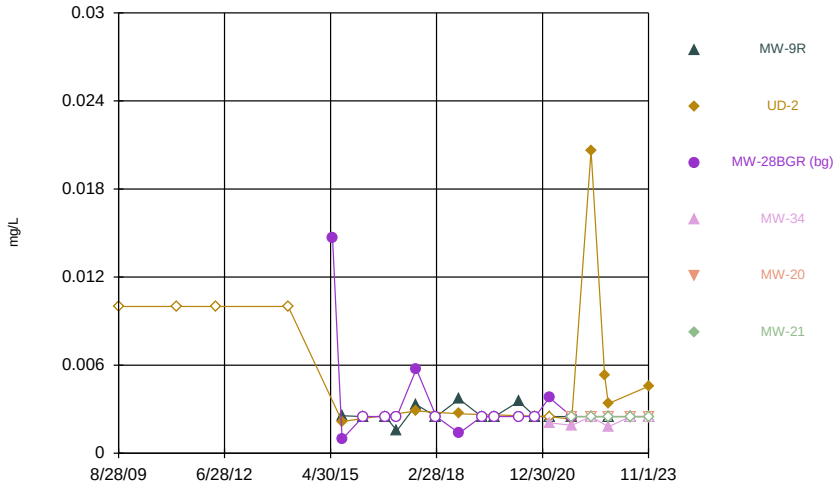
Time Series



Constituent: Copper Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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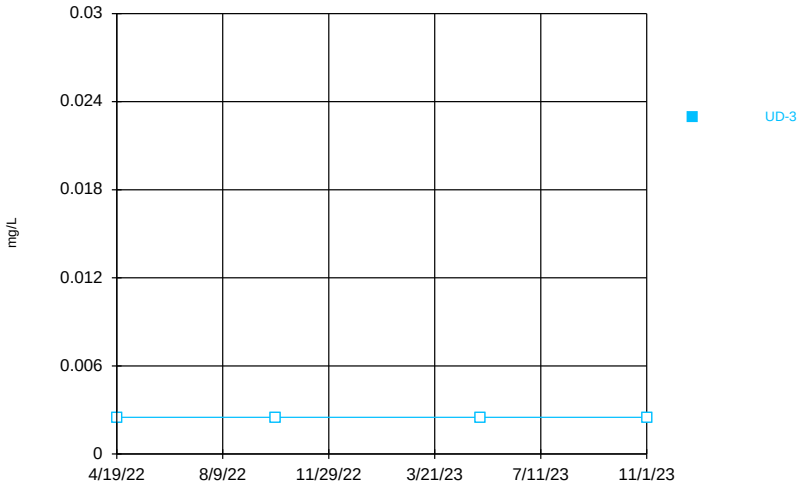
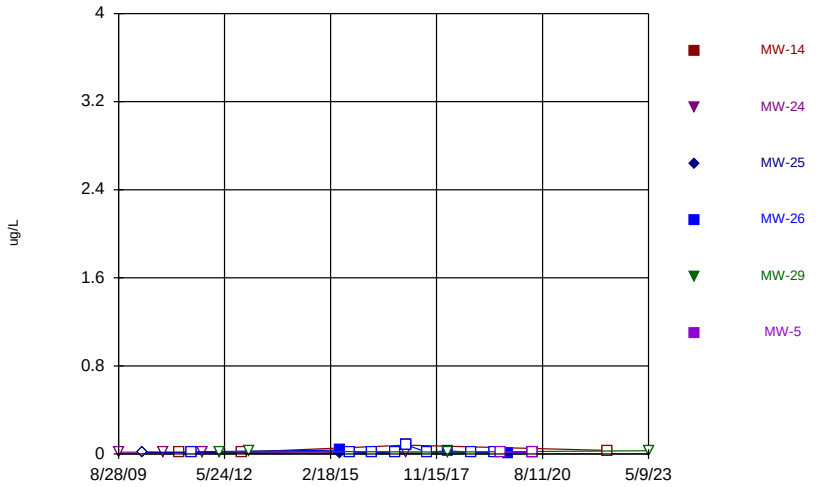
Time Series



Constituent: Copper Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

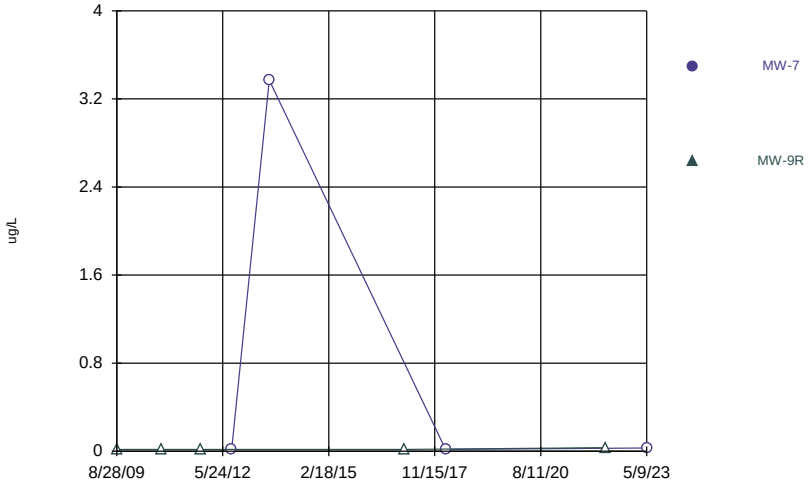
Time Series



Constituent: Endosulfan II Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

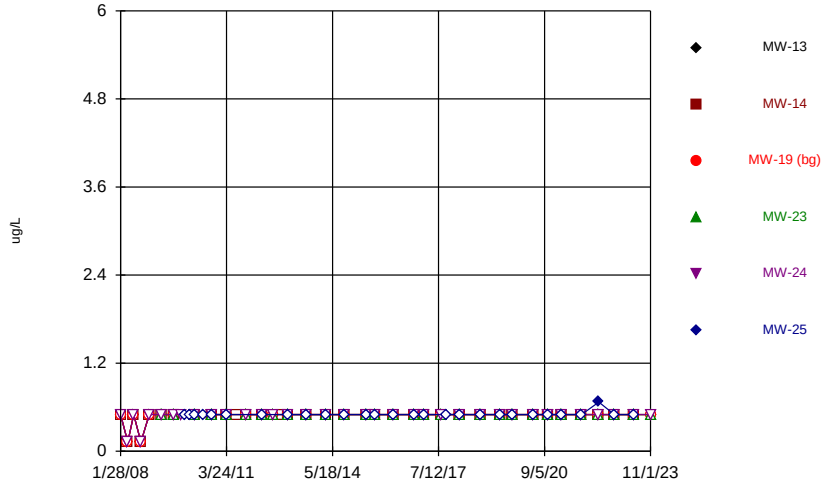
Time Series



Constituent: Endosulfan II Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

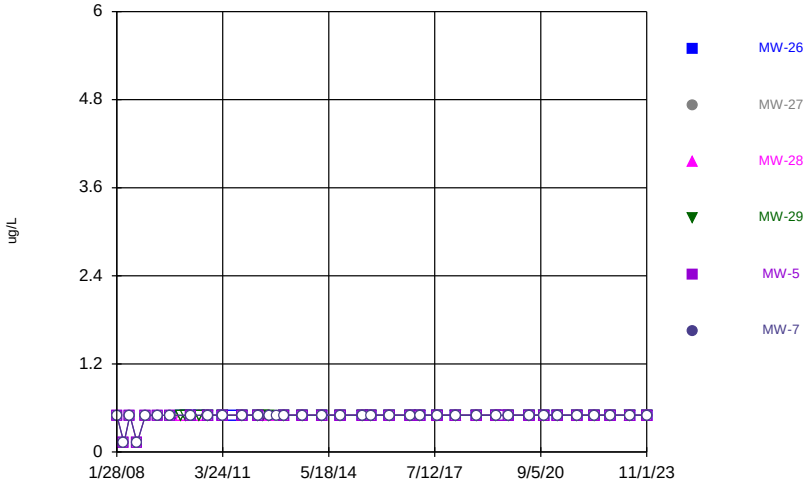
Time Series



Constituent: Ethylbenzene Analysis Run 12/18/2023 5:57 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

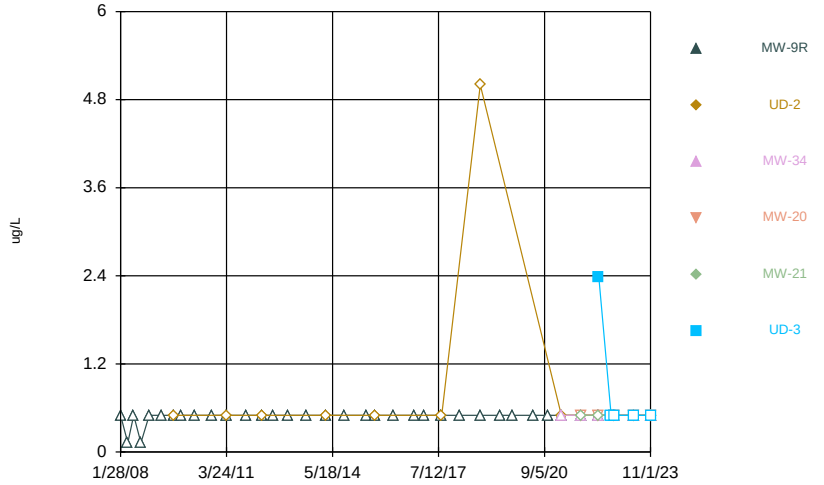
Time Series



Constituent: Ethylbenzene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

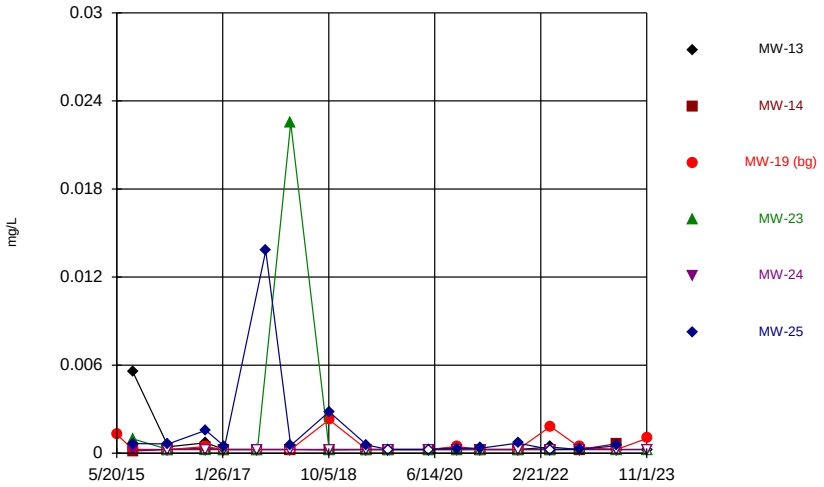
Time Series



Constituent: Ethylbenzene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

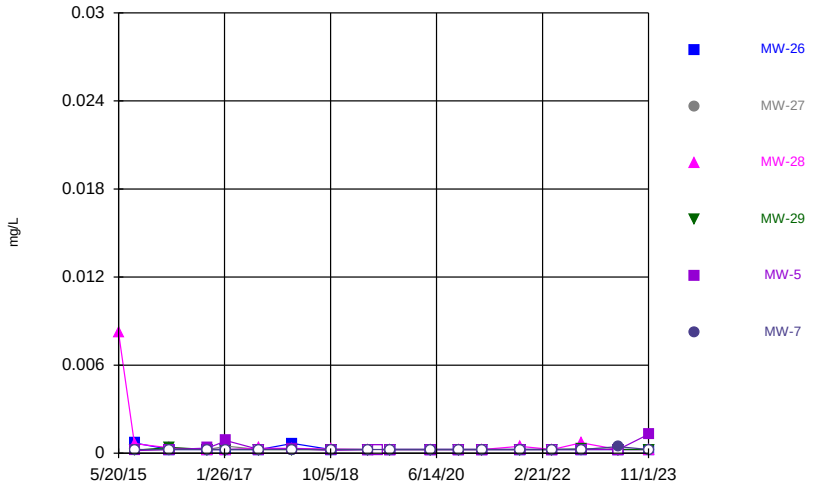
Time Series



Constituent: Lead Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

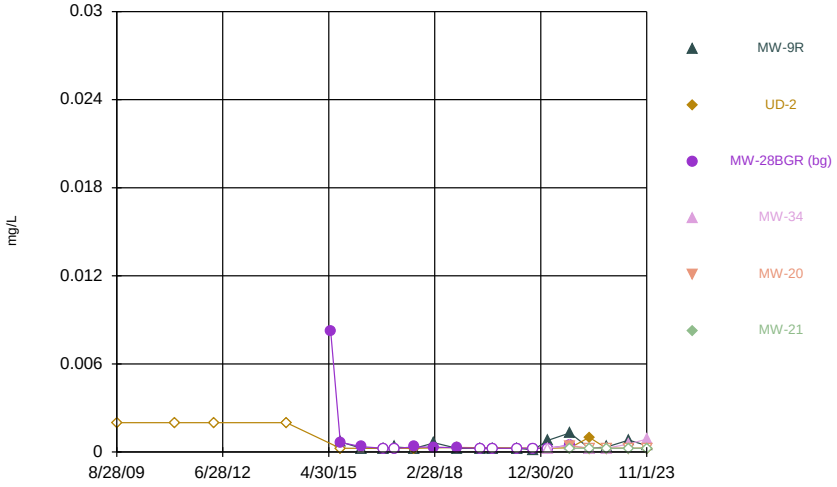
Time Series



Constituent: Lead Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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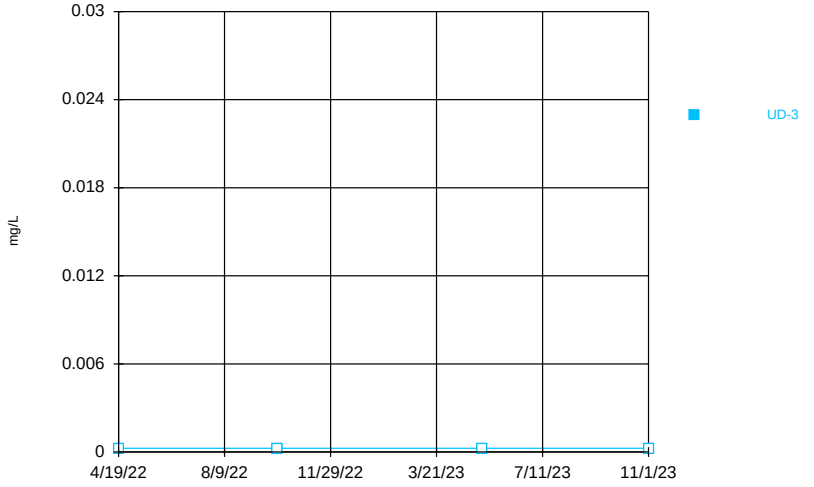

Constituent: Lead Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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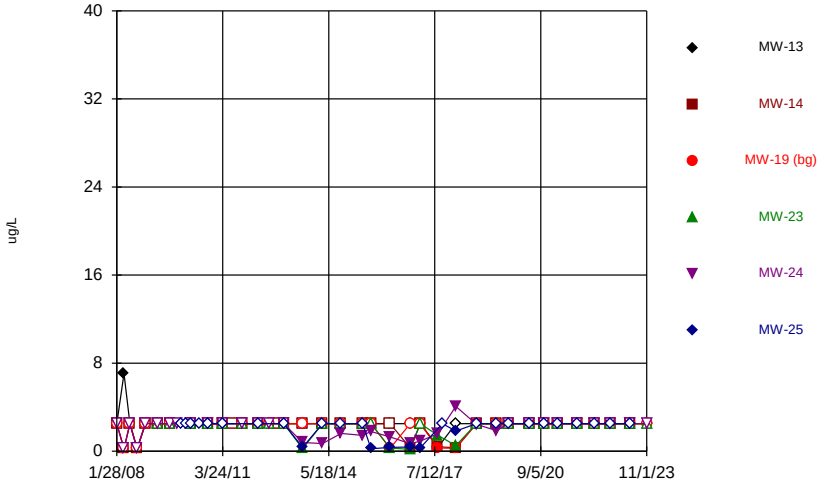
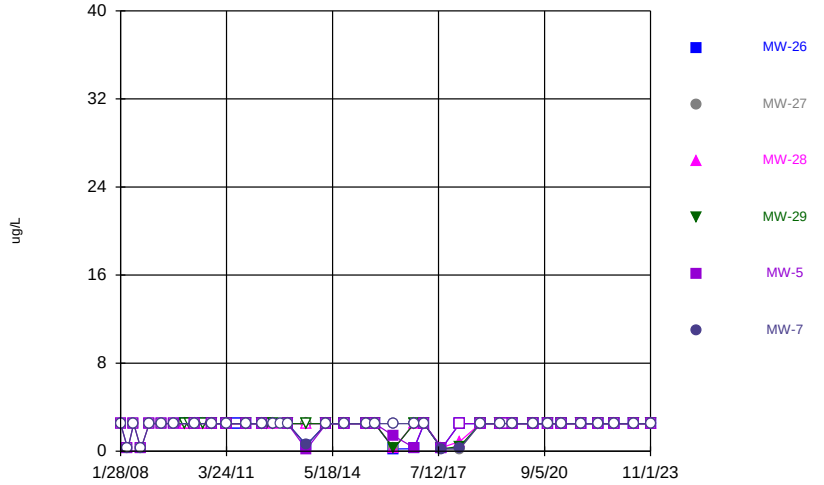
Time Series



Constituent: Methylene Chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

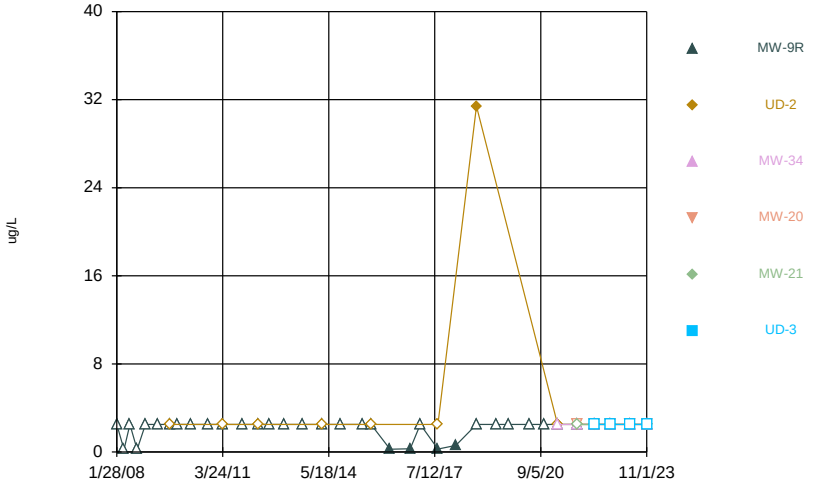
Time Series



Constituent: Methylene Chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

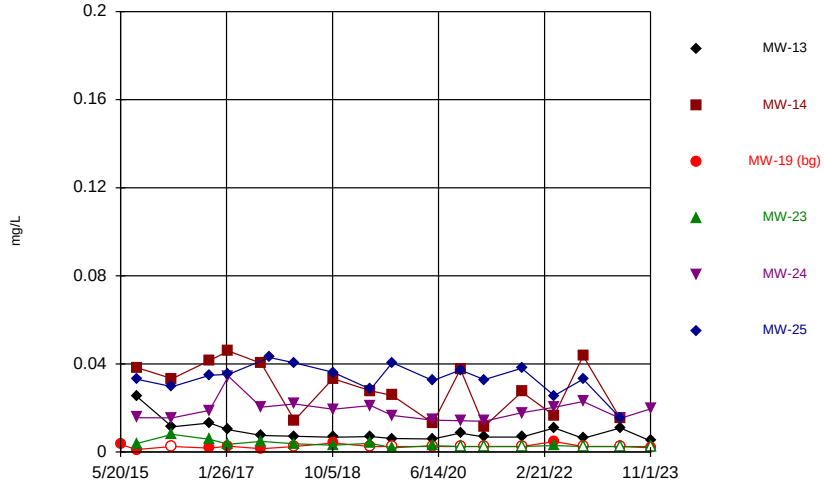
Time Series



Constituent: Methylene Chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

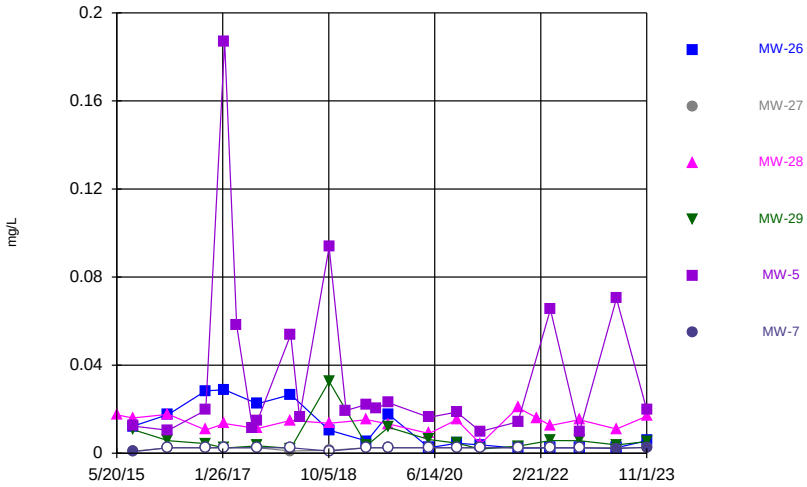
Time Series



Constituent: Nickel Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

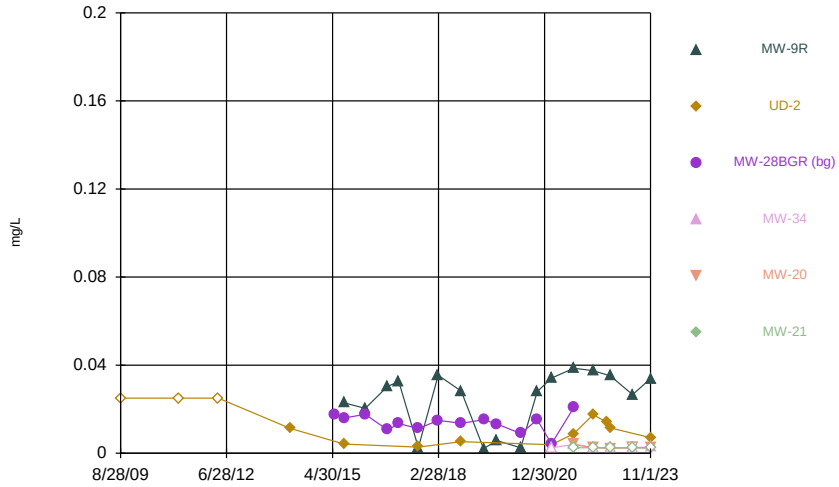
Time Series



Constituent: Nickel Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

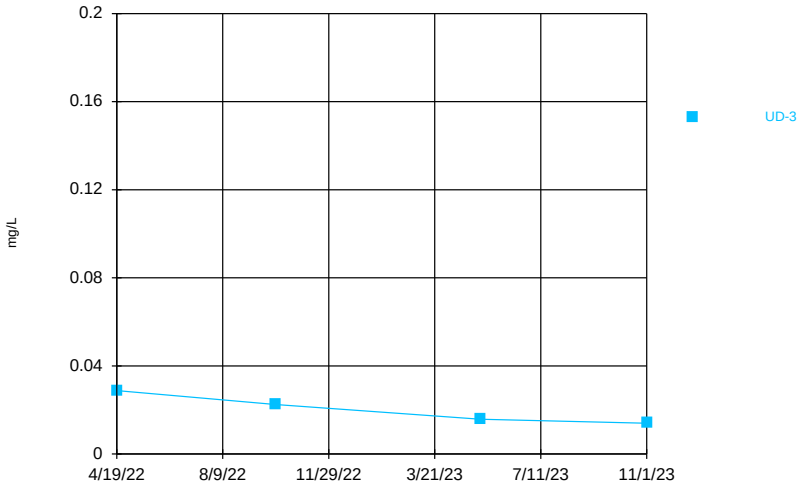
Time Series



Constituent: Nickel Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

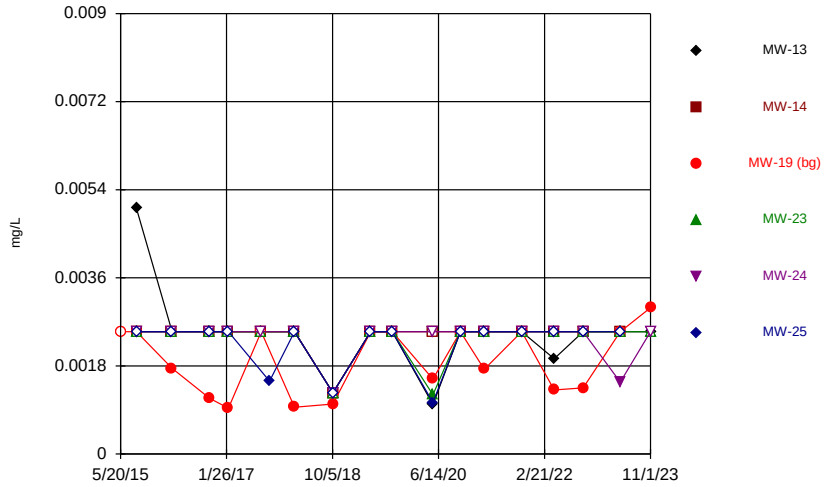
Time Series



Constituent: Nickel Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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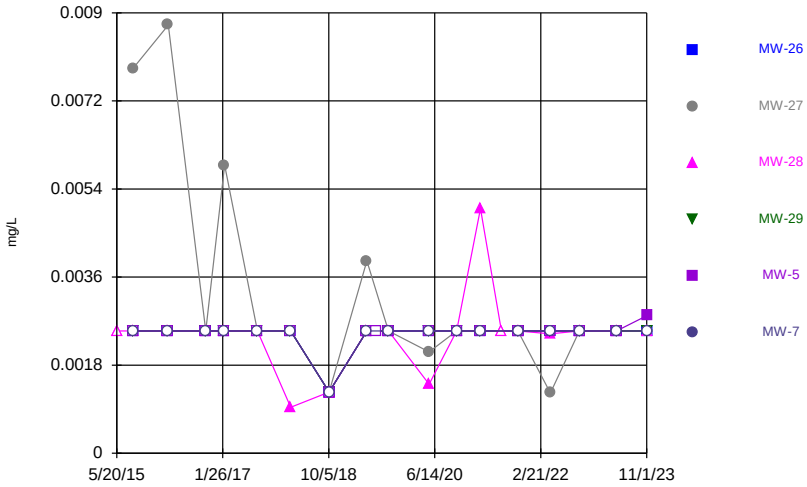
Time Series



Constituent: Selenium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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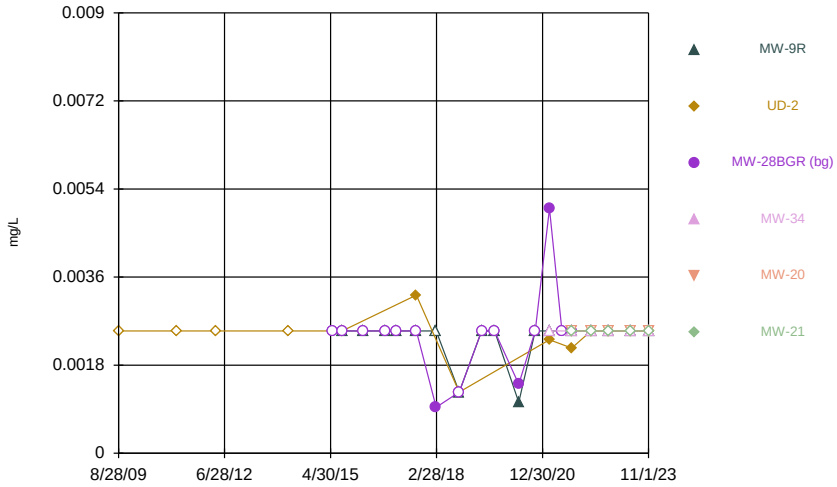

Constituent: Selenium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
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Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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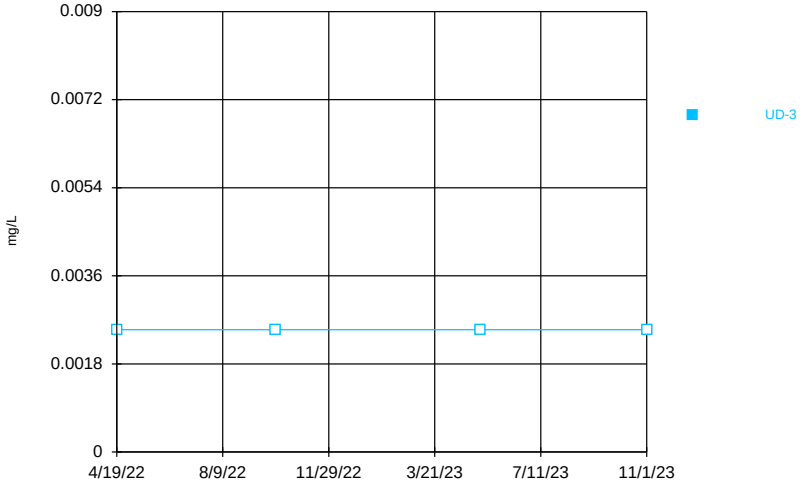
Time Series



Constituent: Selenium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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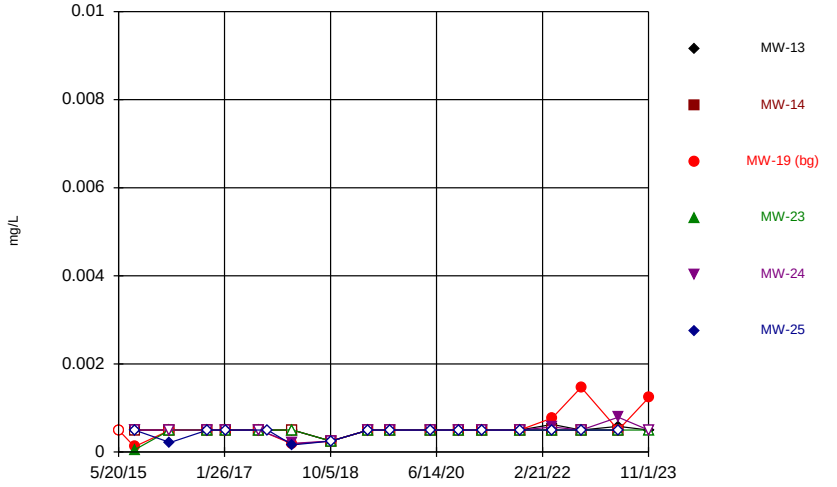
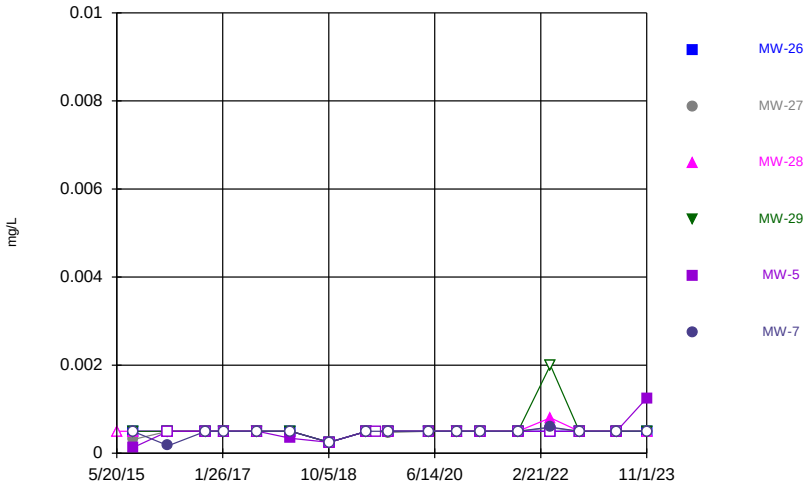
Time Series



Constituent: Silver Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Silver Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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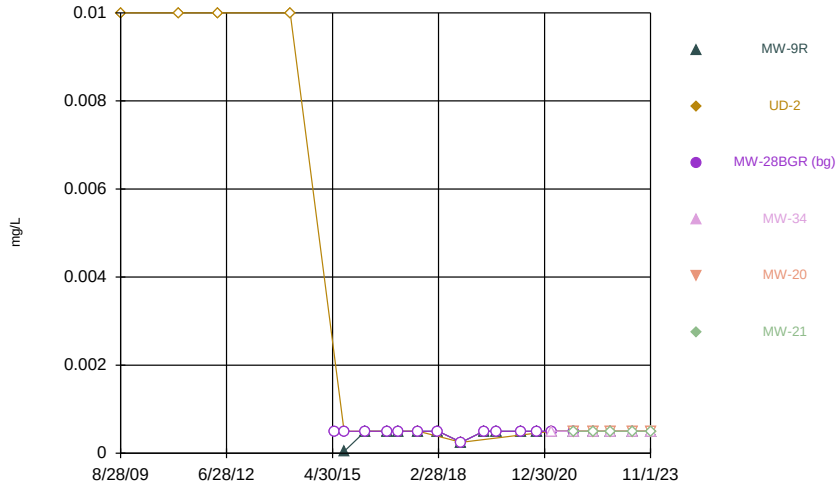
Time Series



Constituent: Silver Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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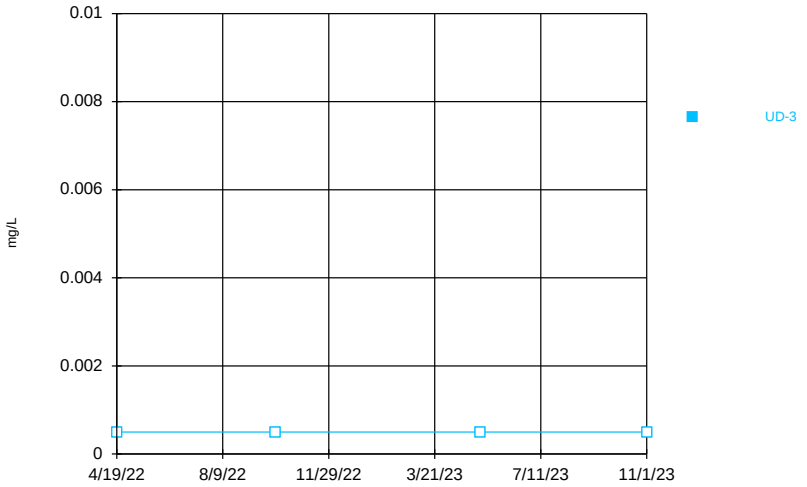
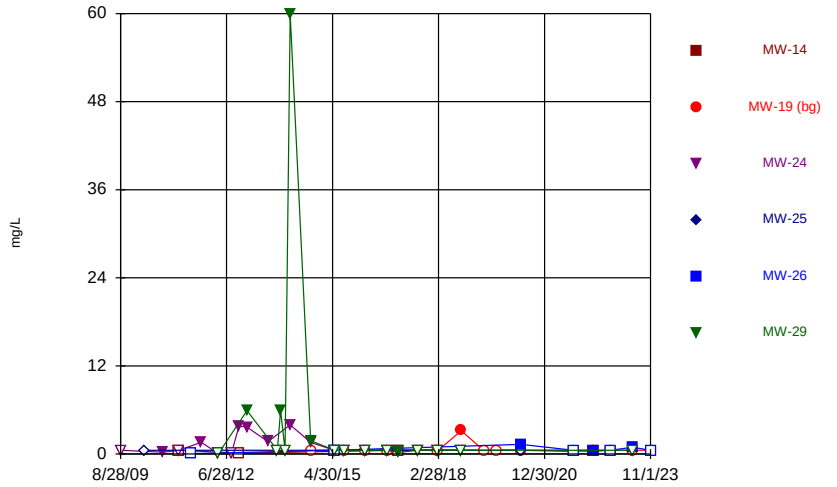
Time Series



Constituent: Silver Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

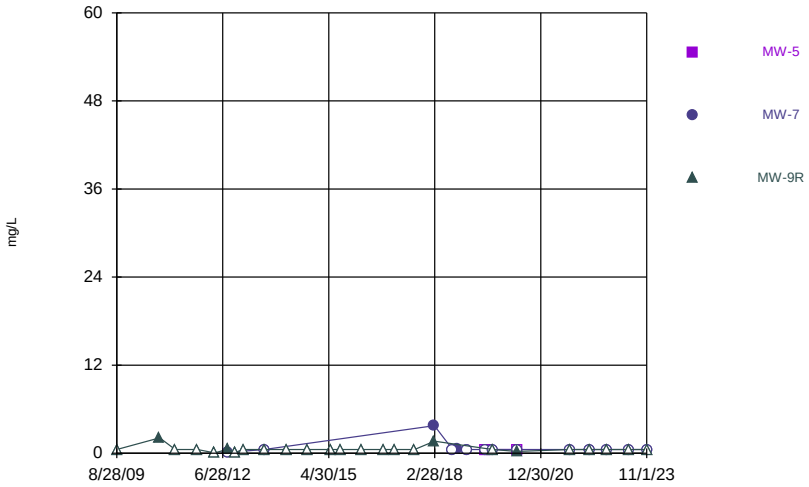
Time Series



Constituent: Sulfide Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

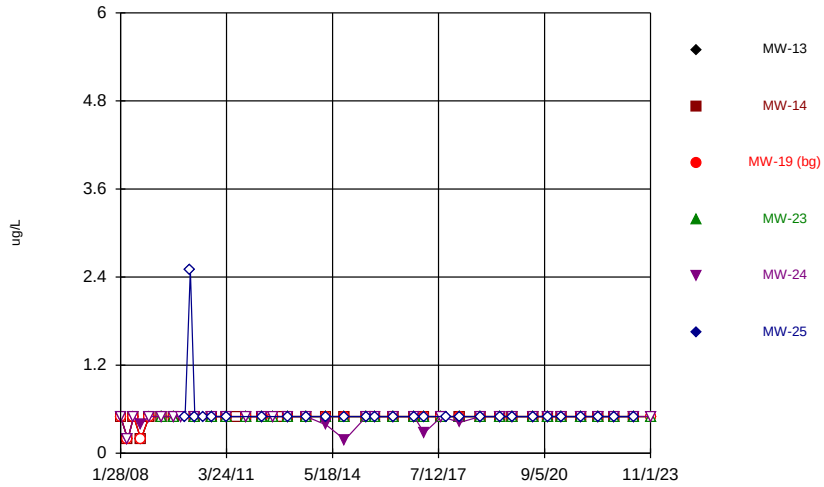
Time Series



Constituent: Sulfide Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

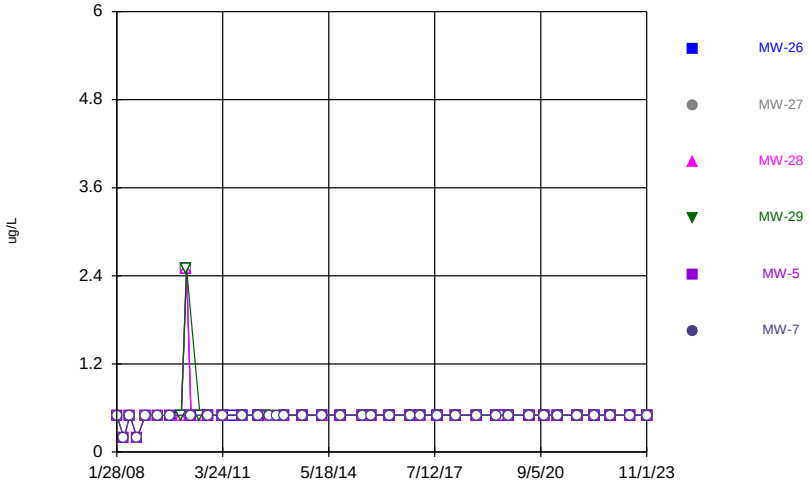
Time Series



Constituent: Tetrachloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

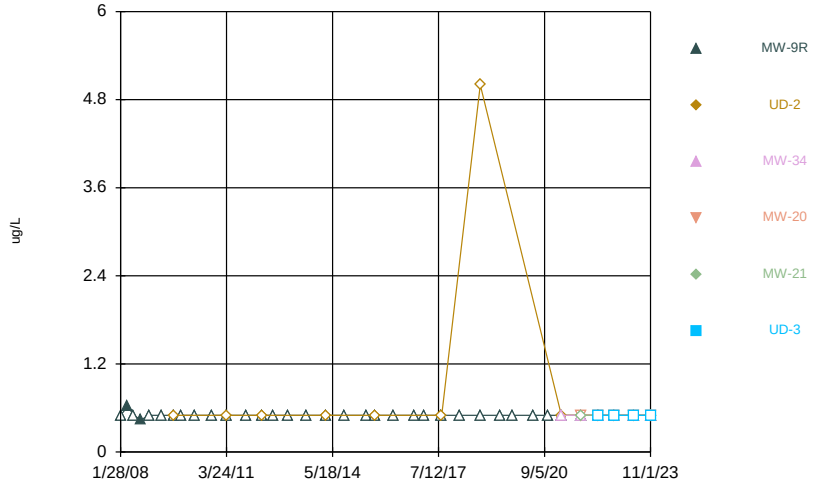
Time Series



Constituent: Tetrachloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

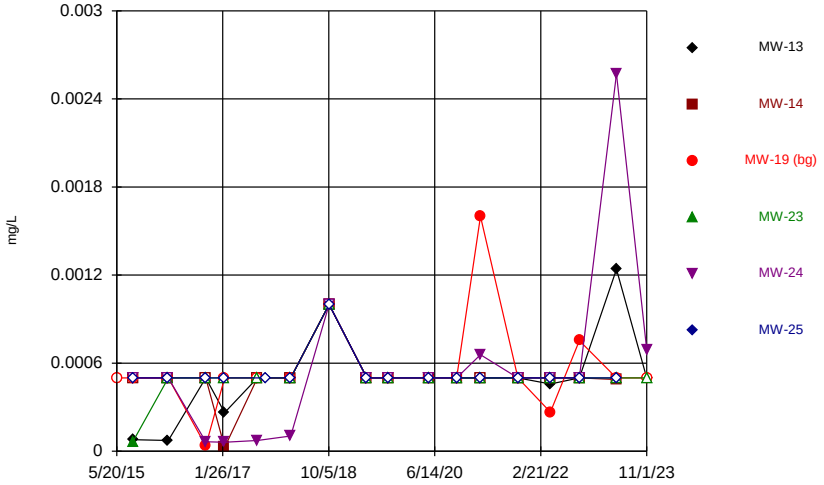
Time Series



Constituent: Tetrachloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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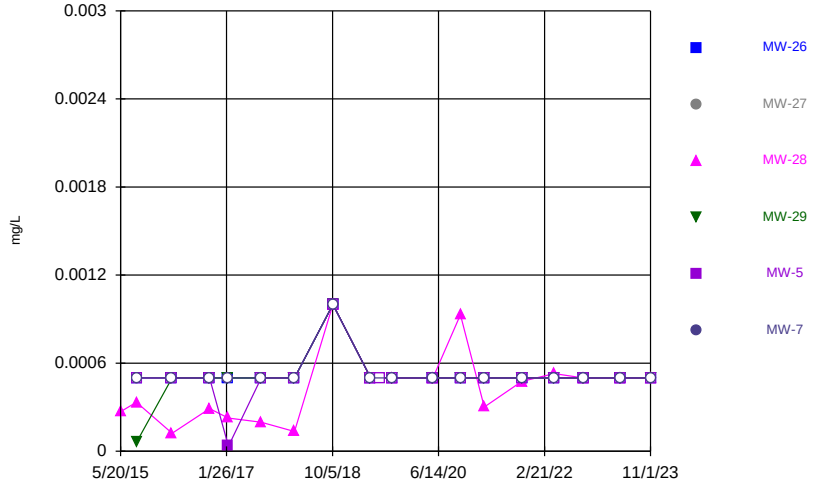
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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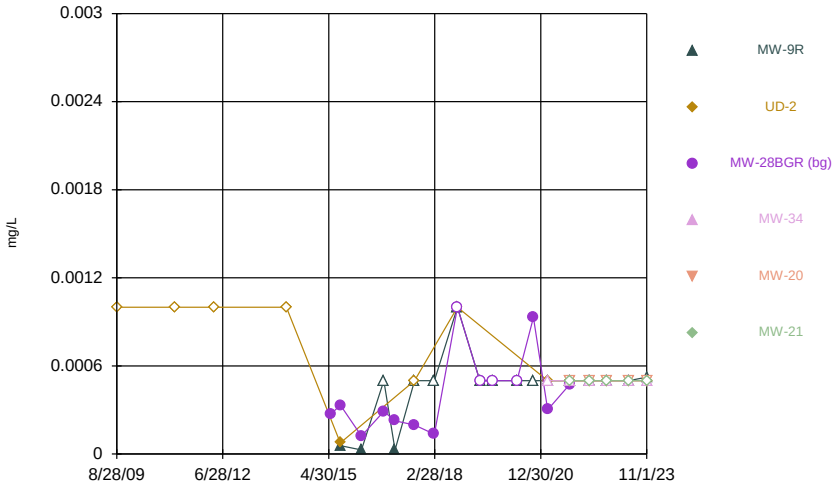
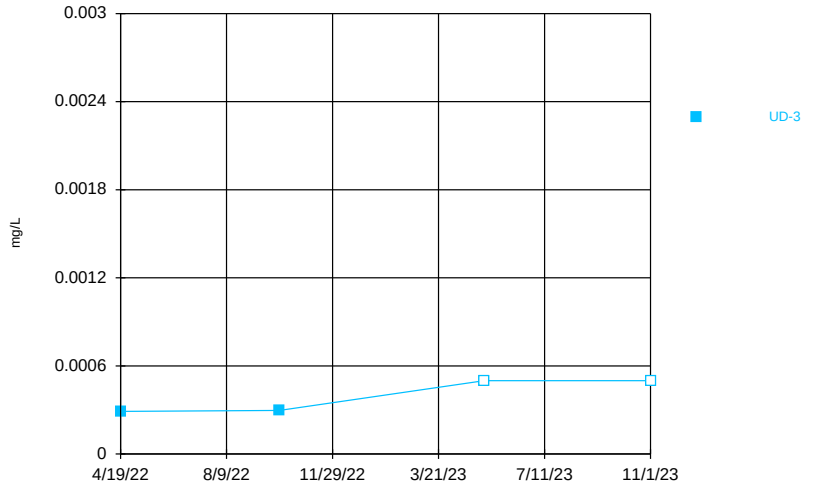
Time Series



Constituent: Thallium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

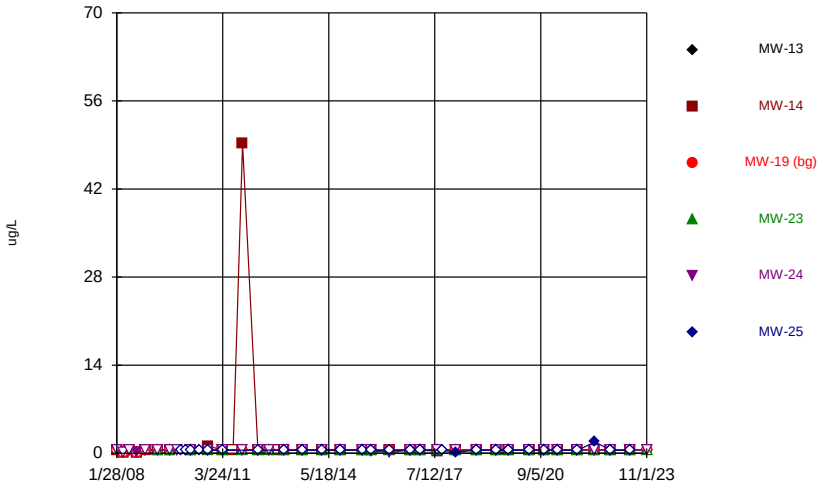
Time Series



Constituent: Thallium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Toluene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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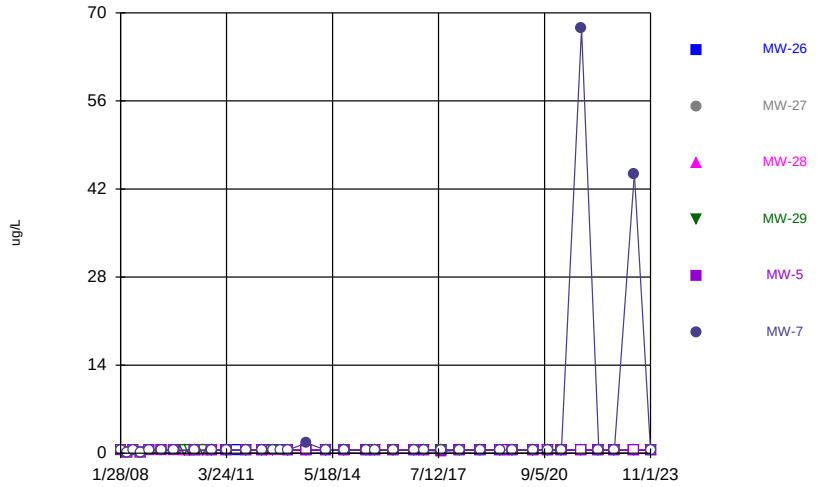
Hollow symbols indicate censored values.

Time Series



Constituent: Toluene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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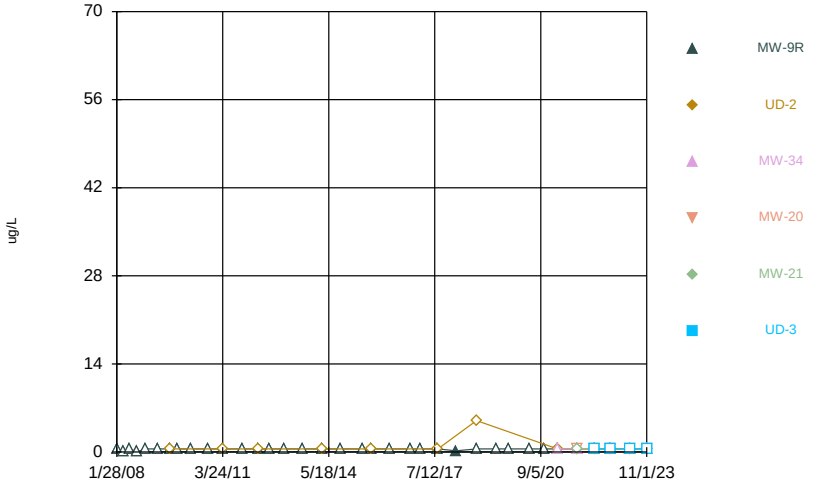
Hollow symbols indicate censored values.

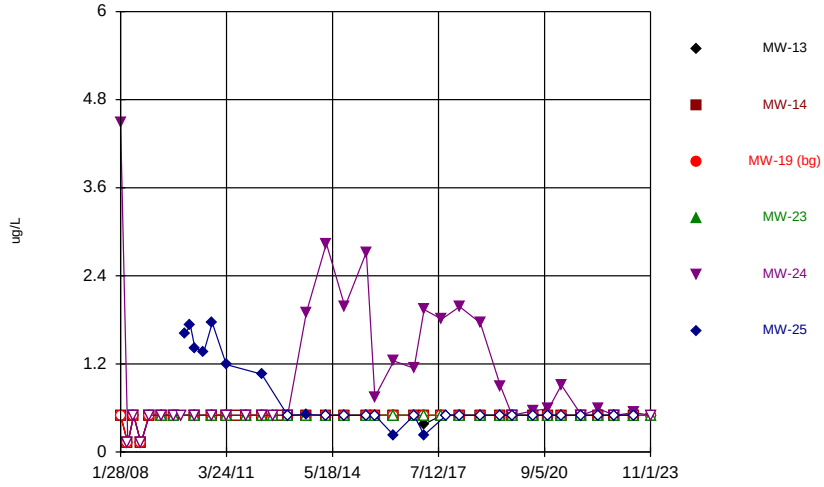
Time Series



Constituent: Toluene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Trichloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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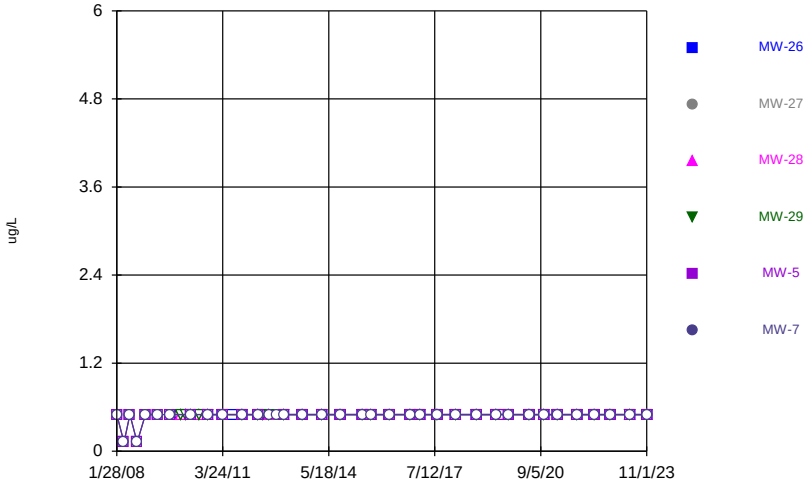
Hollow symbols indicate censored values.

