SCS ENGINEERS

Transmittal

West Des Moines, IA

PROJECT:	NWIASWA,FY25 Env Comp,IA 27223095.25	DATE:	3/12/2025
SUBJECT:	Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report	TRANSMITTAL ID:	00001
PURPOSE:	For your approval	VIA:	Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Nathan Ohrt West Des Moines, IA	SCS Engineers	NOhrt@scsengineers.com	+1-515-415-9220

TO

NAME	COMPANY	EMAIL	PHONE
Mike Smith 502 East 9th Street Des Moines IA 50319-0034 United States	Iowa, State of	mike.smith@dnr.iowa.gov	515-725-8200

REMARKS:

Good afternoon Mike-

SCS Engineers, on behalf of the Northwest Iowa Area Solid Waste Agency, is submitting the 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report for the Northwest Iowa Area Sanitary Landfill. If you have any questions or comments regarding these reports, please contact me at the number below. Thank you.

Nathan Ohrt
Senior Project Professional
SCS ENGINEERS
Environmental Consultants and Contractors
West Des Moines, Iowa
m: 319-331-9613
nohrt@scsengineers.com

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Transmittal

DATE: 3/12/2025
TRANSMITTAL ID: 00001

DESCRIPTION OF CONTENTS

QTY	DATED	TITLE	NOTES
1	3/12/2025	Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P - 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report.pdf	

COPIES:

Brent Kach	(Northwest Iowa Area Solid Waste Agency & Recycling)
Sean Marczewski	(SCS Engineers)
Nathan Ohrt	(SCS Engineers)
Becky Jolly	

March 12, 2025
File No. 27223095.25

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

Subject: 2024 Annual Water Quality Report, Leachate Control System Performance Evaluation Report, and Landfill Gas Annual Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Dear Mike:

SCS Engineers, on behalf of the Northwest Iowa Area Solid Waste Agency, has completed the required statistical evaluation and groundwater monitoring system data review for the Northwest Iowa Area Sanitary Landfill (Landfill) for the year 2024. Services were performed in general accordance with Iowa Administrative Code (IAC) 567-113.10 and the current requirements for implementation of the Hydrologic Monitoring System Plan for the Landfill. Please find enclosed a copy of the 2024 Annual Water Quality Report.

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

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

Sincerely,

Nathan Ohrt
Senior Project Professional
SCS Engineers

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

NPO/TCB

Copies: Mr. Brent Kach, Northwest Iowa Area Sanitary Landfill

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

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Solid Waste Permit No. 84-SDP-01-74P

Prepared for:

Northwest Iowa Area Solid Waste Agency

SCS ENGINEERS

27223095.25 | March 2025

1690 All-State Ct Ste 100
West Des Moines, IA 50265
515-631-6160

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CERTIFICATION

Prepared by: _____ Date: 3/12/2025

Typed: Nathan Ohrt

Reviewed by: _____ Date: 3/12/2025

Typed: Timothy C. Buelow, P.E.

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

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

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EXECUTIVE SUMMARY

ES.1 Period of Report Coverage

The period of report coverage is from January – December 2024 and includes data from the sampling events summarized in Table 2.

ES.2 Report Priority

The following summarizes report priorities associated with groundwater compliance at the Northwest Iowa Area Sanitary Landfill (Landfill):

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

ES.3 Site Status and Applicable Rules

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

ES.4 Comments

Site impact on groundwater is located on the northeast side of the Landfill in the vicinity of monitoring well DG-1301. Trichloroethene concentrations in corrective action monitoring well DG-1301 were measured below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. The extent of the elevated concentrations has been defined by both the shallow (horizontal) and deep (vertical) bracketing monitoring wells downgradient of monitoring well DG-1301. The July 2024 concentration was the lowest in the period of record dating to 2008. The use of an assessment zone point of compliance (AZPOC) monitoring well may be considered for remedy evaluation.

A new SSL above the GWPS for arsenic was measured in monitoring well DGP-1500 during the 1st 2024 statistical evaluation. In correspondence dated January 24, 2025 (Doc #111956), an extension to June 23, 2026 to allow for time to characterize the area of impact near DGP-1500 was requested. The request was approved in correspondence dated January 27, 2025 (Doc #111962).