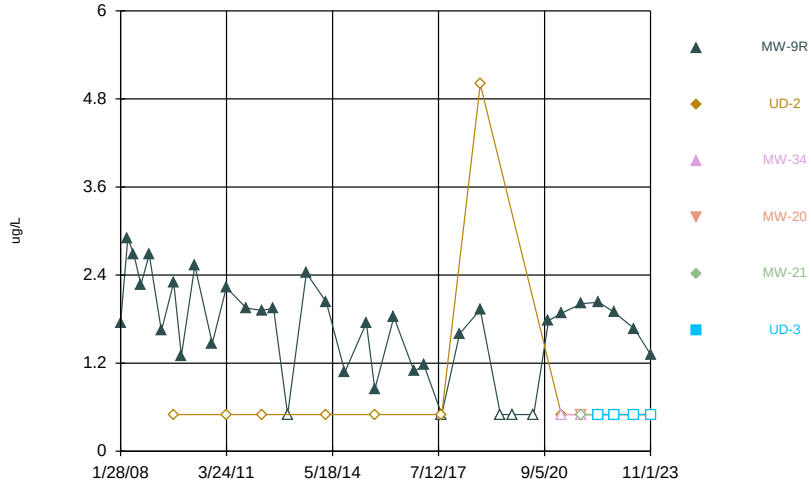
Time Series



Constituent: Trichloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

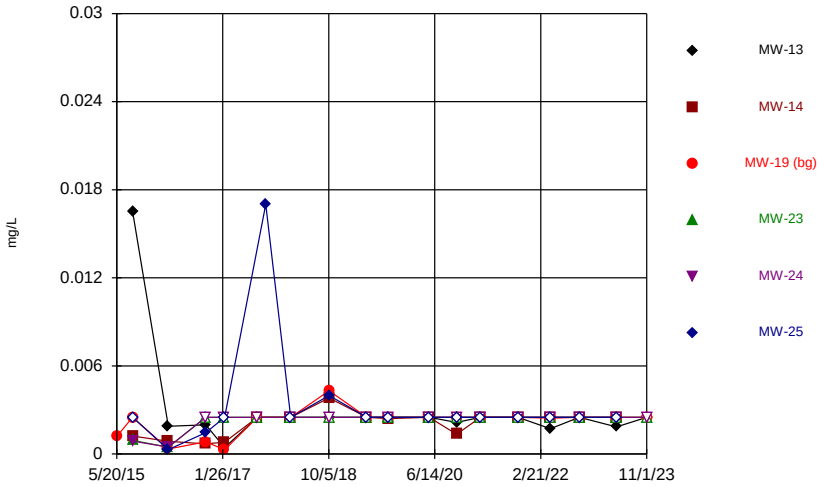
Time Series



Constituent: Trichloroethene Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

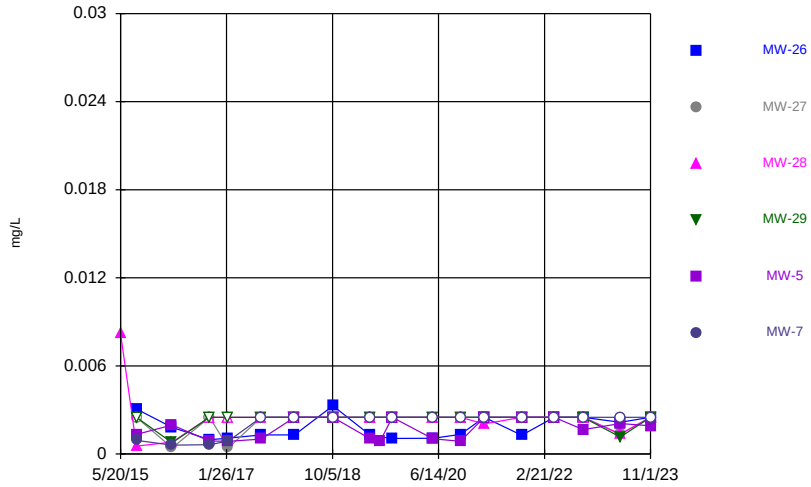
Time Series



Constituent: Vanadium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Vanadium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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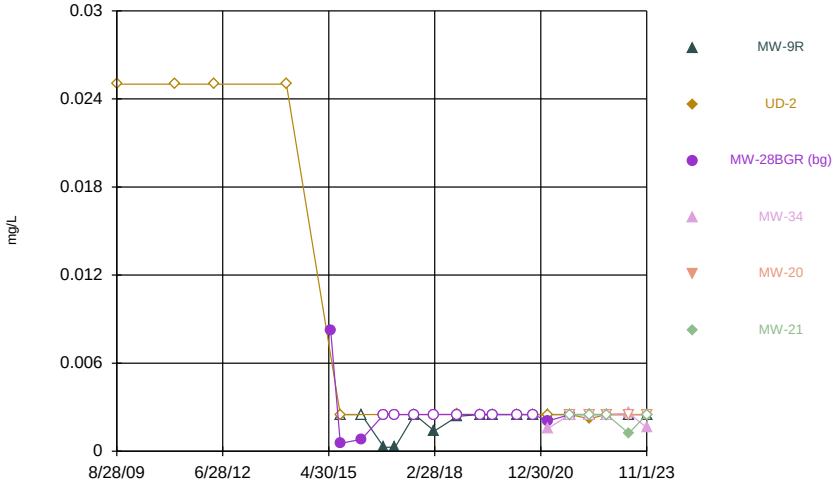

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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

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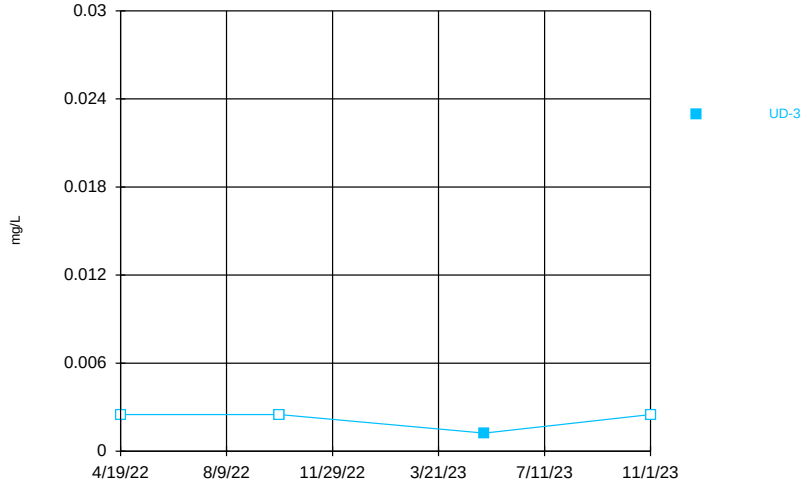

Constituent: Vanadium Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
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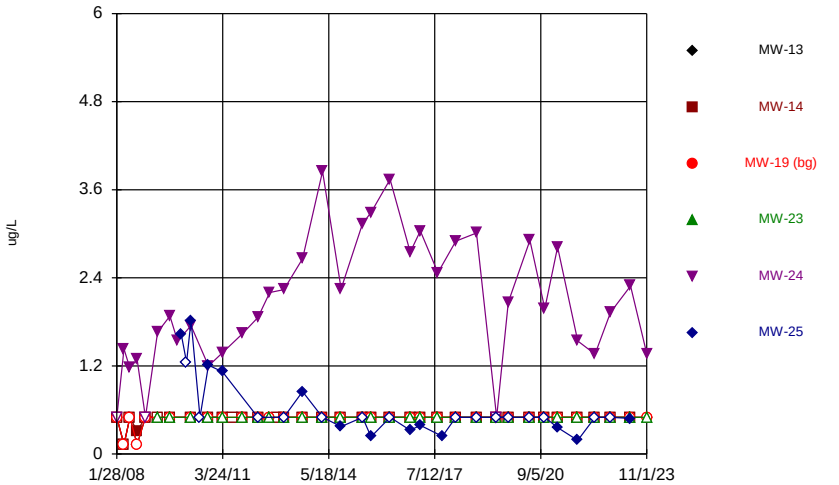

Constituent: Vinyl chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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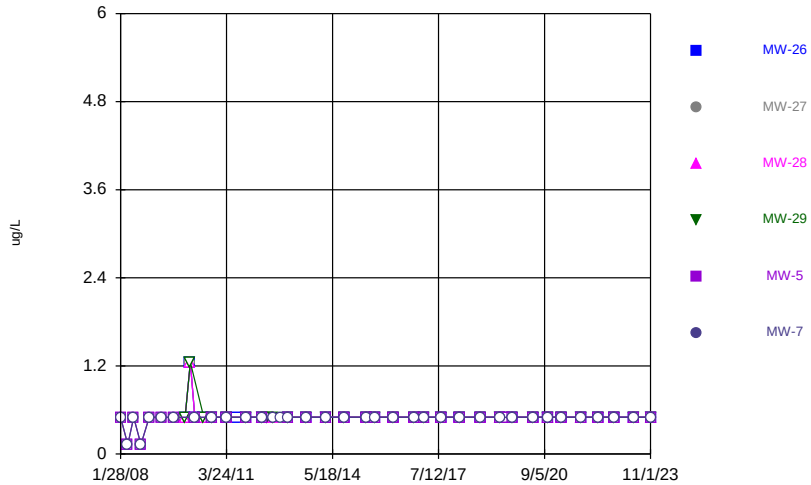
Hollow symbols indicate censored values.

Time Series



Constituent: Vinyl chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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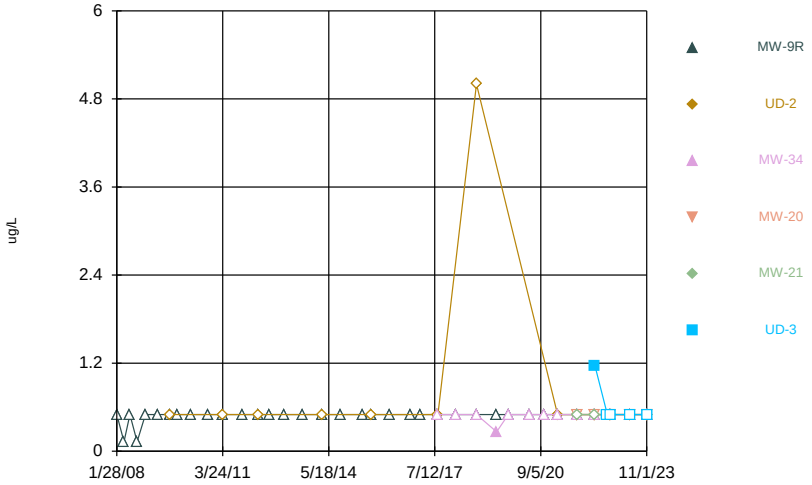
Time Series



Constituent: Vinyl chloride Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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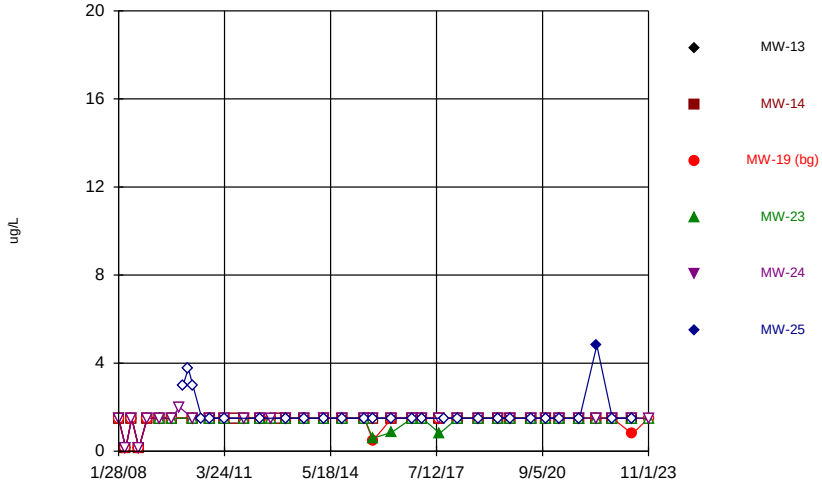
Hollow symbols indicate censored values.

Time Series



Constituent: Xylenes, total Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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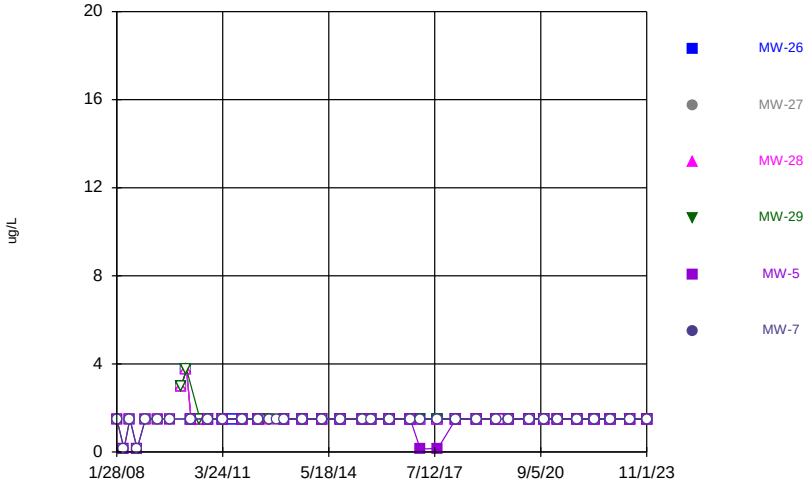
Hollow symbols indicate censored values.

Time Series



Constituent: Xylenes, total Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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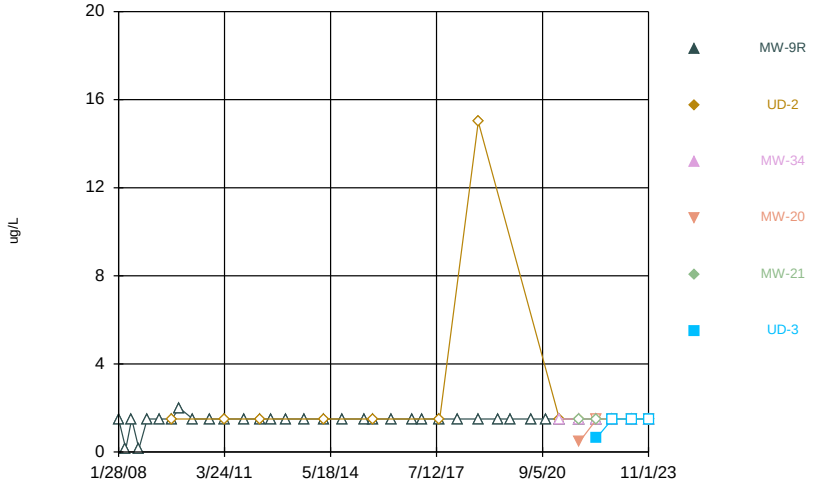
Hollow symbols indicate censored values.

Time Series



Constituent: Xylenes, total Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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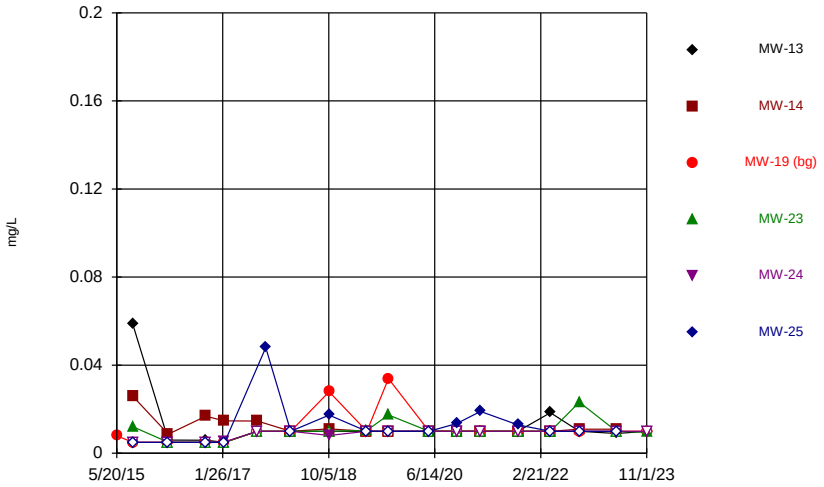

Constituent: Zinc Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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Hollow symbols indicate censored values.

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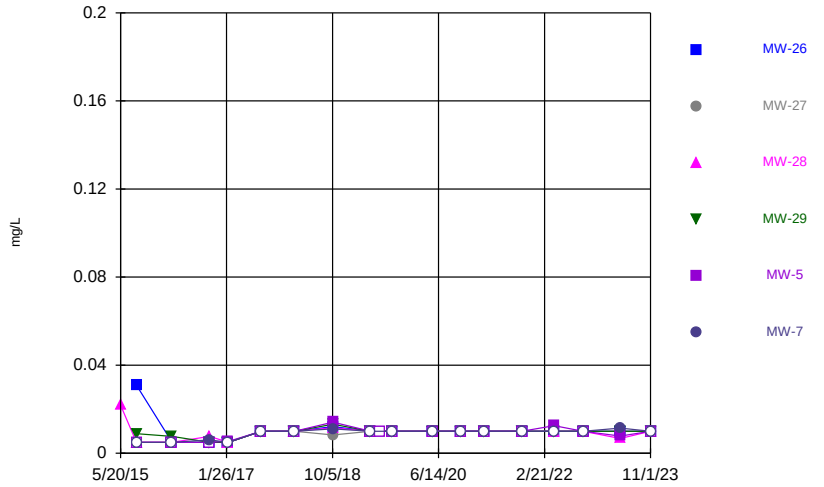

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SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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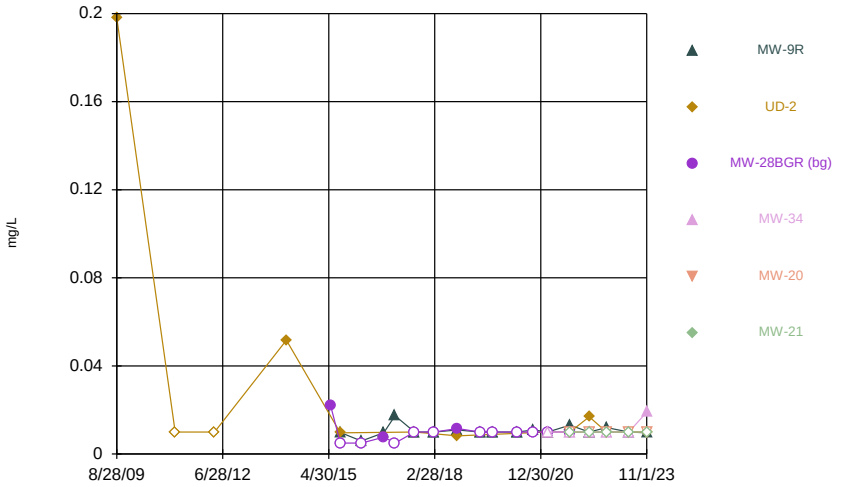
Time Series



Constituent: Zinc Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
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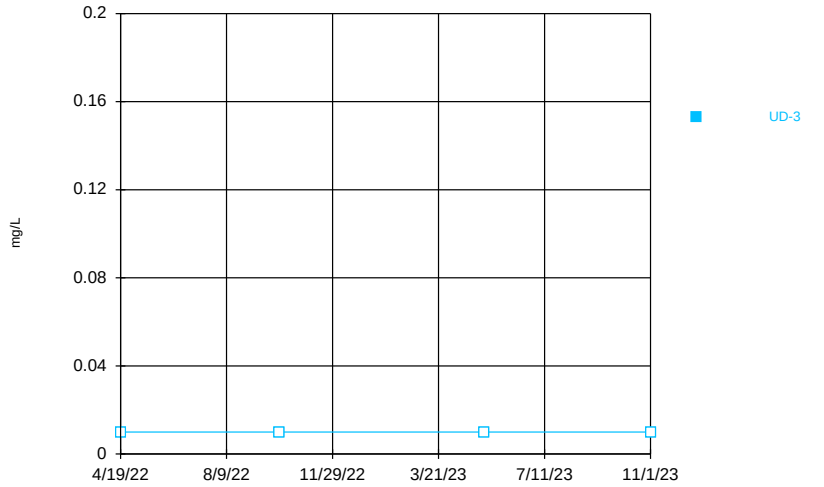

Constituent: Zinc Analysis Run 12/18/2023 5:58 PM View: 2023AWQR - Time Series
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Outlier Tests Summary Table and Graphs

Outlier Analysis

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 12/20/2023, 2:53 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Normality Test
Antimony (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00231**	**n/a w/combined bg**	**OH**	**NaN**	**32**	**0.000733**	**0.000424**	**n/a**
Arsenic (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00271,0.00274,0.00247**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**33**	**0.001227**	**0.0004947**	**ShapiroWilk**
Barium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	35	0.1737	0.1614	ShapiroWilk
Beryllium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	32	0.0004885	0.00008197	n/a
Cadmium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00209,0.00106,0.000555,0.000929**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**32**	**0.0002427**	**0.0004108**	**ShapiroWilk**
Chromium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	32	0.002429	0.0007782	n/a
Cobalt (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	35	0.01724	0.02348	ShapiroWilk
Copper (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	32	0.003108	0.002434	ShapiroWilk
Lead (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.00129,0.00228,0.00182,0.0082**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**32**	**0.0007157**	**0.001447**	**ShapiroWilk**
Nickel (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	32	0.007465	0.006265	ShapiroWilk
Selenium (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	33	0.002146	0.0008148	ShapiroWilk
Silver (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	32	0.0005242	0.0002474	n/a
Thallium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.0016**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**32**	**0.000498**	**0.0003025**	**ShapiroWilk**
Vanadium (mg/L)	**MW-19,MW-28BGR**	**Yes**	**0.0012,0.000347,0.000831,0.00029,0.00431,0.0082,0**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**32**	**0.002376**	**0.001346**	**ShapiroWilk**
Zinc (mg/L)	MW-19,MW-28BGR	No	n/a	n/a w/combined bg	OH	NaN	32	0.0105	0.006247	n/a

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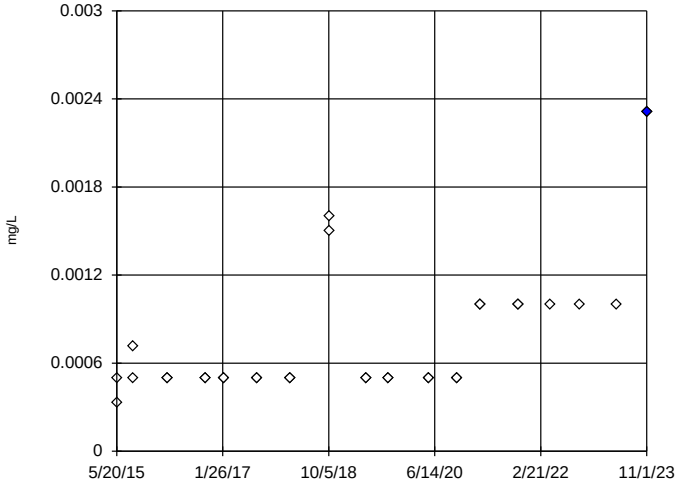
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Antimony Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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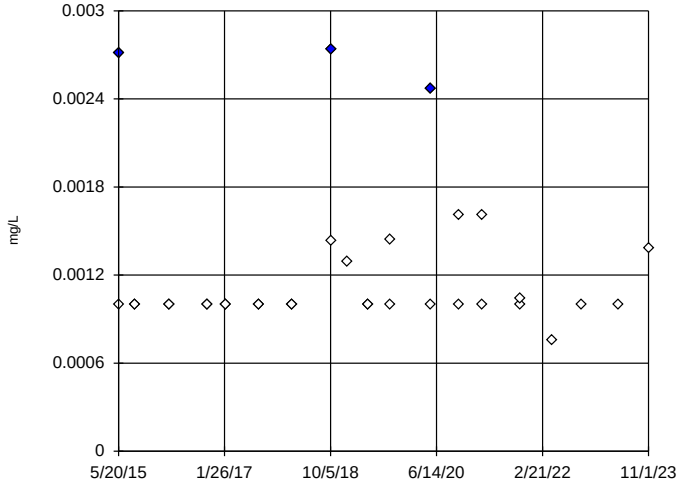
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 33

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.00234, low cutoff = -0.000005, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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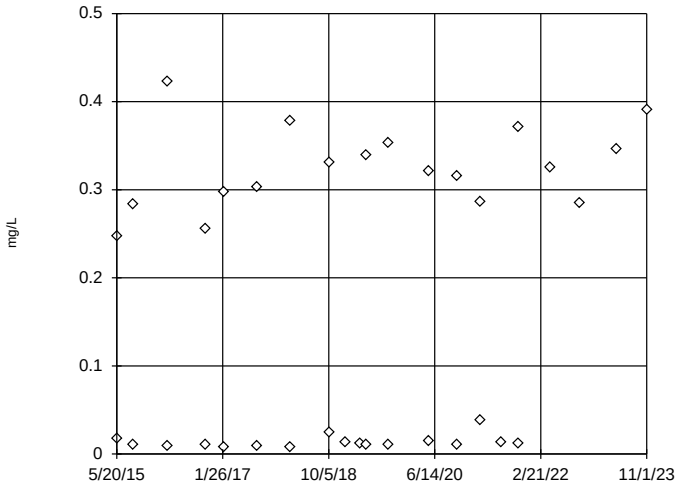
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 35

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 1.268, low cutoff = -0.9318, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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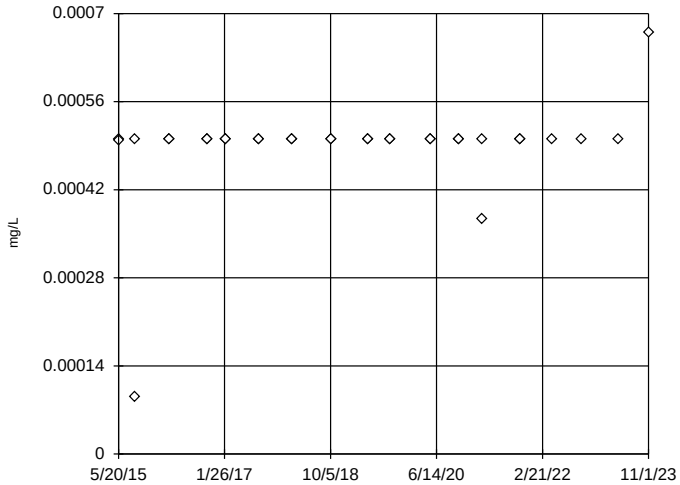
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



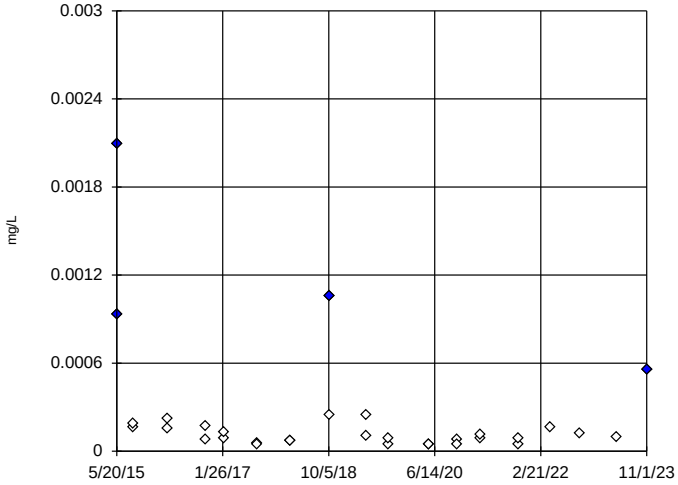
n = 32

No statistical outliers.

Constituent: Beryllium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

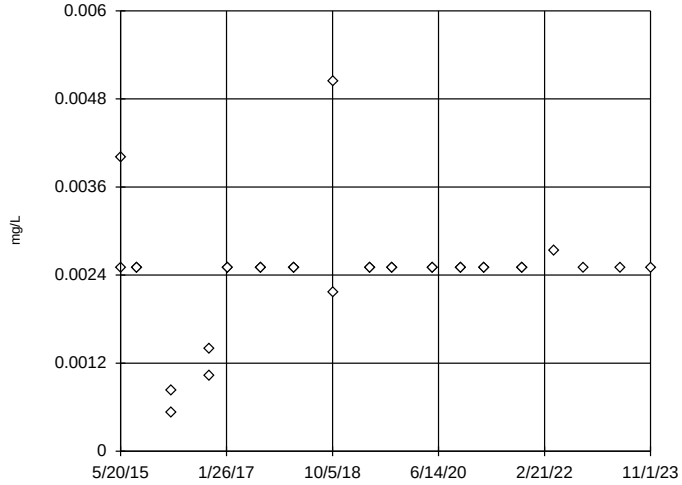
High cutoff = 0.000508, low cutoff = -0.000255, based on IQR multiplier of 3.

Constituent: Cadmium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

No statistical outliers.

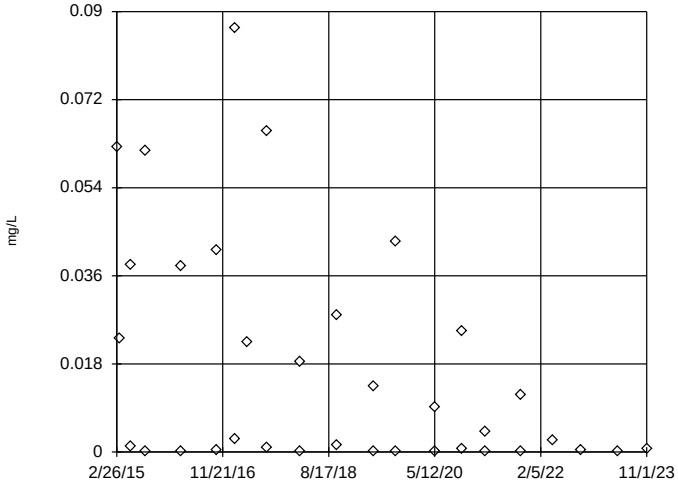
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.8786
Critical = 0.902
The distribution was found to be normally distrib-uted.

Constituent: Chromium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 35

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.1112, low cutoff = -0.083, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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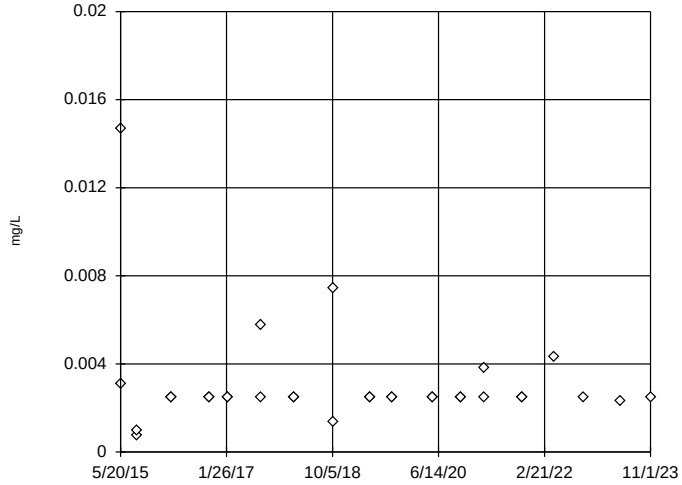
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

The results were invalid-ated, because the lower and upper quartiles are equal.

Constituent: Copper Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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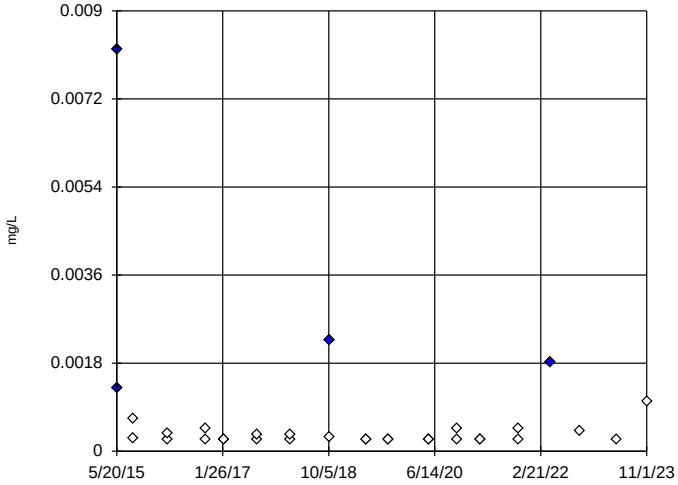
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.001084, low cutoff = -0.0003755, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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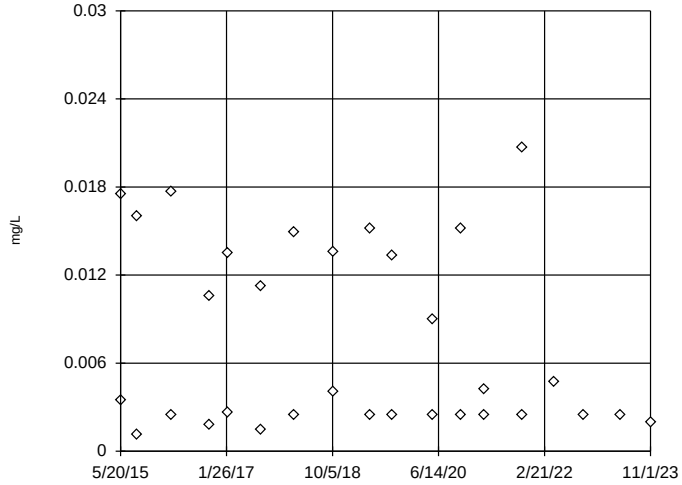
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.0467, low cutoff = -0.03065, based on IQR multiplier of 3.

Constituent: Nickel Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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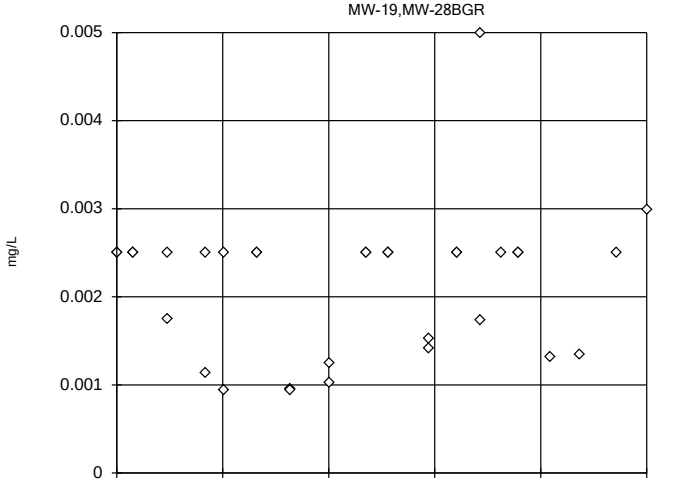
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 33

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.00586, low cutoff = -0.00198, based on IQR multiplier of 3.

Constituent: Selenium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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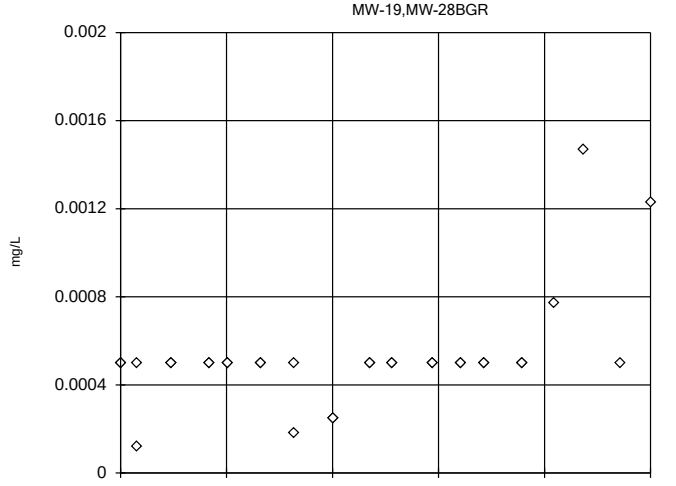
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

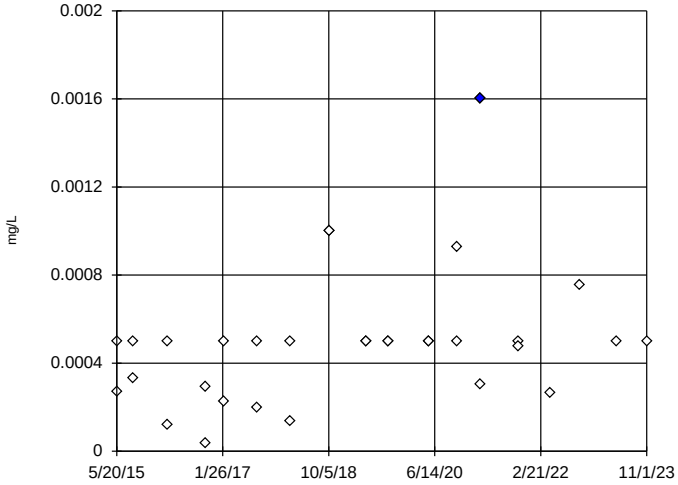
No statistical outliers.

Constituent: Silver Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

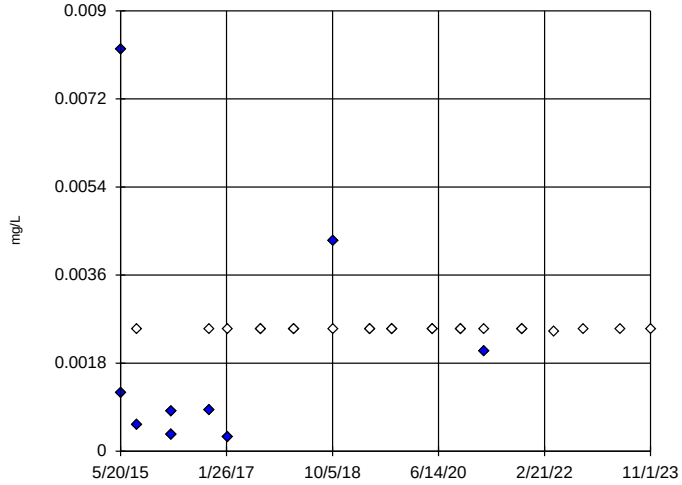
High cutoff = 0.001114, low cutoff = -0.000318, based on IQR multiplier of 3.

Constituent: Thallium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.002575, low cutoff = 0.0024, based on IQR multiplier of 3.

Constituent: Vanadium Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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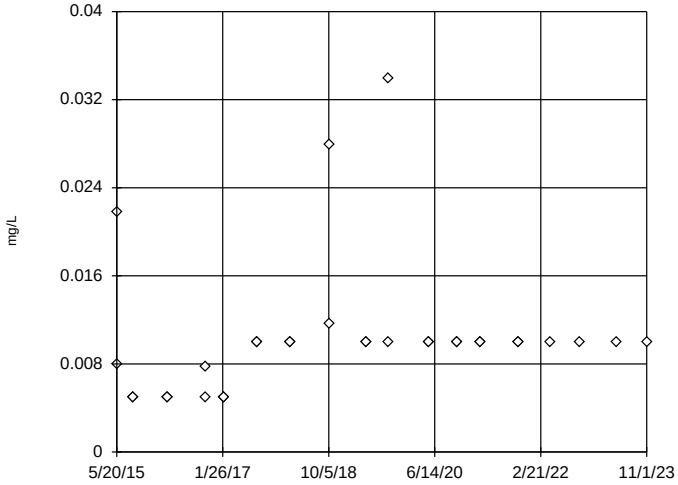
Ohio EPA 0715 Outlier Algorithm, Pooled Background

MW-19,MW-28BGR



n = 32

No statistical outliers.

Constituent: Zinc Analysis Run 12/20/2023 2:22 PM View: 2023AWQR - BG Outliers
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Outlier Analysis

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 12/20/2023, 4:11 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Normality Test
Arsenic (mg/L)	**UD-2**	**Yes**	**0.0101**	**1/15/2019**	**OH**	**NaN**	**10**	**0.002205**	**0.002803**	**n/a**
Barium (mg/L)	UD-2	No	n/a	n/a	EPA/OH	0.05	8	0.03039	0.0434	ShapiroWilk
Beryllium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.0004428	0.0001619	n/a
Cadmium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.0001964	0.00007984	n/a
Chromium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.005429	0.003796	n/a
Cobalt (mg/L)	UD-2	No	n/a	n/a	EPA/OH	0.05	8	0.00175	0.003359	ShapiroWilk
Copper (mg/L)	UD-2	No	n/a	n/a	NP (nrm)/OH	NaN	8	0.006279	0.003983	ShapiroWilk
Lead (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.001132	0.0009279	n/a
Nickel (mg/L)	UD-2	No	n/a	n/a	EPA/OH	0.05	8	0.0128	0.01042	ShapiroWilk
Selenium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.002412	0.0005433	n/a
Thallium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.0007595	0.0003568	n/a
Vanadium (mg/L)	UD-2	No	n/a	n/a	OH	NaN	8	0.01375	0.01203	n/a
Zinc (mg/L)	**UD-2**	**Yes**	**0.198**	**8/28/2009**	**NP (nrm)/OH**	**NaN**	**8**	**0.03845**	**0.06613**	**ShapiroWilk**

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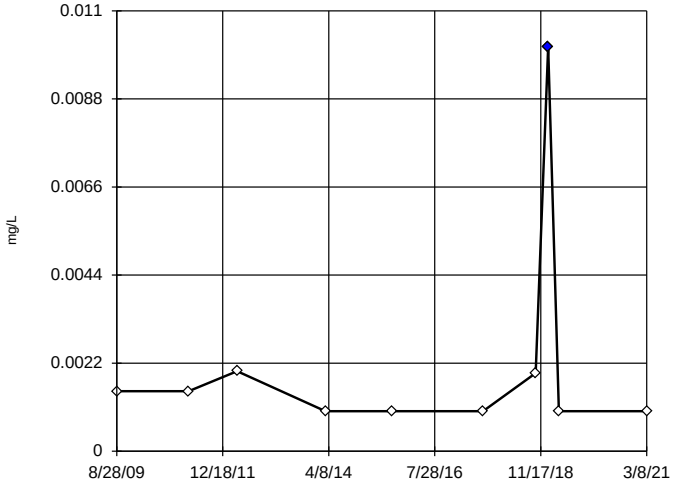
Ohio EPA 0715 Outlier Algorithm

UD-2



n = 10

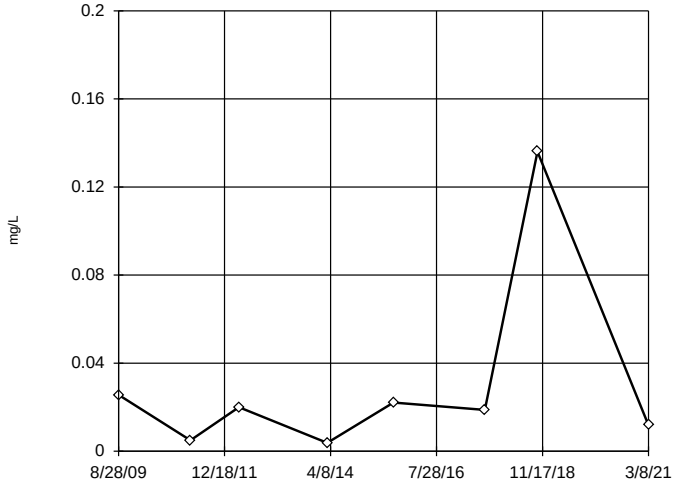
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Arsenic Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

EPA Screening (suspected outliers for Dixon's Test)

UD-2



n = 8

Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.03039, std. dev. 0.0434, critical Tn 2.032

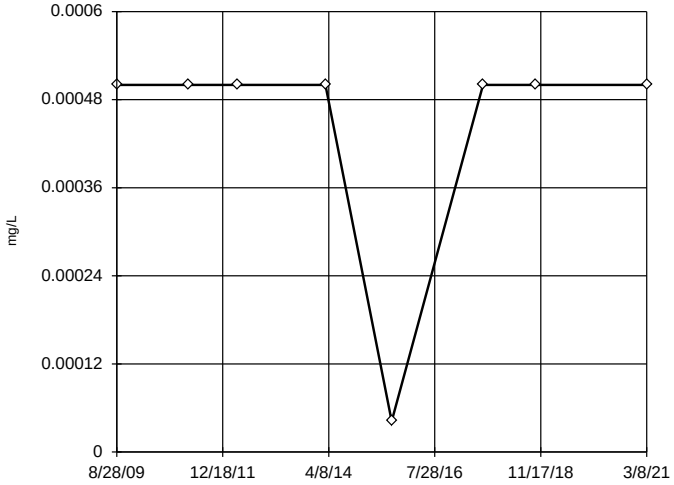
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9218
Critical = 0.749 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Barium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

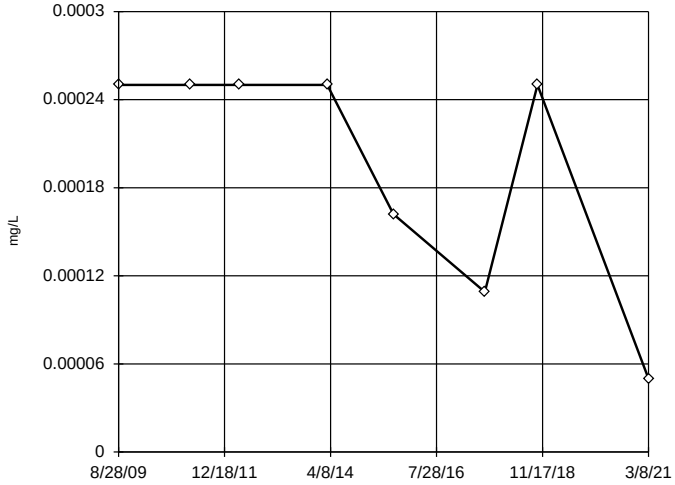
No statistical outliers.

Constituent: Beryllium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

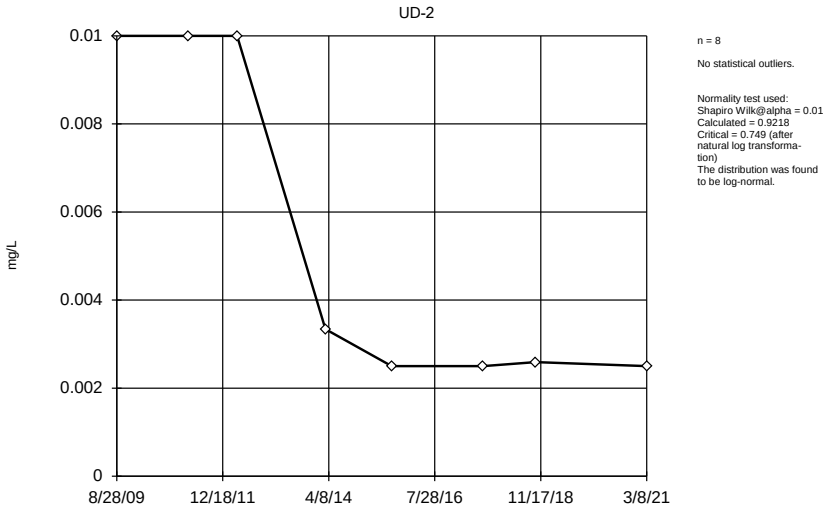
No statistical outliers.

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9218
Critical = 0.749 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Cadmium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm



n = 8

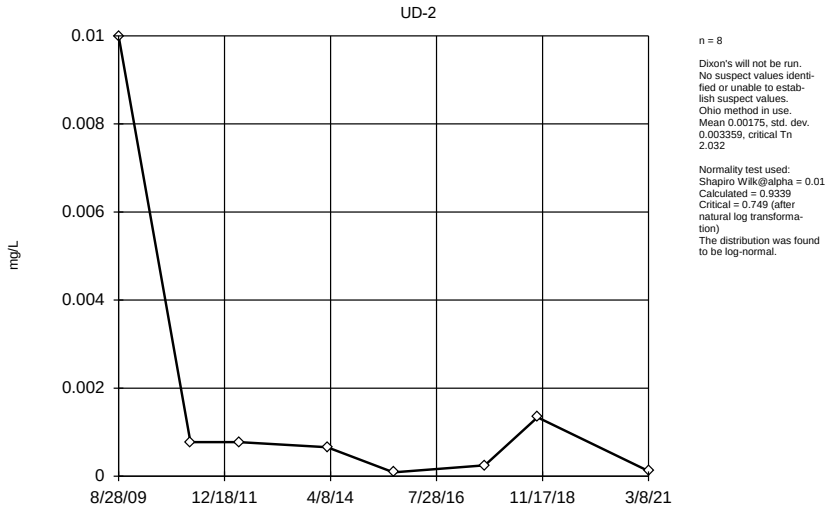
No statistical outliers.

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9218
Critical = 0.749 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Chromium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

EPA Screening (suspected outliers for Dixon's Test)



n = 8

Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.00175, std. dev. 0.003359, critical Tn 2.032

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9339
Critical = 0.749 (after natural log transformation)
The distribution was found to be log-normal.

Constituent: Cobalt Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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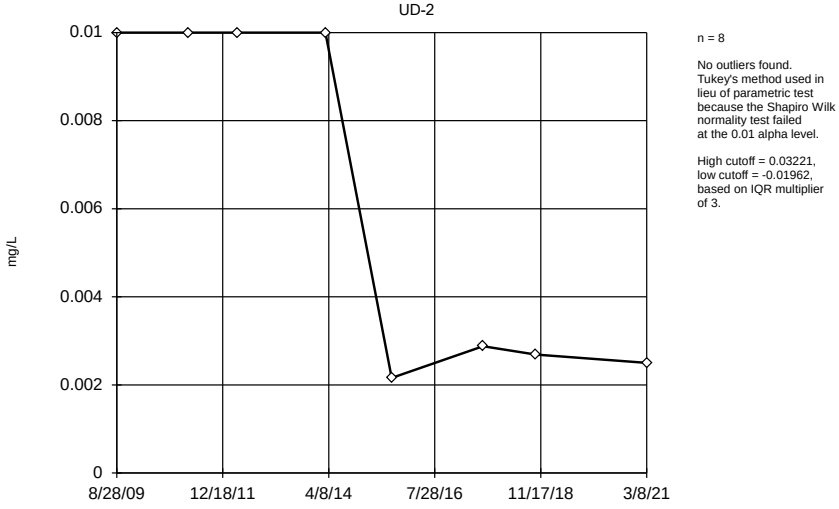
Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm



n = 8

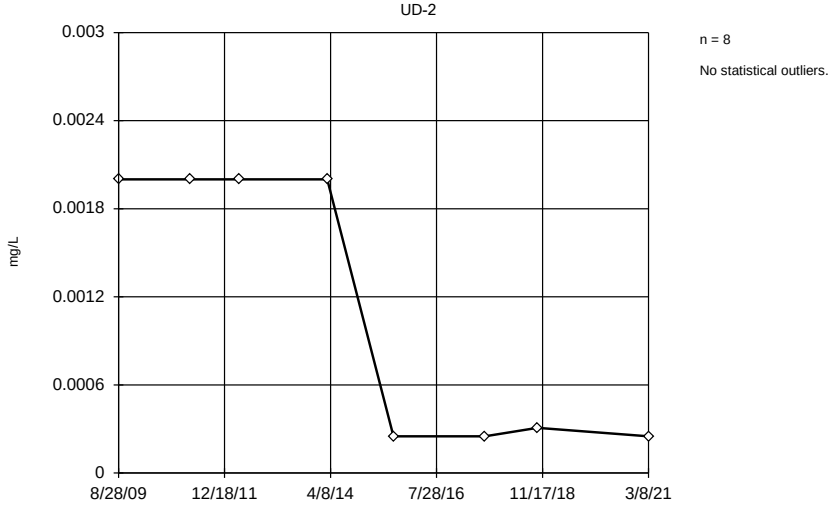
No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.03221, low cutoff = -0.01962, based on IQR multiplier of 3.

Constituent: Copper Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm



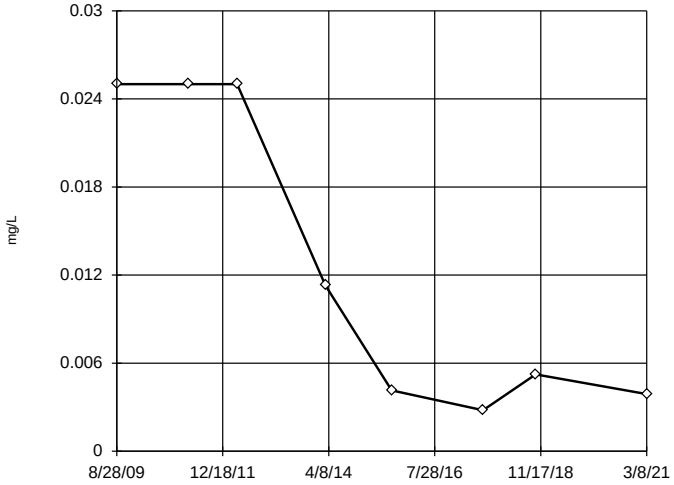
n = 8

No statistical outliers.

Constituent: Lead Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

EPA Screening (suspected outliers for Dixon's Test)

UD-2



n = 8

Dixon's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.0128, std. dev. 0.01042, critical Tn 2.032

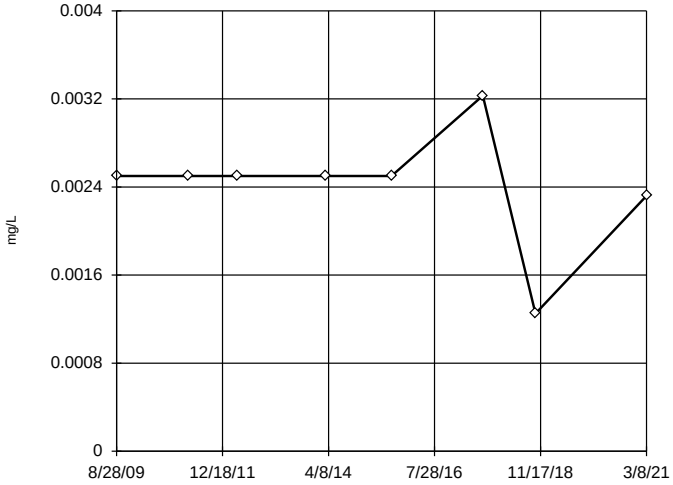
Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.7635
Critical = 0.749
The distribution was found to be normally distributed.

Constituent: Nickel Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

No statistical outliers.

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.7635
Critical = 0.749
The distribution was found to be normally distributed.

Constituent: Selenium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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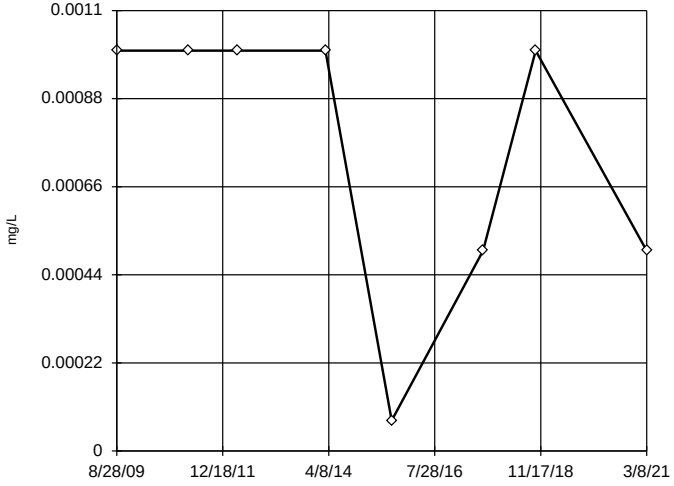
Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

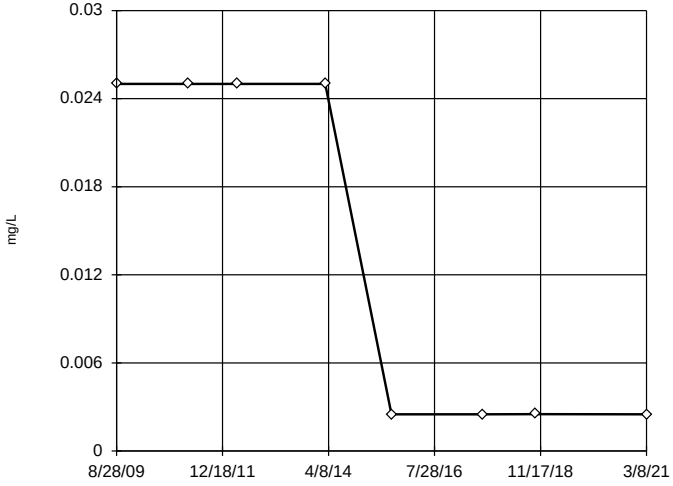
No statistical outliers.

Constituent: Thallium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

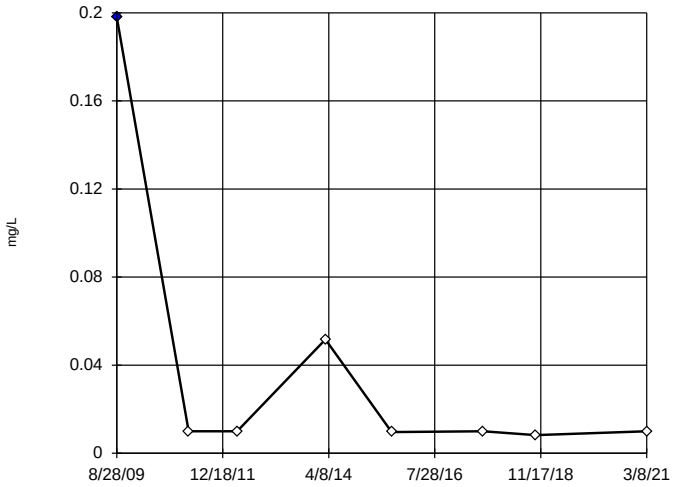
No statistical outliers.

Constituent: Vanadium Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm

UD-2



n = 8

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Wilk normality test failed at the 0.01 alpha level.

High cutoff = 0.09394, low cutoff = -0.05327, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 12/20/2023 4:10 PM View: 2023AWQR - Outliers UD-2

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Interwell Prediction Limit Summary Table and Graphs

Prediction Limit

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 12/20/2023, 3:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Trans...	Alpha	Method
Antimony (mg/L)	**MW-5**	**0.00231**	**n/a**	**11/1/2023**	**0.0029**	**Yes**	**32**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**87.5**	**n/a**	**n/a**	**0.000152**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-5**	**0.00274**	**n/a**	**11/1/2023**	**0.0107**	**Yes**	**33**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.0001398**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-7**	**0.00274**	**n/a**	**11/1/2023**	**0.00926**	**Yes**	**33**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.0001398**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-9R**	**0.00274**	**n/a**	**11/1/2023**	**0.00394**	**Yes**	**33**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.0001398**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**MW-20**	**0.00274**	**n/a**	**11/1/2023**	**0.00526**	**Yes**	**33**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.0001398**	**NP Inter (NDs) 1 of 3**
Barium (mg/L)	MW-13	0.423	n/a	11/1/2023	0.02685	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-23	0.423	n/a	11/1/2023	0.0099	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-26	0.423	n/a	11/1/2023	0.0304	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-27	0.423	n/a	11/1/2023	0.1145	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-28	0.423	n/a	11/1/2023	0.0103	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-29	0.423	n/a	11/1/2023	0.00759	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-5	0.423	n/a	11/1/2023	0.25	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-7	0.423	n/a	11/1/2023	0.262	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-9R	0.423	n/a	11/1/2023	0.0425	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-34	0.423	n/a	11/1/2023	0.112	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-20	0.423	n/a	11/1/2023	0.00988	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Barium (mg/L)	MW-21	0.423	n/a	11/1/2023	0.0329	No	35	MW-28BGR,MW-19	n/a	n/a	0	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cadmium (mg/L)	MW-5	0.00209	n/a	11/1/2023	0.000571	No	32	MW-28BGR,MW-19	n/a	n/a	25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-13	0.0867	n/a	11/1/2023	0.00257	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-26	0.0867	n/a	11/1/2023	0.0034	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-27	0.0867	n/a	11/1/2023	0.00139	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-28	0.0867	n/a	11/1/2023	0.00704	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-5	0.0867	n/a	11/1/2023	0.00937	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-9R	0.0867	n/a	11/1/2023	0.0149	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-34	0.0867	n/a	11/1/2023	0.000644	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Cobalt (mg/L)	MW-20	0.0867	n/a	11/1/2023	0.000741	No	35	MW-19,MW-28BGR	n/a	n/a	2.857	n/a	n/a	0.0001155	NP Inter (normality) 1 of 3
Lead (mg/L)	MW-5	0.0082	n/a	11/1/2023	0.00129	No	32	MW-19,MW-28BGR	n/a	n/a	53.13	n/a	n/a	0.000152	NP Inter (NDs) 1 of 3
Lead (mg/L)	MW-34	0.0082	n/a	11/1/2023	0.000879	No	32	MW-19,MW-28BGR	n/a	n/a	53.13	n/a	n/a	0.000152	NP Inter (NDs) 1 of 3
Nickel (mg/L)	MW-13	0.0207	n/a	11/1/2023	0.00505J	No	32	MW-19,MW-28BGR	n/a	n/a	31.25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-26	0.0207	n/a	11/1/2023	0.00569	No	32	MW-19,MW-28BGR	n/a	n/a	31.25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-28	0.0207	n/a	11/1/2023	0.0168	No	32	MW-19,MW-28BGR	n/a	n/a	31.25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-29	0.0207	n/a	11/1/2023	0.00529	No	32	MW-19,MW-28BGR	n/a	n/a	31.25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Nickel (mg/L)	MW-5	0.0207	n/a	11/1/2023	0.0198	No	32	MW-19,MW-28BGR	n/a	n/a	31.25	n/a	n/a	0.000152	NP Inter (normality) 1 of 3
Nickel (mg/L)	**MW-9R**	**0.0207**	**n/a**	**11/1/2023**	**0.0339**	**Yes**	**32**	**MW-19,MW-28BGR**	**n/a**	**n/a**	**31.25**	**n/a**	**n/a**	**0.000152**	**NP Inter (normality) 1 of 3**
Silver (mg/L)	MW-5	0.00147	n/a	11/1/2023	0.00125	No	32	MW-19,MW-28BGR	n/a	n/a	84.38	n/a	n/a	0.000152	NP Inter (NDs) 1 of 3

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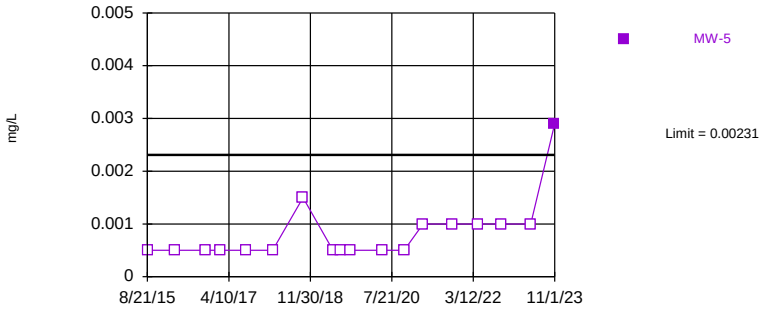
Hollow symbols indicate censored values.

Exceeds Limit: MW-5

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Assumes 15 future values.

Constituent: Antimony Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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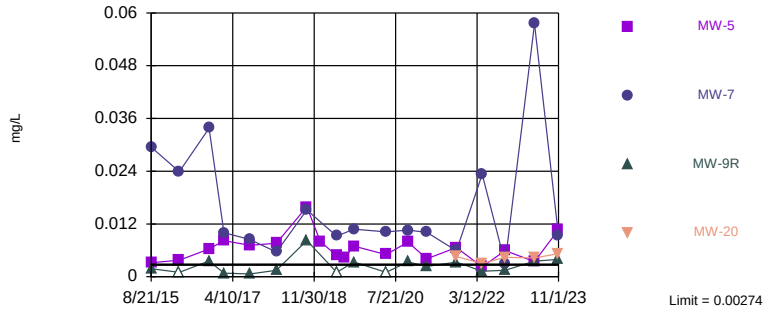
Hollow symbols indicate censored values.

Exceeds Limit: MW-5, MW-7, MW-9R, MW-20

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 66.67% NDs. Annual per-constituent alpha = 0.004465. Individual comparison alpha = 0.0001398 (1 of 3). Comparing 4 points to limit. Assumes 12 future values.

Constituent: Arsenic Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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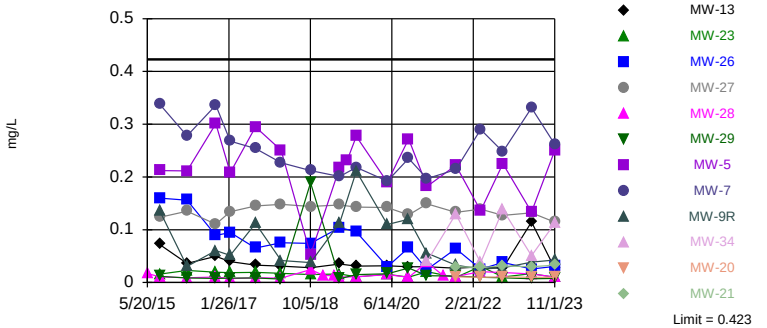
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 35 background values. Annual per-constituent alpha = 0.003689. Individual comparison alpha = 0.0001155 (1 of 3). Comparing 12 points to limit. Assumes 4 future values.

Constituent: Barium Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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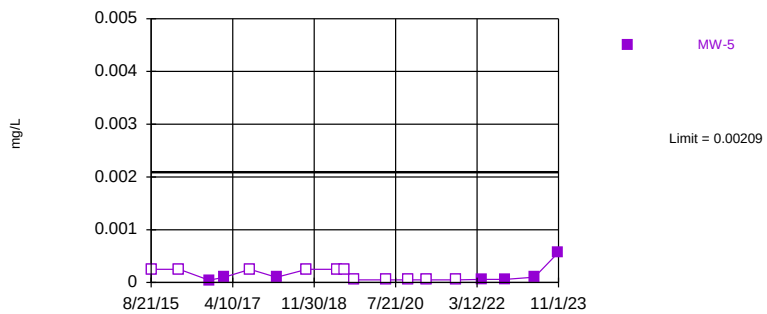
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 25% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Assumes 15 future values.

Constituent: Cadmium Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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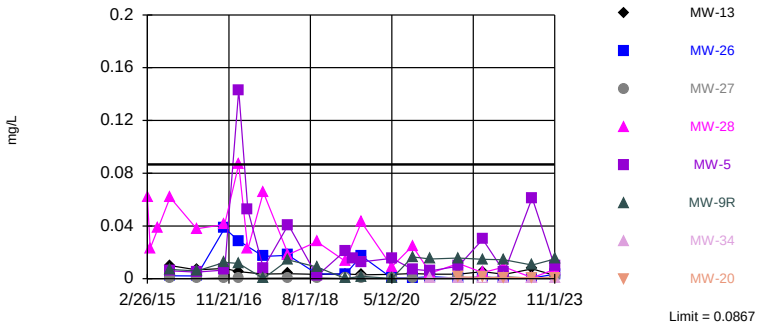
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 35 background values. 2.857% NDs. Annual per-constituent alpha = 0.003689. Individual comparison alpha = 0.0001155 (1 of 3). Comparing 8 points to limit. Assumes 8 future values.

Constituent: Cobalt Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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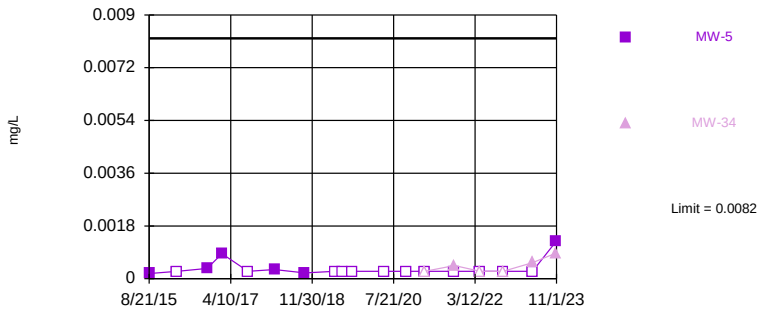
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Comparing 2 points to limit. Assumes 14 future values.

Constituent: Lead Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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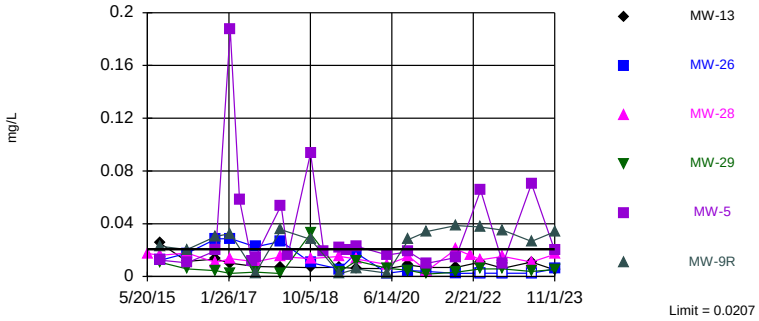
Hollow symbols indicate censored values.

Exceeds Limit: MW-9R

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 31.25% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Comparing 6 points to limit. Assumes 10 future values.

Constituent: Nickel Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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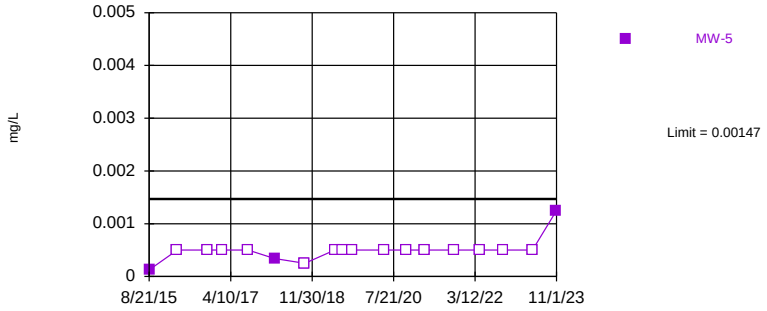
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Annual per-constituent alpha = 0.004853. Individual comparison alpha = 0.000152 (1 of 3). Assumes 15 future values.

Constituent: Silver Analysis Run 12/20/2023 3:32 PM View: 2023AWQR - Interwell PL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Intrawell Prediction Limit Summary Table and Graphs

Prediction Limit

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master Printed 12/20/2023, 4:24 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Trans...	Alpha	Method
Arsenic (mg/L)	UD-2	0.0101	n/a	11/1/2023	0.00072J	No	10	n/a	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Barium (mg/L)	UD-2	0.1701	n/a	11/1/2023	0.0406	No	8	n/a	0.1496	0.09562	12.5	None	sqrt(x)	0.0002532	Param Intra 1 of 3
Beryllium (mg/L)	UD-2	0.0005	n/a	11/1/2023	0.0005ND	No	8	n/a	n/a	n/a	87.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	UD-2	0.00025	n/a	11/1/2023	0.0001ND	No	8	n/a	n/a	n/a	75	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Chromium (mg/L)	UD-2	0.01	n/a	11/1/2023	0.00254J	No	8	n/a	n/a	n/a	75	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	UD-2	0.01	n/a	11/1/2023	0.000457J	No	8	n/a	n/a	n/a	62.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Copper (mg/L)	UD-2	0.01	n/a	11/1/2023	0.00456J	No	8	n/a	n/a	n/a	62.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Lead (mg/L)	UD-2	0.002	n/a	11/1/2023	0.00025ND	No	8	n/a	n/a	n/a	87.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Nickel (mg/L)	UD-2	0.01376	n/a	11/1/2023	0.00707	No	8	n/a	0.005476	0.003014	37.5	Kaplan-Meier	No	0.0002532	Param Intra 1 of 3
Selenium (mg/L)	UD-2	0.00323	n/a	11/1/2023	0.0025ND	No	8	n/a	n/a	n/a	75	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Thallium (mg/L)	UD-2	0.001	n/a	11/1/2023	0.0005ND	No	8	n/a	n/a	n/a	87.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	UD-2	0.025	n/a	11/1/2023	0.0025ND	No	8	n/a	n/a	n/a	87.5	n/a	n/a	0.005912	NP Intra (NDs) 1 of 3
Zinc (mg/L)	UD-2	0.198	n/a	11/1/2023	0.01ND	No	8	n/a	n/a	n/a	50	n/a	n/a	0.005912	NP Intra (normality) 1 of 3

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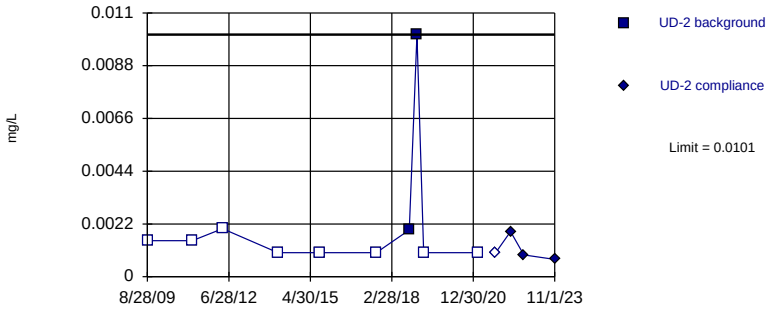
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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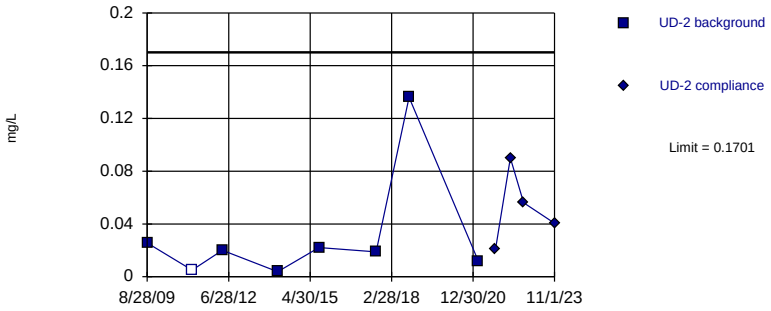
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1496, Std. Dev.=0.09562, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7653, critical = 0.749. Kappa = 2.748 (c=13, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002532.

Constituent: Barium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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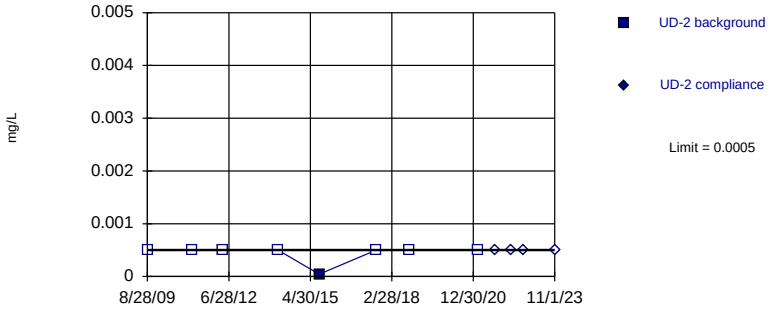
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Beryllium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

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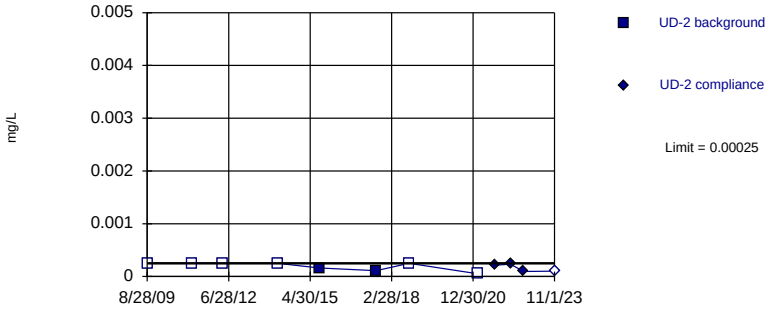
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

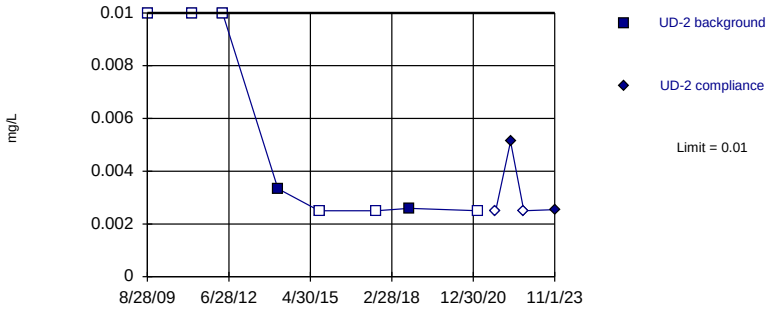
Constituent: Cadmium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

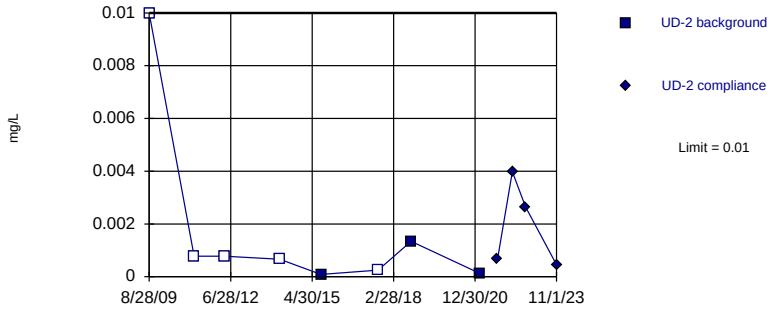
Constituent: Chromium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

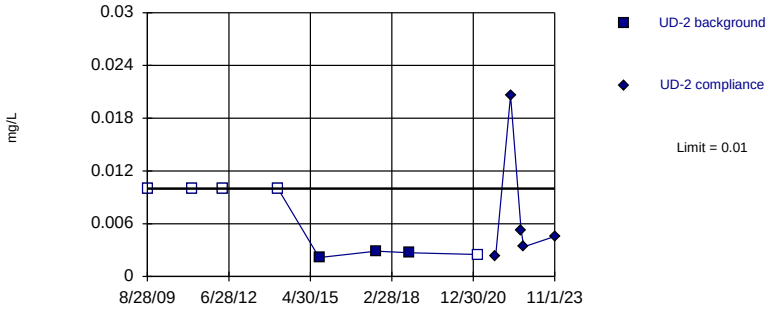
Constituent: Cobalt Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

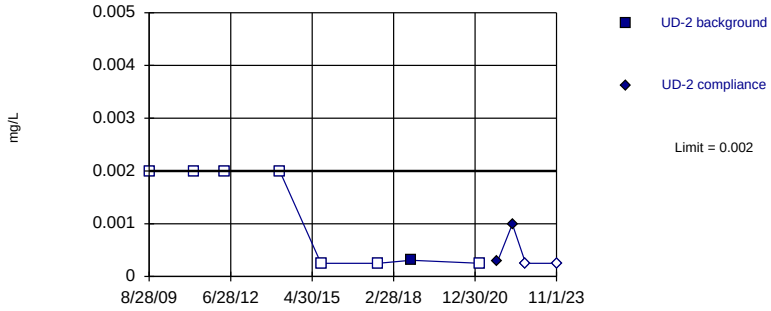
Constituent: Copper Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

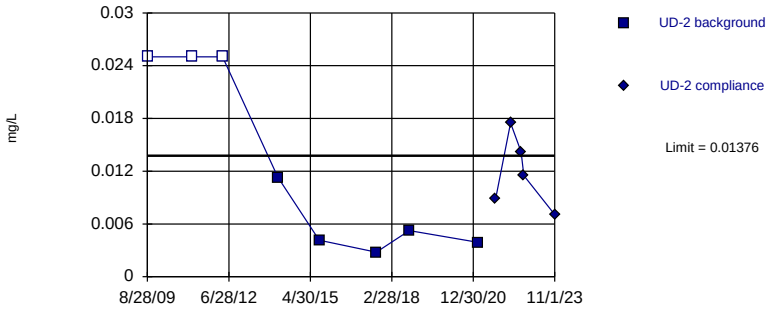
Constituent: Lead Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.005476, Std. Dev.=0.003014, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7635, critical = 0.749. Kappa = 2.748 (c=13, w=16, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002532.

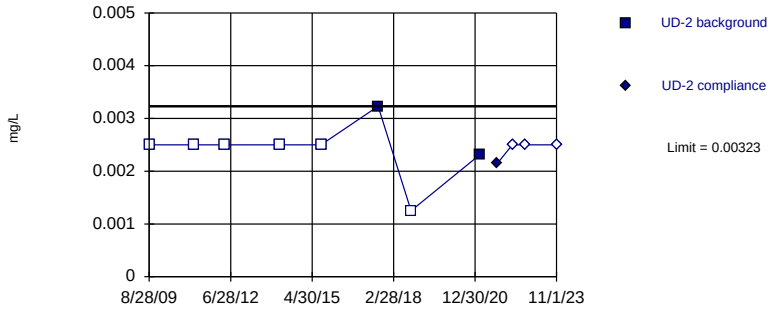
Constituent: Nickel Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

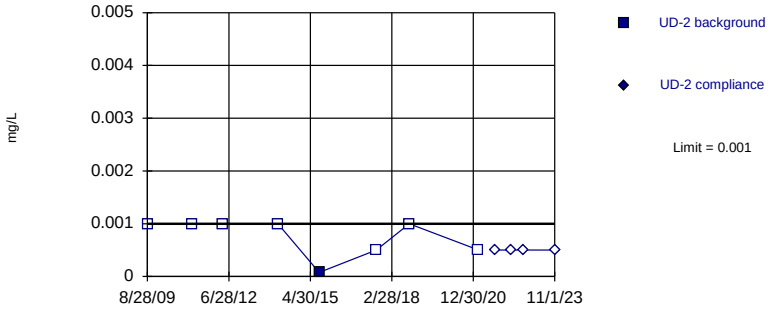
Constituent: Selenium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

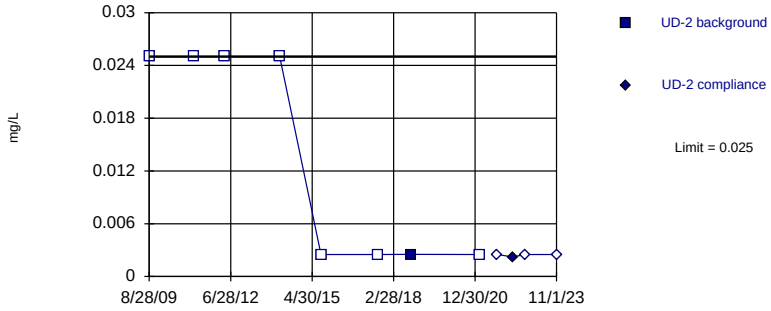
Constituent: Thallium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

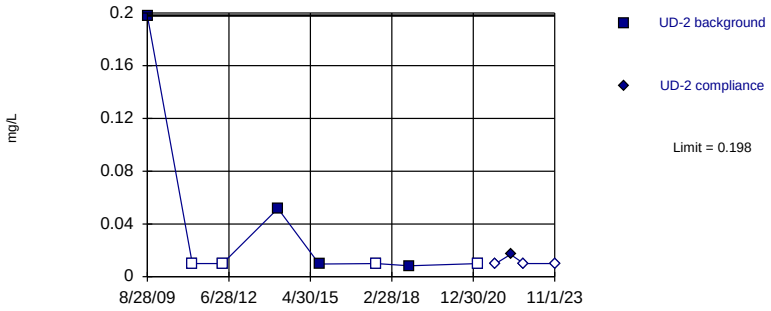
Constituent: Vanadium Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL
SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Sanitas™ v.9.6.37 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 50% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Zinc Analysis Run 12/20/2023 4:23 PM View: 2023AWQR - UD-2 IntraPL

SE Iowa Multi-County SLF Client: SCS Engineers Data: Sanitas SEMCO master

Mann-Kendall/Sen's Slope Trend Test Summary Table and Graphs

Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/21/2023, 9:17 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Acetone (ug/L)	MW-7	0.2418	12	21	No	8	62.5	0.01	NP
Antimony (mg/L)	MW-5	0.0002321	17	21	No	8	87.5	0.01	NP
Arsenic (mg/L)	MW-14	-0.001705	-2	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-25	0.0003348	10	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-26	-0.000611	-12	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-29	-0.0005353	-18	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	MW-5	0.00003448	0	21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-7	-0.0001961	-2	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-9R	0.000379	12	21	No	8	12.5	0.01	NP
Barium (mg/L)	MW-14	-0.00464	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-25	-0.002516	-4	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-26	-0.001604	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	**MW-29**	**-0.003019**	**-24**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**
Barium (mg/L)	MW-5	-0.004812	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	MW-7	0.02649	18	21	No	8	0	0.01	NP
Barium (mg/L)	MW-9R	-0.01854	-10	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-25	-0.08959	-5	-21	No	8	0	0.01	NP
Beryllium (mg/L)	MW-25	0	-1	-21	No	8	87.5	0.01	NP
beta-BHC (ug/L)	MW-7	0.004688	5	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-14	-0.000005879	-4	-21	No	8	0	0.01	NP
Cadmium (mg/L)	**MW-5**	**0.00001136**	**22**	**21**	**Yes**	**8**	**50**	**0.01**	**NP**
Cadmium (mg/L)	MW-7	0.0000166	10	21	No	8	50	0.01	NP
Cadmium (mg/L)	MW-9R	0.000003156	9	21	No	8	75	0.01	NP
Chlorobenzene (ug/L)	MW-25	-0.0824	-6	-21	No	8	12.5	0.01	NP
Chloromethane (ug/L)	MW-25	-0.05991	-10	-21	No	8	62.5	0.01	NP
Chromium (mg/L)	MW-25	0	-3	-21	No	8	87.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-25	-0.1898	-10	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-9R	0.7435	18	21	No	8	12.5	0.01	NP
Cobalt (mg/L)	MW-14	0.001866	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-25	-0.01481	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-26	0.000186	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-29	-0.0009176	-20	-21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-5	0.0009922	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-9R	-0.0003534	-5	-21	No	8	0	0.01	NP
Copper (mg/L)	MW-25	-0.00007146	-6	-21	No	8	50	0.01	NP
Lead (mg/L)	MW-14	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-25	0.0000486	11	21	No	8	37.5	0.01	NP
Lead (mg/L)	MW-5	0	7	21	No	8	87.5	0.01	NP
Lead (mg/L)	MW-9R	0.00008426	9	21	No	8	25	0.01	NP
Nickel (mg/L)	MW-14	0.0007382	2	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-25	-0.005144	-12	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-26	0	2	21	No	8	50	0.01	NP
Nickel (mg/L)	MW-29	-0.0001519	-2	-21	No	8	0	0.01	NP
Nickel (mg/L)	MW-5	0.003201	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-9R	0.002497	4	21	No	8	0	0.01	NP
Silver (mg/L)	MW-5	0	7	21	No	8	87.5	0.01	NP
Sulfide (mg/L)	MW-26	0	-2	-14	No	6	50	0.01	NP
Toluene (ug/L)	MW-25	0	3	21	No	8	87.5	0.01	NP
Toluene (ug/L)	MW-7	0	3	21	No	8	75	0.01	NP
Trichloroethene (ug/L)	MW-9R	0.02249	2	21	No	8	12.5	0.01	NP

Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/21/2023, 9:17 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Xylenes, total (ug/L)	MW-25	0	3	21	No	8	87.5	0.01	NP
Zinc (mg/L)	MW-25	0	-4	-21	No	8	62.5	0.01	NP

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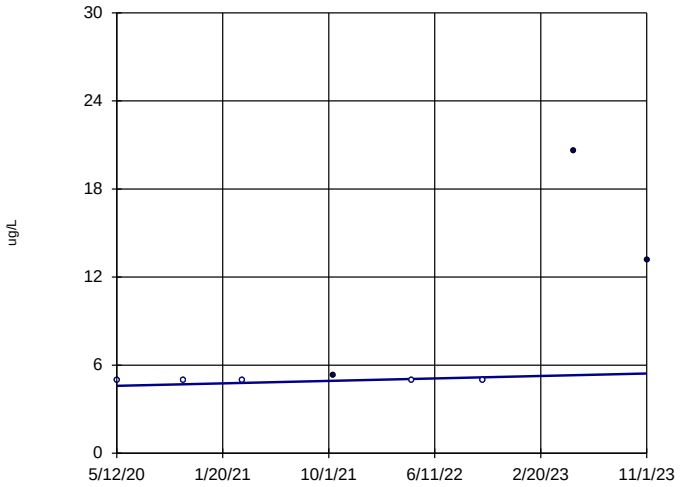
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 8

Slope = 0.2418 units per year.

Mann-Kendall statistic = 12
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Acetone Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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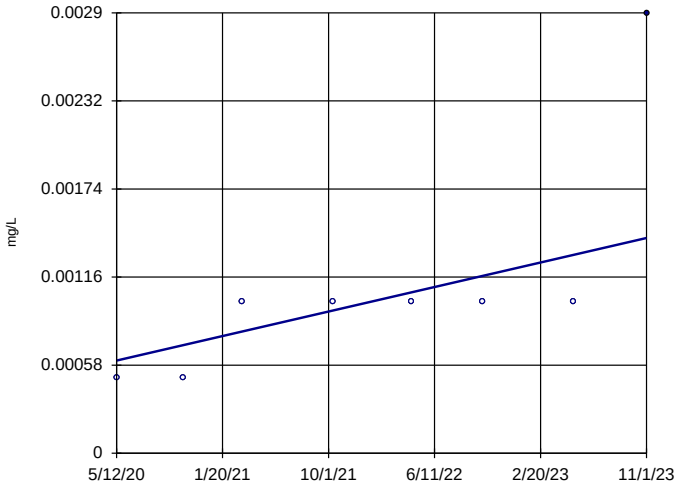
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5



n = 8

Slope = 0.0002321 units per year.

Mann-Kendall statistic = 17
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Antimony Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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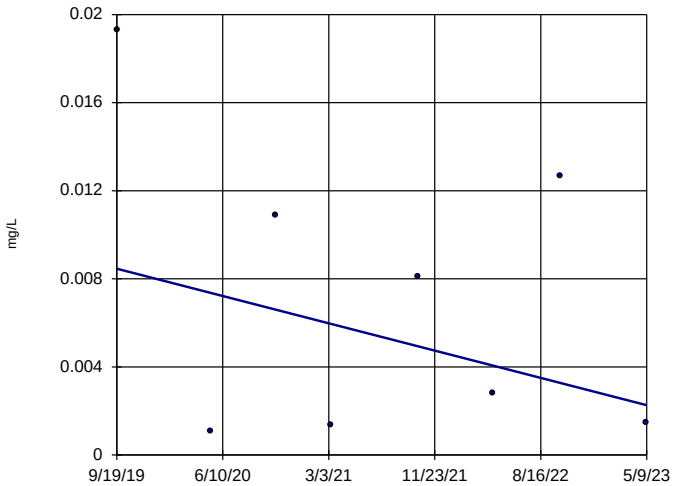
Sen's Slope Estimator

MW-14



n = 8

Slope = -0.001705 units per year.

Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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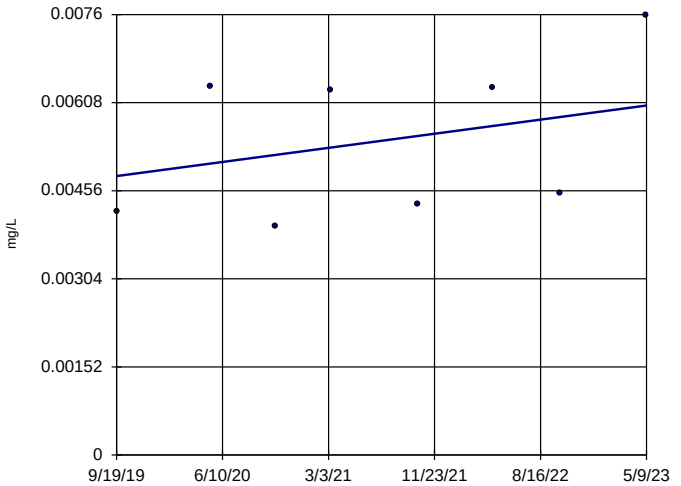
Sen's Slope Estimator

MW-25



n = 8

Slope = 0.0003348 units per year.

Mann-Kendall statistic = 10
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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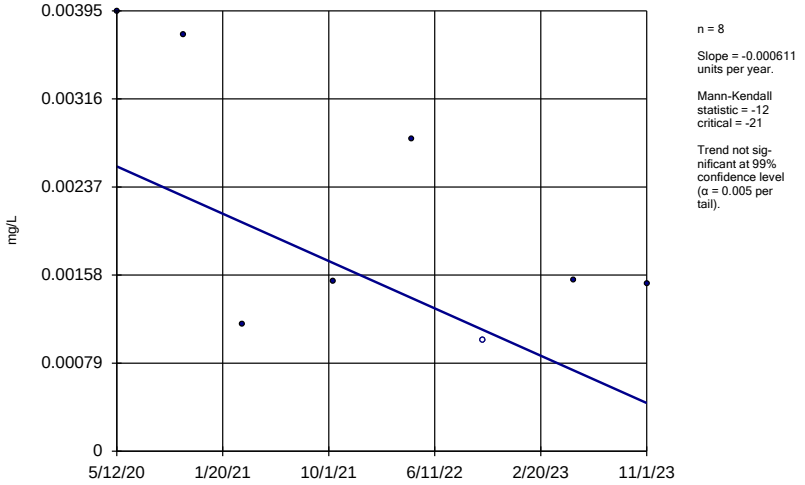
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



n = 8

Slope = -0.000611 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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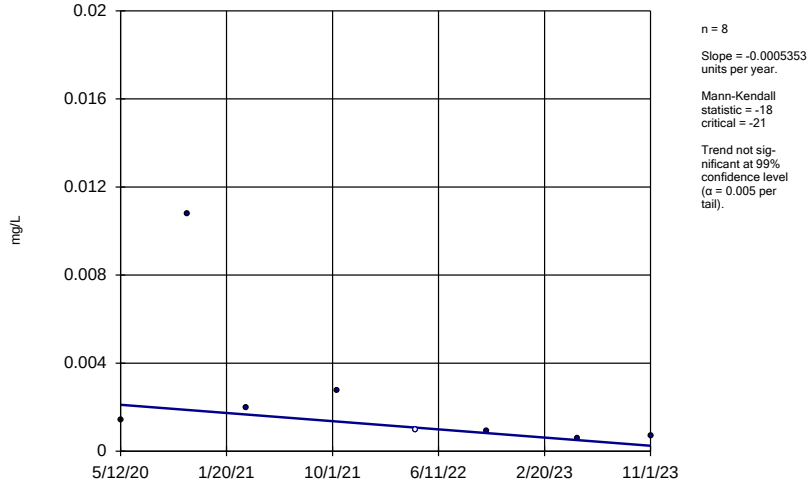
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-29



n = 8

Slope = -0.0005353 units per year.

Mann-Kendall statistic = -18
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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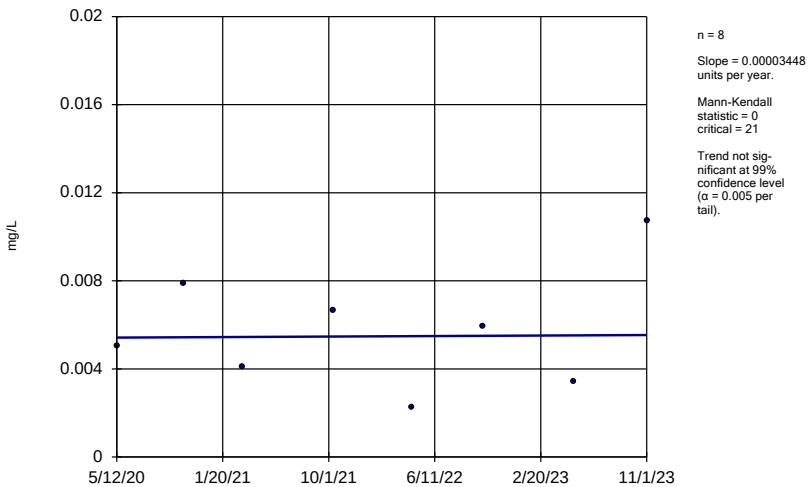
Sen's Slope Estimator

MW-5



n = 8

Slope = 0.00003448 units per year.

Mann-Kendall statistic = 0
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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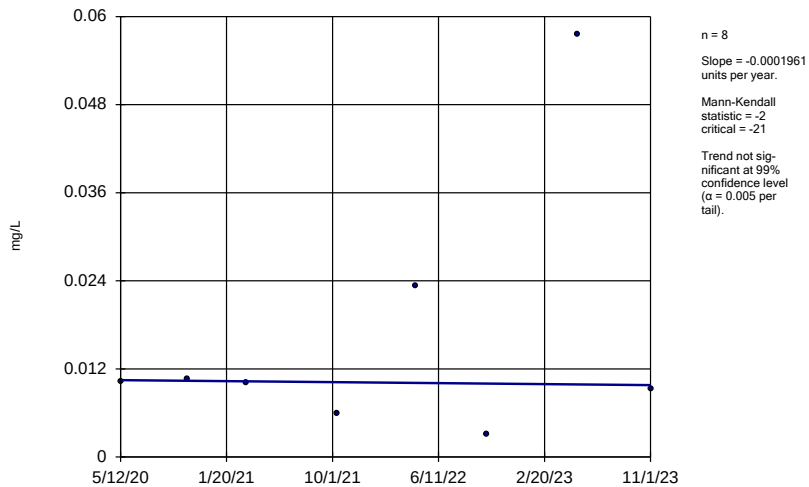
Sen's Slope Estimator

MW-7



n = 8

Slope = -0.0001961 units per year.

Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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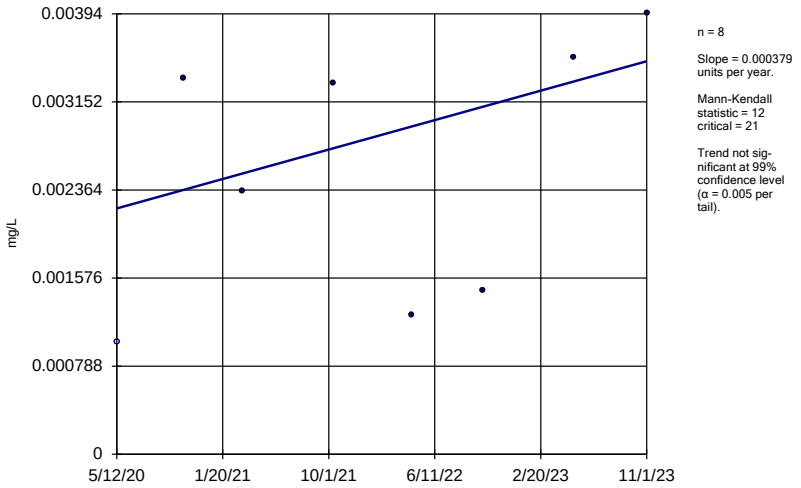
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R

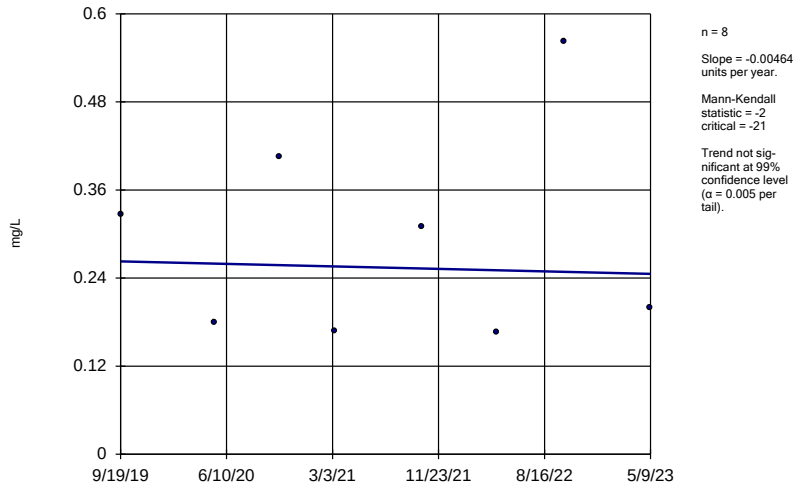


Constituent: Arsenic Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-14



Constituent: Barium Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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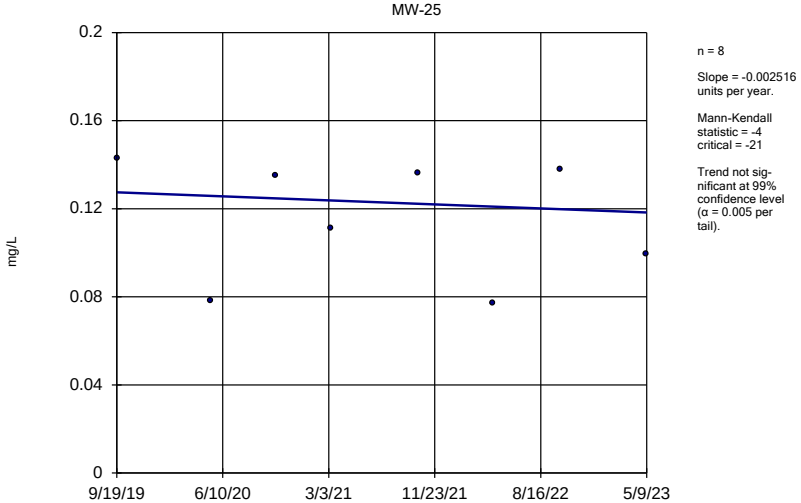
Sen's Slope Estimator

MW-25



Constituent: Barium Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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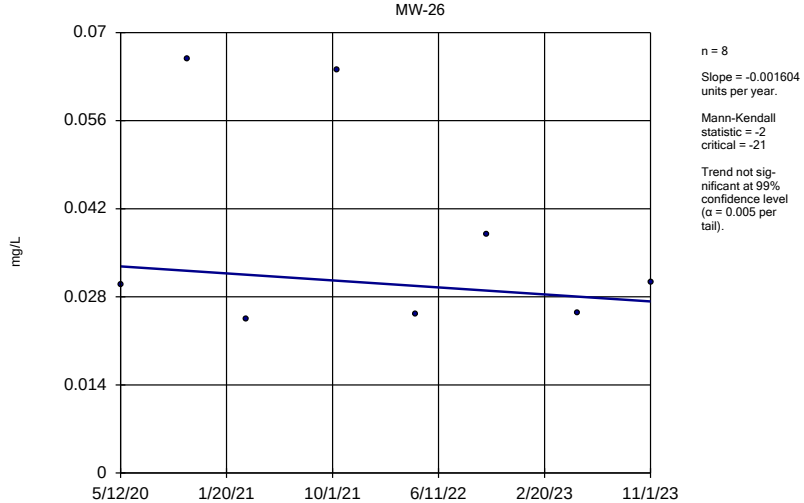
Sen's Slope Estimator

MW-26

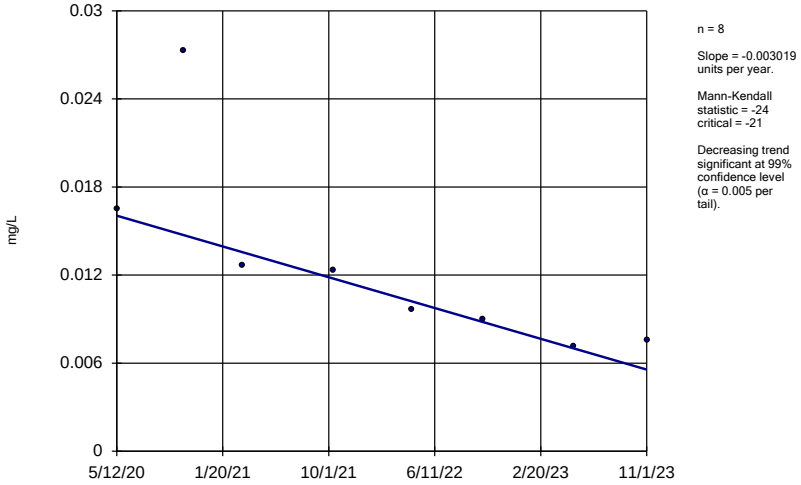


Constituent: Barium Analysis Run 12/21/2023 9:13 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-29



n = 8

Slope = -0.003019 units per year.