Acetone was detected in monitoring points GU-13, SW-101, and DG-1001 during the July 2024 sampling event. In correspondence dated October 2, 2024 (Doc #11100), the Iowa Department of Natural Resources (DNR) approved using the results of the 2nd 2024 semi-annual sampling event as an acetone retest rather than a standalone retesting sampling event. During the 2nd 2024 semi-annual sampling event, acetone was not detected in monitoring well DG-1001, so the detection of acetone was not confirmed for the monitoring well. Monitoring point GU-13 was dry during the 2nd 2024 semi-annual sampling event. Acetone results from the next successful sample collection from

GU-13 will be used to verify the acetone detection. Acetone was detected in monitoring point SW-101 during the July and November 2024 sampling events. In a telephone conversation, the DNR directed that a sample from the sediment pond that receives the discharge from SW-101 be sampled for acetone to verify the detection of acetone in SW-101. The acetone detections in SW-101 do not warrant additional action at this time.

Monitoring well TDG-301 had a statistically significant increase (SSI) above background indicated for cobalt. The prediction limit of 0.001797 mg/L was exceeded by the measured cobalt concentration of 0.00208 mg/L. In a telephone conversation on October 18, 2024, the DNR approved that the results of the 2nd 2024 semi-annual sampling event be used as a retest for cobalt in monitoring well TDG-301 rather than a standalone retesting sampling event. The concentration of cobalt in monitoring well TDG-301 during the 2nd 2024 semi-annual sampling event was a J flag concentration of 0.00413 mg/L, so the indicated SSI was not confirmed.

SSIs above background were indicated for copper and zinc in monitoring point GU-14 during the 1st 2023 statistical evaluation. The monitoring point has been dry since the May 2023 sample collection. The next successful sampling attempt of GU-14 will be used as a retest for the indicated SSIs. The elevated total suspended solids (TSS) concentration of 93 mg/L in monitoring point GU-14 may have contributed to the indicated SSIs.

Indicated SSIs during the 2nd 2024 semi-annual sampling event for cobalt in monitoring well DG-1001 and for acetone in monitoring point GU-15 and arsenic, barium, and acetone in monitoring point GU-13 during the 1st 2024 semi-annual sampling event will be retested before the next semi-annual sampling event, provided sufficient water is present for sample collection.

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ACRONYMS/ABBREVIATIONS

amsl = above mean sea level
AZPOC = Assessment Zone Point of Compliance
C&D = Construction & Demolition Waste
GWPS = Groundwater Protection Standard
HMSP = Hydrologic Monitoring System Plan
IAC = Iowa Administrative Code
MSW = Municipal Solid Waste
QA = Quality Assurance
QC = Quality Control
SCS = SCS Engineers
SSI = Statistically Significant Increase above background
SSL = Statistically Significant Level above groundwater protection standard
TSS = Total Suspended Solids
VOC = Volatile Organic Compound

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1.0 SITE BACKGROUND

1.1 SITE LOCATION

The Landfill property is depicted in **Figure 1**, Approved Monitoring Network. The Landfill is located at 4540 360th Street, west of Highway 60 and approximately 4.5 miles south of Sheldon, Iowa. The Landfill property is situated in the SW ¼ of Section 14, T96N, R43W, in Sioux County, Iowa.

1.2 GEOLOGY AND HYDROGEOLOGY OF THE SITE

In the document entitled *Hydrogeological Investigation Report*, Five States Engineering Co., March 1994 (1994 HIR), the following geologic description was provided:

> *The NWIA Landfill site is comprised of two distinct areas. The upland area (generally above elevation 1,370 feet above mean sea level (ft amsl)) is an area of glacial clay till overlain by silty clay and loam soils. The glacial clay till contains a layer of sand which appears continuous in the northern half of the landfill site. The sand layer appears less continuous in the southern half of the site with wider variances in thickness and occurrence along a general grade line. The sand layer under the northern half of the site tilts generally to the east on a grade of 1%.*
>
> *The lower areas of the site (below elevation 1,370 ft amsl) are parts of the Floyd River alluvial plain. The alluvial plain is generally in the northeast area of the site. The alluvial plain is composed of detrital deposits of gravels, sand, and silty clay. Borings in the alluvial plain indicated that the base of the gravels is irregular and dips to the east. The base of gravels near the east property line is at an elevation of approximately 1,325 ft amsl.*
>
> *An interconnection between the two areas occurs at the intersection of the glacial till sand layer and alluvial deposits of sand, silty clay, and gravel.*

The 1994 HIR and revisions stated the following regarding the hydrogeology of the site:

> *The movement of groundwater through the glacial till is through a series of poorly defined fractures and intermittent sand pockets and thin layers of sand. The material analysis completed during this project and previous projects indicates an in-place permeability of 4 x 10^{-7} cm/sec to 4 x 10^{-9} cm/sec. Most of the glacial clay materials tested indicated an in-place permeability of approximately 2 x 10^{-8} cm/sec. Permeabilities indicate that the glacial clay acts as an aquitard and groundwater movement will occur horizontally along the surface of the material.*
>
> *Flow of groundwater beneath the fill sites is generally to the southeast. The flow of groundwater beneath the fill sites includes a vertically upward flow to an existing sand layer. The potentiometric of the site indicates a free static level. In field static water levels measured around the fill site indicate all upward vertical flow is isolated by the existing sand layer.*
>
> *Flow of groundwater around the existing site is along the interface of the glacial clay and surficial soils. Flow of groundwater below the existing fill site is horizontally southeast and vertically upward to the existing sand unit. Flow through the sand unit is southeast in the northern area of the site and northeast at the southern part of the site. Flow from the sand*

unit does not appear upward as horizontal flow velocity through the sand is approximately 600 times greater than vertical flow velocity.

2.0 FIGURES DISCUSSION

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

2.1 FIGURE 1 – APPROVED MONITORING NETWORK

The Landfill property, Hydrologic Monitoring System Plan (HMSP) monitoring network, and impact delineation monitoring points are depicted in **Figure 1**. **Figure 1** indicates the respective monitoring programs of the HMSP monitoring points as of the beginning of this reporting period.

2.2 FIGURE 2 – GROUNDWATER CONTOURS

A groundwater contour map based on water levels measured from the monitoring wells and groundwater piezometers during the November 2024 sampling event is included in **Figure 2**. Groundwater flows generally in an easterly direction beneath the Landfill towards the Boyer River. As this flow direction is similar to previous groundwater contour maps, it does not appear that landfilling operations are affecting flow paths.

2.3 FIGURE 3 – REPORTING PERIOD DETECTION SUMMARY

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

2.4 FIGURE 4 – ARSENIC CONCENTRATION MAP

Arsenic concentrations in monitoring well DGP-1500 were measured above background and the GWPS during the 2024 semi-annual sampling events. The elevated arsenic concentrations are bracketed to background to the west and northwest as the most recent four samples in the surrounding monitoring wells are entirely below background, with the majority of concentrations J flags or non-detect. The elevated concentrations are not bracketed to the north, east, or south.

2.5 FIGURE 5 – TRICHLOROETHENE CONCENTRATION MAP

Trichloroethene concentrations in monitoring well DG-1301 were measured below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. The elevated trichloroethene concentrations are bracketed to background horizontally in the upper part of the aquifer as the surrounding monitoring wells were entirely J flags and non-detect in the four most recent samples. The deep aquifer flow is monitored by monitoring wells MWP-7, MW-17, and MW-18. Trichloroethene concentrations in deep monitoring well MWP-7 adjacent to DG-1301 were measured below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. The vertical flow is bracketed to background in the direction of groundwater flow by monitoring wells MW-17 and MW-18.

3.0 STANDARDS HISTORY GRAPHS

Standards history graphs for the Appendix I metals are included in **Appendix G**. The prediction limits were below the statewide standards for most constituents with the following exceptions:

- For antimony, the prediction limit during the 2nd 2024 statistical evaluation was 0.0139 mg/L, as it has been since 2018, so the GWPS for antimony was established as 0.0139 mg/L.
- For the 2nd 2024 statistical evaluation, the prediction limit for cobalt was 0.003517mg/L, so the GWPS for cobalt was established as 0.003517 mg/L.
- For the 2nd 2024 statistical evaluation, the prediction limit for thallium was 0.0104 mg/L, so the GWPS for thallium was established as 0.0104 mg/L.

More information on prediction limits and GWPSs is included in **Table 5**.

4.0 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 was 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 a review of sample handling, analytical sensitivity, blanks, accuracy, and precision. A summary of the laboratory QA/QC and data validation can be found in **Appendix B-1**, Laboratory Analytical Data Sheets, and **Appendix B-2**, Data Validation Documentation, respectively.

5.0 DATA EVALUATION AND SUMMARY

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

5.1 DATA EVALUATION

Groundwater monitoring for the Landfill consists of samples from monitoring wells encompassing the downgradient perimeters of the Landfill and seven groundwater underdrain discharge points. Background monitoring wells UG-90 and UG-201 are located northwest and west of the MSWLF unit, respectively. There is one surface water monitoring point, SW-101, near the southeast corner of the Landfill, which discharges into the sediment pond of a perimeter drainage ditch running along the east side of the Landfill. The range of measured concentrations for the detected constituents during this reporting period is shown in **Figure 3**, Reporting Period Detection Summary.