Mann-Kendall statistic = -24
critical = -21

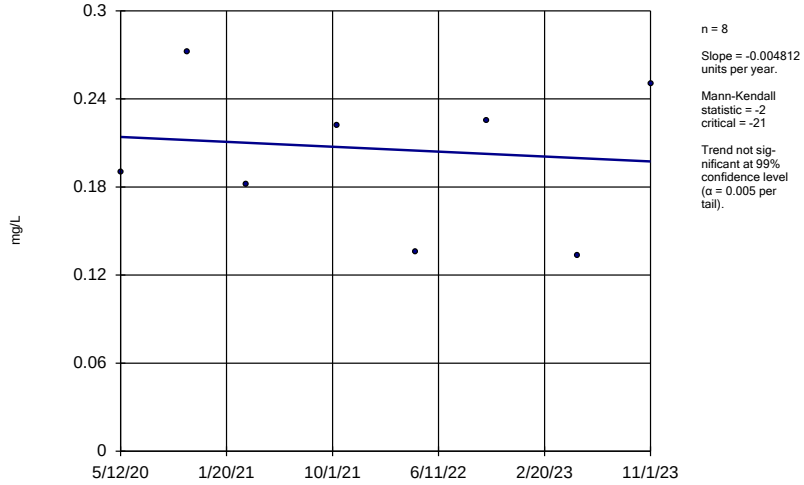
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-5



n = 8

Slope = -0.004812 units per year.

Mann-Kendall statistic = -2
critical = -21

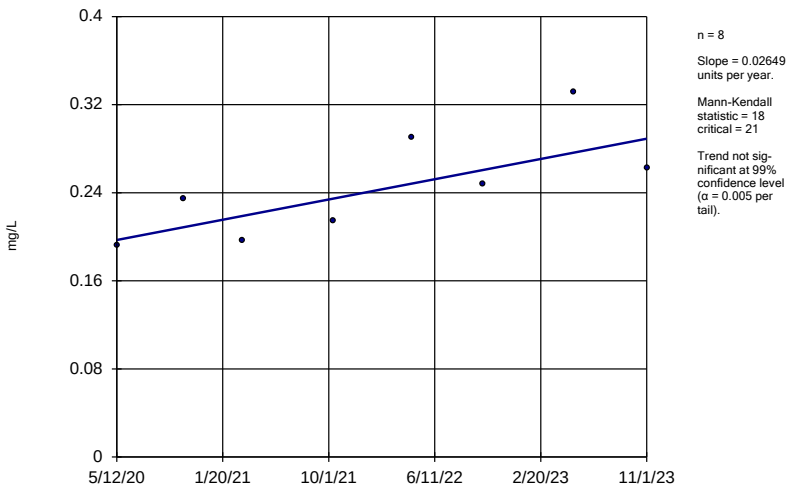
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-7



n = 8

Slope = 0.02649 units per year.

Mann-Kendall statistic = 18
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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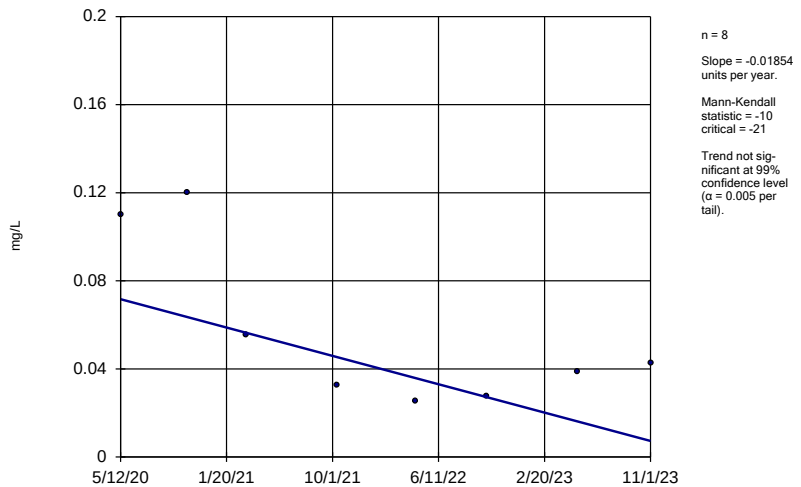
Sen's Slope Estimator

MW-9R



n = 8

Slope = -0.01854 units per year.

Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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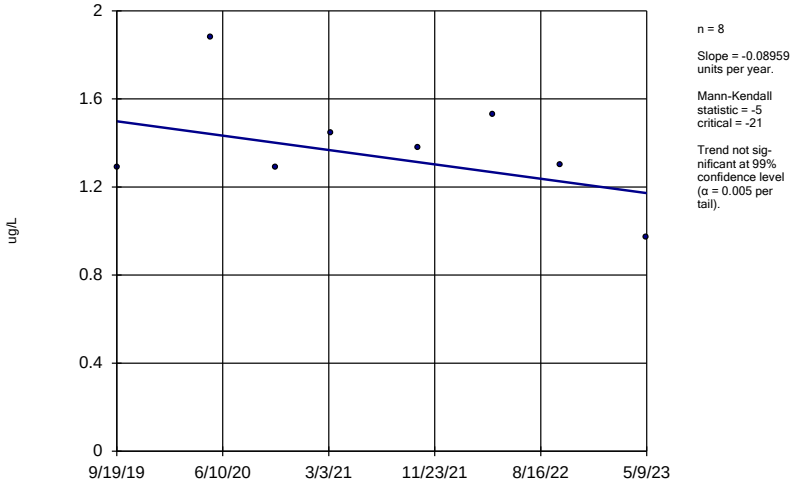
Sen's Slope Estimator

MW-25

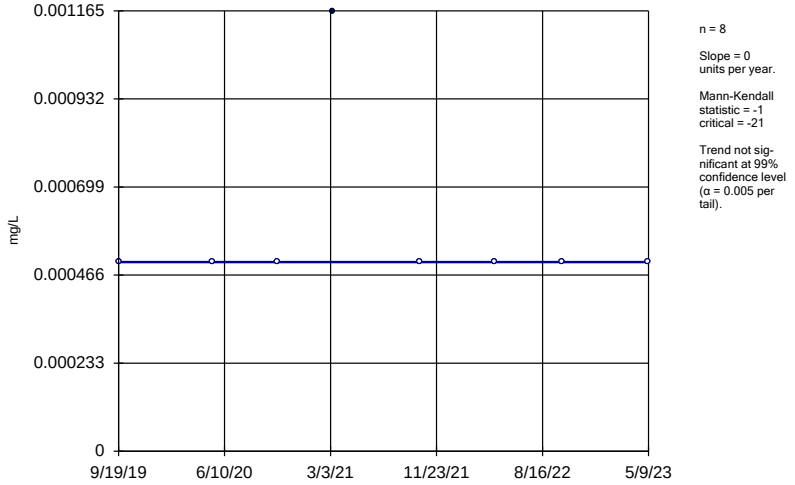


Constituent: Benzene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Beryllium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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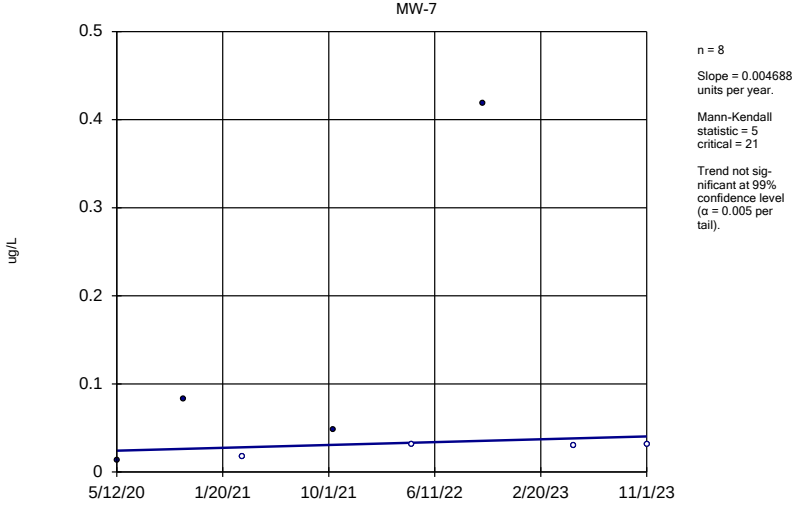
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



Constituent: beta-BHC Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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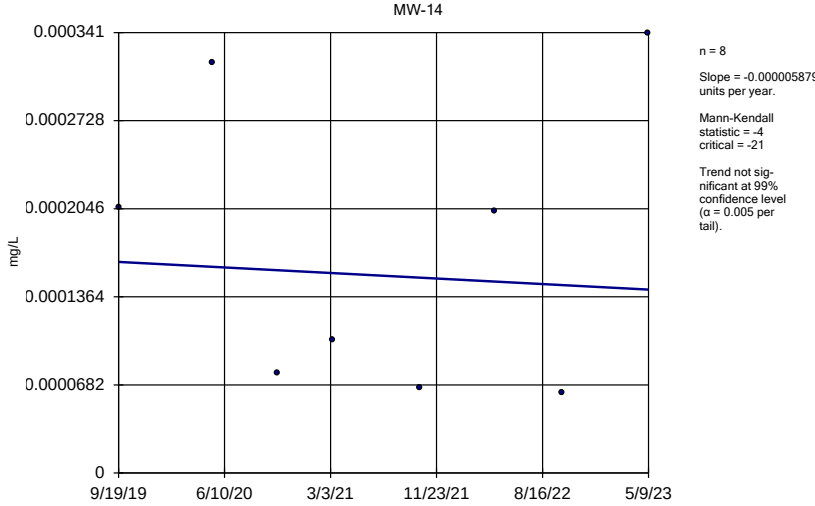
Sen's Slope Estimator

MW-14



Constituent: Cadmium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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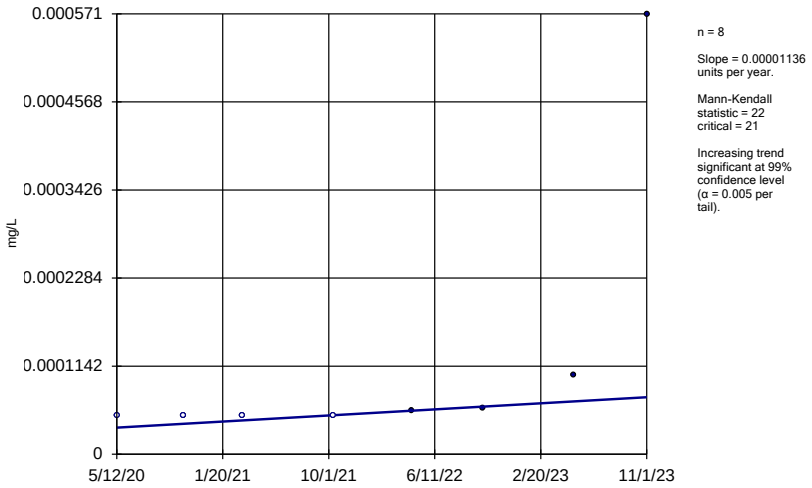
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5



n = 8

Slope = 0.00001136 units per year.

Mann-Kendall statistic = 22
critical = 21

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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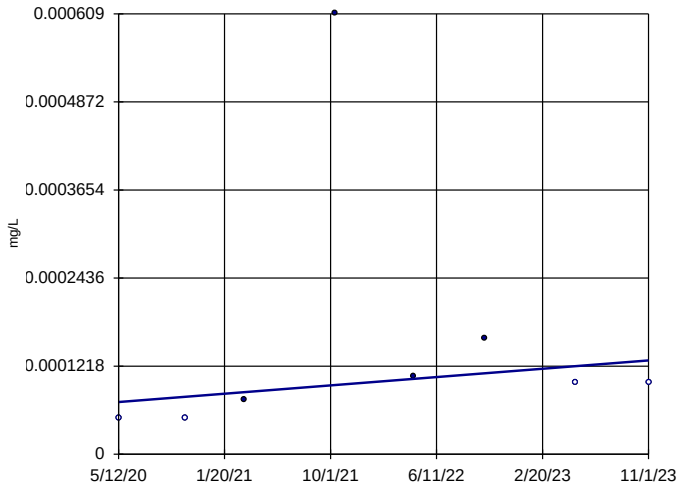
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



n = 8

Slope = 0.0000166 units per year.

Mann-Kendall statistic = 10
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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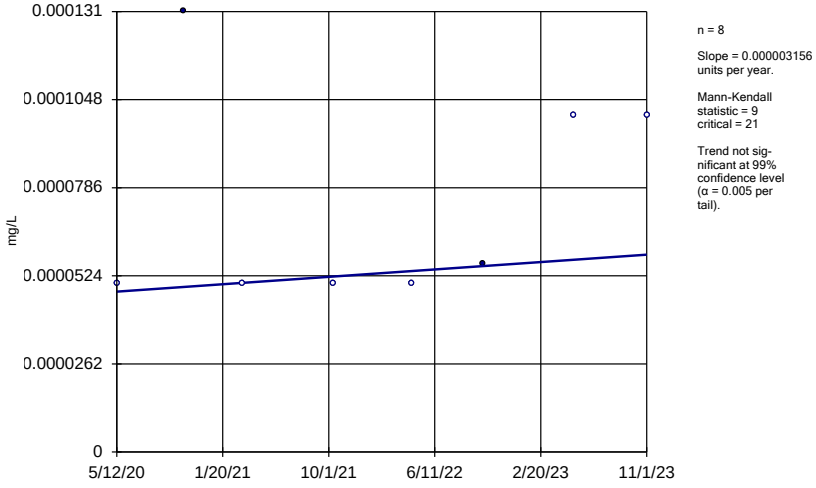
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



n = 8

Slope = 0.000003156 units per year.

Mann-Kendall statistic = 9
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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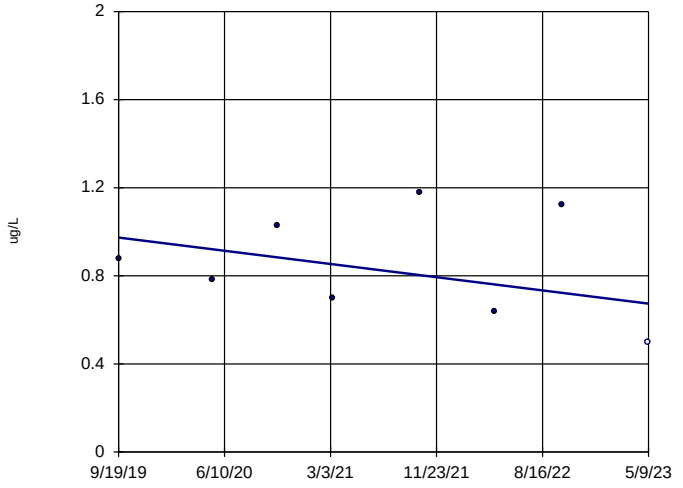
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = -0.0824 units per year.

Mann-Kendall statistic = -6
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chlorobenzene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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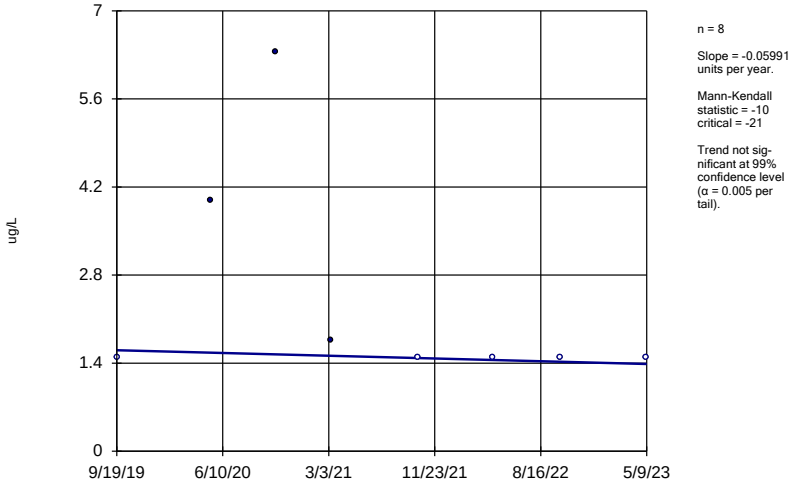
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Chloromethane Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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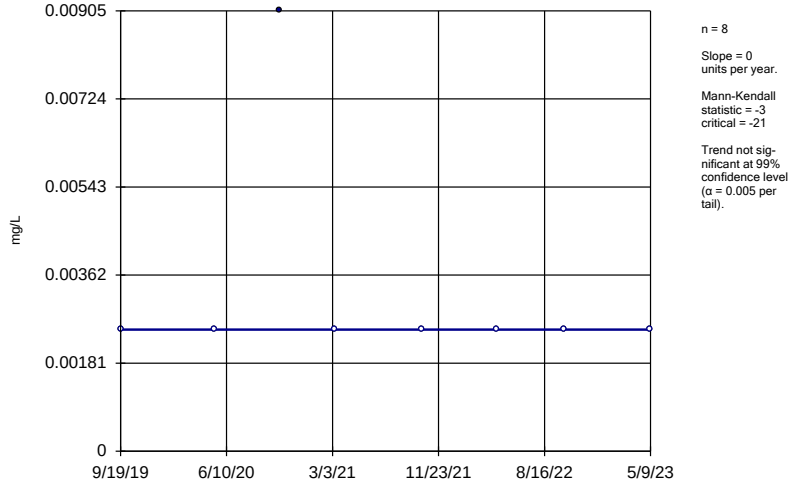
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Chromium Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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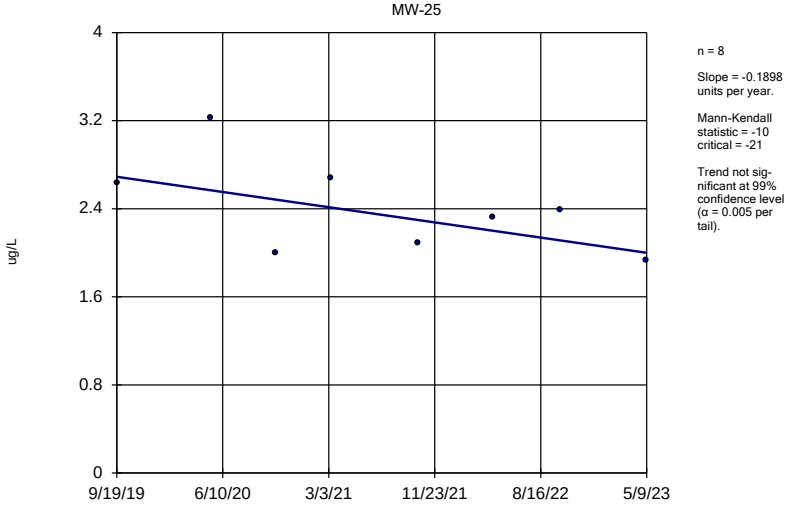
Sen's Slope Estimator

MW-25



Constituent: cis-1,2-Dichloroethene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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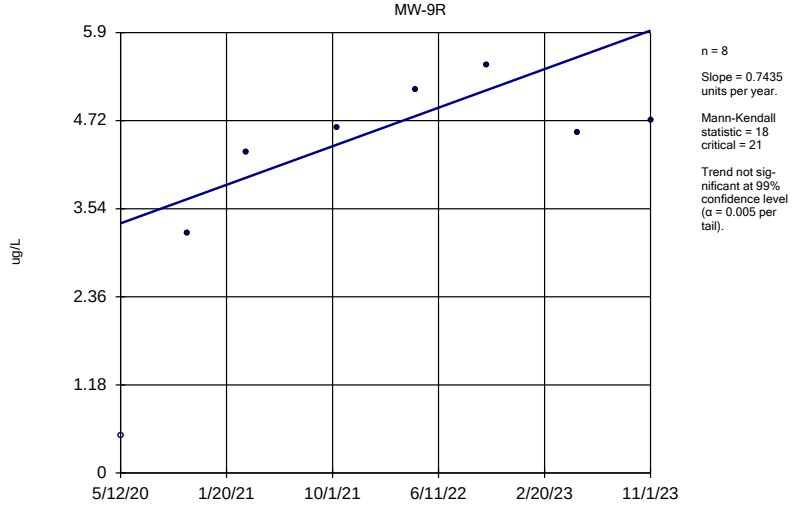
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



Constituent: cis-1,2-Dichloroethene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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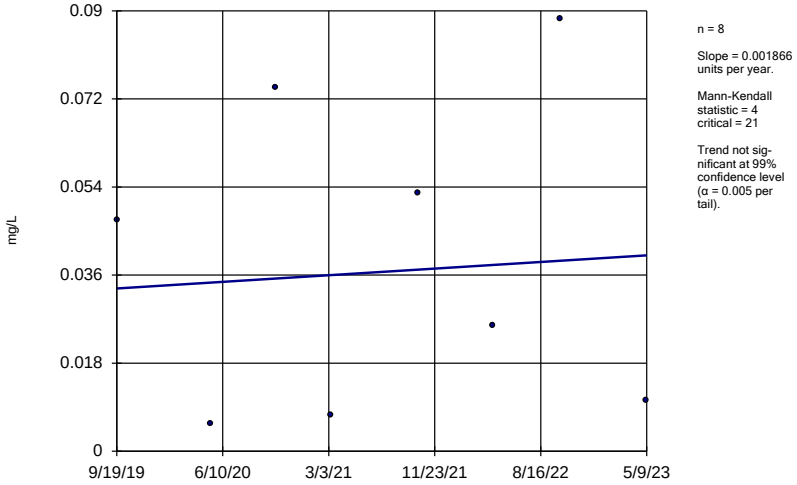
Sen's Slope Estimator

MW-14



Constituent: Cobalt Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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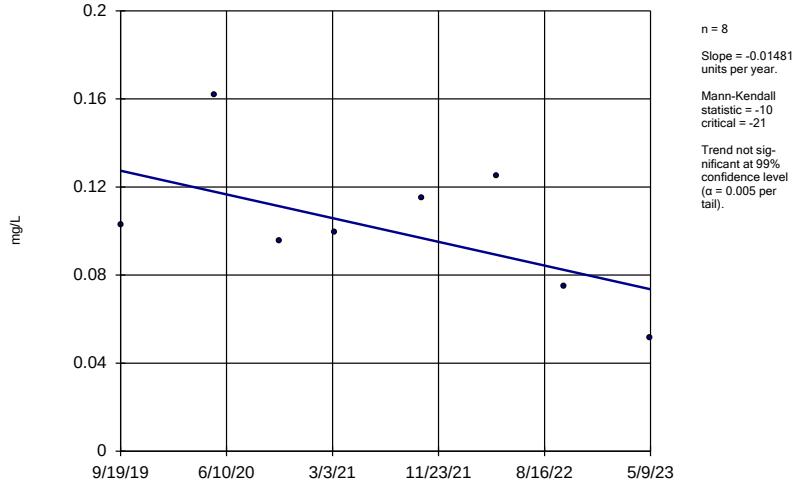
Sen's Slope Estimator

MW-25



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SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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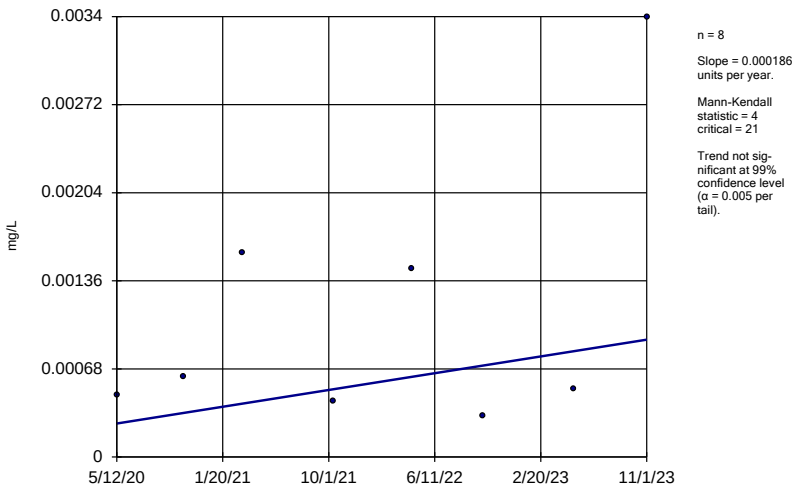
Sen's Slope Estimator

MW-26



Constituent: Cobalt Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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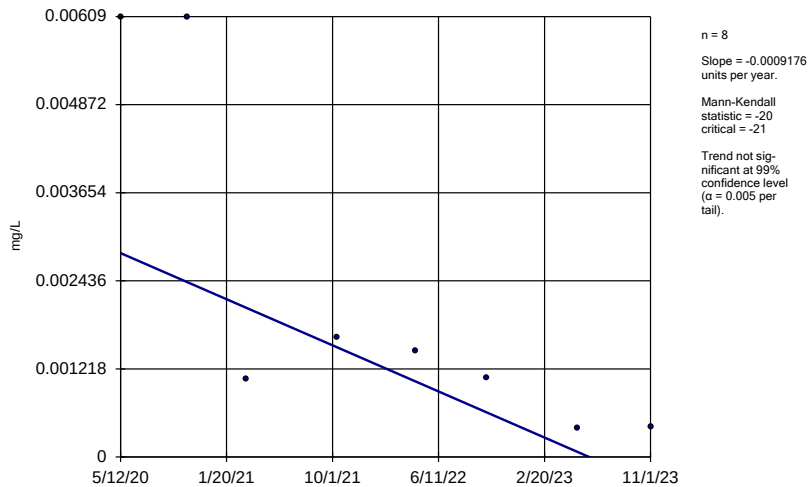
Sen's Slope Estimator

MW-29



Constituent: Cobalt Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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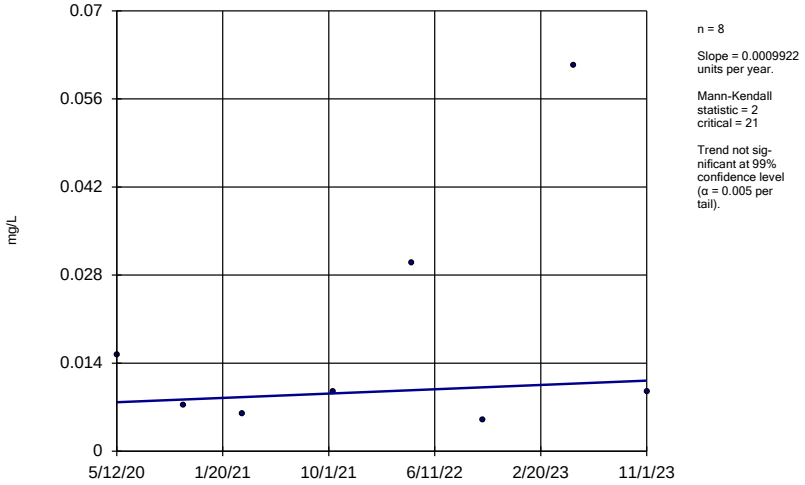
Sen's Slope Estimator

MW-5

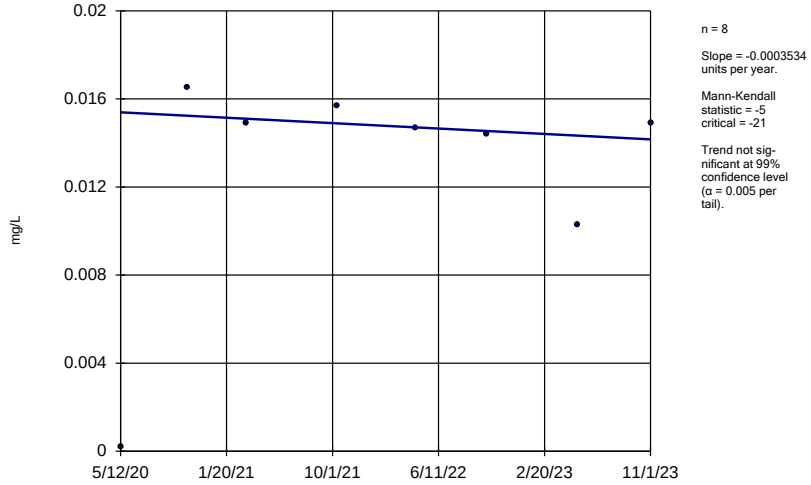


Constituent: Cobalt Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-9R



Constituent: Cobalt Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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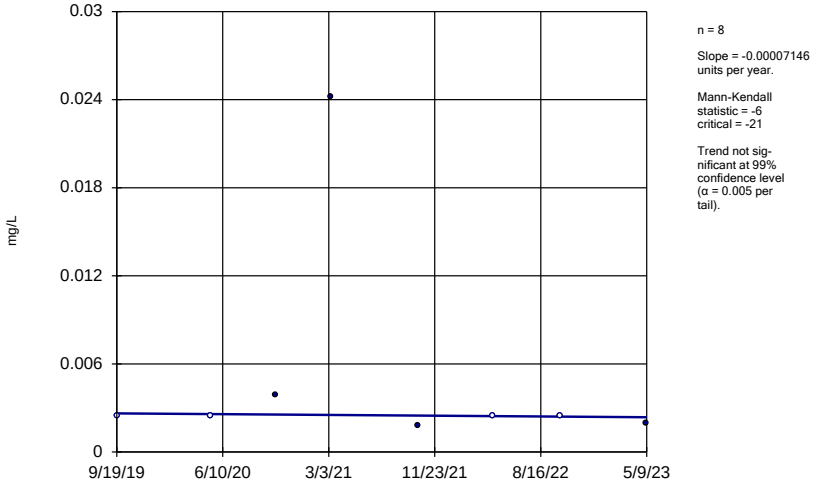
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Copper Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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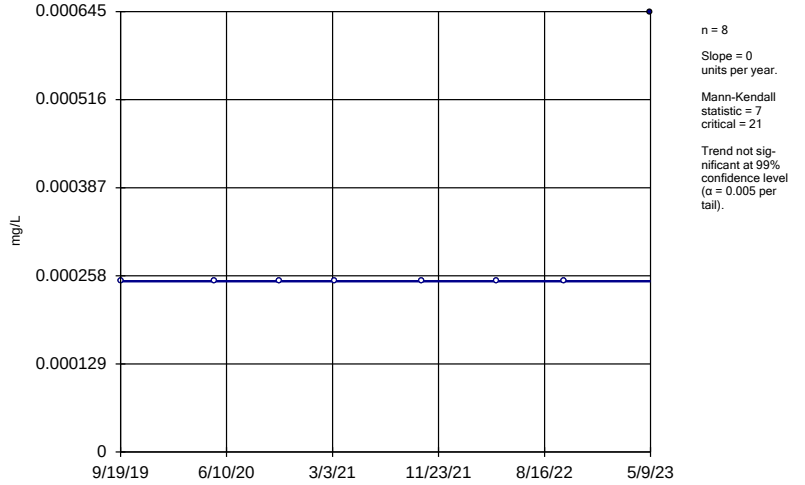
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-14

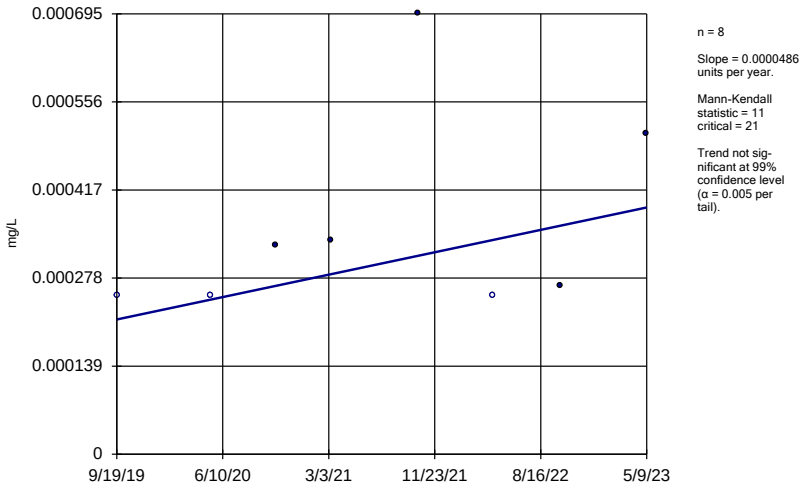


Constituent: Lead Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



n = 8

Slope = 0.0000486 units per year.

Mann-Kendall statistic = 11
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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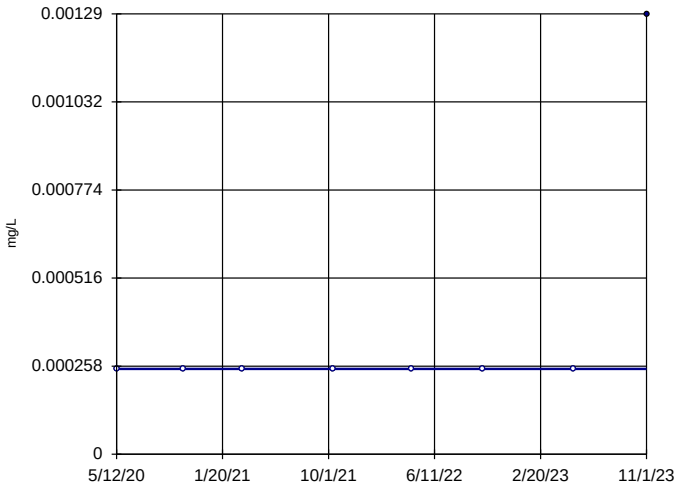
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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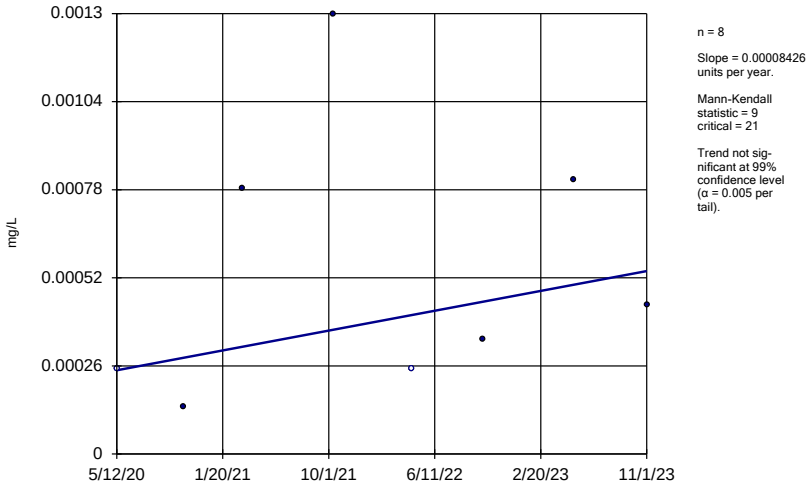
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



n = 8

Slope = 0.00008426 units per year.

Mann-Kendall statistic = 9
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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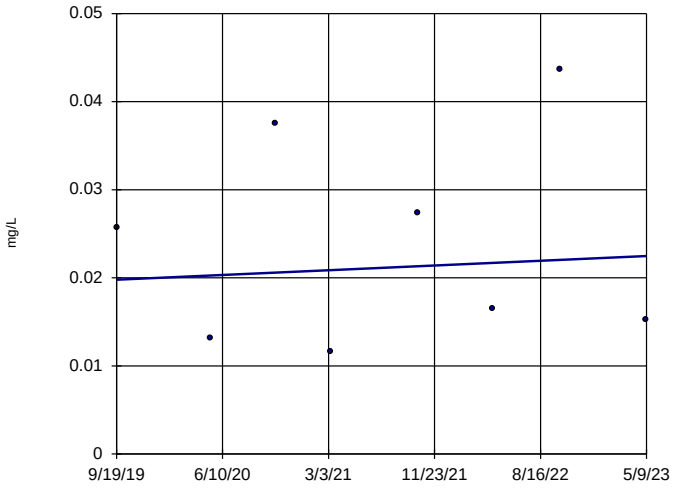
Sen's Slope Estimator

MW-14



n = 8

Slope = 0.0007382 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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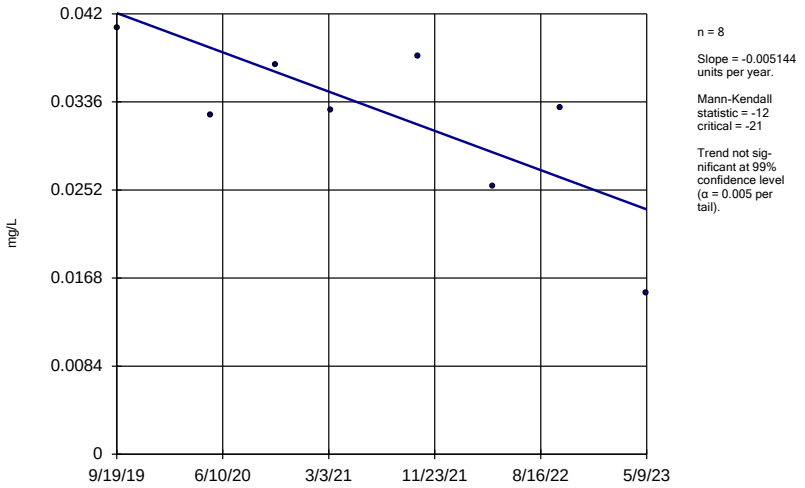
Sen's Slope Estimator

MW-25



n = 8

Slope = -0.005144 units per year.

Mann-Kendall statistic = -12
critical = -21

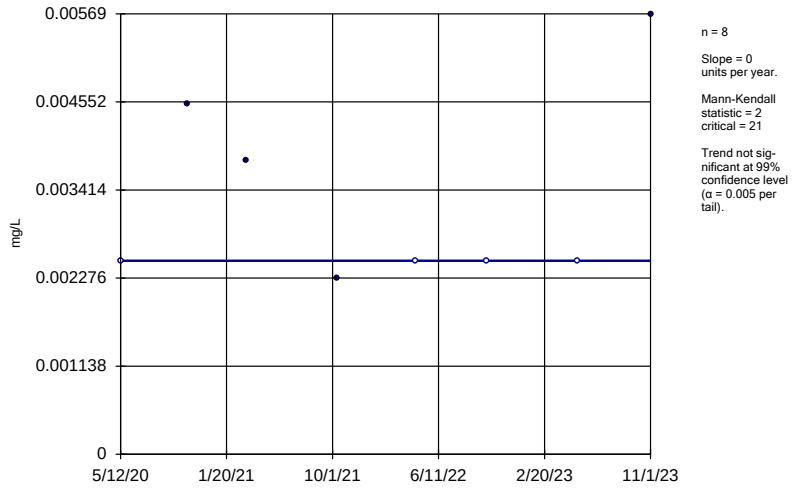
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 21

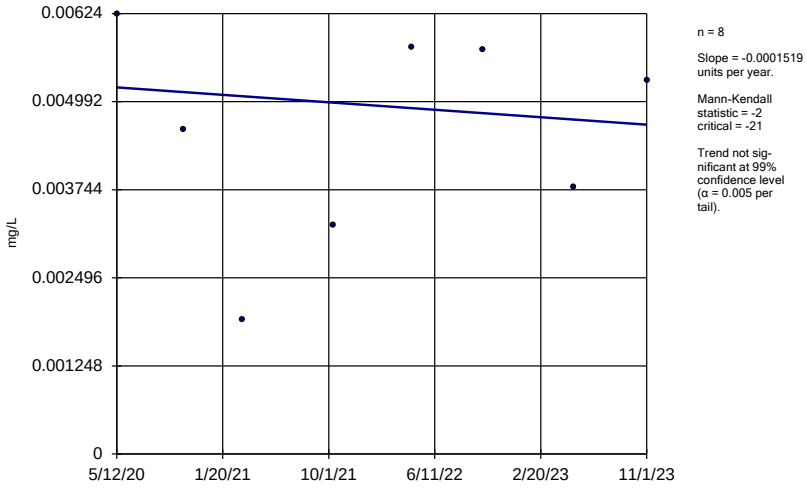
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-29



n = 8

Slope = -0.0001519 units per year.

Mann-Kendall statistic = -2
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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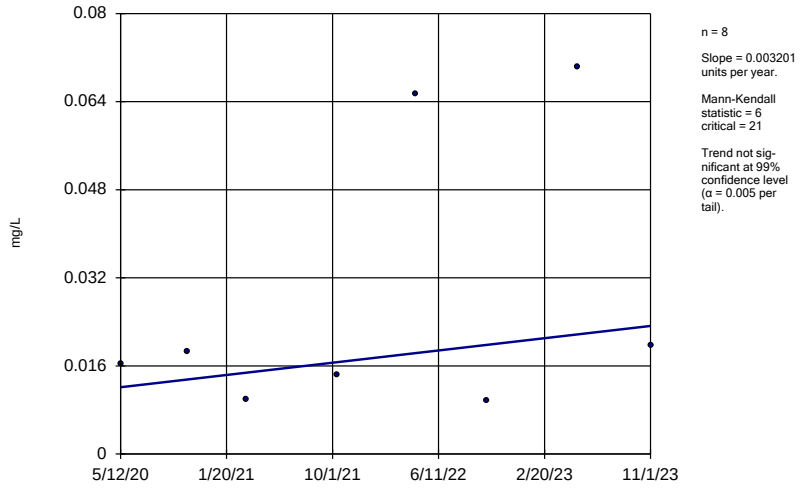
Sen's Slope Estimator

MW-5



n = 8

Slope = 0.003201 units per year.

Mann-Kendall statistic = 6
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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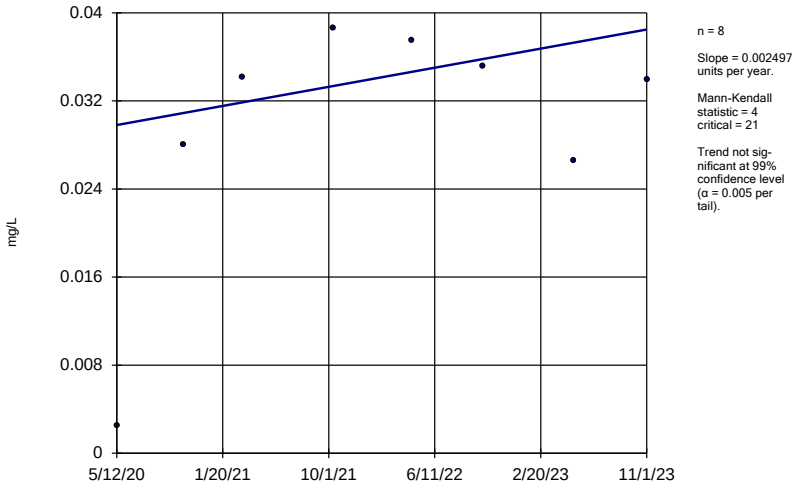
Sen's Slope Estimator

MW-9R



Constituent: Nickel Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall

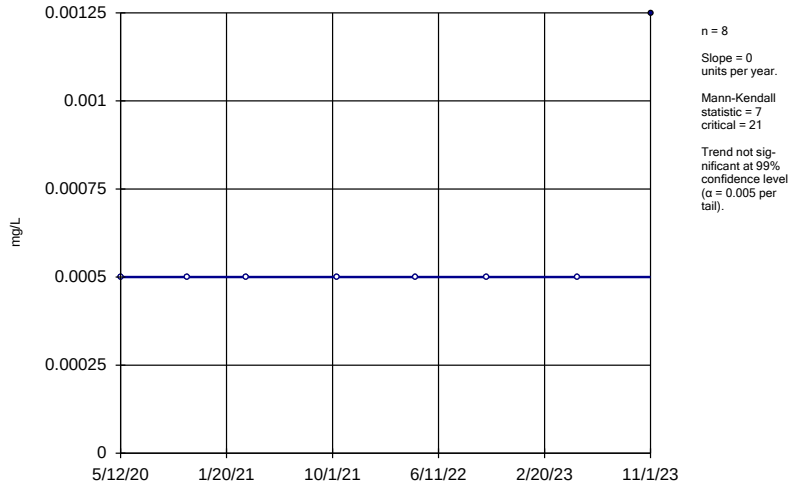
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-5



Constituent: Silver Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall

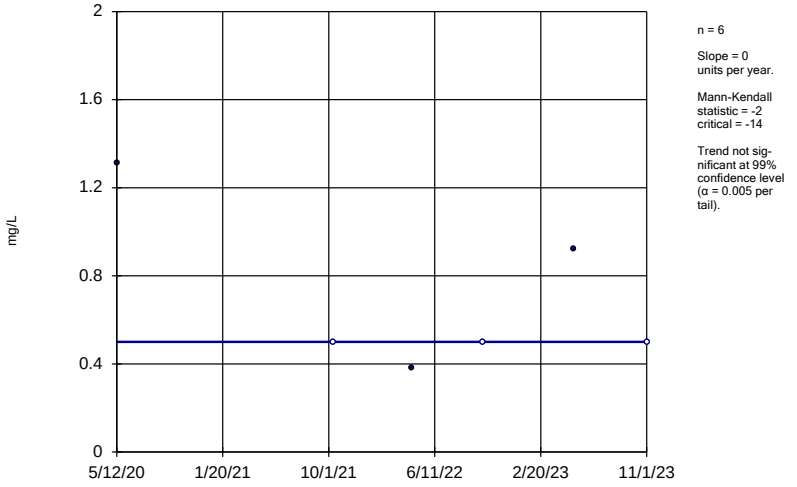
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-26



Constituent: Sulfide Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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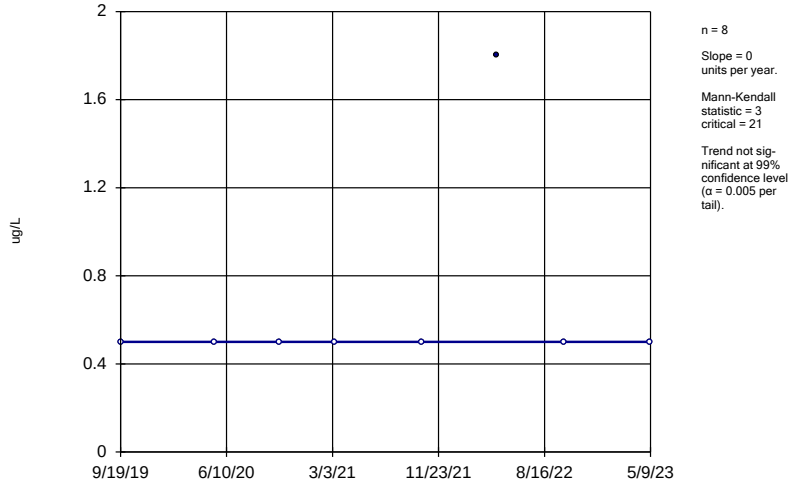
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Toluene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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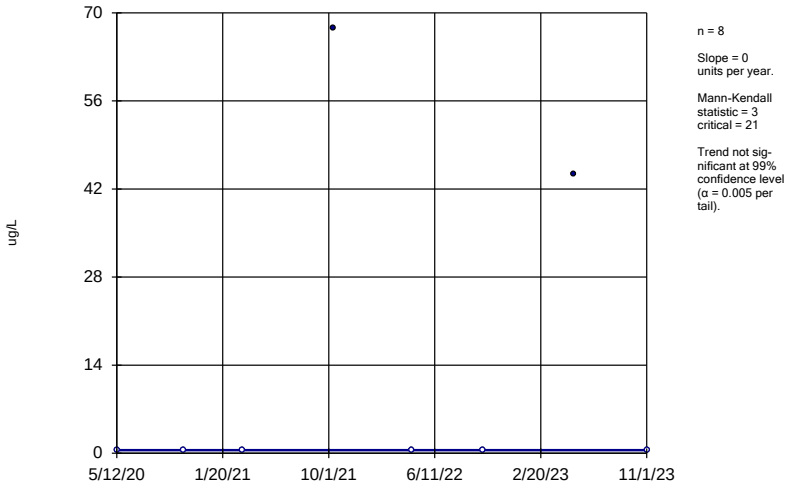
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-7



Constituent: Toluene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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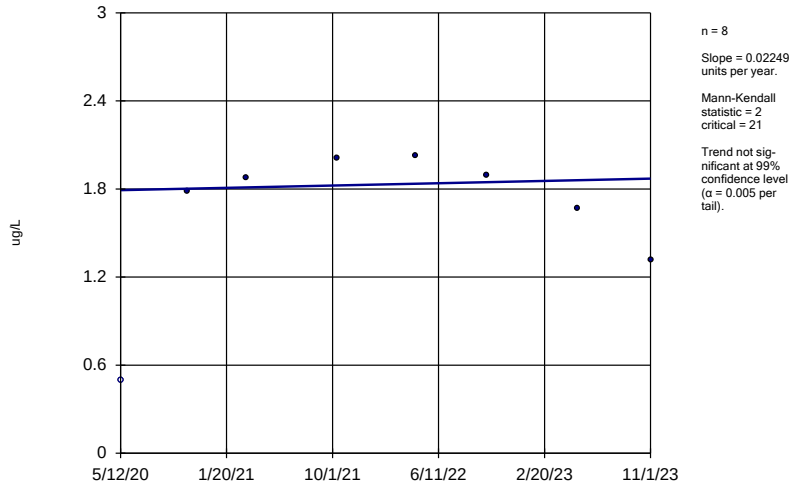
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-9R



Constituent: Trichloroethene Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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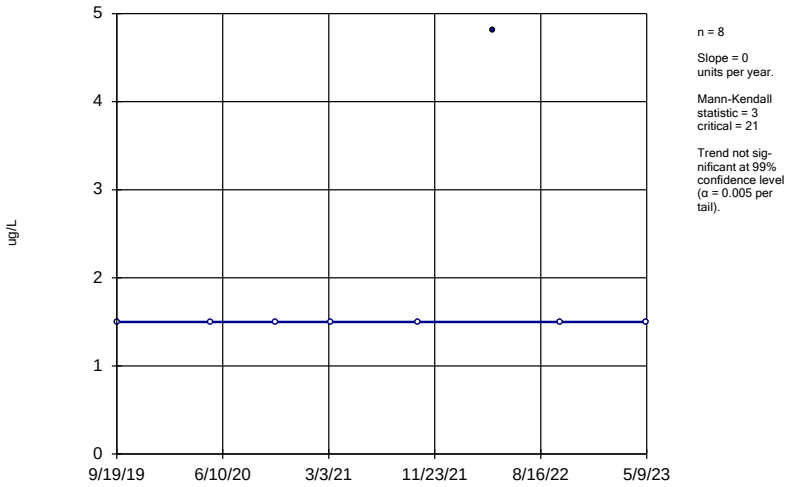
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Xylenes, total Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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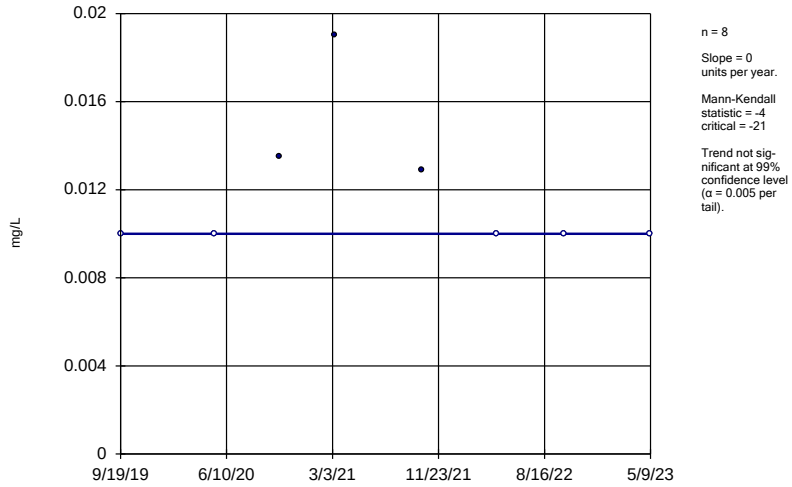
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-25



Constituent: Zinc Analysis Run 12/21/2023 9:14 AM View: 2023AWQR - MannKendall
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Confidence Interval Summary Table and Graphs

Confidence Interval

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/21/2023, 9:43 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Acetone (ug/L)	MW-7	20.6	5	6300	No	8	62.5	No	0.004	NP (NDs)
Antimony (mg/L)	MW-5	0.0029	0.0005	0.006	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	MW-14	0.01432	0.0001161	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-25	0.006889	0.004011	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-26	0.003398	0.0008994	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	MW-29	0.0108	0.000563	0.01	No	8	12.5	No	0.004	NP (normality)
Arsenic (mg/L)	MW-5	0.008599	0.002889	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.0575	0.00306	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	MW-9R	0.003763	0.001294	0.01	No	8	12.5	No	0.01	Param.
Barium (mg/L)	MW-14	0.4398	0.1398	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-25	0.1436	0.08586	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-26	0.0562	0.01968	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-5	0.2546	0.148	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-7	0.2966	0.1956	2	No	8	0	No	0.01	Param.
Barium (mg/L)	MW-9R	0.09617	0.01703	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	MW-25	1.659	1.113	5	No	8	0	No	0.01	Param.
Beryllium (mg/L)	MW-25	0.001165	0.0005	0.004	No	8	87.5	No	0.004	NP (NDs)
beta-BHC (ug/L)	MW-7	0.418	0.0138	0.042	No	8	50	No	0.004	NP (normality)
Cadmium (mg/L)	MW-14	0.0002916	0.00005241	0.005	No	8	0	No	0.01	Param.
Cadmium (mg/L)	MW-7	0.000609	0.00005	0.005	No	8	50	No	0.004	NP (normality)
Cadmium (mg/L)	MW-9R	0.000131	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	MW-25	1.109	0.5963	100	No	8	12.5	No	0.01	Param.
Chloromethane (ug/L)	MW-25	6.34	1.5	3	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	MW-25	0.00905	0.0025	0.1	No	8	87.5	No	0.004	NP (NDs)
cis-1,2-Dichloroethene (ug/L)	MW-25	2.867	1.952	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	MW-9R	5.744	2.384	70	No	8	12.5	No	0.01	Param.
Cobalt (mg/L)	MW-14	0.07265	0.005334	0.0867	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-25	0.1383	0.06836	0.0867	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-26	0.002208	0	0.0867	No	8	0	No	0.01	Param.
Cobalt (mg/L)	MW-29	0.00609	0.000405	0.0867	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW-5	0.06125	0.00501	0.0867	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	MW-9R	0.0165	0.00017	0.0867	No	8	0	No	0.004	NP (normality)
Copper (mg/L)	MW-25	0.0242	0.00182	1.3	No	8	50	No	0.004	NP (normality)
Lead (mg/L)	MW-14	0.000645	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-25	0.0005286	0.0002394	0.015	No	8	37.5	No	0.01	Param.
Lead (mg/L)	MW-5	0.00129	0.00025	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	MW-9R	0.0009387	0.0001673	0.015	No	8	25	No	0.01	Param.
Nickel (mg/L)	MW-14	0.03642	0.01123	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-25	0.04044	0.02334	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-26	0.004998	0.002608	0.1	No	8	50	No	0.01	Param.
Nickel (mg/L)	MW-29	0.006146	0.002984	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	MW-5	0.07025	0.00972	0.1	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	MW-9R	0.0386	0.00249	0.1	No	8	0	No	0.004	NP (normality)
Silver (mg/L)	MW-5	0.00125	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Sulfide (mg/L)	MW-26	1.238	0.2858	1	No	6	50	No	0.01	Param.
Toluene (ug/L)	MW-25	1.8	0.5	1000	No	8	87.5	No	0.004	NP (NDs)
Toluene (ug/L)	MW-7	67.5	0.5	1000	No	8	75	No	0.004	NP (NDs)
Trichloroethene (ug/L)	MW-9R	2.177	1.093	5	No	8	12.5	No	0.01	Param.
Xylenes, total (ug/L)	MW-25	4.81	1.5	10000	No	8	87.5	No	0.004	NP (NDs)
Zinc (mg/L)	MW-25	0.019	0.01	2	No	8	62.5	No	0.004	NP (NDs)

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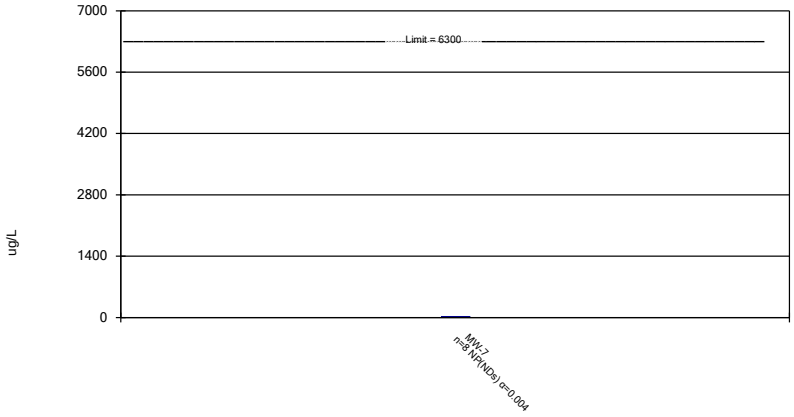
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Acetone Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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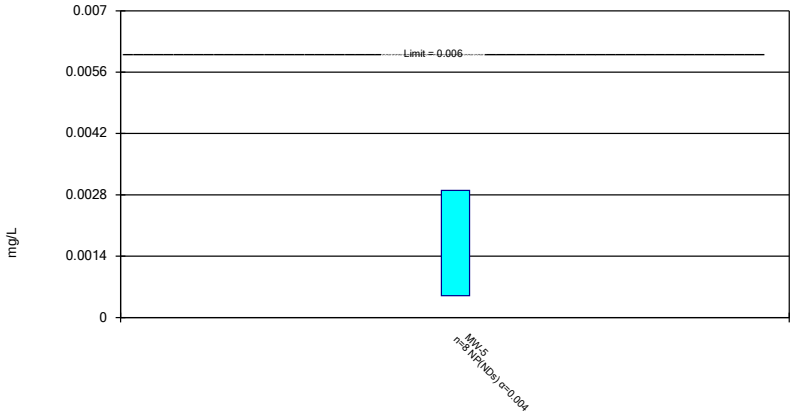
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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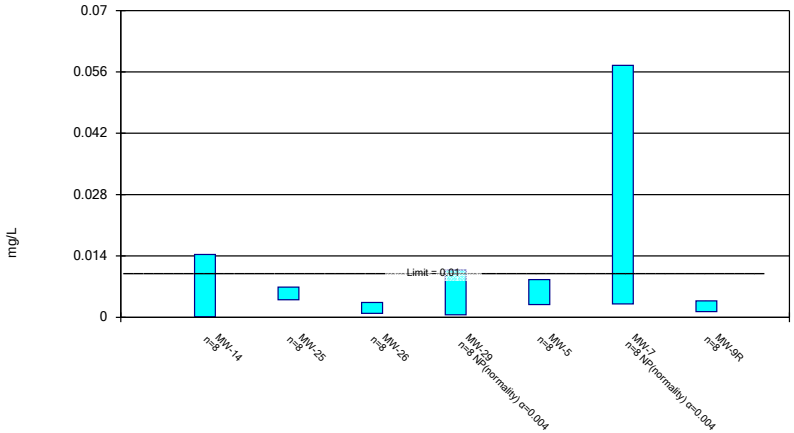
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Arsenic Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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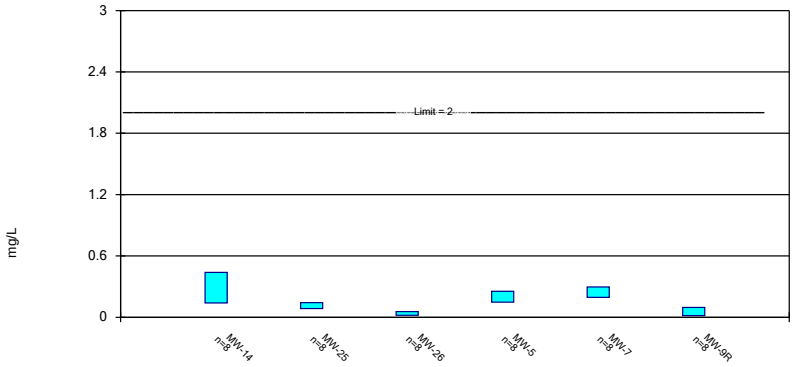
Parametric Confidence Interval

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



Constituent: Barium Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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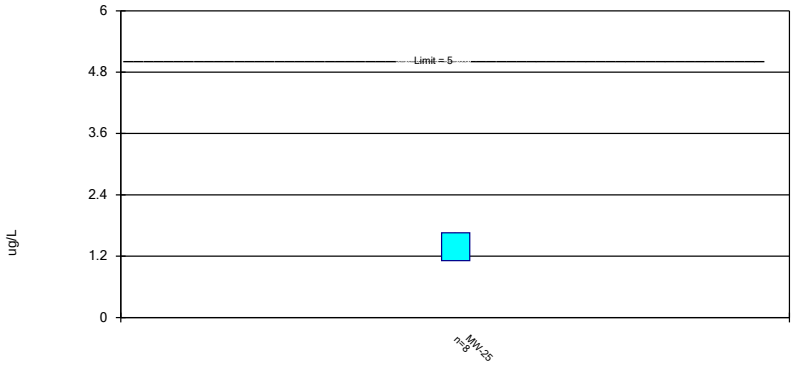
Parametric Confidence Interval

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



Constituent: Benzene Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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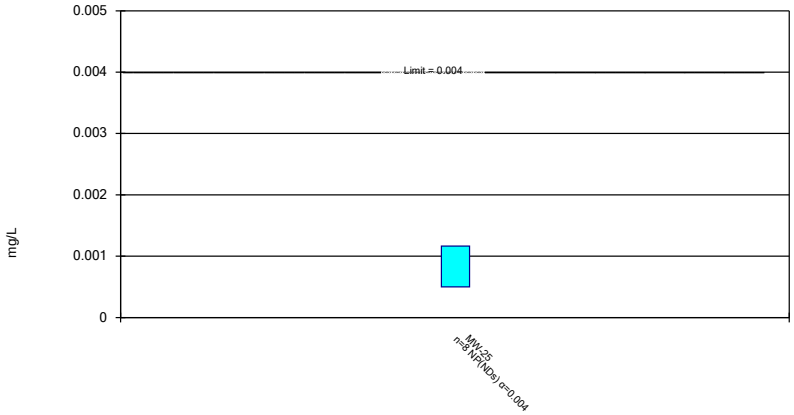
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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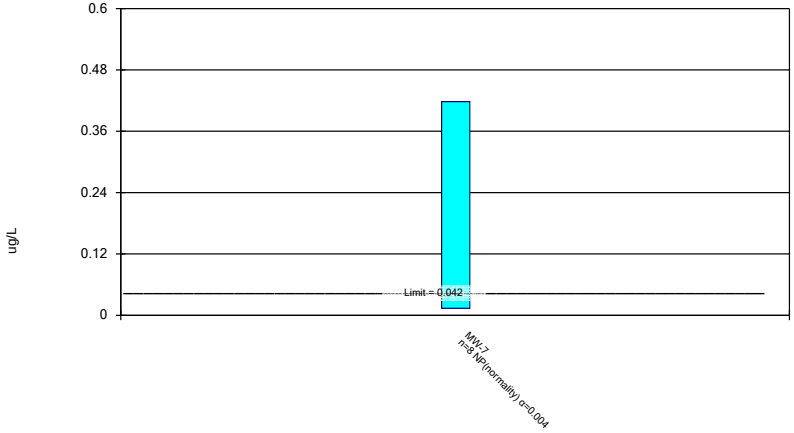
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: beta-BHC Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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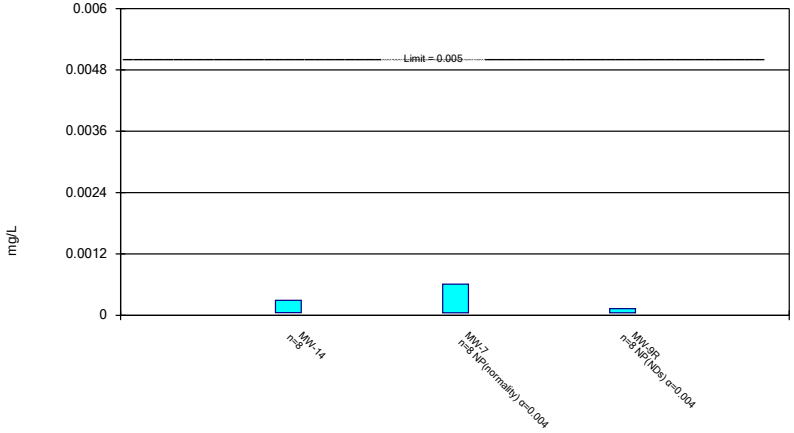
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Cadmium Analysis Run 12/21/2023 9:41 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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Parametric Confidence Interval

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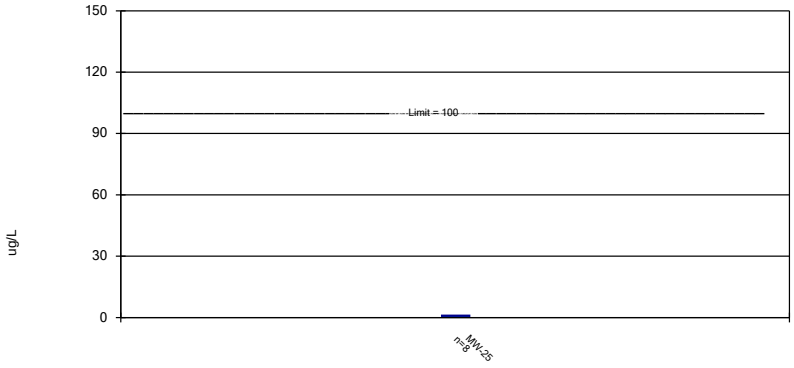

Constituent: Chlorobenzene Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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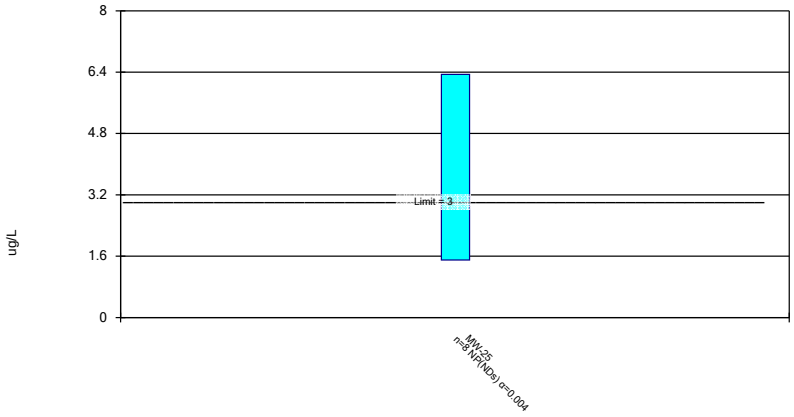
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Chloromethane Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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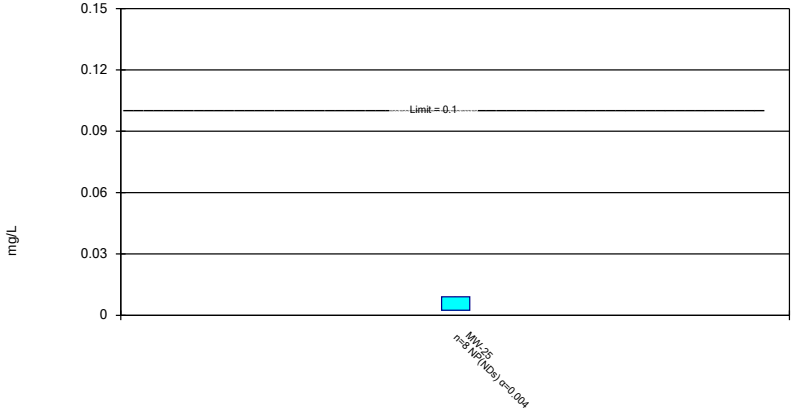
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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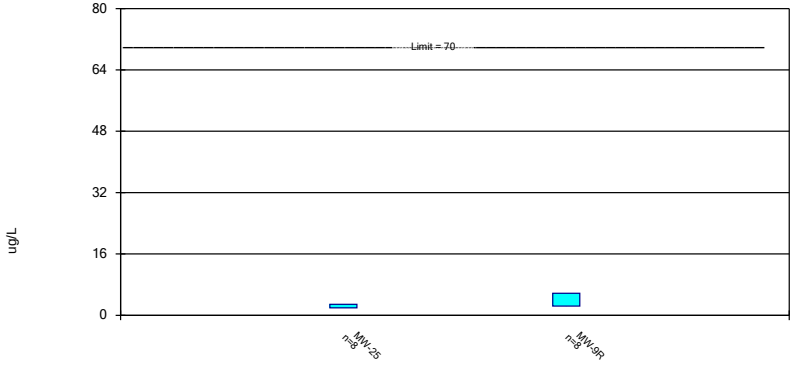
Parametric Confidence Interval

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



Constituent: cis-1,2-Dichloroethene Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Int
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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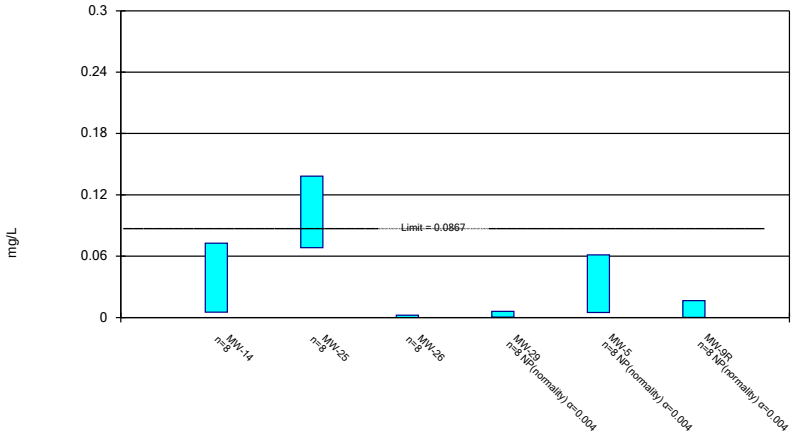
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Cobalt Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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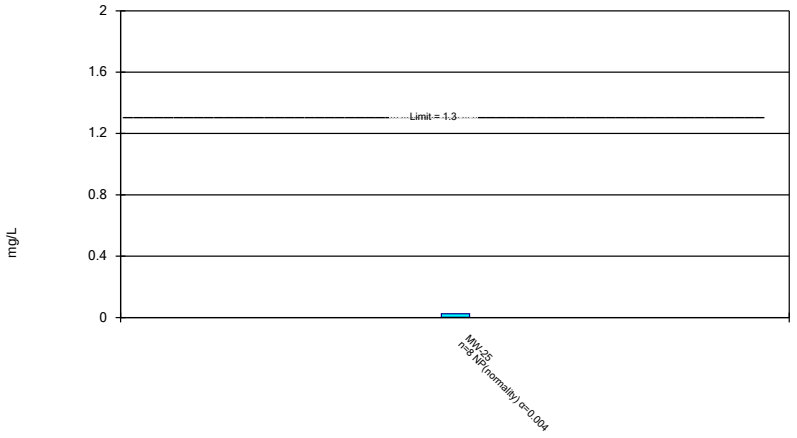
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Copper Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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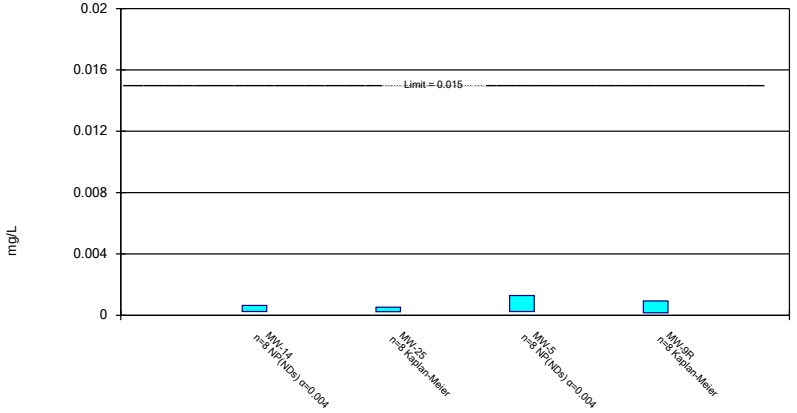
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Lead Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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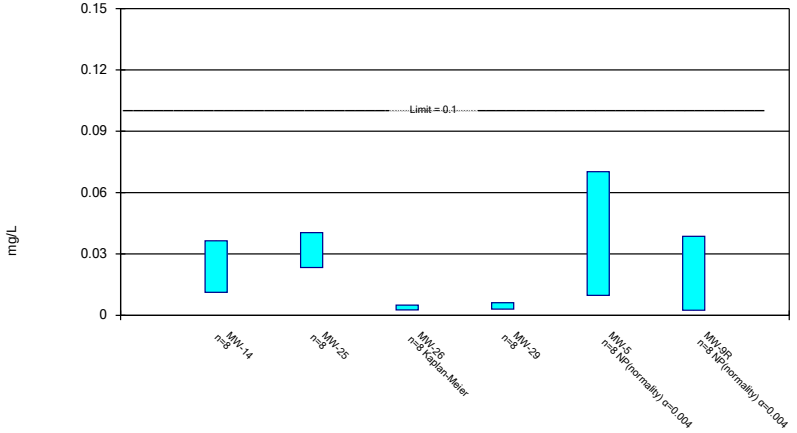
Parametric and Non-Parametric (NP) Confidence Interval

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



Constituent: Nickel Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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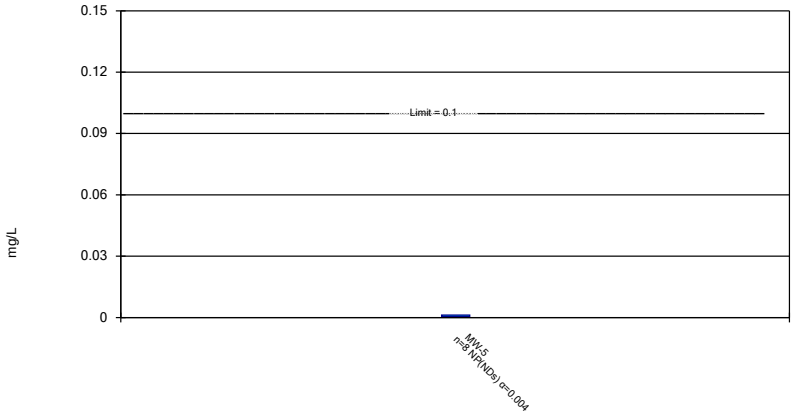
Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Silver Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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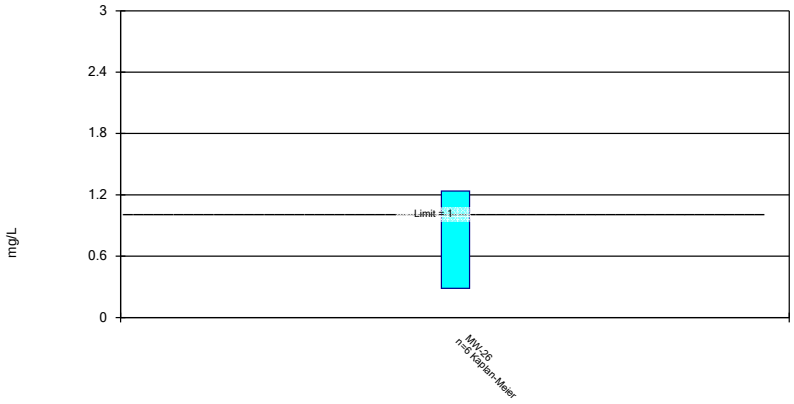
Parametric Confidence Interval

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

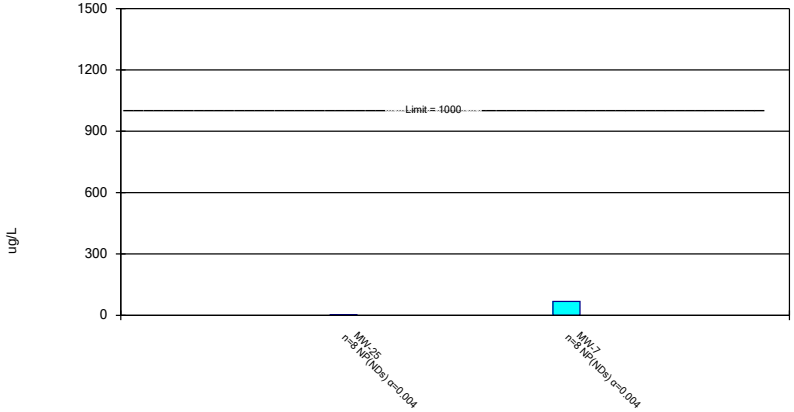


Constituent: Sulfide Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

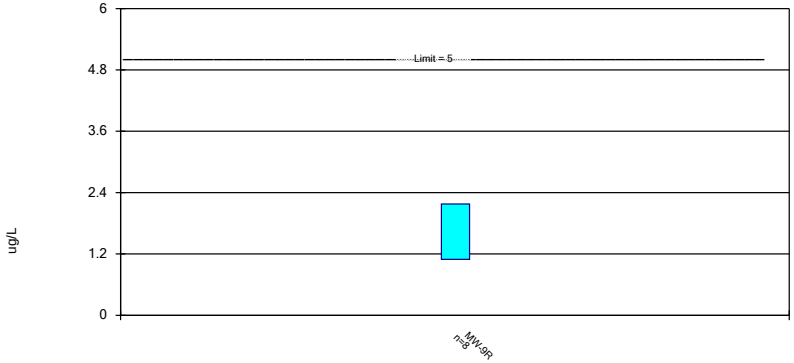


Constituent: Toluene Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Parametric Confidence Interval

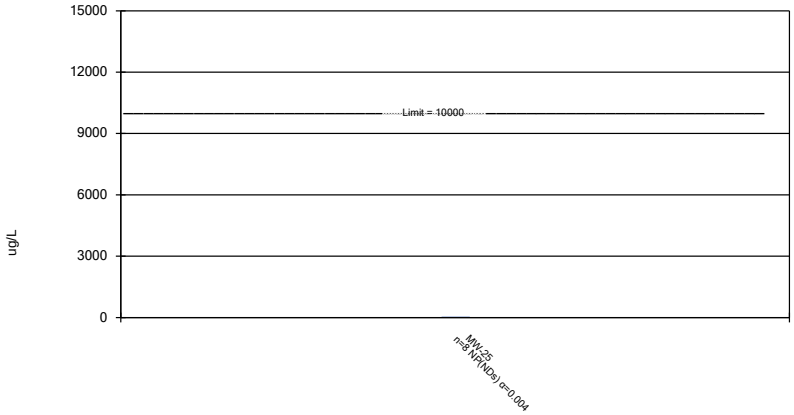
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.01.



Constituent: Trichloroethene Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

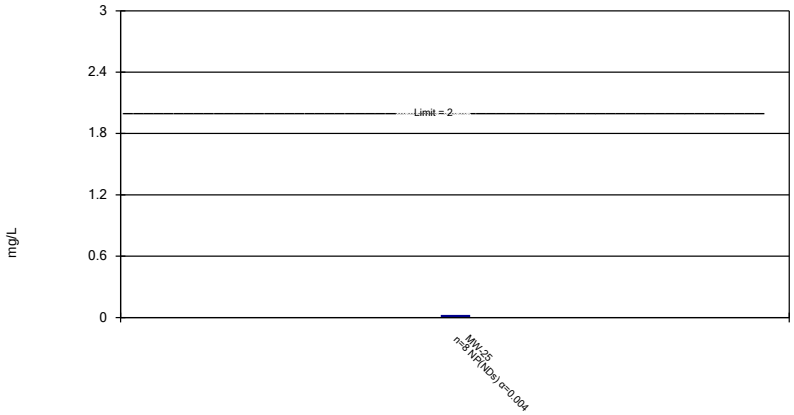


Constituent: Xylenes, total Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 12/21/2023 9:42 AM View: 2023AWQR - Confidence Interval
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Theil-Sen Confidence Bands Summary Table and Graphs

Theil Sen/Trend Test

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/21/2023, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Barium (mg/L)	**MW-29**	**-0.003019**	**-24**	**-21**	**Yes**	**8**	**0**	**0.01**	**NP**
Cadmium (mg/L)	**MW-5**	**0.00001136**	**22**	**21**	**Yes**	**8**	**50**	**0.01**	**NP**

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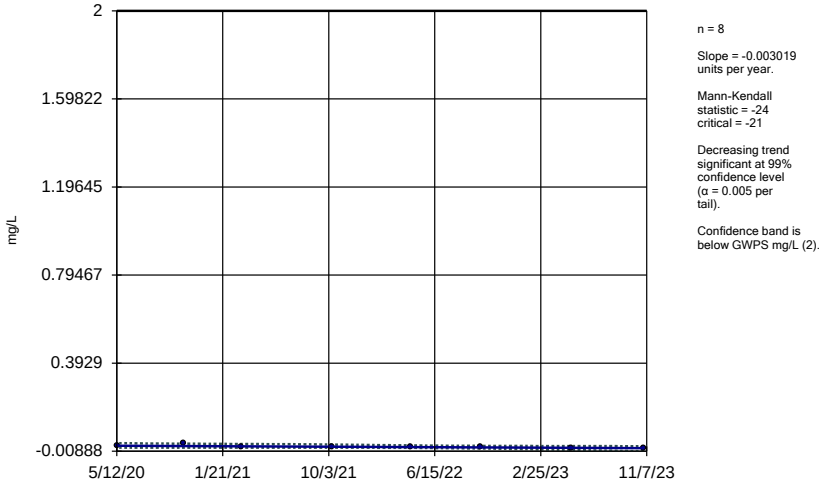
Sen's Slope and 99% Confidence Band

MW-29



n = 8

Slope = -0.003019 units per year.

Mann-Kendall statistic = -24
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below GWPS mg/L (2).

Constituent: Barium Analysis Run 12/21/2023 9:55 AM View: 2023AWQR - Theil Sen

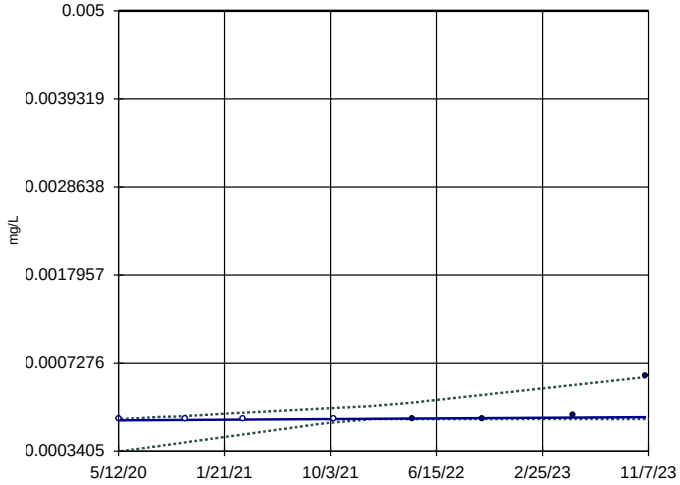
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope and 99% Confidence Band

MW-5



n = 8

Slope = 0.00001136 units per year.

Mann-Kendall statistic = 22
critical = 21

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below GWPS mg/L (0.005).

Constituent: Cadmium Analysis Run 12/21/2023 9:55 AM View: 2023AWQR - Theil Sen

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Appendix E
2023 Leachate Control System Performance Evaluation Report

2023 LEACHATE CONTROL SYSTEM PERFORMANCE EVALUATION REPORT

FOR

SOUTHEAST IOWA MULTI-COUNTY SANITARY LANDFILL

RICHLAND, IOWA

SUBMITTAL DATE: JANUARY 2024

PREPARED FOR:
SOUTHEAST IOWA MULTI-COUNTY SOLID WASTE AGENCY

PREPARED BY:
SCS ENGINEERS

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FIGURE 1 LEACHATE CONTROL SYSTEM

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ATTACHMENT B HISTORICAL LEACHATE COLUMN THICKNESS TABLES AND GRAPHS

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Section 1.0
Leachate Control System

SCS Engineers (SCS), on behalf of the Southeast Iowa Multi-County Solid Waste Agency (SEMCO), has prepared this Leachate Control System Performance Evaluation Report (LCSPER) for the SEMCO Sanitary Landfill (Landfill). This LCSPER was prepared in general accordance with the requirements of Iowa Administrative Code (IAC) 567-113.7(5)"b"(14) and additional Iowa Department of Natural Resources (DNR) requirements specified in the Landfill's operating permit and subsequent permit revisions. This LCSPER describes the leachate control system, discusses maintenance activities, provides an evaluation of the effectiveness of the system, and, if necessary, makes recommendations for additional control measures. The reporting period for this LCSPER is January-December 2023.

1.1 Location of Control System

The Landfill property is depicted in Figure 1, Leachate Control System. The Landfill is located within Lot 3 of the Irregular Survey of the W ½, NW ¼, SW ¼ of Section 28; the SE ¼, SE ¼ of Section 29; Lot 2 of the Irregular Survey of the NE ¼, SE ¼ of Section 29; and a strip of land 50 feet in width on the south side of the original center line of the main track of the Minneapolis and St. Louis Railroad Company within the NW ¼, SW ¼, of Section 28 and the E ¼ of Section 29, all in T74N, R10W, in Keokuk County, Iowa.

1.1.1 Northern Unlined Area

The leachate control system in the northern unlined portion of the Landfill consists of leachate extraction from leachate piezometer LW-10 within Trench 1A, which extends along the eastern waste management boundary. There are eight leachate piezometers (LW-1 through LW-5 and LW-7 through LW-9) and two observation wells (OW-1 and OW-2) in the northern unlined portion of the Landfill, as shown in Figure 1. Leachate piezometers LW-5, LW-8, and OW-2 are damaged and do not provide leachate level data. Leachate piezometers OW-1 and LW-7 are damaged, but level data can be obtained from these piezometers. The requirement for leachate head is to maintain the lowest practical head over the landfill liner (base of landfill).

1.1.2 South Subtitle D Area

The leachate control system for the Subtitle D-compliant lined Phase 0, Phase 0 Abutment, Phase 1, Phase 1 Abutment, Phase 2, and Phase 3 and 4 cells consists of a composite liner including a 2-foot thick layer of compacted soil, overlain with a geomembrane liner, overlain with geocomposite, washed sand, and/or tire chips. In the case of a geocomposite used as the drainage layer, sand was used as a protective layer. In addition, the Phase 0, Phase 1 (a small area at the west end), Phase 2, and Phase 3 and 4 cells have a groundwater underdrain system consisting of either a geocomposite drainage layer or trench drains beneath the compacted soil liner component. The Phase 0, Phase 0 Abutment, Phase 1, Phase 2, and Phase 3 and 4 cell liners slope toward leachate collection pipes aligned and sloped to convey leachate to the leachate storage lagoon. Leachate piezometer LPZ-1 is located at the low end of the Phase 0 cell. Leachate piezometers LPZ-2 and LPZ-2R are located at the low end of the Phase 2 cell. The replacement piezometer LPZ-2R was installed as part of an investigation into a leachate head exceedance. Leachate extraction well LEW-2 was installed at the low point of the Phase 2 cell. Leachate is intercepted at the low point in the cell and is removed with a submersible pump. Leachate in the Phase 3 and 4 cells is monitored by leachate piezometer LPZ-3 and intercepted leachate gravity drains to the leachate storage lagoon. Pursuant to IAC

113.7(5)"b"(3), the "*MSWLF unit shall have a leachate collection system that maintains less than a 30-centimeter (i.e., 12-inch) depth of leachate over the liner.*"

The leachate storage lagoon details are provided in the Revised 2005 Lateral Expansion Plan, Southeast Iowa Multi-County Sanitary Landfill, prepared by Barker Lemar Engineering Consultants, dated June 2006 (Doc #51307) and subsequent revisions.

1.2 Effectiveness of the Leachate System

1.2.1 Northern Unlined Area

Table 12 in Attachment A provides monthly leachate column thicknesses for the northern unlined area of the Landfill. Table B.1 in Attachment B provides a table and graphs of the leachate measurement points for the period of record. The thicknesses remained stable in the leachate piezometers during this reporting period, with variability of one foot or less of leachate thickness in the leachate piezometers.

1.2.2 South Subtitle D Area

Table 12 in Attachment A provides monthly leachate column thicknesses for the southern Subtitle D area. Table B.2 in Attachment B provides a table and graphs of the leachate measurement points for the period of record. Leachate piezometers LPZ-1 and LPZ-2 were dry throughout this reporting period, while leachate piezometer LPZ-3 had less than one inch of leachate head throughout this reporting period.

1.3 Approved Changes to System

There were no changes to the leachate control system during this reporting period.

1.4 Proposed Changes to System

There are no proposed changes to the leachate control system at this time. SCS recommends continuing to perform the following items to maintain the effectiveness of the leachate control system:

- Continue monthly monitoring of the leachate levels as required in the facility permit.
- Maintain good vegetation over the final cover and intermediate cover over the inactive areas.
- Continue operation and maintenance of the leachate control system in accordance with the approved Leachate Control System Plan.
- Continue recording the volume of leachate disposed of at the City of Hedrick publicly-owned treatment works (POTW). 2,928,000 gallons of leachate were hauled to the POTW during this reporting period.
- Continue cleaning the leachate control system once every three years, or more frequently if the leachate head or the volume of leachate collected indicates cleaning is necessary. Hydro-Klean cleaned the leachate control system in June 2022 and cleaning will occur next in 2025.



Leachate Control System

Legend

- Leachate Monitoring Location
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Leachate Line - Perforated
- Leachate Line - Solid
- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

Southeast Multi-County
Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

Figure 1

N
W E
S

0 237.5 475 950
Feet

SCS ENGINEERS
environmental consultants and contractors

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

Path: C:\Users\bmadson\OneDrive - SCS Engineers\Desktop\GIS\Maps\Site Maps\SEMCO\2023 AWOR\SEMCO-2023-AWOR.aprx
User: bmadson
Date Saved: 1/16/2024 10:24 AM

Attachment A

Table 12 – Leachate Management Summary

Table 12
Leachate Management Summary
2023 Leachate Control System Performance Evaluation Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Month	Unlined Cells - Column Thickness (ft)							Lined Cells - Maximum Head on Liner (ft)			Hauled to City of Hedrick POTW	Precipitation (in)
	LW-1	LW-2	LW-3	LW-4	LW-7	LW-9	OW-1	LPZ-1	LPZ-2	LPZ-3		
1/23/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	0.02	360,000	1.68
2/13/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	0.02	312,000	2.96
3/20/2023	2.11	11.33	13.59	7.99	42.85	3.00	25.06	Dry	Dry	0.02	402,000	1.98
4/20/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	0.02	330,000	1.12
5/22/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	390,000	2.29
6/14/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	264,000	0.03
7/24/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	138,000	0.75
8/22/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	0.02	174,000	1.77
9/18/2023	2.01	11.33	13.49	7.89	42.65	2.90	25.26	Dry	Dry	0.02	156,000	0.81
10/24/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	168,000	2.37
11/8/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	120,000	0.37
12/12/2023	NM	NM	NM	NM	NM	NM	NM	Dry	Dry	Dry	114,000	1.55
										January - December 2023 Total	2,928,000	17.68

Comments:

Measurements collected by Landfill staff. Unlined cells are measured semi-annually and lined cells are measured monthly.

1. Reporting Period: January - December 2023.
2. Recommended Changes to Leachate Collection System: None.
3. Maintenance Performed on Leachate Collection System: None.
4. Last Date of Cleaning and Inspection: Leachate line cleaning and inspection was completed by Hydro-Klean in June 2022.
5. Date for Next Cleaning and Inspection: Leachate line cleaning and inspection will be completed next in 2025.
6. Volume of Leachate Recirculated: Leachate is not recirculated at this facility.
7. Volume of Leachate Treated On-Site: Leachate is not treated on-site at this facility.
8. Volume of Leachate Treated Off-Site: During this reporting period approximately 2,928,000 gallons of leachate were hauled to the City of Hedrick publicly-owned treatment works (POTW).
9. Leachate Quality Testing Results: Testing of the leachate is not required by the City of Hedrick POTW.
10. Precipitation data for Washington, IA from January - December 2023 from Iowa State University Mesonet. (https://mesonet.agron.iastate.edu/ASOS/reports/mon_prec.php?year=2023).

Attachment B

Historical Leachate Column Thickness Tables and Graphs

Table B.1
Historical Leachate Column Thicknesses (Closed Northern Unlined Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

	LEACHATE PIEZOMETER						
	LW-1	**LW-2**	**LW-3**	**LW-4**	**LW-7**	**LW-9**	**OW-1**
EASTING	4801.56	4614.82	4485.48	4383.82	4265.03	4870.20	4490.10
NORTHING	12048.27	12098.31	12092.18	12100.89	11744.37	11903.70	12050.78
TOP OF CASING	716.52	709.88	717.86	714.27	758.95	726.10	717.46
GROUND ELEVATION	713.70	708.10	712.80	709.30	753.10	720.50	713.90
WELL DEPTH (Linear Feet)	19.6	25.9	38.1	30.3	58.5	26.3	35.8
DATE	**MEASURED LEACHATE COLUMN IN PIEZOMETER (Linear Feet)**						
10/17/2005	2.21	13.78	16.19	11.49	47.85	DRY	DRY
4/6/2006	4.81	13.38	15.99	11.09	47.95	0.30	DRY
10/10/2006	2.76	13.16	16.10	8.08	47.75	0.80	DRY
4/3/2007	5.29	13.48	16.09	12.42	41.40	DRY	22.76
10/9/2007	3.88	13.72	16.58	12.30	DRY	0.64	DRY
4/16/2008	5.96	14.19	16.89	12.66	45.45	1.34	22.66
9/5/2008	5.17	13.87	16.41	12.40	41.28	DRY	22.85
4/15/2009	0.81	12.93	14.09	11.67	42.72	0.63	23.21
6/26/2009	0.61	13.12	15.93	10.79	42.16	0.30	22.41
7/21/2009	5.69	13.07	15.78	12.19	41.40	1.01	23.59
8/20/2009	5.16	13.22	16.04	12.29	41.99	0.87	23.90
9/22/2009	4.39	13.04	15.77	11.92	41.27	0.72	24.08
10/9/2009	4.10	14.07	16.65	12.41	41.39	DRY	22.72
11/19/2009	3.93	14.16	16.62	12.23	41.29	DRY	22.67
12/28/2009	5.26	12.87	15.75	11.76	41.77	0.46	23.42
1/28/2010	4.36	12.41	15.41	10.68	41.62	2.18	23.41
2/24/2010	4.43	12.32	15.44	10.72	41.67	2.21	23.46
3/23/2010	5.63	13.11	16.02	12.12	44.96	2.19	23.55
4/13/2010	5.54	13.05	16.08	10.68	44.90	2.21	23.43
5/19/2010	4.34	11.50	14.92	10.27	44.34	4.33	22.79
6/7/2010	5.31	12.23	15.64	11.66	44.06	2.35	23.92
7/20/2010	5.65	12.14	16.06	12.20	45.04	2.20	23.60
8/4/2010	5.40	12.92	15.75	11.70	42.19	3.11	23.82
9/14/2010	5.40	12.78	15.67	11.57	41.88	2.71	23.80
10/21/2010	5.46	12.95	15.27	11.76	41.51	2.86	23.86
11/16/2010	4.96	12.93	15.09	11.16	41.54	3.18	23.26
1/19/2011	4.21	12.33	15.24	11.25	DRY	4.88	DRY
2/17/2011	3.11	12.78	15.49	11.74	40.96	4.06	23.86
3/22/2011	5.36	13.07	15.71	11.88	42.55	0.89	24.02
4/7/2011	5.38	13.13	15.71	11.93	42.55	0.80	24.06
5/24/2011	5.41	13.10	15.71	11.94	42.54	0.87	23.93
6/29/2011	5.31	12.40	15.08	11.08	42.43	5.27	24.36
7/14/2011	5.36	13.13	15.09	11.89	42.54	0.90	24.06
8/23/2011	5.41	13.12	15.16	12.30	42.70	2.45	24.06
9/29/2011	DRY	12.11	14.74	10.90	41.06	DRY	23.60
10/26/2011	3.04	12.16	14.87	11.32	41.65	4.98	23.94
11/23/2011	4.46	12.43	15.10	12.24	42.45	2.25	23.96
12/7/2011	3.20	12.19	14.81	11.14	41.78	5.06	23.73

Table B.1
Historical Leachate Column Thicknesses (Closed Northern Unlined Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

	LEACHATE PIEZOMETER						
	LW-1	**LW-2**	**LW-3**	**LW-4**	**LW-7**	**LW-9**	**OW-1**
EASTING	4801.56	4614.82	4485.48	4383.82	4265.03	4870.20	4490.10
NORTHING	12048.27	12098.31	12092.18	12100.89	11744.37	11903.70	12050.78
TOP OF CASING	716.52	709.88	717.86	714.27	758.95	726.10	717.46
GROUND ELEVATION	713.70	708.10	712.80	709.30	753.10	720.50	713.90
WELL DEPTH (Linear Feet)	19.6	25.9	38.1	30.3	58.5	26.3	35.8
DATE	**MEASURED LEACHATE COLUMN IN PIEZOMETER (Linear Feet)**						
1/4/2012	4.35	12.24	14.88	11.18	42.11	3.34	23.70
2/17/2012	4.46	12.15	14.78	10.98	42.82	7.05	23.64
3/14/2012	4.41	12.40	14.79	11.04	41.95	NM	22.93
4/10/2012	5.15	11.98	14.74	10.88	42.10	5.64	23.64
5/8/2012	4.66	11.93	17.99	10.04	41.95	2.00	23.56
6/13/2012	5.10	11.99	19.12	10.88	42.18	5.71	23.61
7/9/2012	5.16	11.98	14.75	10.89	42.09	5.65	23.64
8/17/2012	4.50	12.26	15.14	11.54	43.54	5.87	23.71
9/24/2012	3.12	11.67	25.66	10.56	41.04	2.51	23.33
10/29/2012	4.41	11.93	15.09	11.57	43.45	5.79	23.66
11/14/2012	5.40	13.12	15.08	11.90	42.55	0.91	24.07
12/14/2012	2.22	11.48	DRY	10.84	42.35	0.93	23.76
1/15/2013	2.20	10.43	DRY	10.76	42.25	0.71	22.61
2/21/2013	2.43	11.34	DRY	0.78	DRY	0.57	23.51
3/15/2013	5.16	11.68	14.30	10.80	DRY	0.43	23.76
4/26/2013	4.62	11.45	14.34	2.90	DRY	DRY	24.25
5/6/2013	5.19	11.72	14.25	9.90	43.04	2.34	24.75
6/12/2013	5.04	11.74	14.14	10.16	42.45	2.95	24.51
7/3/2013	4.82	11.32	14.14	9.94	42.44	3.79	24.75
8/7/2013	4.33	11.18	DRY	10.08	41.95	3.26	24.45
9/31/2013	4.31	11.13	DRY	10.06	41.93	3.30	24.43
10/8/2013	2.75	10.79	DRY	9.90	41.54	3.21	24.24
11/8/2013	2.52	10.96	DRY	10.02	41.62	4.68	24.25
12/9/2013	2.00	10.86	14.56	10.02	42.39	4.11	24.07
1/21/2014	1.61	10.53	13.09	9.29	45.95	3.80	23.96
2/18/2014	1.31	10.92	12.59	8.59	45.24	3.30	23.76
3/13/2014	1.21	10.93	13.09	9.89	45.95	4.30	23.76
4/1/2014	1.31	11.08	13.39	9.79	45.45	4.20	23.81
5/7/2014	1.41	11.43	13.19	9.89	46.50	4.30	23.96
6/3/2014	3.69	10.84	13.49	9.97	45.97	3.23	23.86
7/1/2014	4.44	10.97	13.65	10.26	46.36	2.83	24.27
8/21/2014	4.41	10.94	13.09	10.32	46.30	2.30	24.06
9/30/2014	4.46	10.88	13.29	10.01	42.25	1.80	23.56
10/3/2014	4.42	10.82	13.50	9.88	42.14	2.85	24.30
11/6/2014	4.30	10.68	13.38	9.70	41.95	2.40	24.41
12/3/2014	3.41	10.58	13.09	9.24	DRY	4.50	24.36
1/9/2015	4.08	10.68	13.54	9.66	46.41	3.61	24.34
2/20/2015	4.51	10.83	13.34	9.89	42.15	6.80	24.06
3/20/2015	4.01	10.53	13.49	9.59	41.85	4.80	24.06
4/16/2015	3.51	10.93	13.74	10.29	39.15	5.00	DRY
5/14/2015	3.61	11.03	13.59	9.79	42.45	5.20	23.96
6/9/2015	3.79	10.93	13.94	9.84	42.95	3.95	24.21
7/15/2015	2.51	10.63	13.39	7.99	42.15	3.50	24.36
8/25/2015	2.11	10.93	13.59	7.79	41.75	2.50	23.76
9/23/2015	2.41	10.73	13.69	8.99	42.45	2.80	24.46
10/28/2015	2.71	10.73	13.79	9.39	42.45	1.80	24.06
11/12/2015	2.91	10.53	13.59	9.59	42.65	1.70	23.96
12/22/2015	2.71	10.63	13.59	7.79	42.35	2.40	24.26

Table B.1
Historical Leachate Column Thicknesses (Closed Northern Unlined Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

	LEACHATE PIEZOMETER						
	LW-1	**LW-2**	**LW-3**	**LW-4**	**LW-7**	**LW-9**	**OW-1**
EASTING	4801.56	4614.82	4485.48	4383.82	4265.03	4870.20	4490.10
NORTHING	12048.27	12098.31	12092.18	12100.89	11744.37	11903.70	12050.78
TOP OF CASING	716.52	709.88	717.86	714.27	758.95	726.10	717.46
GROUND ELEVATION	713.70	708.10	712.80	709.30	753.10	720.50	713.90
WELL DEPTH (Linear Feet)	19.6	25.9	38.1	30.3	58.5	26.3	35.8
DATE	**MEASURED LEACHATE COLUMN IN PIEZOMETER (Linear Feet)**						
1/21/2016	2.91	10.83	13.59	7.69	42.35	3.50	26.56
2/18/2016	3.31	11.13	13.79	7.59	43.45	4.70	24.96
3/17/2016	3.71	11.03	13.79	7.89	43.65	3.70	25.06
4/21/2016	4.11	11.33	13.69	8.09	44.45	3.30	25.96
5/19/2016	4.11	11.53	13.49	7.99	43.85	4.60	24.76
6/16/2016	4.01	11.33	13.29	7.79	43.95	4.00	24.66
7/21/2016	3.91	14.83	13.59	7.69	43.55	3.20	24.66
8/18/2016	4.21	11.33	13.69	8.19	43.15	2.90	24.46
9/22/2016	4.11	11.23	13.59	8.29	42.75	3.30	24.16
10/13/2016	4.21	11.03	13.49	8.09	42.95	3.60	24.46
11/15/2016	3.61	11.03	13.79	8.39	43.15	3.70	24.66
12/20/2016	3.01	10.73	13.39	7.99	43.15	3.80	25.36
1/18/2017	2.71	10.93	14.29	8.49	43.25	4.00	24.96
2/15/2017	2.41	11.43	14.29	8.19	42.75	3.80	24.46
3/15/2017	3.01	11.83	14.09	8.09	42.95	3.20	24.26
4/19/2017	2.51	11.13	14.19	8.09	42.55	1.90	25.06
5/17/2017	2.11	11.13	13.89	7.79	42.15	2.20	24.76
6/21/2017	1.71	10.93	13.59	7.89	41.45	1.60	25.26
7/19/2017	1.71	10.63	13.39	7.79	41.55	0.80	25.36
8/16/2017	1.81	10.73	13.29	7.99	41.25	0.40	25.86
9/20/2017	2.01	10.63	13.69	8.39	41.75	DRY	25.76
10/18/2017	2.11	10.83	13.79	8.39	42.05	0.90	25.66
11/15/2017	2.31	10.93	13.49	8.09	41.55	0.60	26.06
12/20/2017	2.11	10.63	13.49	7.99	41.95	0.50	25.96
1/16/2018	2.31	10.93	13.59	8.19	42.25	0.90	26.26
2/20/2018	2.31	11.23	13.79	8.19	42.45	1.50	26.26
3/13/2018	2.41	11.43	13.69	7.99	42.65	2.30	26.06
4/17/2018	2.31	11.33	13.89	8.19	42.45	3.00	26.16
5/15/2018	2.51	11.43	13.69	8.49	42.75	2.70	25.76
6/19/2018	2.71	11.63	13.79	8.29	42.95	3.20	25.16
7/17/2018	2.61	11.43	13.59	8.19	42.95	3.60	24.86
8/14/2018	2.81	11.53	13.49	8.09	43.05	3.30	24.76
9/18/2018	3.11	11.63	13.69	8.49	43.35	3.70	25.06
10/16/2018	3.11	11.43	13.69	8.29	43.05	3.80	25.36
11/20/2018	3.21	11.33	13.69	8.39	42.85	3.60	25.26
12/18/2018	3.21	11.63	13.49	8.29	42.85	3.60	25.46
1/15/2019	3.31	11.53	13.49	8.39	42.95	3.30	25.56
2/19/2019	3.31	11.53	13.59	8.19	42.85	3.00	25.76
3/19/2019	3.31	11.43	13.59	8.09	42.95	3.40	25.76
4/16/2019	3.41	11.63	12.69	8.19	43.05	2.80	25.66
5/14/2019	3.21	11.43	13.69	8.29	42.85	3.00	25.76
6/18/2019	3.01	11.53	13.59	8.09	42.95	3.30	25.56
7/16/2019	3.21	11.43	13.79	8.09	42.75	3.60	25.86
8/20/2019	3.61	11.73	13.89	8.29	43.05	3.30	25.56
9/17/2019	1.71	11.63	13.79	8.39	43.25	3.30	25.26
10/15/2019	3.61	11.73	13.69	8.09	43.05	3.50	25.36
11/19/2019	1.71	11.73	13.79	8.29	42.95	3.60	25.26
12/17/2019	1.71	11.63	13.79	8.29	42.95	3.90	25.26