Monitoring point GU-13 had insufficient water for sampling during the November 2024 sampling event and monitoring point GU-15 had insufficient water for sampling during the July 2024 sampling event. Monitoring point GU-14 was dry during both 2024 sampling events. SSIs were indicated for copper and zinc in monitoring points GU-14 during the 1st 2023 statistical evaluation. The next successful sampling attempt of GU-14 will be used to confirm or deny the indicated SSIs. The elevated total suspended solids (TSS) concentration of 93 mg/L in monitoring point GU-14 may have contributed to the indicated SSIs.

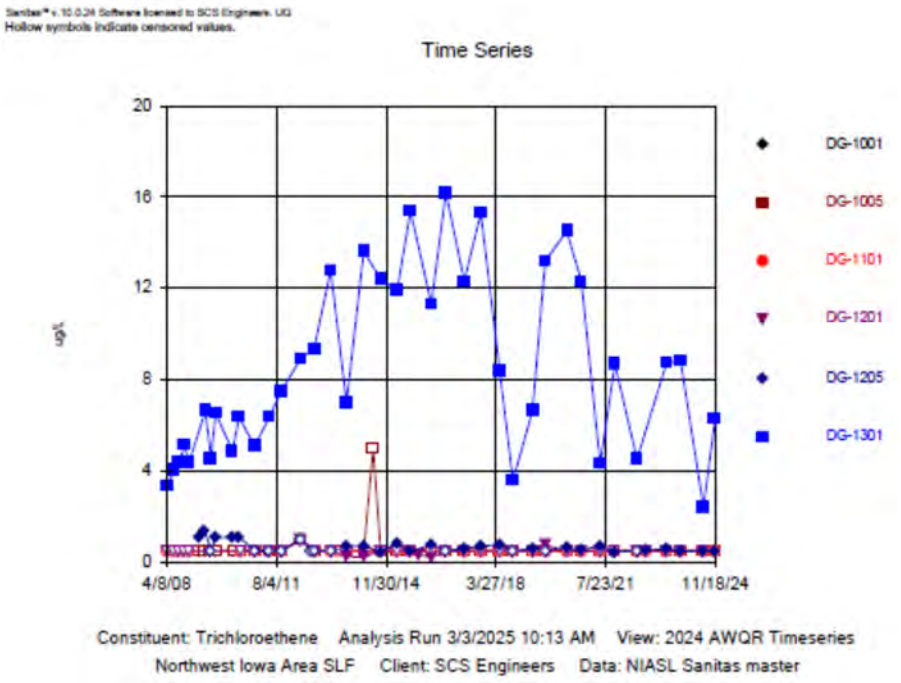
VOCs and/or semi-VOCs were detected in assessment monitoring wells DG-901, DG-1205, DG-1305, and DG-1401R and corrective action monitoring wells DG-1301 and DGP-1500. The only VOC that exceeded the GWPS was the SSL parameter trichloroethene in monitoring well DG-1301.

Metals GWPS exceedances included arsenic in monitoring well DGP-1500, DG-901, and monitoring point GU-13; cobalt in monitoring wells DG-901, DG-1001, and DG-1005; and vanadium in monitoring well DG-1005.

The monitoring wells in the southern part of the Landfill are generally not impacted, although site-wide maximum concentrations for metals were measured in monitoring wells DG-901, DG-1005, and background monitoring well UG-201, and surface water monitoring point SW-101.

5.2 CORRECTIVE ACTION

The remedy to address trichloroethene impact near monitoring well DG-1301 is passive venting of the subsurface, as landfill gas is the primary source of impact. Trichloroethene concentrations in monitoring well DG-1301 were measured below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. The elevated trichloroethene concentrations are bracketed to background horizontally in the upper part of the aquifer. The deep aquifer flow is monitored by monitoring wells MWP-7, MW-17, and MW-18. Trichloroethene concentrations in deep monitoring well MWP-7 adjacent to DG-1301 were measured below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. The vertical flow is bracketed to background in the direction of groundwater flow by monitoring wells MW-17 and MW-18. The impact of the subsurface venting wells on trichloroethene concentrations in monitoring well DG-1301 will continue to be evaluated during routine sampling events. The time series plot below shows that trichloroethene concentrations in monitoring well DG-1301 remain typically above the GWPS but are lower than before the remedy was implemented in 2018, indicating the remedy is effective. The July 2024 concentration was the lowest in the period of record dating to 2008.