Table B.1
Historical Leachate Column Thicknesses (Closed Northern Unlined Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

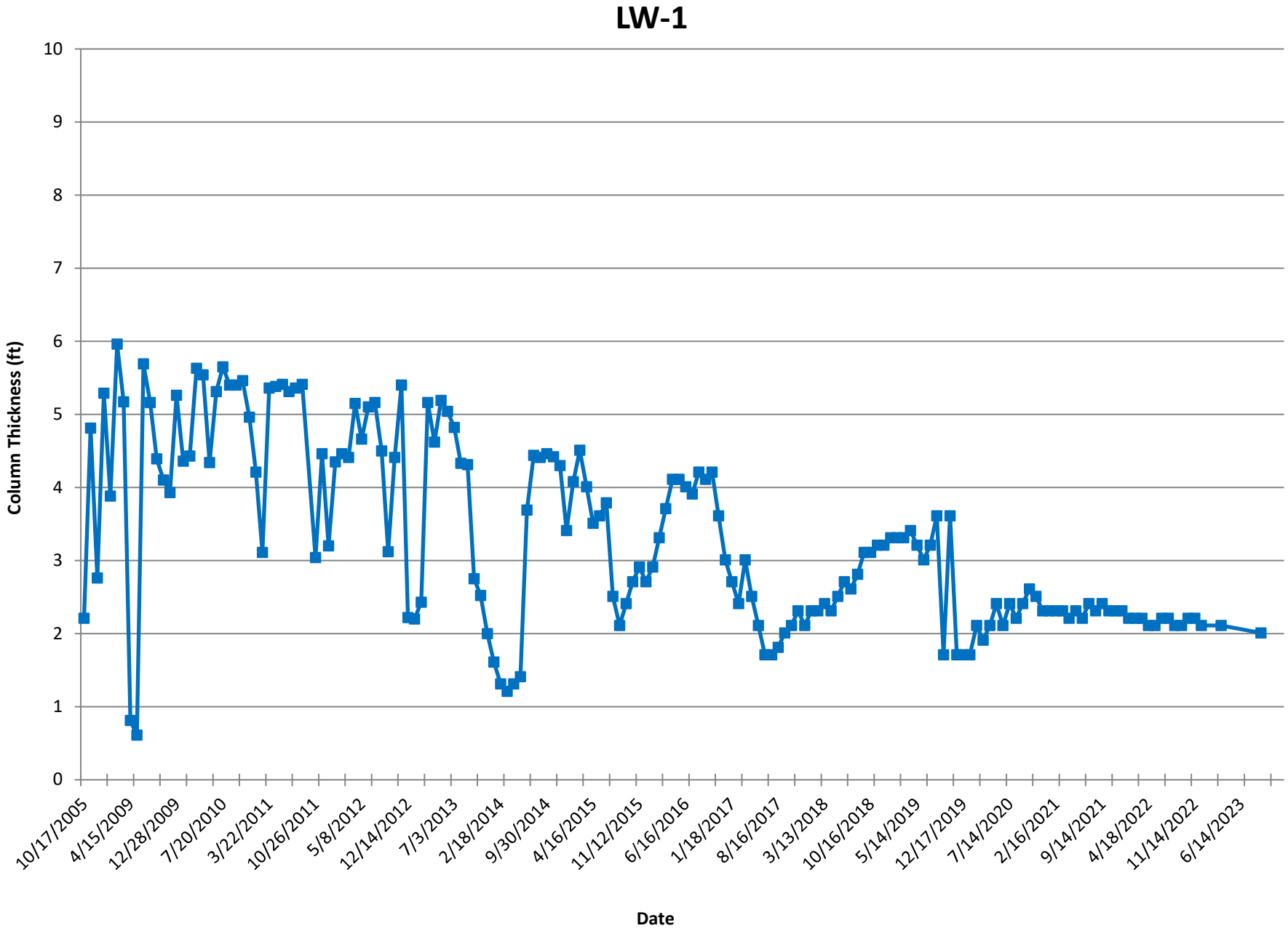
	LEACHATE PIEZOMETER						
	LW-1	**LW-2**	**LW-3**	**LW-4**	**LW-7**	**LW-9**	**OW-1**
EASTING	4801.56	4614.82	4485.48	4383.82	4265.03	4870.20	4490.10
NORTHING	12048.27	12098.31	12092.18	12100.89	11744.37	11903.70	12050.78
TOP OF CASING	716.52	709.88	717.86	714.27	758.95	726.10	717.46
GROUND ELEVATION	713.70	708.10	712.80	709.30	753.10	720.50	713.90
WELL DEPTH (Linear Feet)	19.6	25.9	38.1	30.3	58.5	26.3	35.8
DATE	**MEASURED LEACHATE COLUMN IN PIEZOMETER (Linear Feet)**						
1/14/2020	1.71	11.43	13.59	8.19	42.85	3.50	25.36
2/18/2020	2.11	11.33	13.59	8.29	42.95	3.60	25.56
3/17/2020	1.91	11.33	13.49	8.19	42.85	3.30	25.46
4/14/2020	2.11	11.43	13.59	8.09	42.95	3.20	25.46
5/19/2020	2.41	11.43	13.29	8.19	42.75	3.10	25.36
6/16/2020	2.11	11.43	13.39	7.99	42.85	3.20	25.16
7/14/2020	2.41	11.63	13.39	7.99	43.05	3.20	25.26
8/18/2020	2.21	11.43	13.49	7.99	42.85	2.90	25.26
9/15/2020	2.41	11.53	13.49	8.19	42.75	3.10	25.46
10/20/2020	2.61	11.43	13.39	8.09	42.95	3.20	25.46
11/17/2020	2.51	11.63	13.49	8.19	42.95	3.30	25.36
12/7/2020	2.31	11.53	13.49	8.19	43.05	3.10	25.36
1/19/2021	2.31	11.53	13.69	8.19	43.05	3.20	25.26
2/16/2021	2.31	11.53	13.59	8.19	43.15	3.30	25.16
3/16/2021	2.31	11.63	13.89	8.19	43.15	3.20	25.16
4/20/2021	2.21	11.63	13.69	8.09	43.15	3.20	25.16
5/18/2021	2.31	11.43	13.59	8.09	43.15	3.10	25.06
6/15/2021	2.21	11.53	13.59	8.09	42.95	3.30	25.06
7/20/2021	2.41	11.63	13.69	8.19	43.05	3.61	25.16
8/17/2021	2.31	11.63	13.69	8.09	43.05	3.30	25.26
9/14/2021	2.41	11.53	13.59	8.19	43.15	3.10	25.26
10/19/2021	2.31	11.53	13.59	8.09	42.95	3.10	25.36
11/17/2021	2.31	11.53	13.69	8.09	43.05	3.20	25.26
12/14/2021	2.31	11.53	13.69	8.19	43.05	3.20	25.26
1/17/2022	2.21	11.63	13.39	7.99	42.85	3.30	25.16
2/14/2022	2.21	11.53	13.39	8.09	42.85	3.30	25.16
3/14/2022	2.21	11.53	13.29	8.09	42.95	3.10	25.26
4/18/2022	2.11	11.43	13.49	7.99	42.85	3.10	25.16
5/19/2022	2.11	11.53	13.59	8.19	42.85	3.00	25.16
6/13/2022	2.21	11.33	13.49	7.89	42.95	3.10	25.06
7/18/2022	2.21	11.33	13.59	7.99	42.95	3.00	25.06
8/15/2022	2.11	11.33	13.59	7.99	42.85	3.00	25.06
9/19/2022	2.11	11.23	13.49	7.89	42.75	3.10	25.16
10/17/2022	2.21	11.33	13.39	7.89	42.85	3.00	25.26
11/14/2022	2.21	11.23	13.29	8.09	42.85	3.10	25.16
12/19/2022	2.11	11.23	13.39	8.09	42.75	3.20	25.16

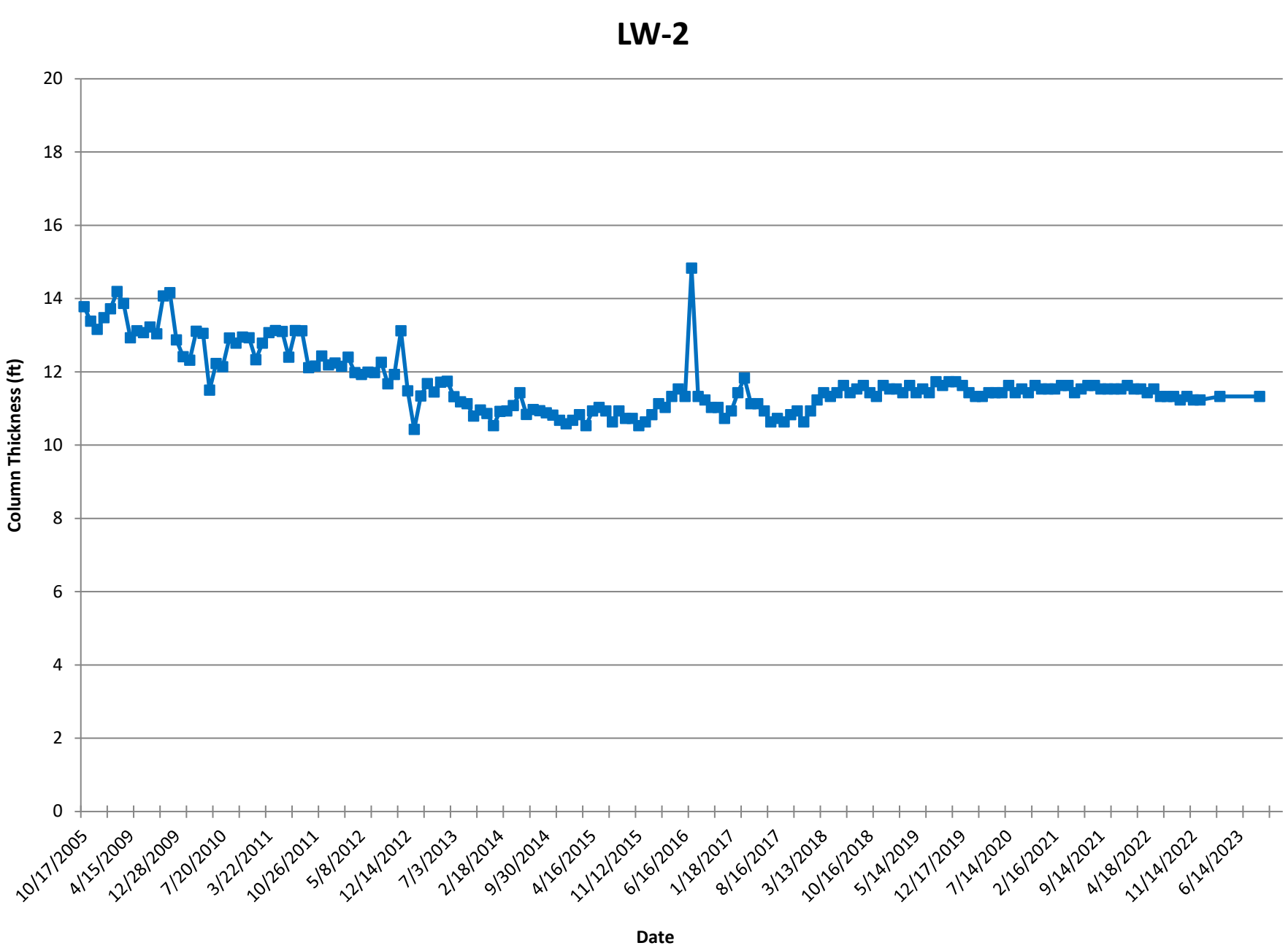
Table B.1
Historical Leachate Column Thicknesses (Closed Northern Unlined Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

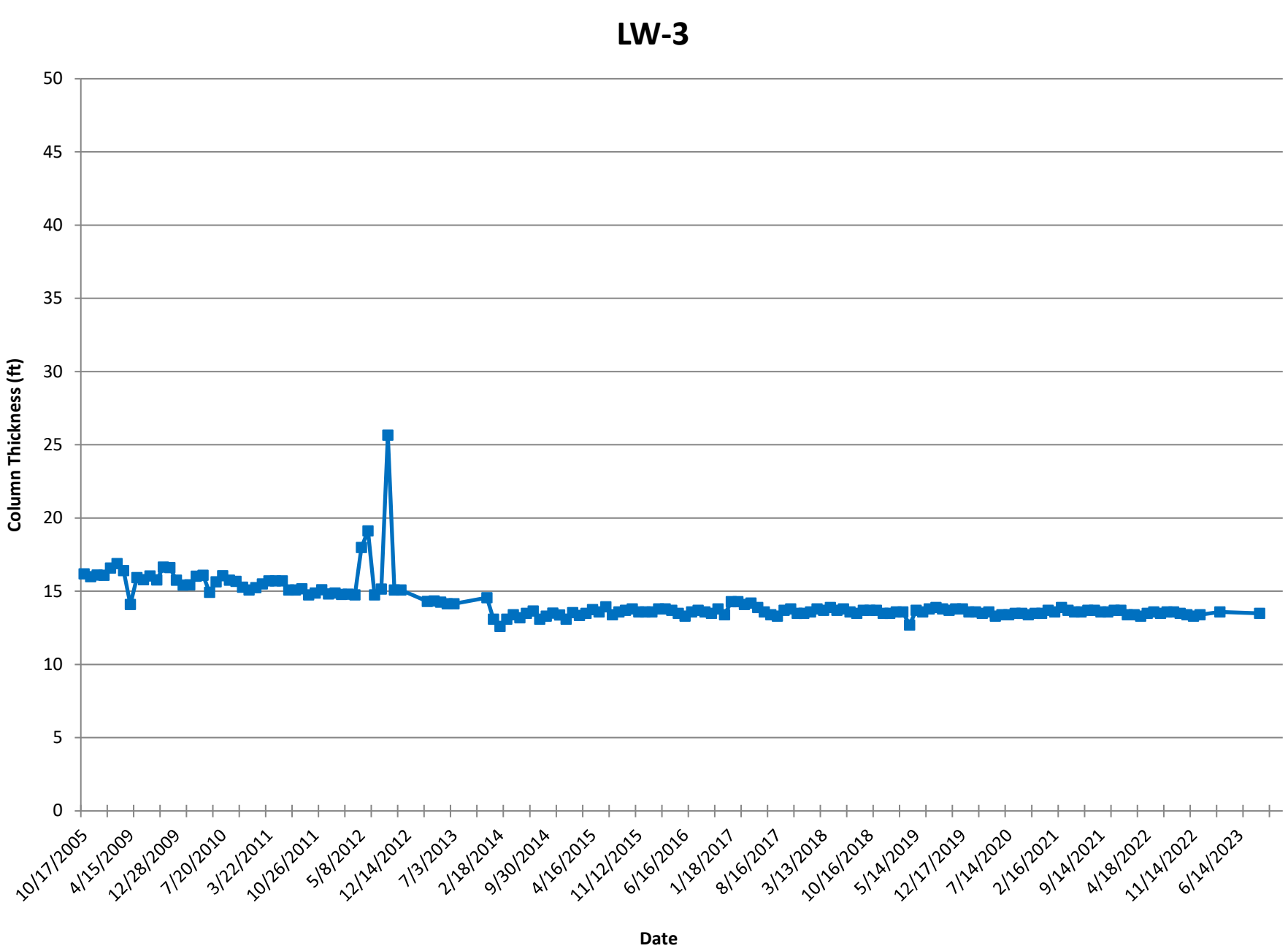
	LEACHATE PIEZOMETER						
	LW-1	**LW-2**	**LW-3**	**LW-4**	**LW-7**	**LW-9**	**OW-1**
EASTING	4801.56	4614.82	4485.48	4383.82	4265.03	4870.20	4490.10
NORTHING	12048.27	12098.31	12092.18	12100.89	11744.37	11903.70	12050.78
TOP OF CASING	716.52	709.88	717.86	714.27	758.95	726.10	717.46
GROUND ELEVATION	713.70	708.10	712.80	709.30	753.10	720.50	713.90
WELL DEPTH (Linear Feet)	19.6	25.9	38.1	30.3	58.5	26.3	35.8
DATE	**MEASURED LEACHATE COLUMN IN PIEZOMETER (Linear Feet)**						
1/23/2023	NM	NM	NM	NM	NM	NM	NM
2/13/2023	NM	NM	NM	NM	NM	NM	NM
3/20/2023	2.11	11.33	13.59	7.99	42.85	3.00	25.06
4/20/2023	NM	NM	NM	NM	NM	NM	NM
5/22/2023	NM	NM	NM	NM	NM	NM	NM
6/14/2023	NM	NM	NM	NM	NM	NM	NM
7/24/2023	NM	NM	NM	NM	NM	NM	NM
8/22/2023	NM	NM	NM	NM	NM	NM	NM
9/18/2023	2.01	11.33	13.49	7.89	42.65	2.90	25.26
10/24/2023	NM	NM	NM	NM	NM	NM	NM
11/8/2023	NM	NM	NM	NM	NM	NM	NM
12/12/2023	NM	NM	NM	NM	NM	NM	NM

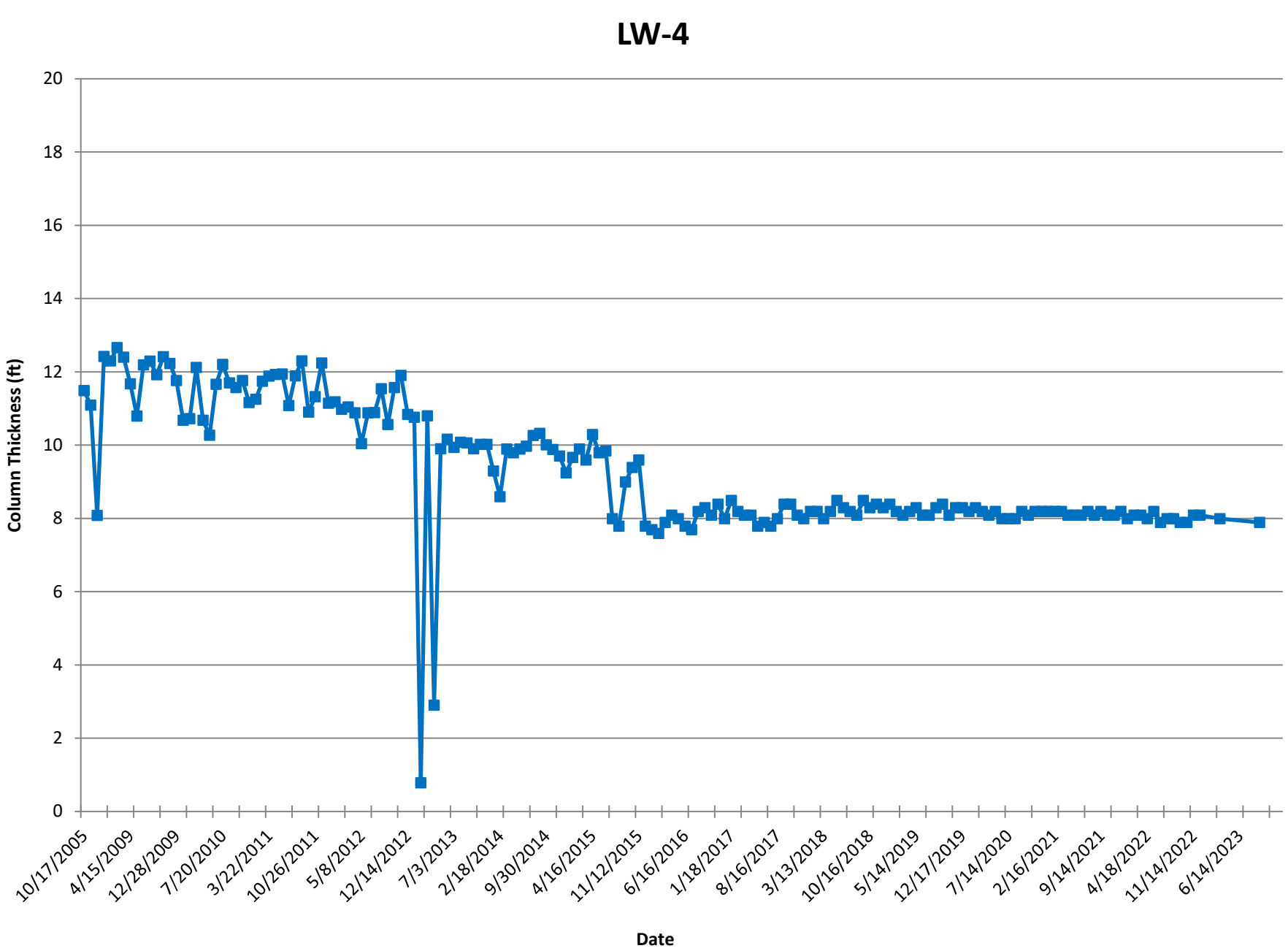
Notes: NM denotes Not Measured.

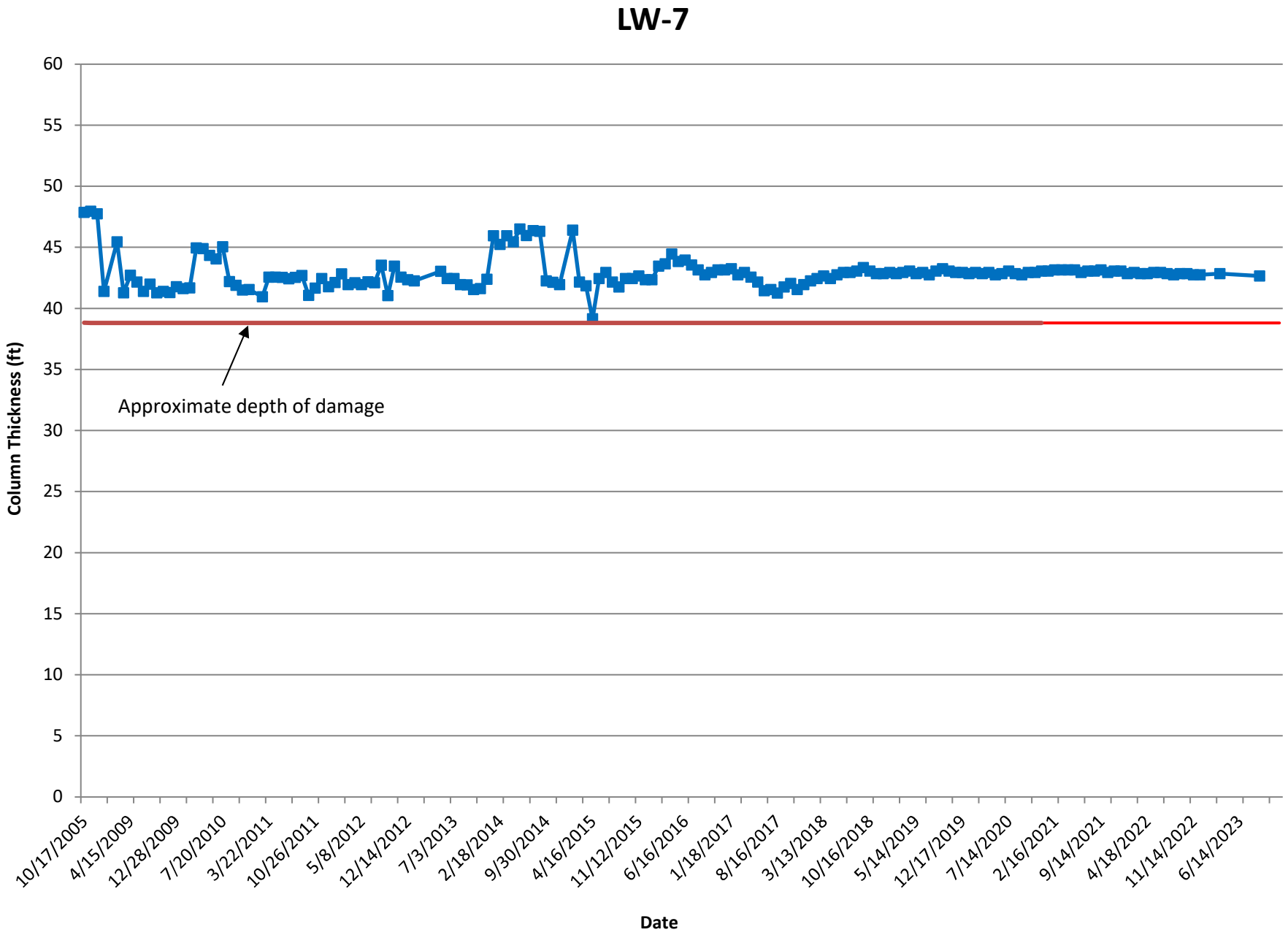
Leachate levels are measured semi-annually by landfill personnel.

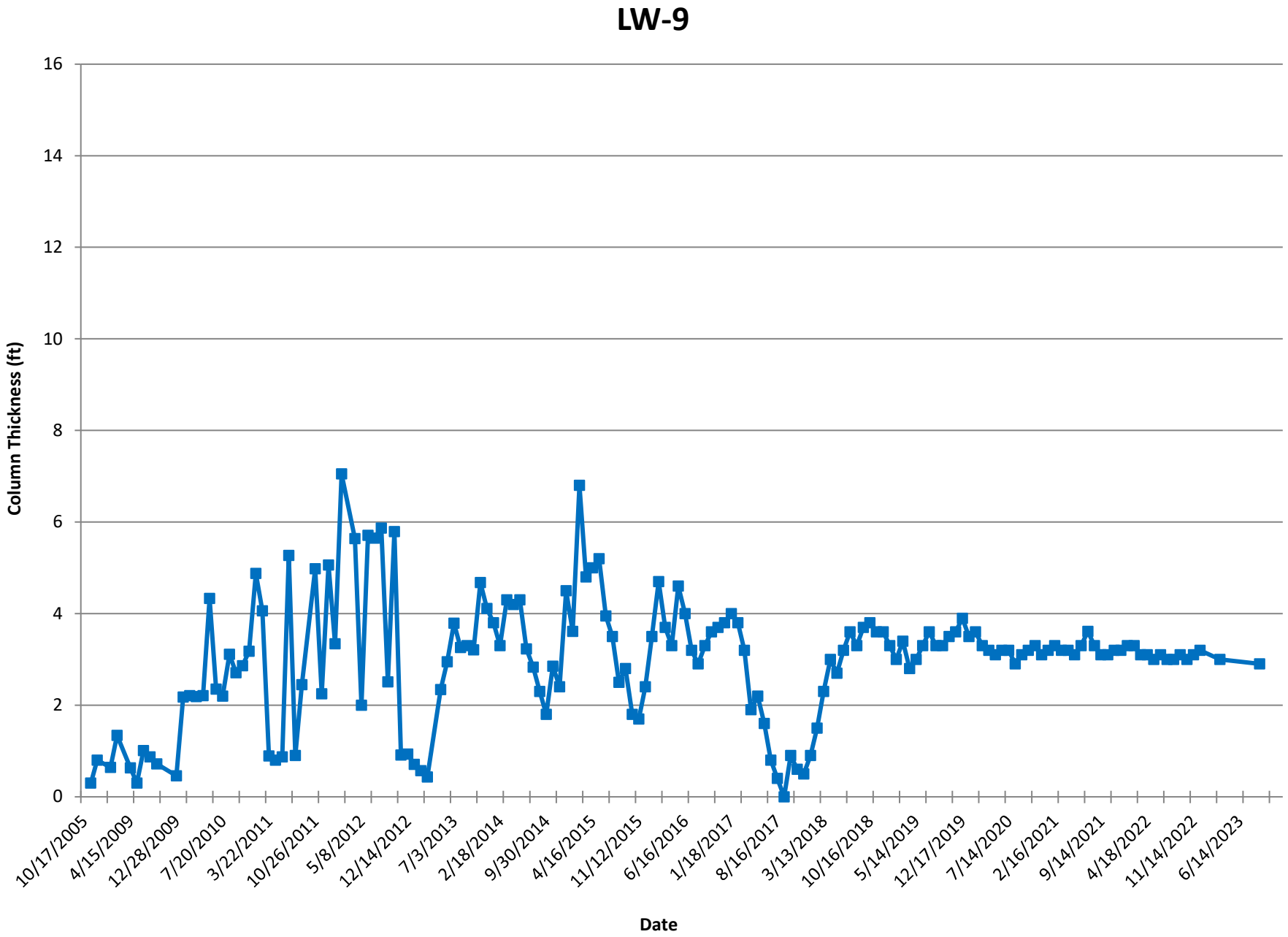

LW-1
Column Thickness (ft)
10
9
8
7
6
5
4
3
2
1
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-2
Column Thickness (ft)
20
18
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-3
Column Thickness (ft)
50
45
40
35
30
25
20
15
10
5
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-4
Column Thickness (ft)
20
18
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-7
Column Thickness (ft)
60
55
50
45
40
35
30
25
20
15
10
5
0
Approximate depth of damage
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-9
Column Thickness (ft)
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date

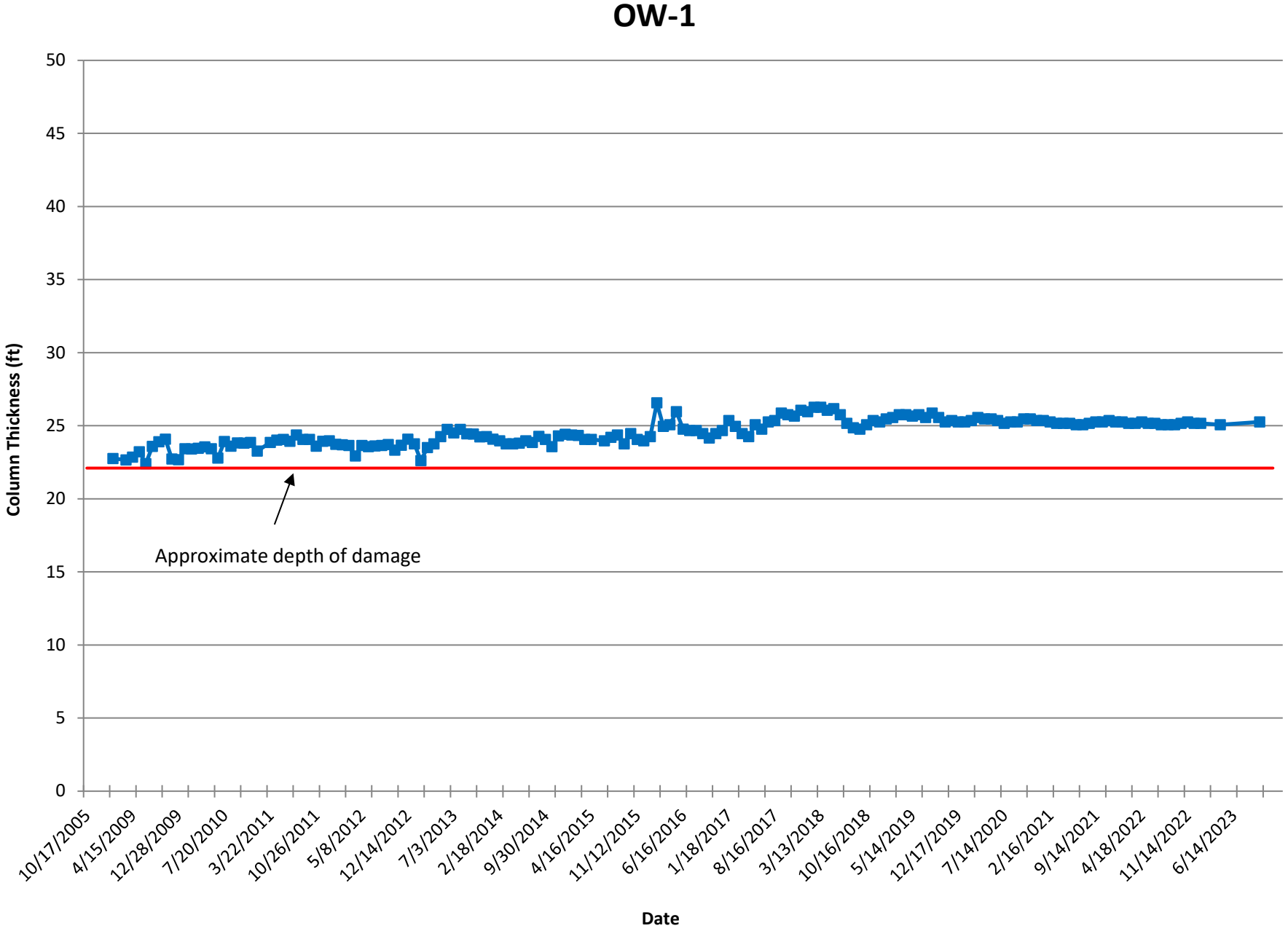

OW-1
Column Thickness (ft)
50
45
40
35
30
25
20
15
10
5
0
Approximate depth of damage
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date

Table B.2
Historical Leachate Column Thicknesses (South Subtitle D-Compliant Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

	LEACHATE PIEZOMETER				
	LPZ-1		LPZ-2		LPZ-3
Installed Depth	Depth (ft) =	29.00	Depth (ft) =	23.50	Depth (ft) = 20.00
Revised Depth			Depth (ft) [(1)] =	19.50	
Date	Fluid Level	Column	Fluid Level	Column	Column*
4/15/2008	28.72	0.28	NM	NA	NI
9/4/2008	Dry	Dry	NM	NA	NI
4/15/2009	28.72	0.28	NM	NA	NI
6/26/2009	28.90	0.10	NM	NA	NI
7/21/2009	28.29	0.71	NM	NA	NI
8/20/2009	28.23	0.77	20.38	3.12	NI
9/22/2009	28.20	0.80	21.00	2.50	NI
10/9/2009	Dry	Dry	21.43	2.07	NI
11/19/2009	Dry	Dry	21.46	2.04	NI
12/28/2009	28.24	0.76	20.17	3.33	NI
1/28/2010	Dry	Dry	20.20	3.30	NI
2/24/2010	Dry	Dry	20.17	3.33	NI
3/23/2010	28.15	0.85	20.00	3.50	NI
4/13/2010	Dry	Dry	20.86	2.64	NI
5/19/2010	Dry	Dry	15.61	3.89	NI
6/7/2010	28.20	0.80	17.50	2.00	NI
7/20/2010	Dry	Dry	16.94	2.56	NI
8/4/2010	28.31	0.69	15.56	3.94	NI
9/14/2010	28.19	0.81	15.91	3.59	NI
10/21/2010	27.97	1.03	19.76	Dry	NI
11/16/2010	Dry	Dry	17.31	2.19	NI
1/19/2011	Dry	Dry	16.98	2.52	NI
2/17/2011	Dry	Dry	16.50	3.00	NI
3/22/2011	Dry	Dry	16.21	3.29	NI
4/7/2011	Dry	Dry	16.11	3.39	NI
5/24/2011	Dry	Dry	16.07	3.43	NI
6/29/2011	Dry	Dry	16.21	3.29	NI
7/14/2011	Dry	Dry	16.20	3.30	NI
8/23/2011	Dry	Dry	17.30	2.20	NI
9/29/2011	Dry	Dry	16.76	2.74	NI
10/26/2011	Dry	Dry	16.04	3.46	NI
11/23/2011	Dry	Dry	17.80	1.70	NI
12/7/2011	Dry	Dry	15.98	3.52	NI
1/4/2012	28.31	0.69	16.01	3.49	NI
2/17/2012	ME	Dry	16.39	3.11	NI
3/14/2012	NM	NM	NM	NM	NI
4/10/2012	Dry	Dry	17.46	2.04	NI
5/8/2012	ME	Dry	21.53	Dry	NI
5/13/2012	Dry	Dry	17.47	2.03	NI
7/9/2012	Dry	Dry	17.45	2.05	NI
8/17/2012	Dry	Dry	17.03	2.47	NI
9/24/2012	Dry	Dry	18.63	0.87	NI
10/29/2012	Dry	Dry	17.25	2.25	NI
11/14/2012	Dry	Dry	16.30	3.20	NI
12/14/2012	Dry	Dry	16.39	3.11	NI

Table B.2
Historical Leachate Column Thicknesses (South Subtitle D-Compliant Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

	LEACHATE PIEZOMETER				
	LPZ-1		LPZ-2		LPZ-3
Installed Depth	Depth (ft) =	29.00	Depth (ft) =	23.50	Depth (ft) = 20.00
Revised Depth			Depth (ft) [(1)] =	19.50	
Date	Fluid Level	Column	Fluid Level	Column	Column*
1/15/2013	Dry	Dry	16.57	2.93	NI
2/21/2013	Dry	Dry	17.23	2.27	NI
3/15/2013	Dry	Dry	17.29	2.21	NI
4/26/2013	Dry	Dry	18.31	1.19	NI
5/6/2013	Dry	Dry	17.94	1.56	NI
6/12/2013	Dry	Dry	Dry	Dry	NI
7/3/2013	Dry	Dry	Dry	Dry	NI
8/7/2013	Dry	Dry	18.05	1.45	NI
9/13/2013	Dry	Dry	18.00	1.50	NI
10/8/2013	Dry	Dry	18.21	1.29	NI
11/8/2013	Dry	Dry	17.74	1.76	NI
12/9/2013	28.41	0.59	18.02	1.48	NI
1/21/2014	28.50	0.50	18.40	1.10	NI
2/18/2014	28.59	0.41	18.87	0.63	NI
3/13/2014	28.40	0.60	18.30	1.20	NI
4/1/2014	28.40	0.60	18.50	1.00	NI
5/7/2014	28.50	0.50	18.50	1.00	NI
6/3/2014	28.31	0.69	17.72	1.78	NI
7/1/2014	28.12	0.88	17.30	2.20	NI
8/21/2014	28.00	1.00	17.80	1.70	NI
9/30/2014	28.58	0.42	18.19	1.31	NI
10/3/2014	Dry	Dry	18.18	1.32	NI
11/6/2014	Dry	Dry	Dry	Dry	NI
12/3/2014	Dry	Dry	NM	NM	NI
1/9/2015	28.32	0.68	17.24	2.26	NI
2/20/2015	Dry	Dry	16.70	2.80	NI
3/20/2015	Dry	Dry	16.70	2.80	NI
4/16/2015	Dry	Dry	19.00	0.50	NI
5/14/2015	Dry	Dry	17.50	2.00	NI
6/9/2015	Dry	Dry	16.65	2.85	NI
7/15/2015	Dry	Dry	18.00	1.50	NI
8/25/2015	Dry	Dry	18.60	0.90	NI
9/23/2015	28.00	1.00	18.70	0.80	NI
10/28/2015	Dry	Dry	18.50	1.00	NI
11/12/2015	Dry	Dry	18.70	0.80	NI
12/22/2015	Dry	Dry	18.60	0.90	NI
1/21/2016	Dry	Dry	18.60	0.90	NI
2/18/2016	Dry	Dry	19.10	0.40	NI
3/17/2016	Dry	Dry	19.00	0.50	NI
4/21/2016	28.20	0.80	18.70	0.80	NI
5/19/2016	Dry	Dry	19.00	0.50	NI
6/16/2016	Dry	Dry	18.40	1.10	NI
7/21/2016	28.20	0.80	16.70	2.80	NI
8/18/2016	Dry	Dry	NM	NM	NI
9/22/2016	28.10	0.90	19.30	0.20	NI
10/13/2016	Dry	Dry	Dry	Dry	NI
11/15/2016	28.10	0.90	Dry	Dry	NI
12/20/2016	Dry	Dry	Dry	Dry	NI

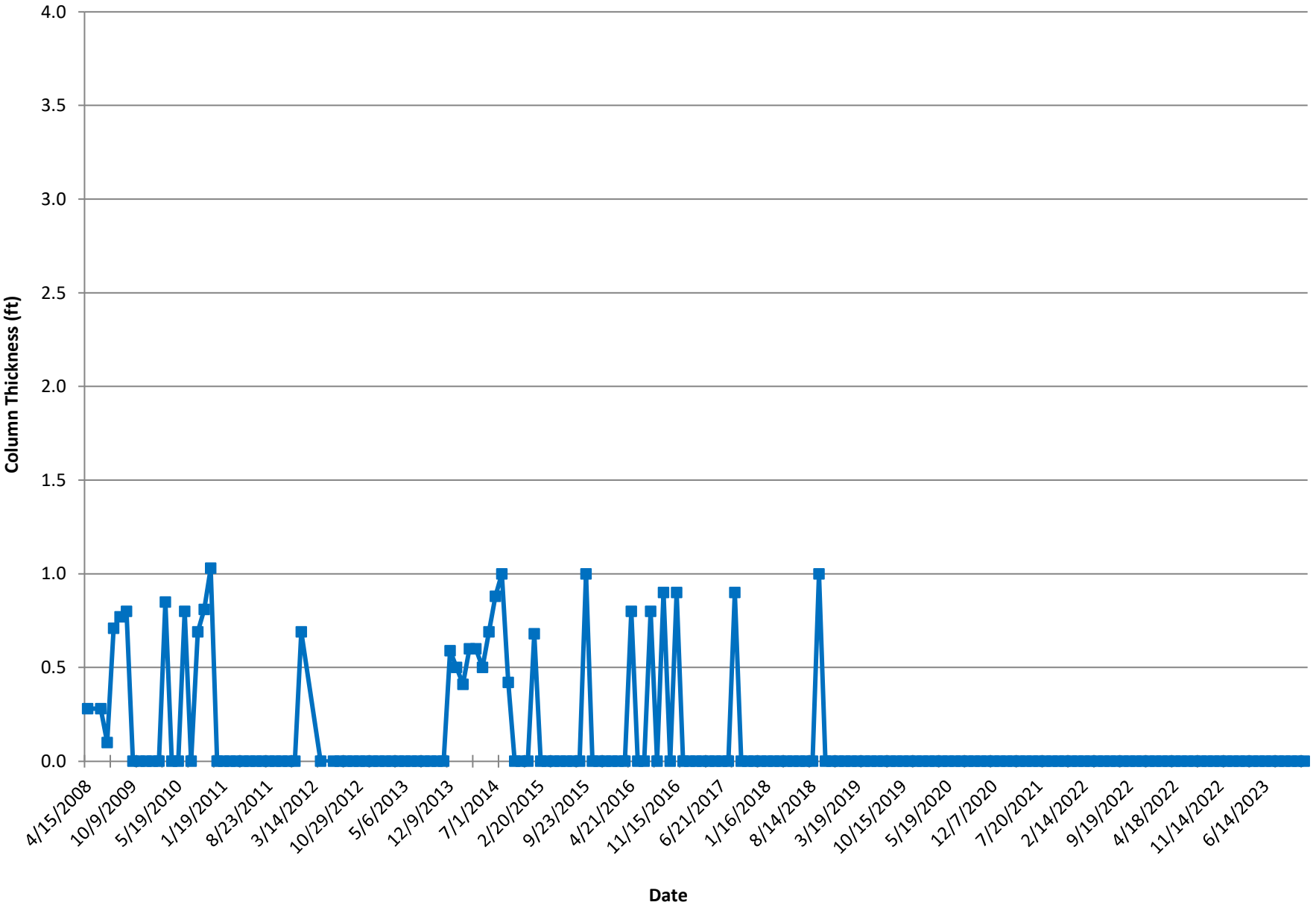
Table B.2
Historical Leachate Column Thicknesses (South Subtitle D-Compliant Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

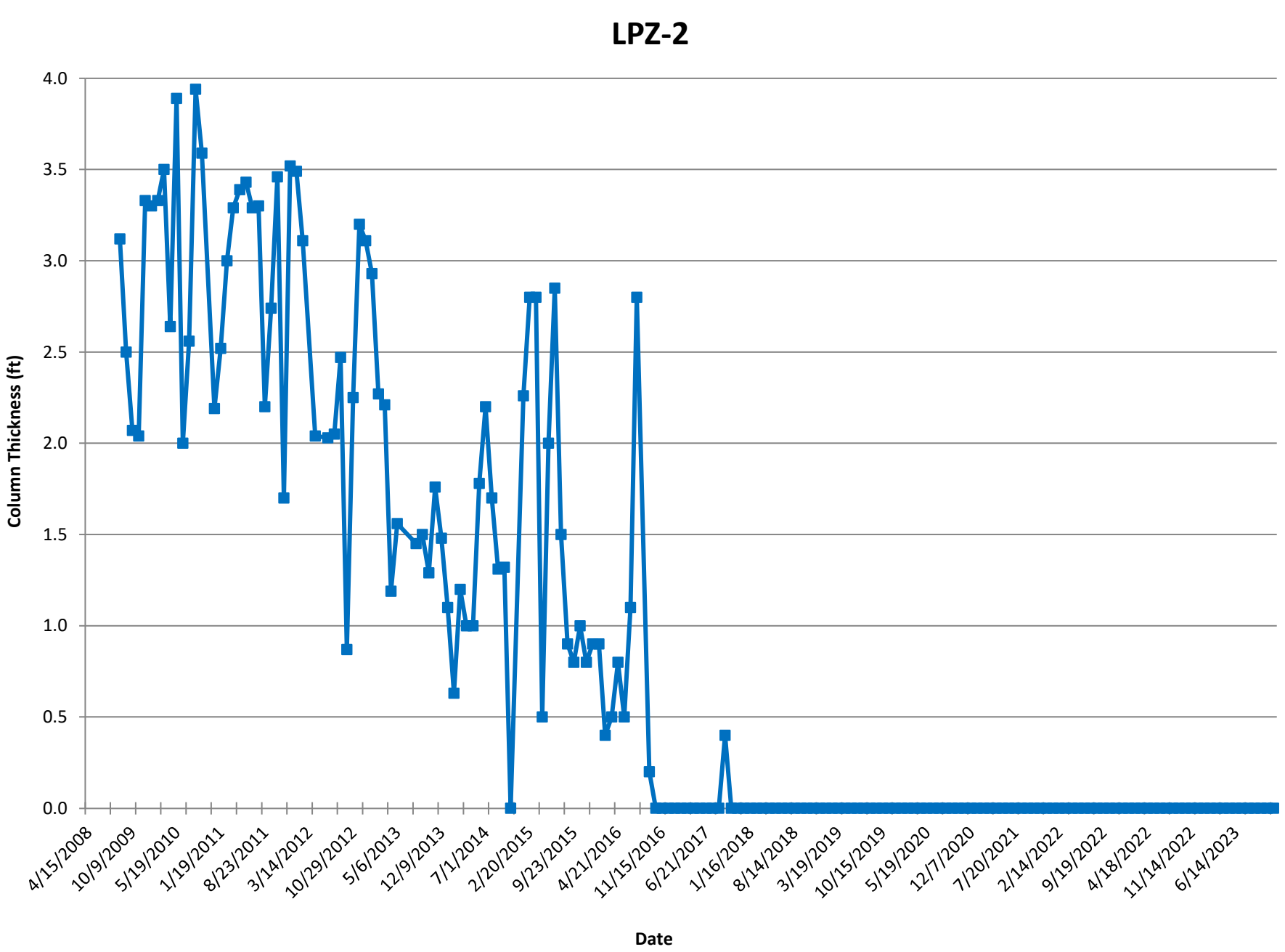
	LEACHATE PIEZOMETER				
	LPZ-1		LPZ-2		LPZ-3
Installed Depth	Depth (ft) =	29.00	Depth (ft) =	23.50	Depth (ft) = 20.00
Revised Depth			Depth (ft) [(1)] =	19.50	
Date	Fluid Level	Column	Fluid Level	Column	Column*
1/18/2017	Dry	Dry	Dry	Dry	NI
2/15/2017	Dry	Dry	Dry	Dry	NI
3/15/2017	Dry	Dry	Dry	Dry	NI
4/19/2017	Dry	Dry	Dry	Dry	NI
5/17/2017	Dry	Dry	Dry	Dry	NI
6/21/2017	Dry	Dry	Dry	Dry	NI
7/19/2017	Dry	Dry	Dry	Dry	NI
8/16/2017	28.10	0.90	Dry	NM	NI
9/20/2017	Dry	Dry	19.10	0.40	NI
10/18/2017	Dry	Dry	Dry	Dry	NI
11/15/2017	Dry	Dry	Dry	Dry	NI
12/20/2017	Dry	Dry	Dry	Dry	NI
1/16/2018	Dry	Dry	Dry	Dry	NI
2/20/2018	Dry	Dry	Dry	Dry	NI
3/13/2018	Dry	Dry	Dry	Dry	NI
4/17/2018	Dry	Dry	Dry	Dry	NI
5/15/2018	Dry	Dry	Dry	Dry	NI
6/19/2018	Dry	Dry	Dry	Dry	NI
7/17/2018	Dry	Dry	Dry	Dry	NI
8/14/2018	Dry	Dry	Dry	Dry	NI
9/18/2018	28.00	1.00	Dry	Dry	NI
10/16/2018	Dry	Dry	Dry	Dry	NI
11/20/2018	Dry	Dry	Dry	Dry	NI
12/18/2018	Dry	Dry	Dry	Dry	NI
1/15/2019	Dry	Dry	Dry	Dry	NI
2/19/2019	Dry	Dry	Dry	Dry	NI
3/19/2019	Dry	Dry	Dry	Dry	NI
4/16/2019	Dry	Dry	Dry	Dry	NI
5/14/2019	Dry	Dry	Dry	Dry	NI
6/18/2019	Dry	Dry	Dry	Dry	NI
7/16/2019	Dry	Dry	Dry	Dry	NI
8/20/2019	Dry	Dry	Dry	Dry	NI
9/17/2019	Dry	Dry	Dry	Dry	NI
10/15/2019	Dry	Dry	Dry	Dry	NI
11/19/2019	Dry	Dry	Dry	Dry	NI
12/17/2019	Dry	Dry	Dry	Dry	NI
1/14/2020	Dry	Dry	Dry	Dry	NI
2/18/2020	Dry	Dry	Dry	Dry	NI
3/17/2020	Dry	Dry	Dry	Dry	NI
4/14/2020	Dry	Dry	Dry	Dry	NI
5/19/2020	Dry	Dry	Dry	Dry	NI
6/16/2020	Dry	Dry	Dry	Dry	NI
7/14/2020	Dry	Dry	Dry	Dry	NI
8/18/2020	Dry	Dry	Dry	Dry	NI
9/15/2020	Dry	Dry	Dry	Dry	NI
10/20/2020	Dry	Dry	Dry	Dry	NI
11/14/2020	Dry	Dry	Dry	Dry	NI
12/7/2020	Dry	Dry	Dry	Dry	NI

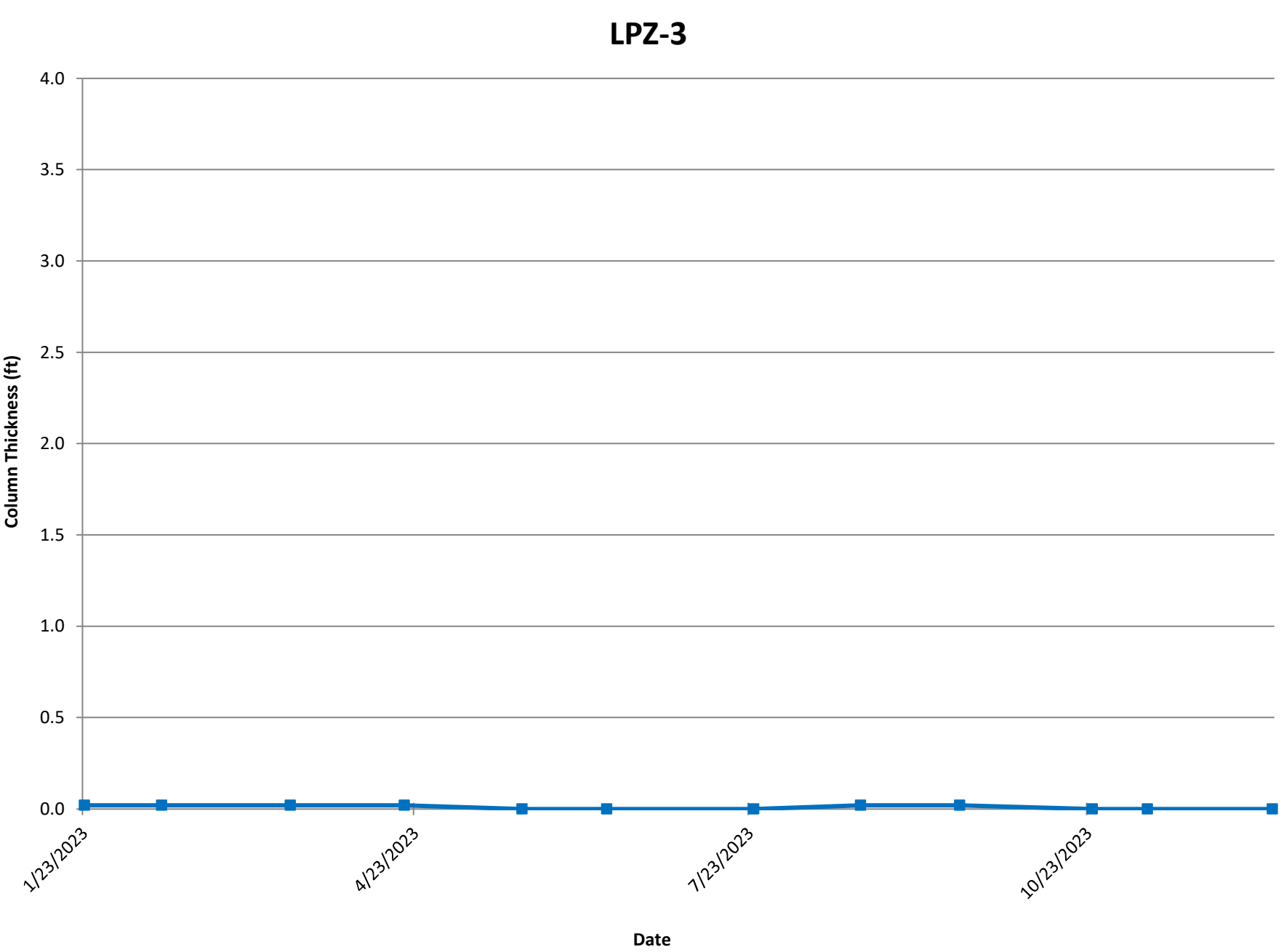
Table B.2
Historical Leachate Column Thicknesses (South Subtitle D-Compliant Area)
Southeast Iowa Multi-County Sanitary Landfill
Richland, Iowa

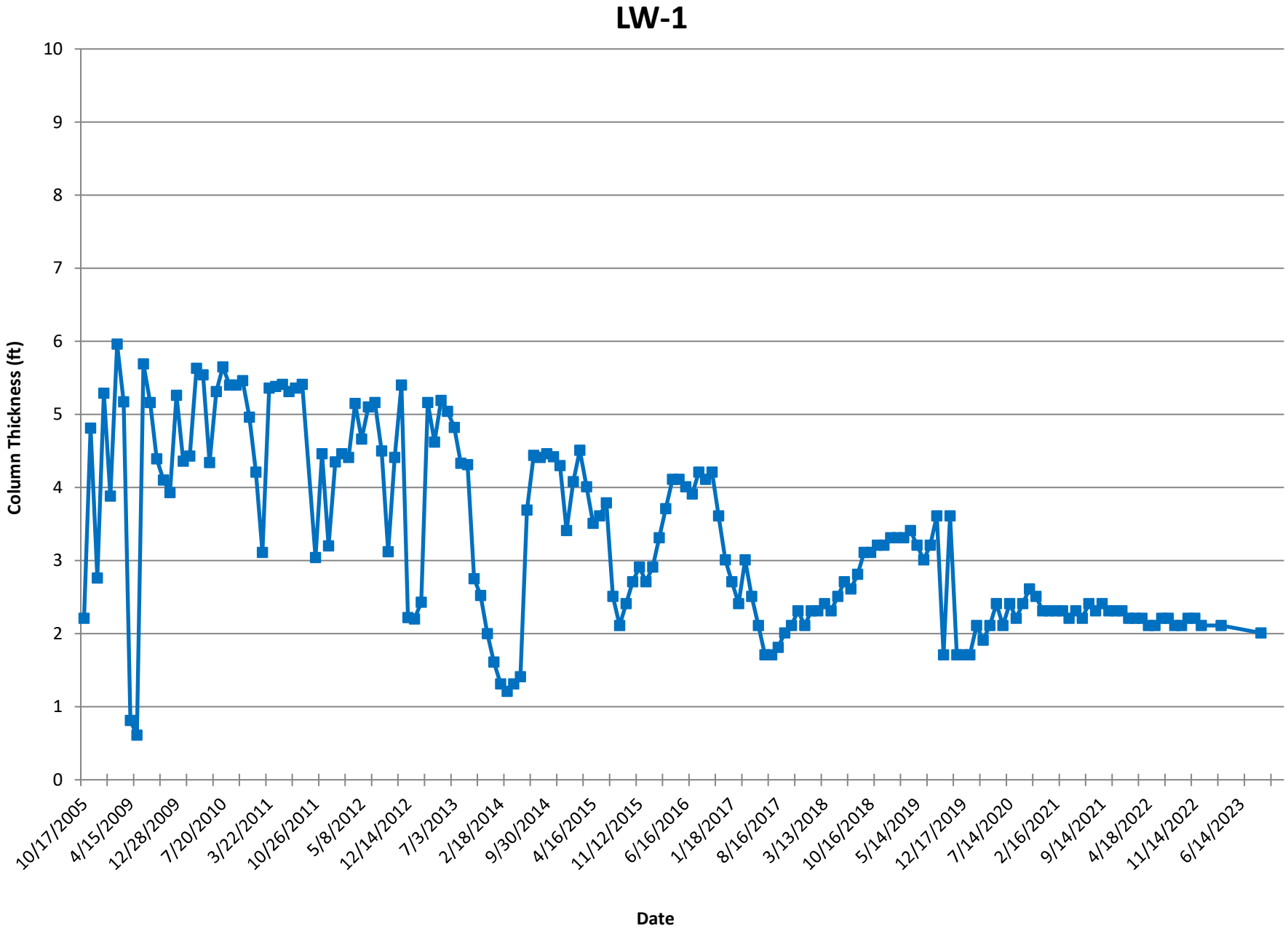
	LEACHATE PIEZOMETER				
	LPZ-1		LPZ-2		LPZ-3
Installed Depth	Depth (ft) =	29.00	Depth (ft) =	23.50	Depth (ft) = 20.00
Revised Depth			Depth (ft) [(1)] =	19.50	
Date	Fluid Level	Column	Fluid Level	Column	Column*
1/19/2021	Dry	Dry	Dry	Dry	NI
2/16/2021	Dry	Dry	Dry	Dry	NI
3/16/2021	Dry	Dry	Dry	Dry	NI
4/20/2021	Dry	Dry	Dry	Dry	NI
5/18/2021	Dry	Dry	Dry	Dry	NI
6/15/2021	Dry	Dry	Dry	Dry	NI
7/20/2021	Dry	Dry	Dry	Dry	NI
8/17/2021	Dry	Dry	Dry	Dry	NI
9/14/2021	Dry	Dry	Dry	Dry	NI
10/19/2021	Dry	Dry	Dry	Dry	NI
11/17/2021	Dry	Dry	Dry	Dry	NI
12/14/2021	Dry	Dry	Dry	Dry	NI
1/17/2022	Dry	Dry	Dry	Dry	0.02
2/14/2022	Dry	Dry	Dry	Dry	0.02
3/14/2022	Dry	Dry	Dry	Dry	0.02
4/18/2022	Dry	Dry	Dry	Dry	0.02
5/19/2022	Dry	Dry	Dry	Dry	0.02
6/13/2022	Dry	Dry	Dry	Dry	0.02
7/18/2022	Dry	Dry	Dry	Dry	0.02
8/15/2022	Dry	Dry	Dry	Dry	0.02
9/19/2022	Dry	Dry	Dry	Dry	0.02
10/17/2022	Dry	Dry	Dry	Dry	0.02
11/14/2022	Dry	Dry	Dry	Dry	Dry
12/19/2022	Dry	Dry	Dry	Dry	Dry
1/23/2023	Dry	Dry	Dry	Dry	0.02
2/13/2023	Dry	Dry	Dry	Dry	0.02
3/20/2023	Dry	Dry	Dry	Dry	0.02
4/20/2023	Dry	Dry	Dry	Dry	0.02
5/22/2023	Dry	Dry	Dry	Dry	Dry
6/14/2023	Dry	Dry	Dry	Dry	Dry
7/24/2023	Dry	Dry	Dry	Dry	Dry
8/22/2023	Dry	Dry	Dry	Dry	0.02
9/18/2023	Dry	Dry	Dry	Dry	0.02
10/24/2023	Dry	Dry	Dry	Dry	Dry
11/8/2023	Dry	Dry	Dry	Dry	Dry
12/12/2023	Dry	Dry	Dry	Dry	Dry

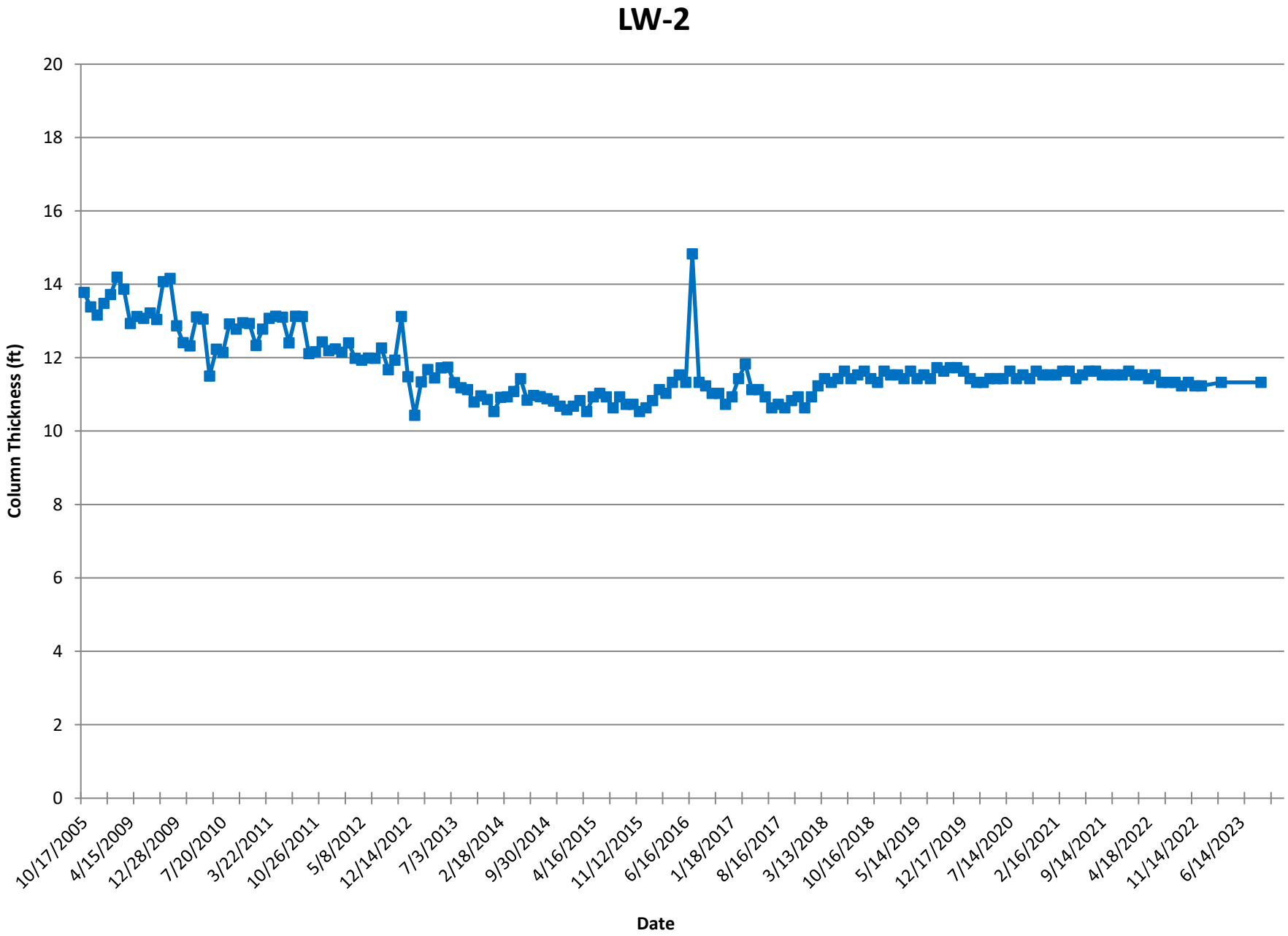
Notes: Leachate levels are measured by landfill personnel.
* - Column depth for LPZ-3 measured by an electronic monitoring device.
ME denotes measurement error.
NM denotes not measured.
NA denotes not available.
NI denotes not installed.

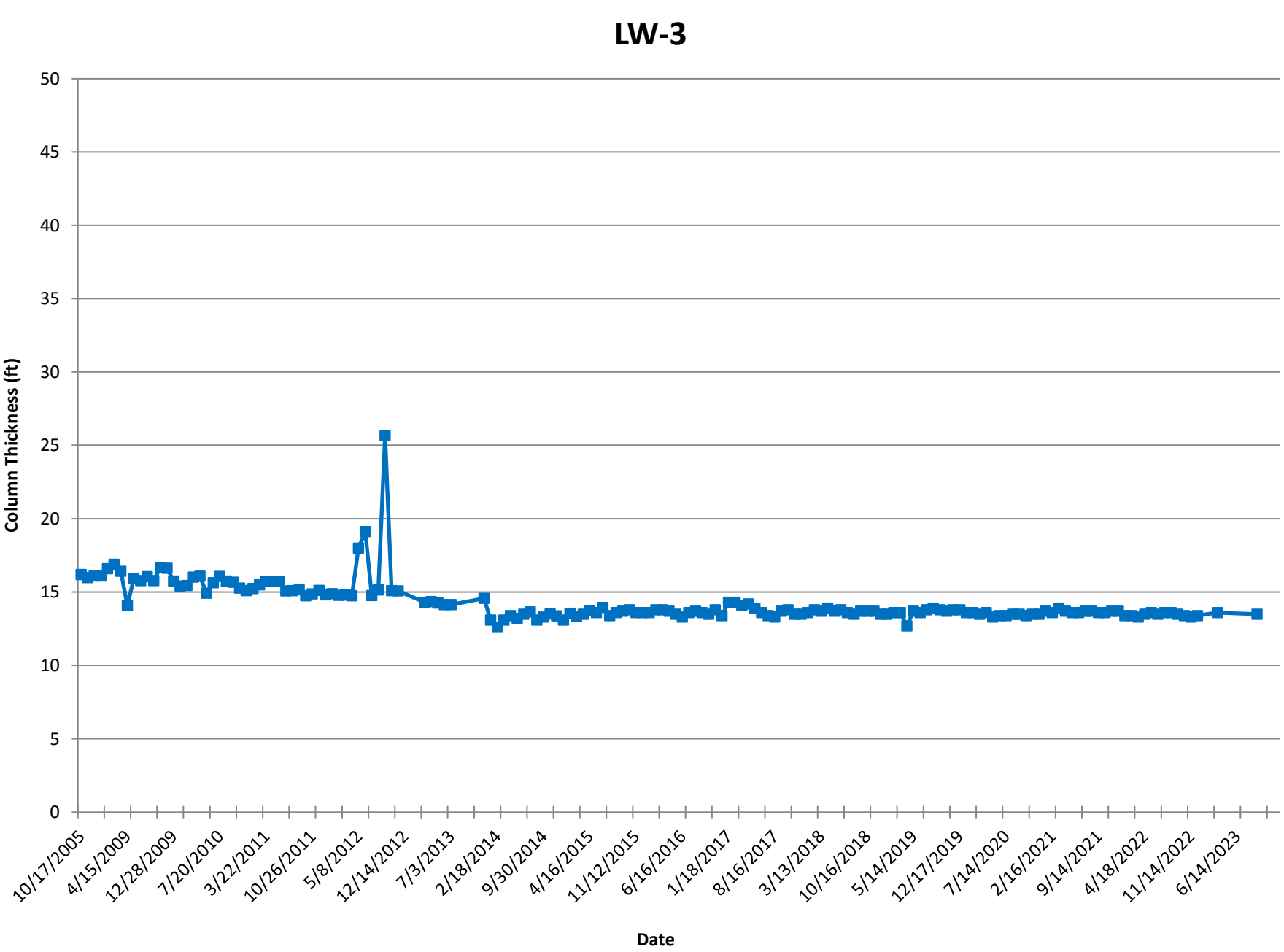

LPZ-1
Column Thickness (ft)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/15/2008
10/9/2009
5/19/2010
1/19/2011
8/23/2011
3/14/2012
10/29/2012
5/6/2013
12/9/2013
7/1/2014
2/20/2015
9/23/2015
4/21/2016
11/15/2016
6/21/2017
1/16/2018
8/14/2018
3/19/2019
10/15/2019
5/19/2020
12/7/2020
7/20/2021
2/14/2022
9/19/2022
4/18/2022
11/14/2022
6/14/2023
Date

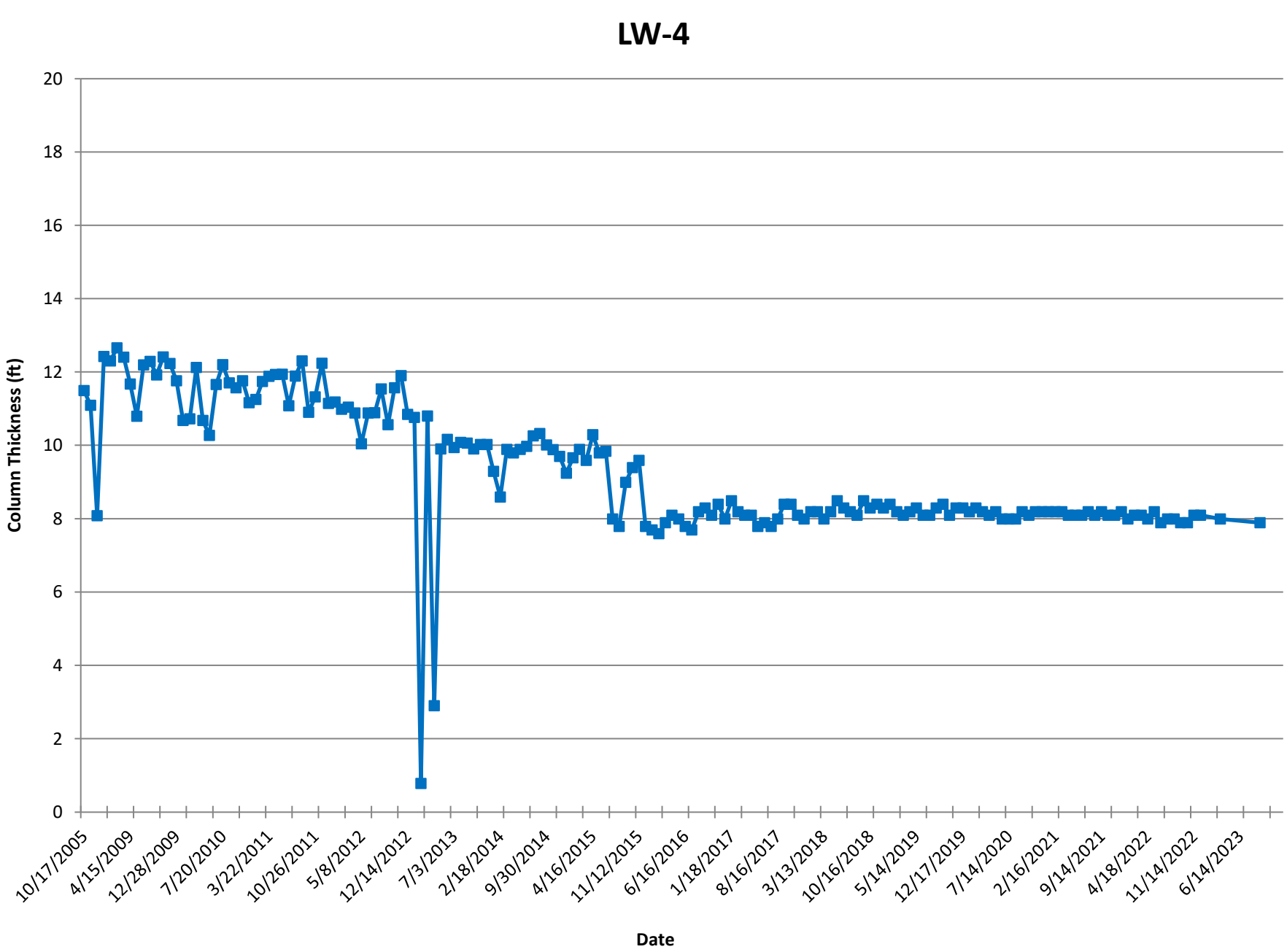

LPZ-2
Column Thickness (ft)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4/15/2008
10/9/2009
5/19/2010
1/19/2011
8/23/2011
3/14/2012
10/29/2012
5/6/2013
12/9/2013
7/1/2014
2/20/2015
9/23/2015
4/21/2016
11/15/2016
6/21/2017
1/16/2018
8/14/2018
3/19/2019
10/15/2019
5/19/2020
12/7/2020
7/20/2021
2/14/2022
9/19/2022
4/18/2022
11/14/2022
6/14/2023
Date

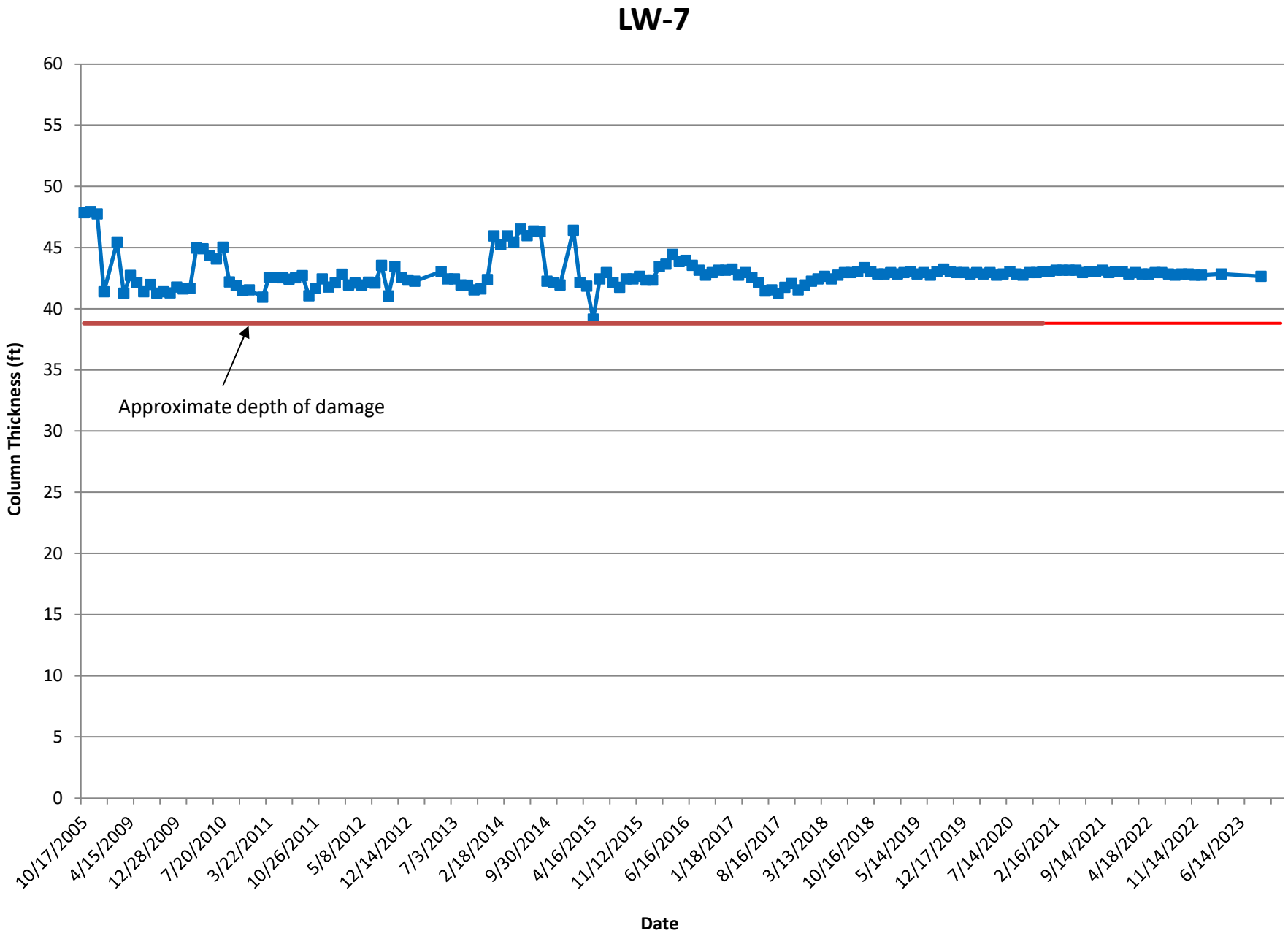

LPZ-3
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Column Thickness (ft)
1/23/2023
4/23/2023
7/23/2023
10/23/2023
Date

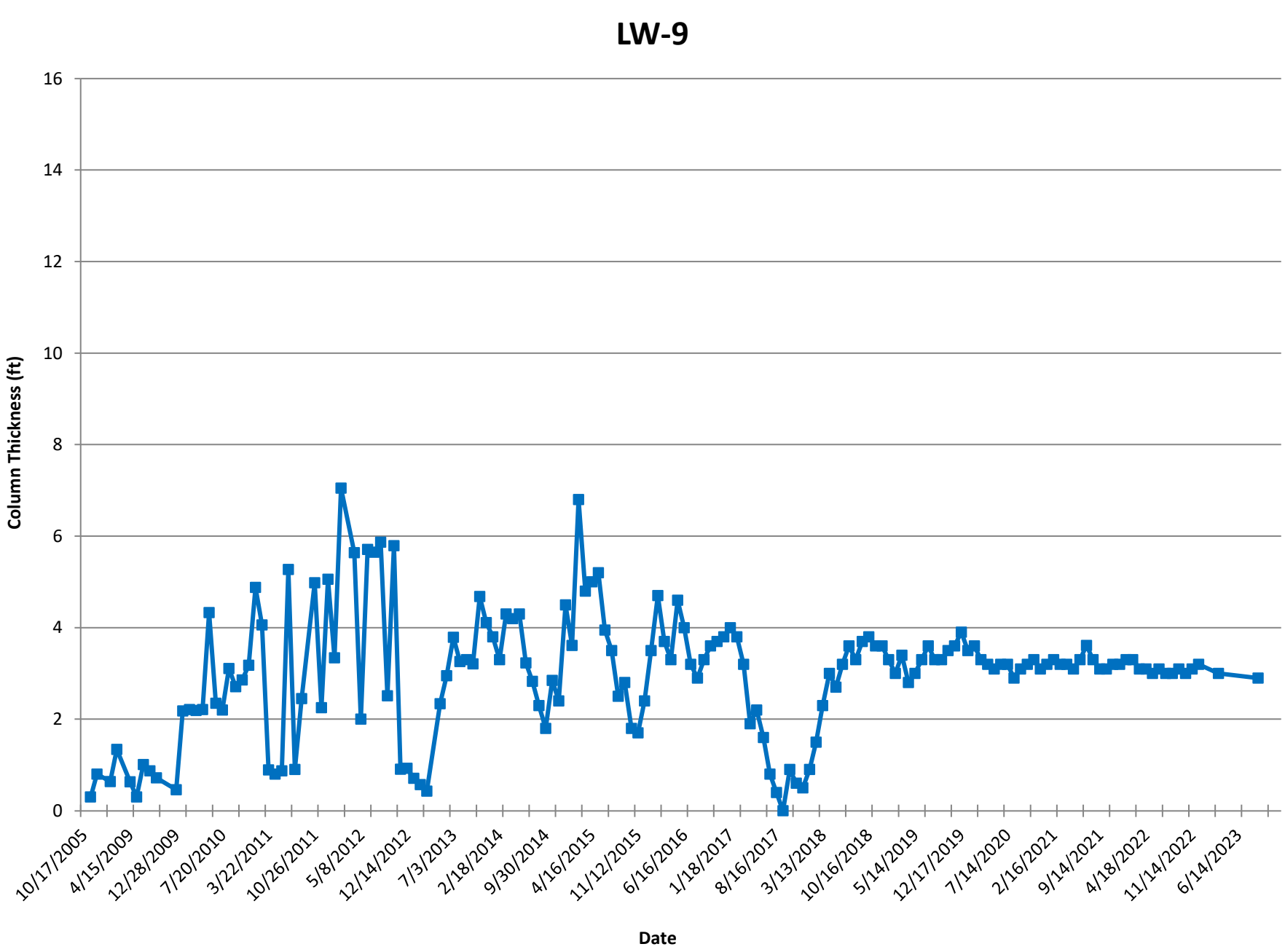

LW-1
Column Thickness (ft)
10
9
8
7
6
5
4
3
2
1
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date

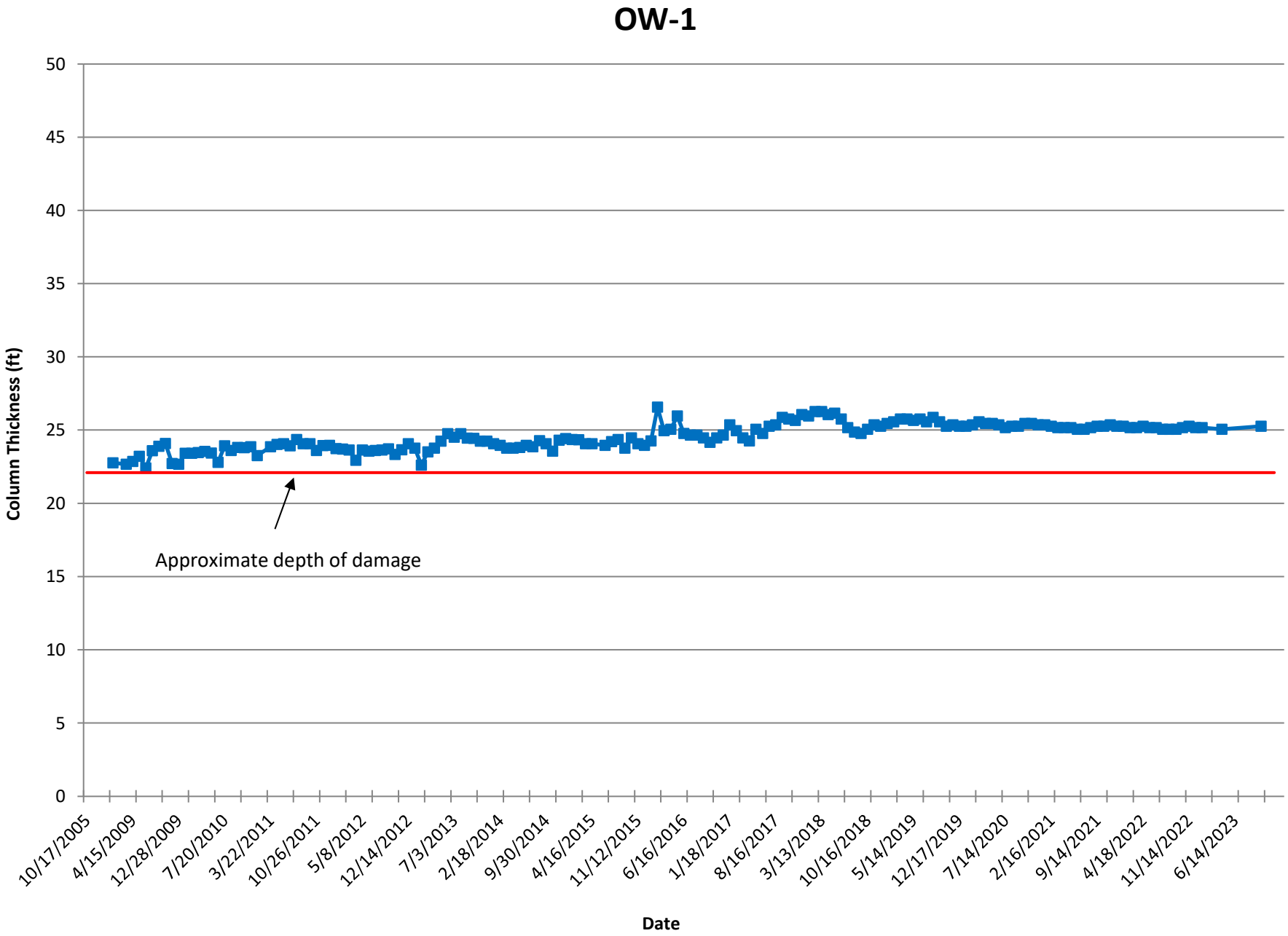

LW-2
Column Thickness (ft)
20
18
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-3
Column Thickness (ft)
50
45
40
35
30
25
20
15
10
5
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-4
Column Thickness (ft)
20
18
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-7
Column Thickness (ft)
60
55
50
45
40
35
30
25
20
15
10
5
0
Approximate depth of damage
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


LW-9
Column Thickness (ft)
16
14
12
10
8
6
4
2
0
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date


OW-1
Column Thickness (ft)
50
45
40
35
30
25
20
15
10
5
0
Approximate depth of damage
10/17/2005
4/15/2009
12/28/2009
7/20/2010
3/22/2011
10/26/2011
5/8/2012
12/14/2012
7/3/2013
2/18/2014
9/30/2014
4/16/2015
11/12/2015
6/16/2016
1/18/2017
8/16/2017
3/13/2018
10/16/2018
5/14/2019
12/17/2019
7/14/2020
2/16/2021
9/14/2021
4/18/2022
11/14/2022
6/14/2023
Date

Appendix F
2023 Landfill Gas Annual Report

Table 13
Gas Monitoring Summary
2023 Gas Monitoring Report
Southeast Iowa Multi-County Landfill
Permit No. 54-SDP-01-75P

Monitoring Points				Methane Results (% LEL)							
Name		Type	Description	3/15/2023	S (Y/N)	5/11/2023	S (Y/N)	8/22/2023	S (Y/N)	11/3/2023	S (Y/N)
#1	Scale	Outdoor	Beneath the scale	0		0		0		0	
#2	Office/Scalehouse	Indoor	Inside the office building/scalehouse	0		0		0		0	
#3	Shop	Indoor	Inside the shop building	0		0		0		0	
#4	HHW Shed	Indoor	Inside the equipment building between Phase 1 and Phase 2	0		0		0		0	
#5	Maintenance Shop	Indoor	Inside the maintenance shop	0		0		0		0	
#6	MW-7	Subsurface	Vadose zone off the northeast corner of the Closed area	0	Y	0	Y	0	N	5	N
#7	MW-25	Subsurface	Vadose zone off the west part of the north boundary of the Closed area	>100	N	>100	N	>100	N	>100	N
#8	MW-26	Subsurface	Vadose zone off the east part of the north boundary of the Closed area	0	N	11	N	0	N	4	N
#9	MW-27	Subsurface	Vadose zone off the north part of the west boundary of the Closed area	0	Y	0	Y	0	Y	0	Y
#10	LFGW-W1	Subsurface	Vadose zone off the south part of the west boundary of the Closed area	>100	N	0	N	0	N	35	N
#12	UD-2	Structure	Vadose zone, groundwater underdrain beneath the Leachate Lagoon	0		0		0		0	
#13	LFG-GUCO3W	Structure	Vadose zone, groundwater underdrain beneath the Phase 2 Cell, west end	0		>100		0		0	
#16	LFGW-T1	Subsurface	Vadose zone, western boundary of FML-lined area	0	N	0	Y	0	N	0	N
#17M	LFG-GUCO3E	Structure	Groundwater underdrain beneath the Phase 2 Cell, east end	0		0		NM*		0	
#18	LFGW-T2	Subsurface	Vadose zone off the central west boundary of the Closed area	4	N	0	N	>100	N	20	N
#19	LFGW-T3	Subsurface	Vadose zone off the western boundary of the Phase 0 Cell	>100	N	0	N	0	N	0	N
#20	LFGW-T4	Subsurface	Vadose zone approximately 150 feet west of LFGW-T1	0	N	0	N	0	N	0	N
#21	LFGW-T5	Subsurface	Vadose zone approximately 150 feet west of LFGW-T3	0	N	0	N	0	N	0	N
#22	MW-32	Subsurface	Vadose zone approximately 500 feet east-southeast of MW-26	65	N	>100	N	>100	N	>100	N
#23	MW-33	Subsurface	Vadose zone approximately 300 feet northeast of the NE corner of the Closed area	0	Y	0		NM*		NM*	
#24	GV-1	Subsurface	Gas Vent	35		10		0		0	
#25	GV-2	Subsurface	Gas Vent	19		>100		0		0	
#26	GV-3	Subsurface	Gas Vent	14		30		0		0	
#27	GV-4	Subsurface	Gas Vent	>100		12		>100		>100	
#28	GV-5	Subsurface	Gas Vent	>100		>100		>100		>100	
#29	GV-6	Subsurface	Gas Vent	51		>100		>100		0	
#30	GV-7	Subsurface	Gas Vent	35		2		>100		7	
#31	GV-8	Subsurface	Gas Vent	40		50		0		0	
#32	GV-9	Subsurface	Gas Vent	0		>100		0		>100	
#33	LFGW-E1	Subsurface	Vadose zone near eastern boundary approximately 210 feet south of MW-32.	0	N	0	N	0	N	5	N
#34	LFGW-E2	Subsurface	Vadose zone approximately 180 feet east of MW-7.	0	N	0	N	0	N	5	N
#35	GV-10	Subsurface	Gas Vent	>100		50		>100		>100	
#36	GV-11	Subsurface	Gas Vent	54		>100		15		44	
#37	GV-12	Subsurface	Gas Vent	>100		>100		>100		>100	
#38	GV-13	Subsurface	Gas Vent	>100		>100		>100		60	
#39	GV-14	Subsurface	Gas Vent	>100		>100		>100		80	
#40	LFGW-T6	Subsurface	Vadose zone approximately 150 feet west of LFGW-T2.	NI		NI		NI		4	

Notes:

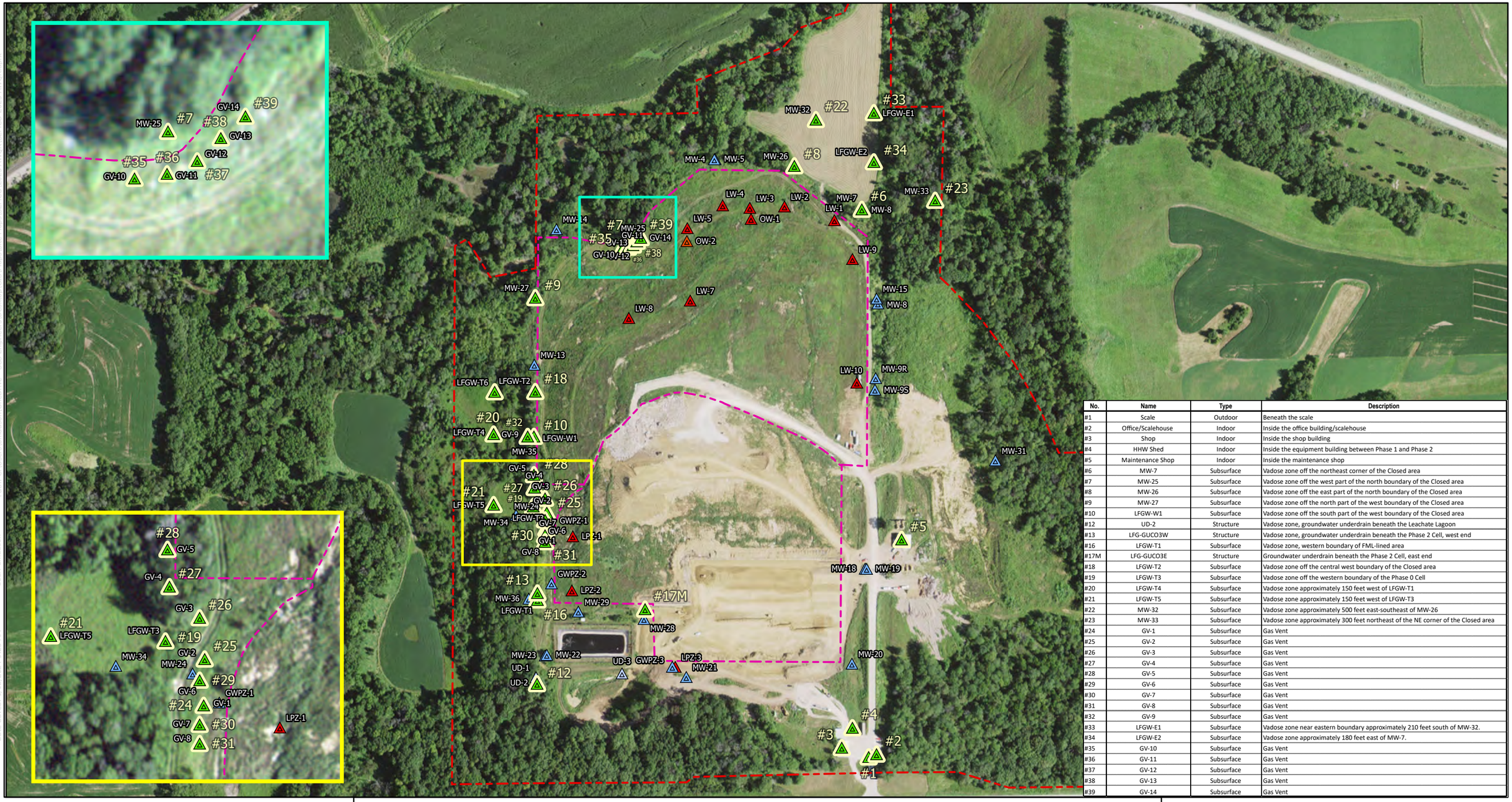
S(Y/N) - Was screen submerged, yes or no or blank is non-applicable.

NM* - Not measured. Monitoring point inaccessible due to overgrowth.

NI - Not installed.

Comments:

1. Exceedances at the groundwater underdrain point LFG-GUCO3W and are bracketed by LFGW-T1 and were reported previously and no longer require additional action (Doc #44590).
2. Exceedances at the groundwater underdrain point LFG-GUCO3E were reported (Doc #48562) and are bracketed in the direction of the nearest property boundary by LFGW-T1.
3. Exceedances at monitoring well MW-25 were previously reported (Doc #57269), additional bracketing wells have not been installed as Richland Creek provides a natural barrier to off-site migration.
4. Exceedances at LFGW-T3 were previously reported (Doc #63939) and are bracketed by LFGW-T5.
5. Exceedances at monitoring well MW-32 were previously reported (Doc #98301) and were bracketed by landfill gas wells LFGW-E1 and LFGW-E2.
6. Exceedances at LFGW-W1 were previously reported(Doc #57269) and are bracketed by LFGW-T4.
7. The subsurface venting wells (Points #24-32, #35-39) were installed to vent the subsurface. The methane detections indicated that they were functioning as intended.
8. Exceedances at LFGW-T2 were previously reported (Doc #107868) and are bracketed by LFGW-T6.