An SSL above the GWPS for arsenic was measured in monitoring well DGP-1500 during the 1st 2024 statistical evaluation. In correspondence dated January 24, 2025 (Doc #111956), an extension to June 23, 2026, was requested to allow for time to characterize the area of impact near DGP-1500. The request was approved in correspondence dated January 27, 2025 (Doc #111962).

6.0 SUMMARY AND RECOMMENDATIONS

6.1 SITE IMPACT ON GROUNDWATER

Based on the lack of VOCs and generally low metals concentrations, the Landfill is not having a significant adverse impact on groundwater to the south of the Landfill.

Evidence of impact based on consistent detection of VOCs is located downgradient of the unlined area of the Landfill on the northeast side and is bracketed to a localized area by adjacent monitoring wells.

Evidence of arsenic impact downgradient of the leachate storage lagoon is present. Characterization and bracketing efforts will be performed in the 2025 reporting period.

6.2 PROPOSED MONITORING

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

Additional sampling of geochemical and natural attenuation parameters and arsenic speciation for characterization of the area of impact near monitoring well DGP-1500 are included in Table 2.

6.3 PROPOSED MONITORING WELL CHANGES

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

Tables

Table 1
Monitoring Program Summary Table
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Monitoring Well	Formation[(1)]	Current Monitoring Program	Change for next sampling event	Constituents with SSIs during the 2024 Reporting Period	Constituents with SSLs	Total # of Samples in each monitoring program		
						Detection	Assessment	Corrective Action
HSMP Monitoring Points								
UG-90	Glacial Clay	Background	No change	Not applicable	Not applicable	37		
UG-201	Loam/Glacial Clay	Background	No change	Not applicable	Not applicable	33		
DG-901	Loam/Glacial Clay	Assessment	No change	Arsenic, Cobalt, Acetone*, Benzene	None		35	
DG-905	Loam/Glacial Clay	Assessment	No change	None	None		36	
DG-1001	Loam/Glacial Clay	Detection	No change	Cobalt**, Acetone*	Not applicable	35		
DG-1005	Loam/Glacial Clay	Assessment	No change	Chromium, Cobalt, Vanadium	None		34	
DG-1101	Loam/Glacial Clay	Assessment	No change	Cobalt	None		36	
DG-1105R	Loam/Glacial Clay	Detection	No change	None	Not applicable	32		
DG-1201	Loam/Glacial Clay	Assessment	No change	None	None		35	
DG-1205	Loam/Glacial Clay	Assessment	No change	1,1-Dichloroethane, 1,2-Dichloropropane, Dichlorodifluoromethane	None		36	
DG-1301	Loam/Glacial Clay	Corrective Action	No change	Lead, 1,1-Dichloroethane, 1,2-Dichloropropane, cis-1,2-Dichloroethene, Tetrachloroethene, trans-1,2-Dichloroethene, Trichloroethene	Trichloroethene			38
DG-1305	Loam/Glacial Clay	Assessment	No change	1,1-Dichloroethane, Chlorobenzene, cis-1,2-Dichloroethene	None		36	
DG-1401R	Silty Clay/Sand/Gravel	Assessment	No change	1,1-Dichloroethane	None		34	
DGP-1500	Silty Sandy Clay	Corrective Action	No change	Arsenic, Benzene	Arsenic		26	
TDG-301	Glacial Clay	Detection	No change	Cobalt**	Not applicable	35		
TDG-305	Glacial Clay	Detection	No change	None	Not applicable	35		
GU-9	Not applicable	Detection	No change	Not applicable (no samples)	Not applicable	0		
GU-10	Not applicable	Detection	No change	Not applicable (no samples)	Not applicable	0		
GU-11	Not applicable	Detection	No change	Not applicable (no samples)	Not applicable	0		
GU-12	Not applicable	Detection	No change	Not applicable (no samples)	Not applicable	0		
GU-13	Not applicable	Detection	No change	Arsenic**, Barium**, Acetone**	Not applicable	15		
GU-14	Not applicable	Detection	No change	Not applicable (no samples)	Not applicable	16		
GU-15	Not applicable	Detection	No change	Acetone**	Not applicable	17		
SW-101	Not applicable	Detection	No change	Acetone	Not applicable	26		

Table 1
Monitoring Program Summary Table
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Monitoring Well	Formation[1]	Current Monitoring Program	Change for next sampling event	Constituents with SSIs during the 2024 Reporting Period	Constituents with SSLs	Total # of Samples in each monitoring program		
						Detection	Assessment	Corrective Action
Other monitoring points								
MW-15	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						
MW-16	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						
MW-17	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						
MW-18	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						
ORG-MW	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						
MWP-7	Loam/Glacial Clay	Impact Delineation for SSL at DG-1301						

Notes:
(1) Obtained from screened interval on boring logs.
SSI = Statistically Significant Increase above background.
SSL = Statistically Significant Level above groundwater protection standard.
* - Not confirmed by retesting (Doc #111000).
** - Not confirmed pending retesting.