No.	Name	Type	Description
#1	Scale	Outdoor	Beneath the scale
#2	Office/Scalehouse	Indoor	Inside the office building/scalehouse
#3	Shop	Indoor	Inside the shop building
#4	HHW Shed	Indoor	Inside the equipment building between Phase 1 and Phase 2
#5	Maintenance Shop	Indoor	Inside the maintenance shop
#6	MW-7	Subsurface	Vadose zone off the northeast corner of the Closed area
#7	MW-25	Subsurface	Vadose zone off the west part of the north boundary of the Closed area
#8	MW-26	Subsurface	Vadose zone off the east part of the north boundary of the Closed area
#9	MW-27	Subsurface	Vadose zone off the north part of the west boundary of the Closed area
#10	LFGW-W1	Subsurface	Vadose zone off the south part of the west boundary of the Closed area
#12	UD-2	Structure	Vadose zone, groundwater underdrain beneath the Leachate Lagoon
#13	LFG-GUCO3W	Structure	Vadose zone, groundwater underdrain beneath the Phase 2 Cell, west end
#16	LFGW-T1	Subsurface	Vadose zone, western boundary of FML-lined area
#17M	LFG-GUCO3E	Structure	Groundwater underdrain beneath the Phase 2 Cell, east end
#18	LFGW-T2	Subsurface	Vadose zone off the central west boundary of the Closed area
#19	LFGW-T3	Subsurface	Vadose zone off the western boundary of the Phase 0 Cell
#20	LFGW-T4	Subsurface	Vadose zone approximately 150 feet west of LFGW-T1
#21	LFGW-T5	Subsurface	Vadose zone approximately 150 feet west of LFGW-T3
#22	MW-32	Subsurface	Vadose zone approximately 500 feet east-southeast of MW-26
#23	MW-33	Subsurface	Vadose zone approximately 300 feet northeast of the NE corner of the Closed area
#24	GV-1	Subsurface	Gas Vent
#25	GV-2	Subsurface	Gas Vent
#26	GV-3	Subsurface	Gas Vent
#27	GV-4	Subsurface	Gas Vent
#28	GV-5	Subsurface	Gas Vent
#29	GV-6	Subsurface	Gas Vent
#30	GV-7	Subsurface	Gas Vent
#31	GV-8	Subsurface	Gas Vent
#32	GV-9	Subsurface	Gas Vent
#33	LFGW-E1	Subsurface	Vadose zone near eastern boundary approximately 210 feet south of MW-32.
#34	LFGW-E2	Subsurface	Vadose zone approximately 180 feet east of MW-7.
#35	GV-10	Subsurface	Gas Vent
#36	GV-11	Subsurface	Gas Vent
#37	GV-12	Subsurface	Gas Vent
#38	GV-13	Subsurface	Gas Vent
#39	GV-14	Subsurface	Gas Vent

Path: C:\Users\bmadison\OneDrive - SCS Engineers\Desktop\GIS\Maps\Site Maps\SEMCO\2023 AWOR\SEMCO-2023-AWOR.aprx
User: bmadison
Date Saved: 1/12/2024 9:23 AM

SCS ENGINEERS
environmental consultants and contractors

Methane Monitoring Network

Legend

- Methane Monitoring Point
- Monitoring Well
- Groundwater Underdrain
- Approximate Landfill Gas Monitoring Location
- Approximate Observation Well Location
- Approximate Leachate Piezometer Location
- Approximate Existing Waste Boundary
- Approximate Property Boundary

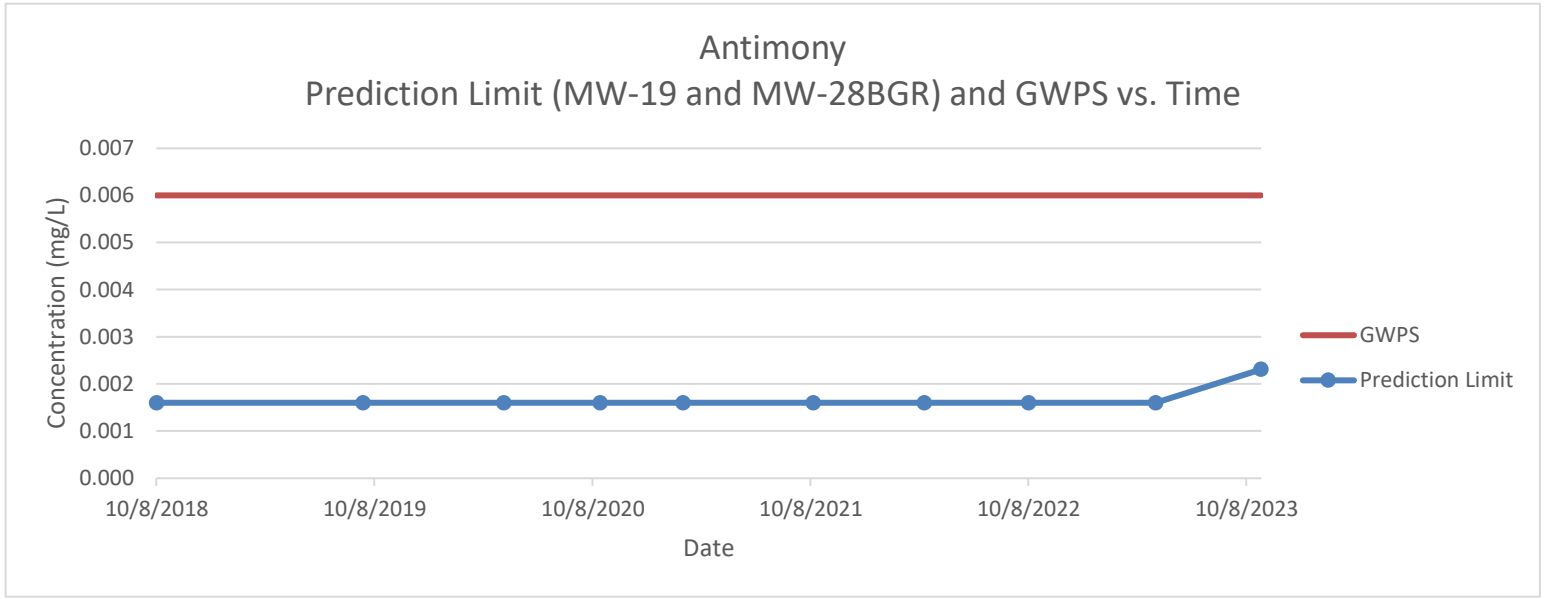
Southeast Multi-County Sanitary Landfill
Richland, Iowa
Project No: 27223215.24
Drawing Date: January 2024

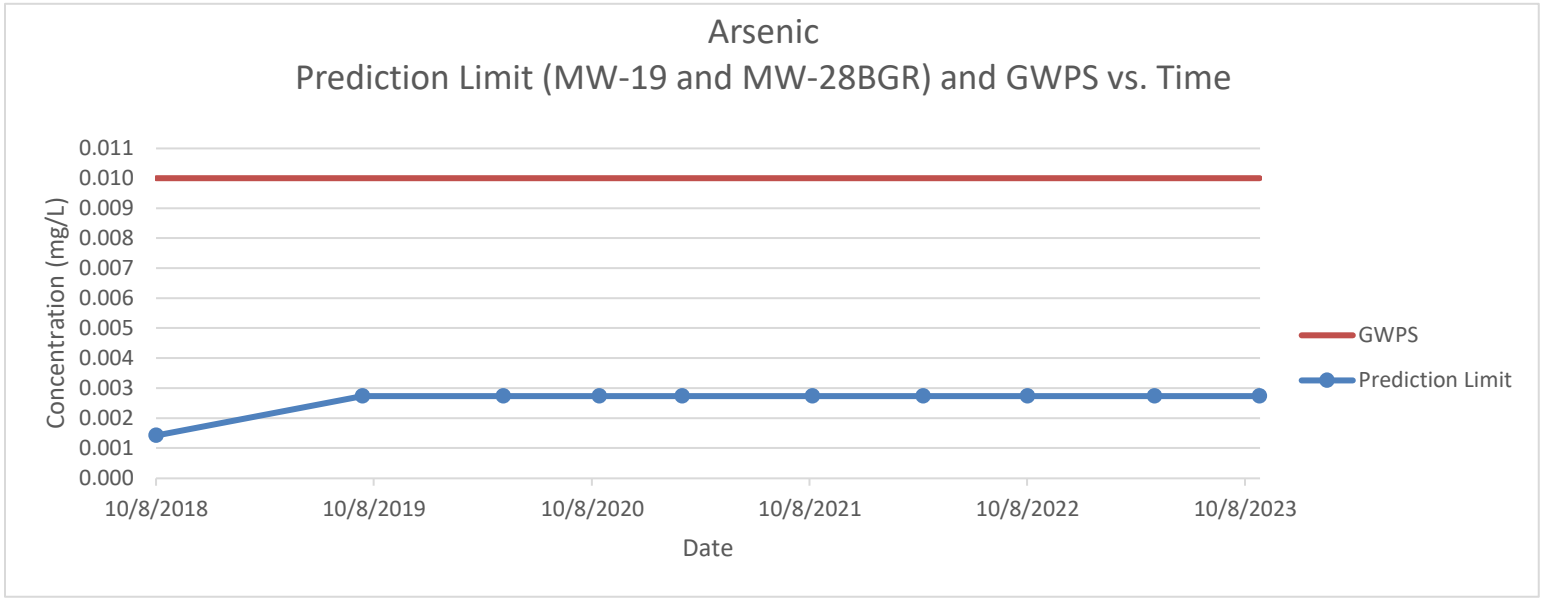
N
W
E
S
0 280 560 1,120 Feet

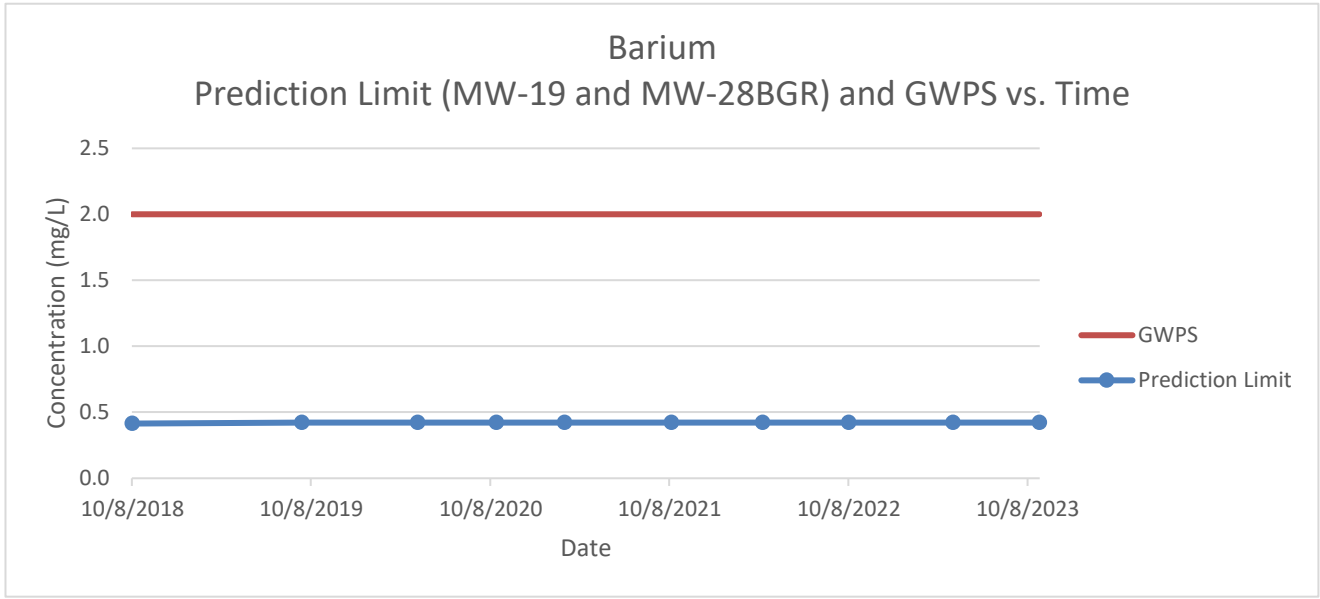
Figure 1

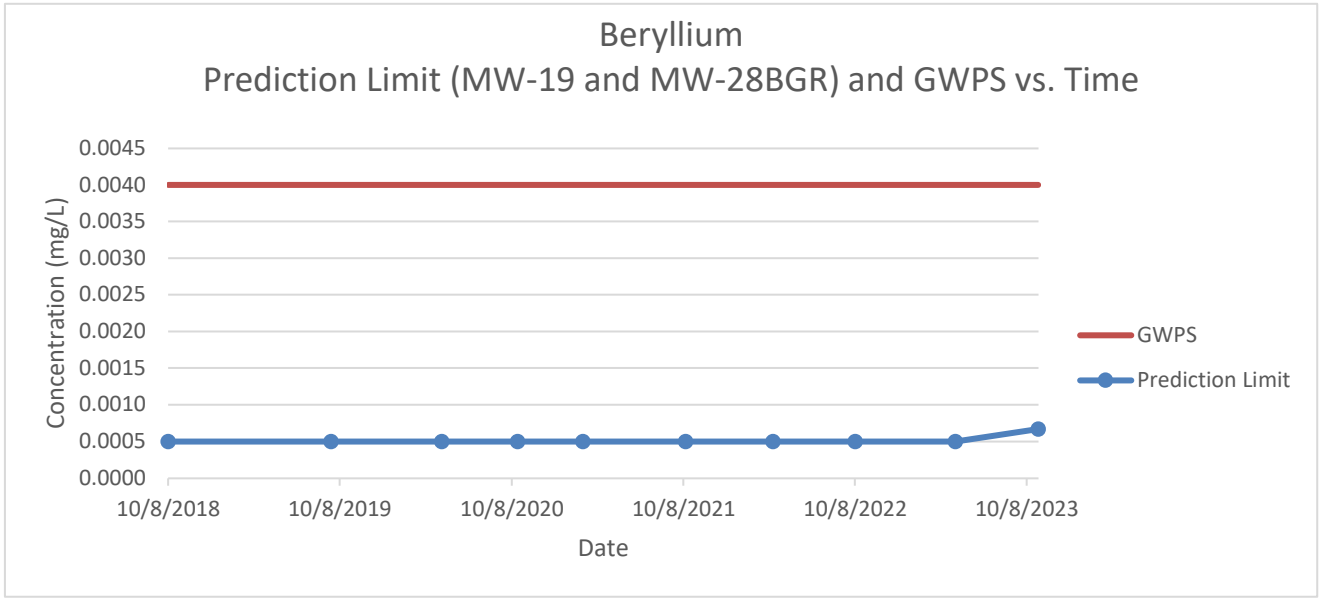
USDA, Iowa State University GIS Facility, Esri, CGIAR, USGS, Esri, TomTom, Garmin, Foursquare, FAO, METI/NASA, USGS

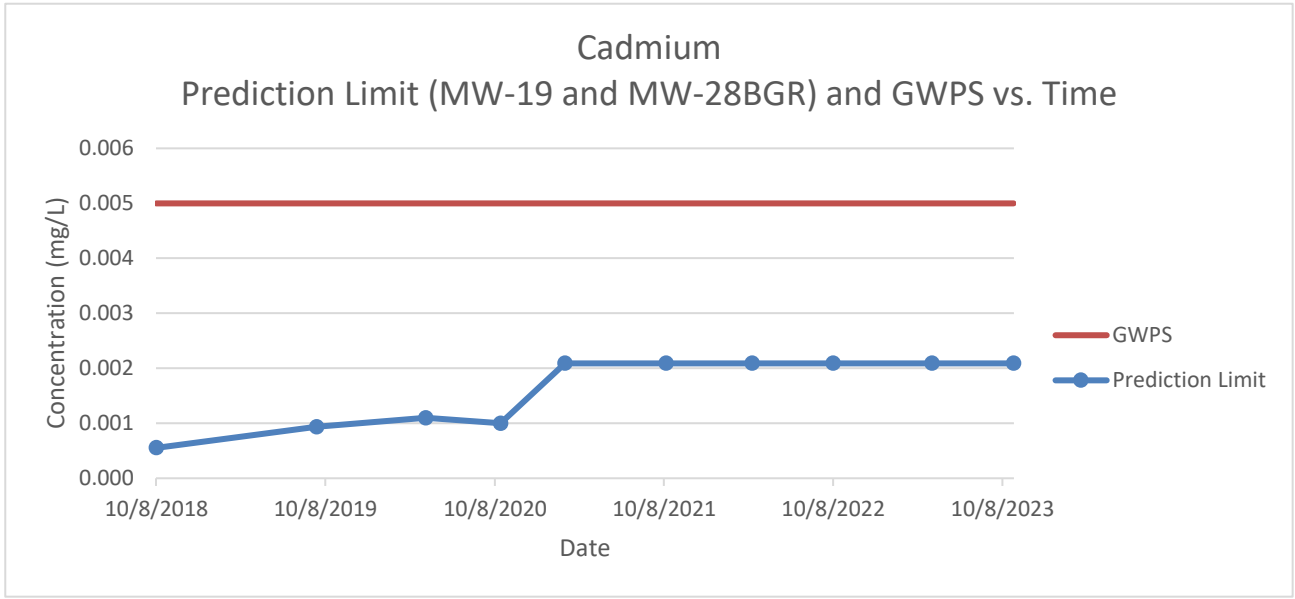
Appendix G
Standards History Graphs

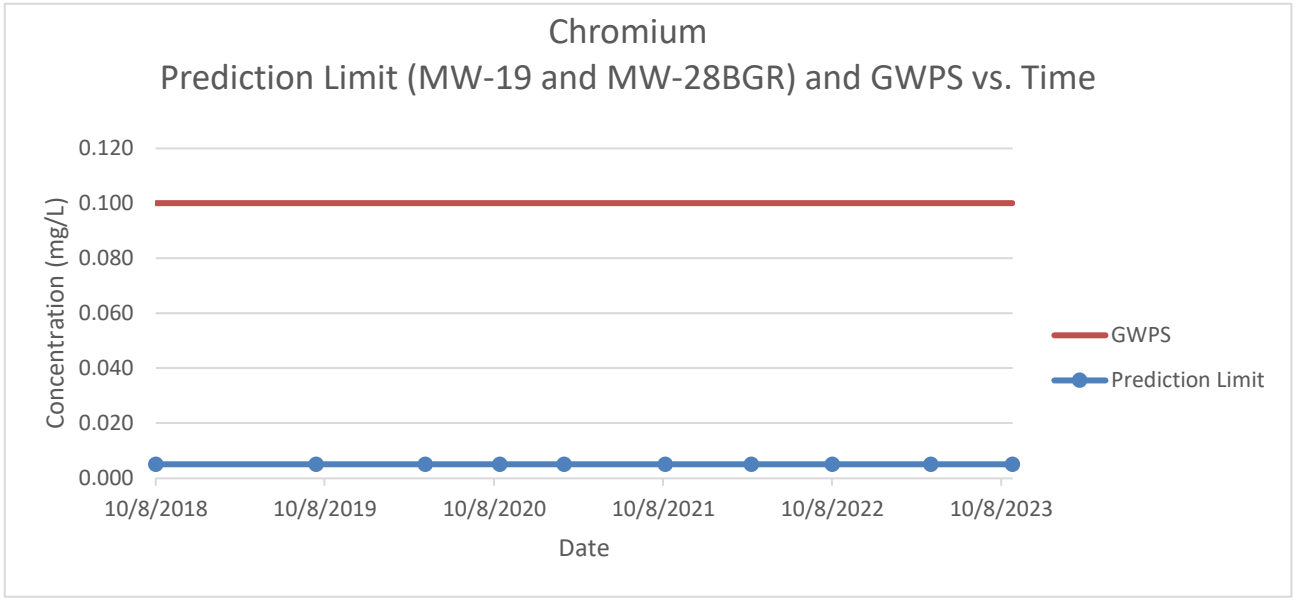

Antimony
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

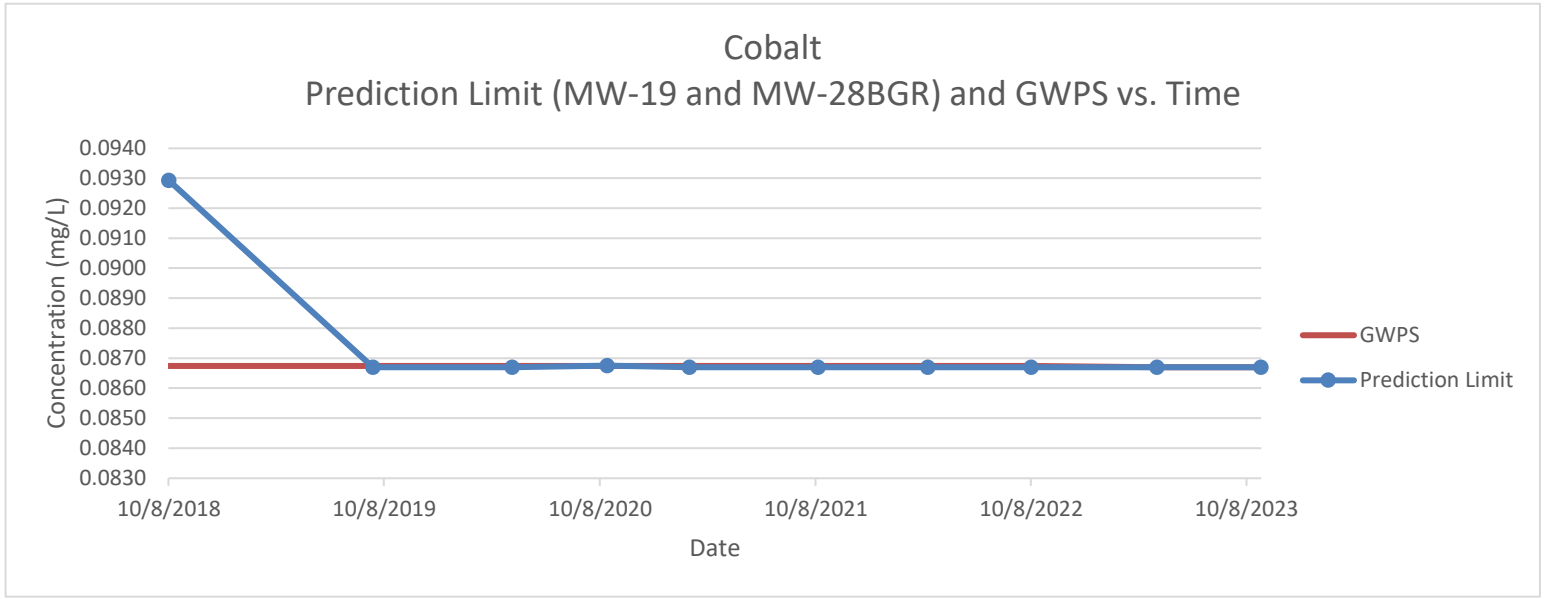

Arsenic
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.011
0.010
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

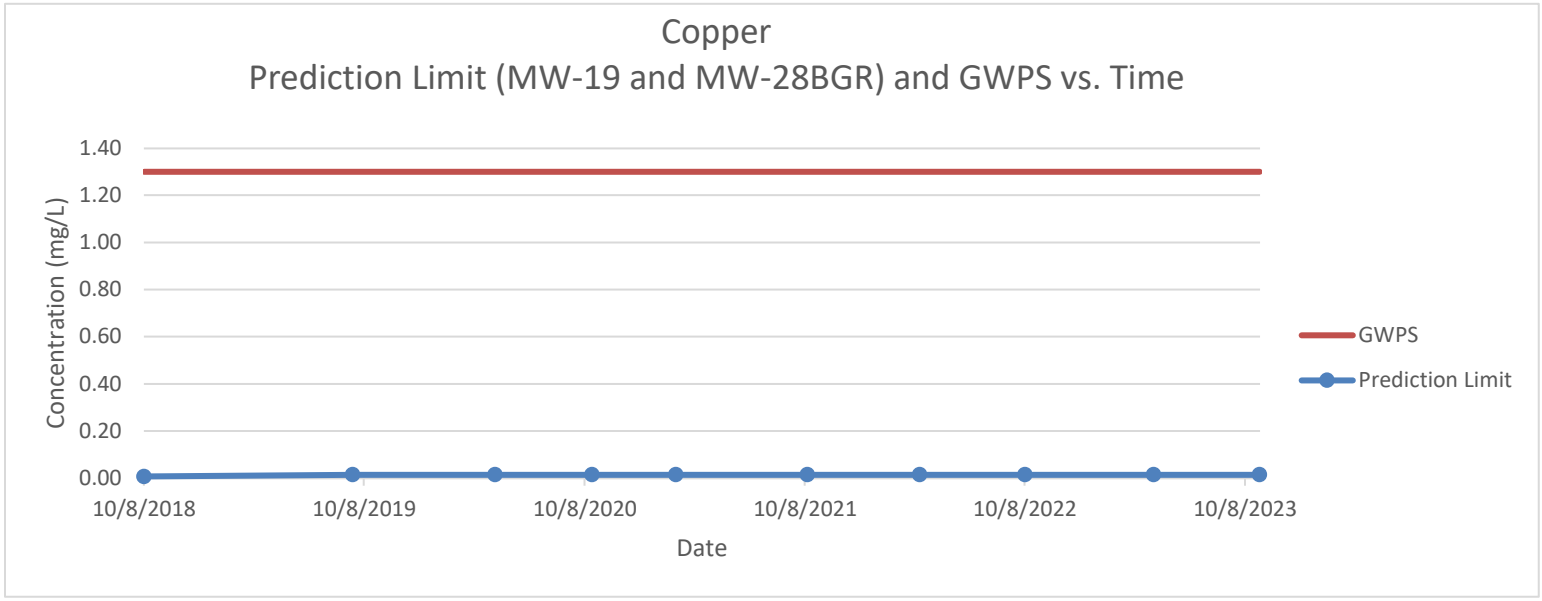

Barium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

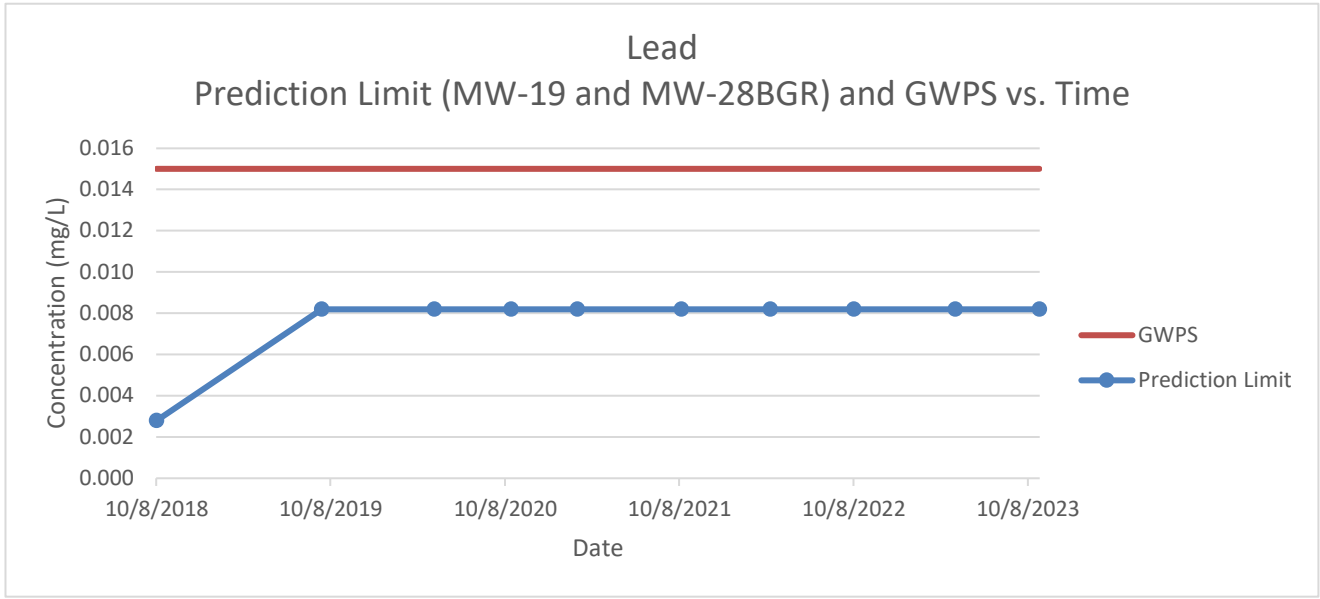

Beryllium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.0045
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

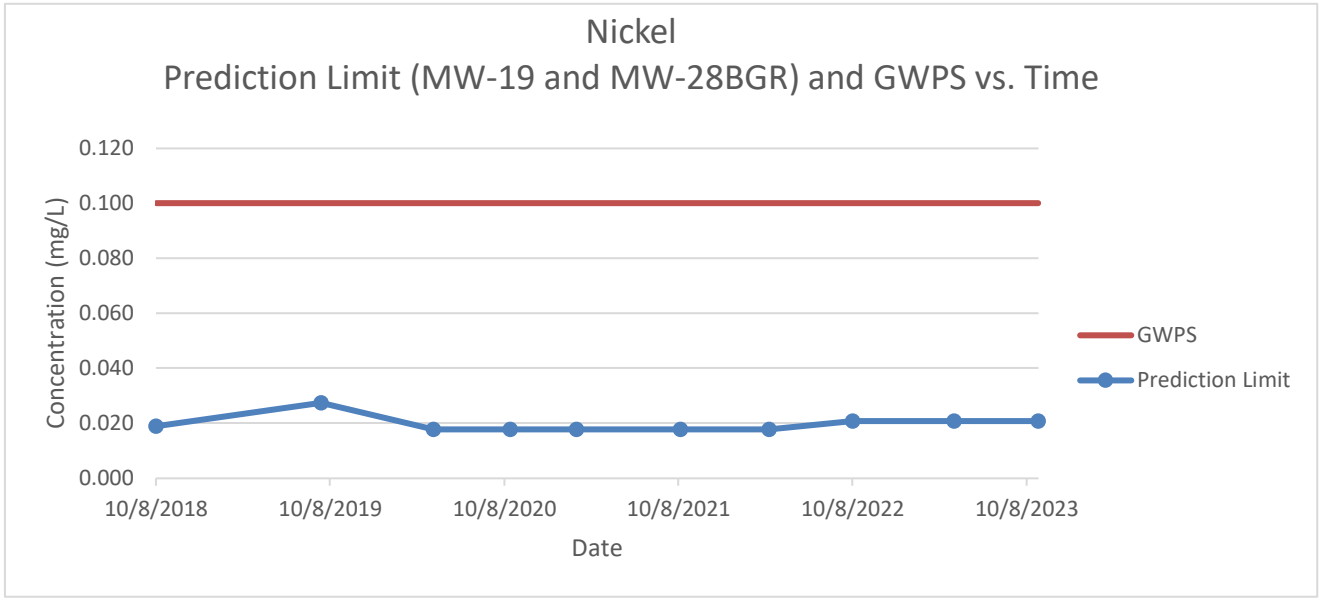

Cadmium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.006
0.005
0.004
0.003
0.002
0.001
0.000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

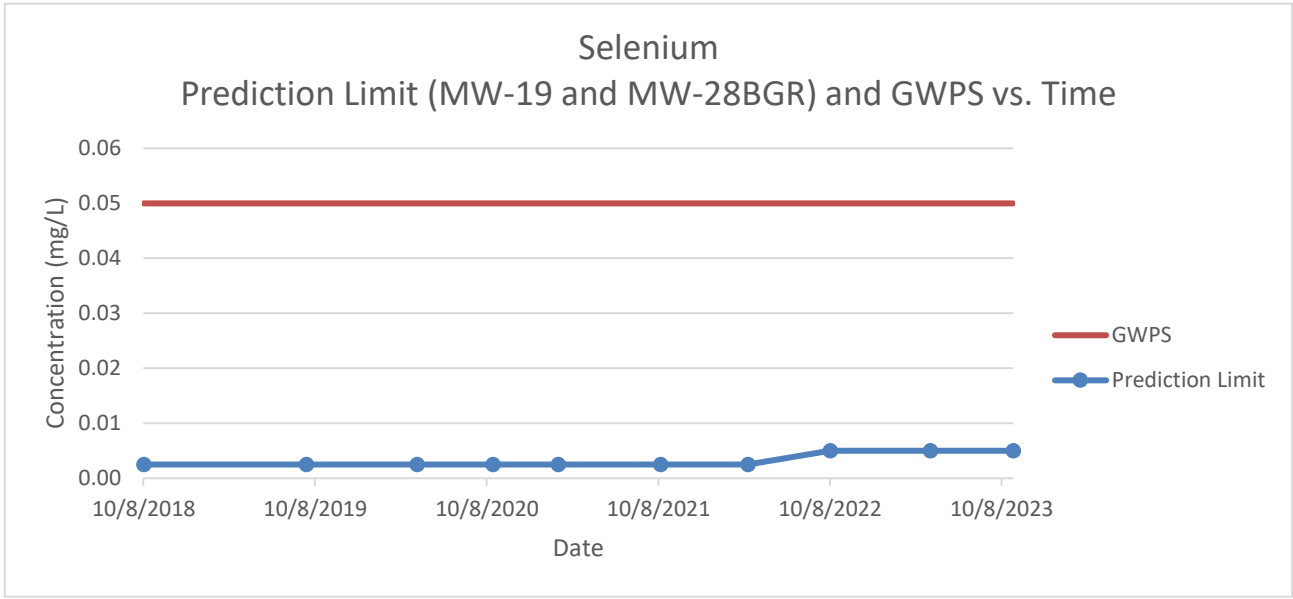

Chromium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.120
0.100
0.080
0.060
0.040
0.020
0.000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

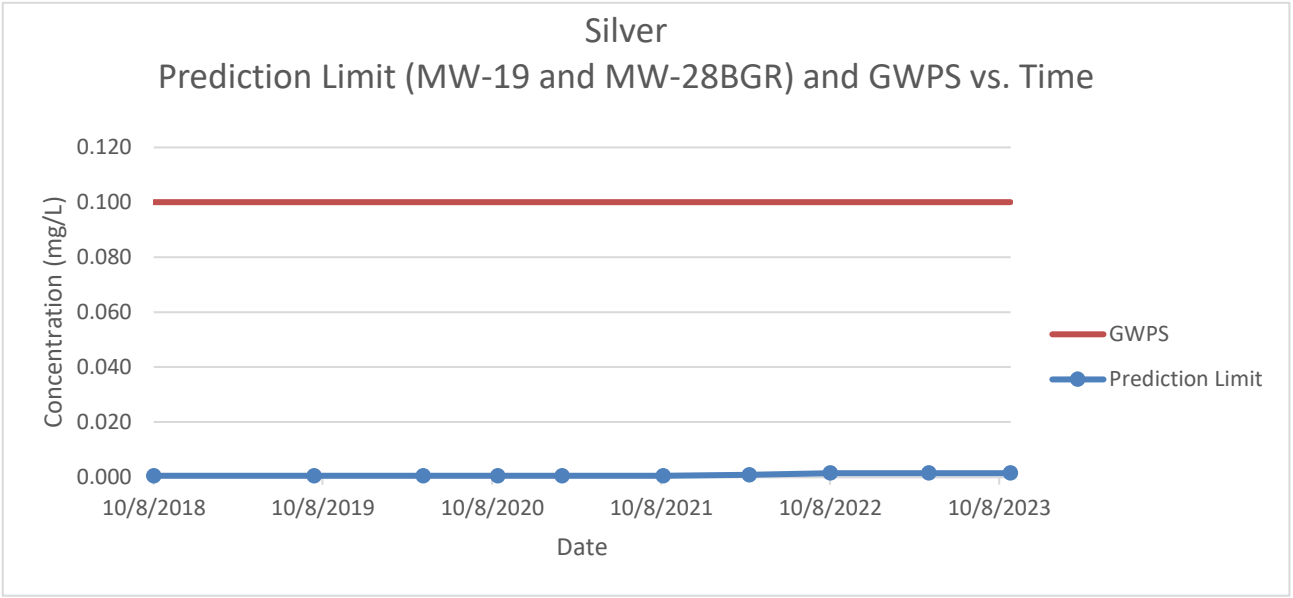

Cobalt
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.0940
0.0930
0.0920
0.0910
0.0900
0.0890
0.0880
0.0870
0.0860
0.0850
0.0840
0.0830
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

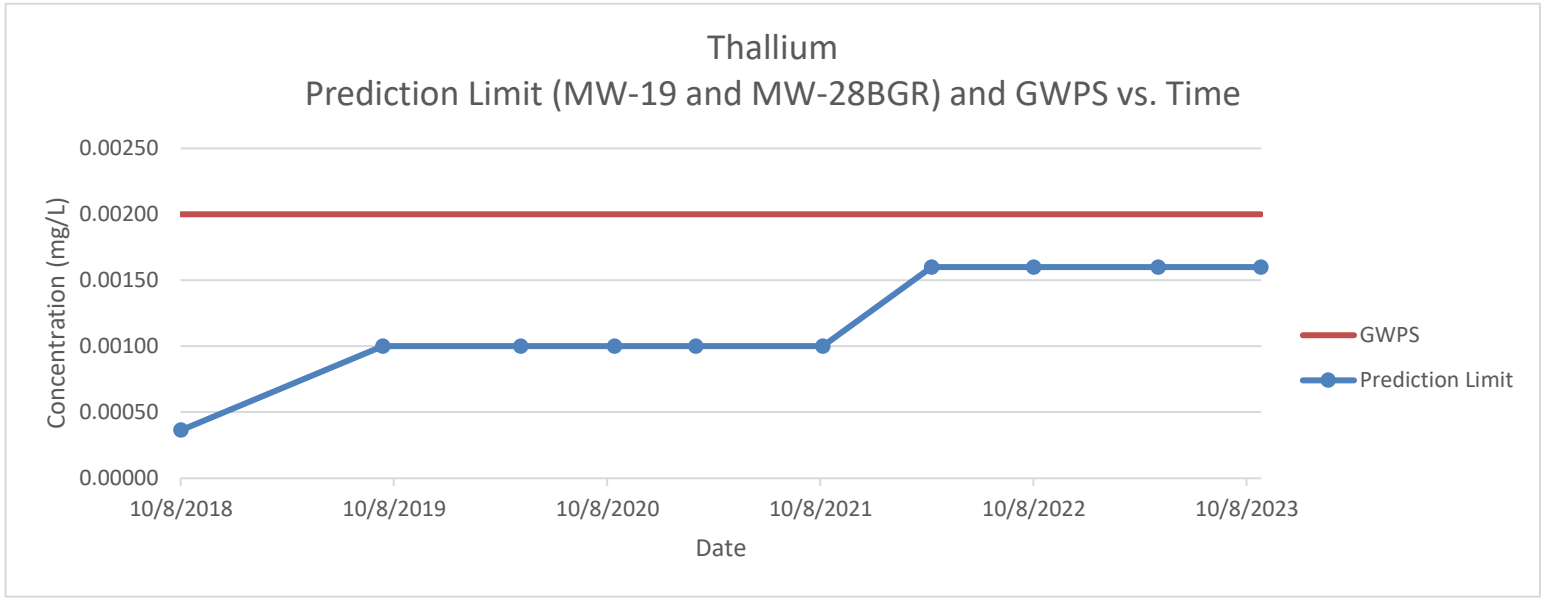

Copper
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

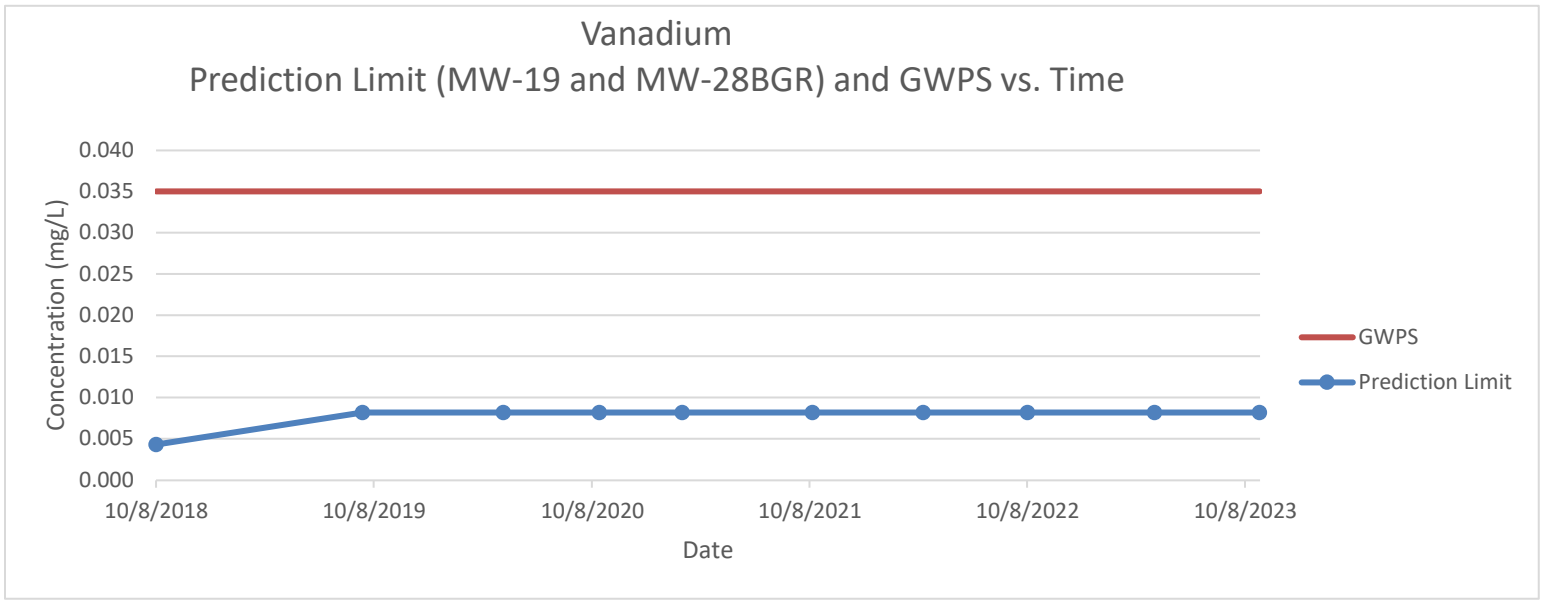

Lead
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
Concentration (mg/L)
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

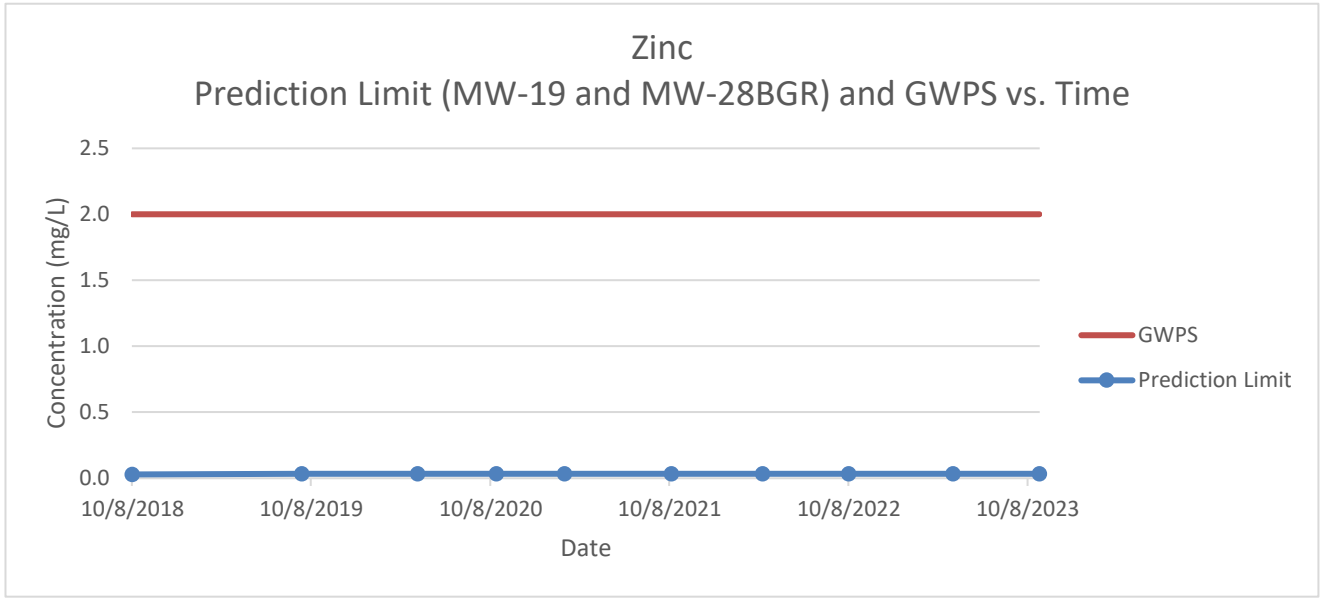

Nickel
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
0.120
0.100
0.080
0.060
0.040
0.020
0.000
Concentration (mg/L)
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit


Selenium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.06
0.05
0.04
0.03
0.02
0.01
0.00
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit


Silver
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
0.120
0.100
0.080
0.060
0.040
0.020
0.000
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit


Thallium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
0.00250
0.00200
0.00150
0.00100
0.00050
0.00000
Concentration (mg/L)
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit


Vanadium
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Concentration (mg/L)
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit


Zinc
Prediction Limit (MW-19 and MW-28BGR) and GWPS vs. Time
Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
10/8/2018
10/8/2019
10/8/2020
10/8/2021
10/8/2022
10/8/2023
Date
GWPS
Prediction Limit

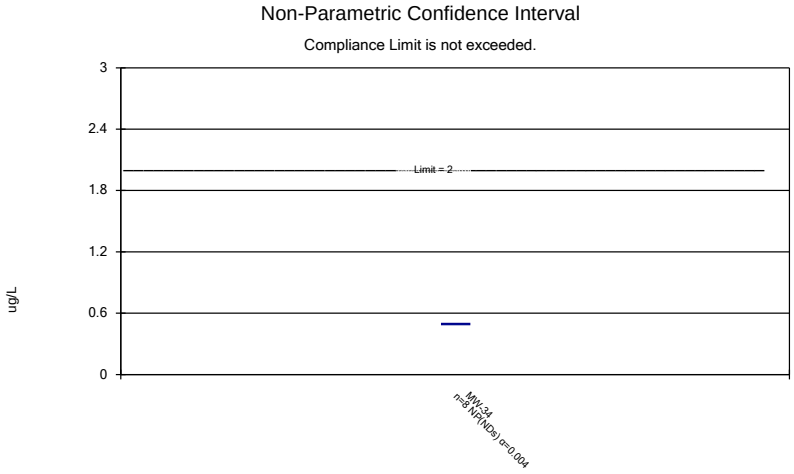
Appendix H
Confidence Interval Summary Table and Graphs
MW-34

Confidence Interval

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/20/2023, 5:25 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Vinyl chloride (ug/L)	MW-34	0.5	0.5	2	No	8	100	No	0.004	NP (NDs)

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG



Constituent: Vinyl chloride Analysis Run 12/20/2023 5:24 PM View: 2023AWQR - MW-34 VC
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Appendix I
Mann-Kendall Trend Test Summary Table and Graphs
MW-24

Trend Test

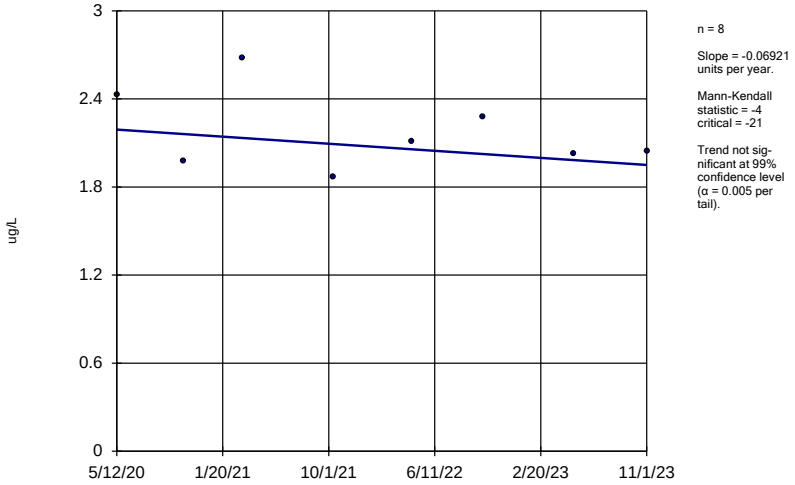
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR Printed 12/21/2023, 9:06 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,1-Dichloroethane (ug/L)	MW-24	-0.06921	-4	-21	No	8	0	0.01	NP
Arsenic (mg/L)	MW-24	0.001285	16	21	No	8	0	0.01	NP
Barium (mg/L)	MW-24	-0.01368	-12	-21	No	8	0	0.01	NP
Benzene (ug/L)	MW-24	0.02114	2	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	MW-24	1.398	17	21	No	8	0	0.01	NP
Cobalt (mg/L)	MW-24	0.001133	6	21	No	8	0	0.01	NP
Nickel (mg/L)	MW-24	0.001946	12	21	No	8	0	0.01	NP
Thallium (mg/L)	MW-24	0.00000641	10	21	No	8	62.5	0.01	NP
Vinyl chloride (ug/L)	MW-24	-0.2959	-12	-21	No	8	0	0.01	NP

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-24



n = 8

Slope = -0.06921 units per year.

Mann-Kendall statistic = -4
critical = -21

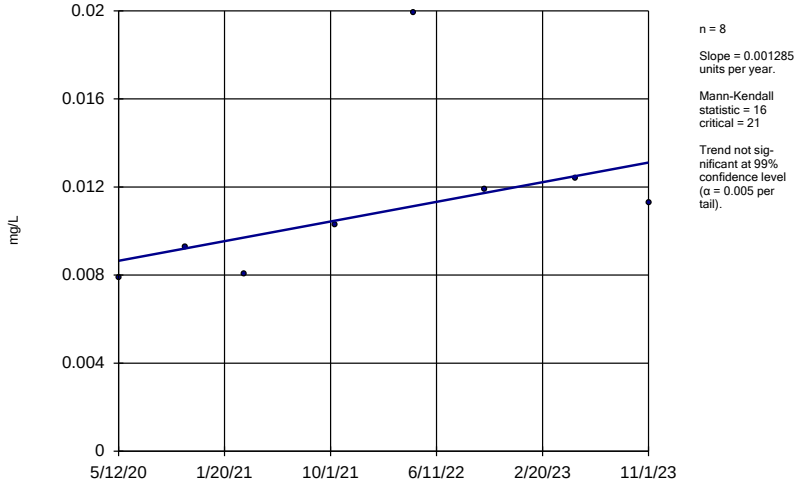
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,1-Dichloroethane Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-24



n = 8

Slope = 0.001285 units per year.

Mann-Kendall statistic = 16
critical = 21

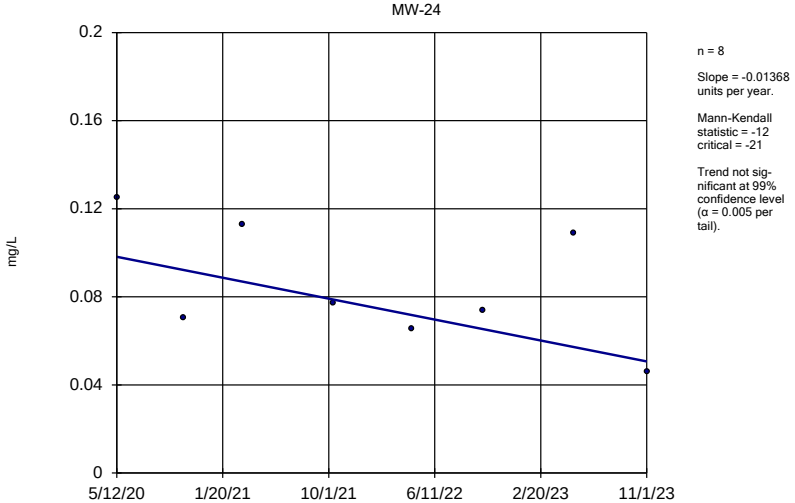
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

Sanitas™ v.10.0.15 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

MW-24



n = 8

Slope = -0.01368 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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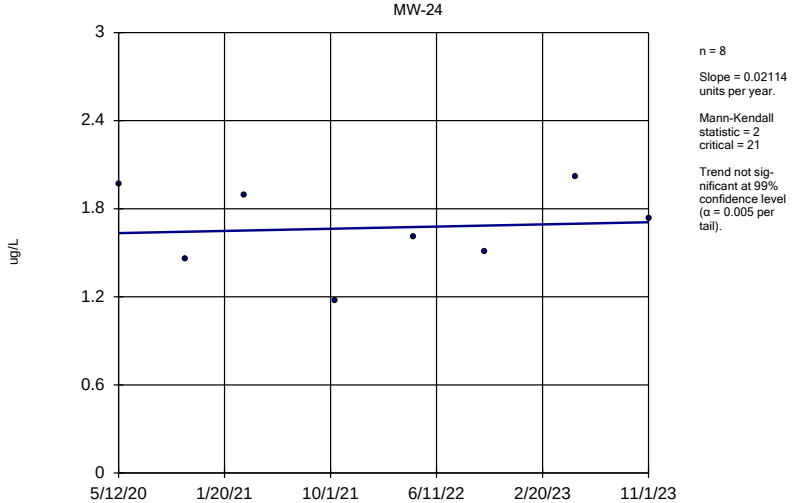
Sen's Slope Estimator

MW-24



n = 8

Slope = 0.02114 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Benzene Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24
SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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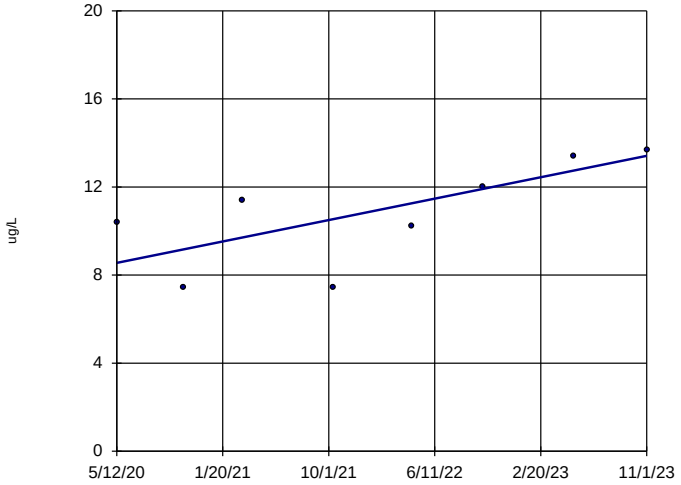
Sen's Slope Estimator

MW-24



n = 8

Slope = 1.398 units per year.

Mann-Kendall statistic = 17 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: cis-1,2-Dichloroethene Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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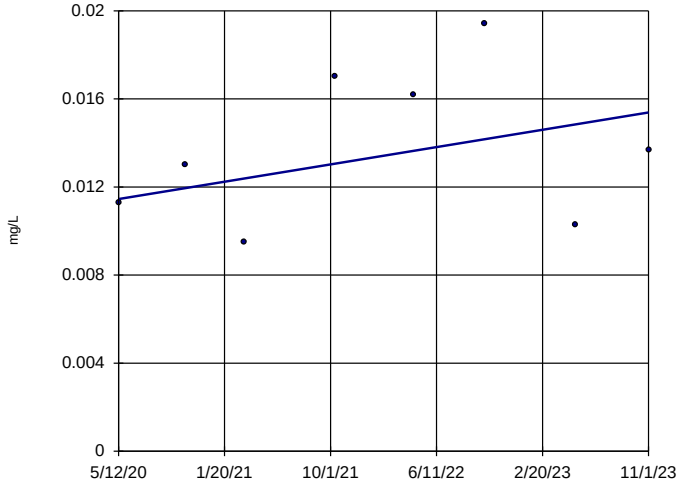
Sen's Slope Estimator

MW-24



n = 8

Slope = 0.001133 units per year.

Mann-Kendall statistic = 6 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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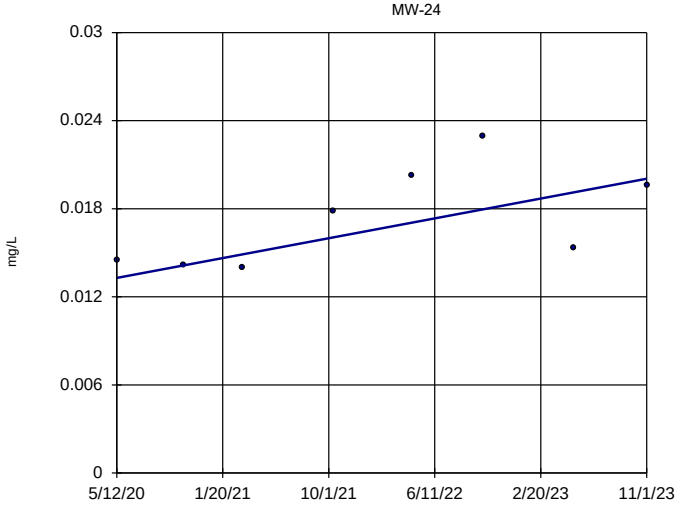
Sen's Slope Estimator

MW-24



n = 8

Slope = 0.001946 units per year.

Mann-Kendall statistic = 12 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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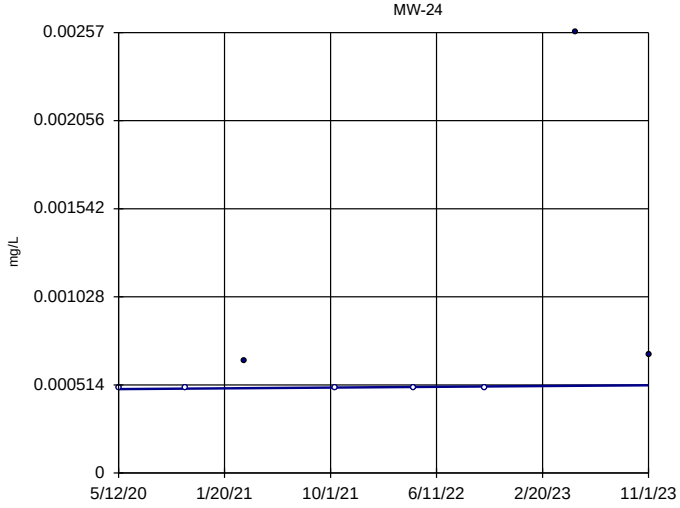
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-24



n = 8

Slope = 0.00000641 units per year.

Mann-Kendall statistic = 10 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR

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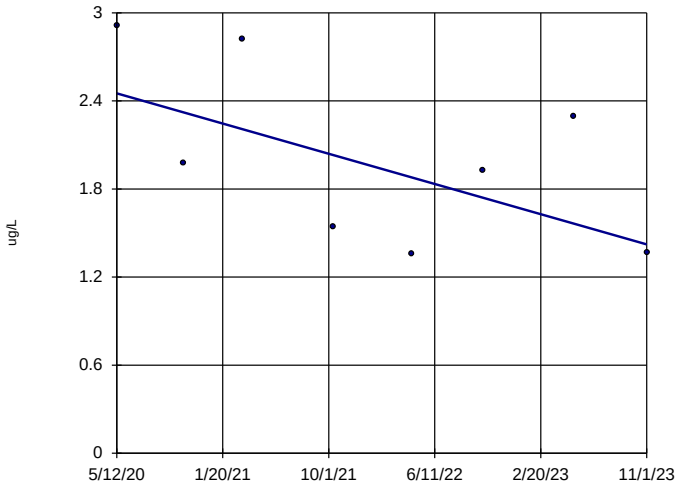
Sen's Slope Estimator

MW-24



n = 8

Slope = -0.2959 units per year.

Mann-Kendall statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Vinyl chloride Analysis Run 12/21/2023 9:05 AM View: 2023AWQR - MW-24

SE Iowa Multi-County SLF Client: SCS Engineers Data: SEMCO Sanitas-AM 2023AWQR