Table 2
Monitoring Program Implementation Schedule
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Monitoring Well	Recent Sampling Dates and Constituents		Upcoming Sampling Dates and Constituents			Full Appendix II Sample Dates	
	July 2024	November 2024	Spring 2025 Retest	1st 2025 Semi-Annual	2nd 2025 Semi-Annual	Previously Collected	Next Event
UG-90	No Sample (Inaccessible)	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	8/11/2009	Not applicable
UG-201	No Sample (Equipment Malfunction)	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	8/11/2009	Not applicable
TDG-301	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
TDG-305	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-2				Geochemical Parameters	Geochemical Parameters		
DG-609				Geochemical Parameters	Geochemical Parameters		
DG-901	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS, Geochemical Parameters	Appendix I, TSS, Geochemical Parameters	5/20/2020, 5/25/2021	2026
DG-905	Appendix II, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	3/26/2013, 3/26/2014, 5/7/2019, 7/10/2024	2029
DG-1001	Appendix I, TSS	Appendix I, TSS	Cobalt, TSS	Appendix I, TSS, Geochemical Parameters	Appendix I, TSS, Geochemical Parameters	Not applicable	Not applicable
DG-1005	Appendix I, TSS	Appendix I, TSS		Appendix II, TSS, Geochemical Parameters	Appendix I+, TSS, Geochemical Parameters	3/26/2014, 3/31/2015, 5/20/2020	2025
DG-1101	Appendix II, TSS	Appendix I, TSS		Appendix I, TSS, Geochemical Parameters	Appendix I, TSS, Geochemical Parameters	3/26/2013, 5/6/2014, 9/29/2014, 5/7/2019, 7/10/2024	2029
DG-1105R	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
DG-1201	Appendix I, TSS	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	12/1/2015, 9/20/2016, 5/5/2021	2026
DG-1205	Appendix I, TSS, Dichlorodifluoromethane	Appendix I, TSS		Appendix I, TSS, Dichlorodifluoromethane	Appendix I, TSS, Dichlorodifluoromethane	8/11/2009, 9/29/2009, 4/6/2010, 6/17/2010, 12/6/2010, 5/17/2011, 9/27/2011, 5/2/2012, 8/15/2012, 9/25/2012, 4/11/2017, 7/18/2022	2027
DG-1301	Appendix I, TSS, Bis [2-ethylhexyl] phthalate	Appendix I, TSS, Bis [2-ethylhexyl] phthalate		Appendix I, TSS, Bis [2-ethylhexyl] phthalate	Appendix I, TSS, Bis [2-ethylhexyl] phthalate	8/11/2009, 9/29/2009, 4/6/2010, 6/17/2010, 12/6/2010, 5/17/2011, 9/27/2011, 5/2/2012, 9/25/2012, 4/11/2017, 7/6/2022	2027
DG-1305	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	8/11/2009, 9/29/2009, 4/6/2010, 6/17/2010, 12/6/2010, 5/17/2011, 9/27/2011, 5/2/2012, 8/15/2012, 9/25/2012, 4/11/2017, 7/11/2022	2027
DG-1401R	Appendix I, TSS	Appendix I, TSS		Appendix I, TSS	Appendix I, TSS	8/11/2009, 9/29/2009, 4/6/2010, 6/17/2010, 12/6/2010, 5/17/2011, 9/27/2011, 5/2/2012, 9/25/2012, 4/11/2017, 7/7/2022	2027
DGP-1500	Appendix I, TSS	Appendix I, TSS, Geochemical Parameters		Appendix II, TSS, Natural Attenuation Parameters, Geochemical Parameters, Arsenic Speciation	Appendix I+, TSS, Natural Attenuation Parameters, Geochemical Parameters, Arsenic Speciation	9/29/2014, 8/25/2015, 5/20/2020	2025
GU-9	No Sample (Dry)	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-10	No Sample (Dry)	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-11	No Sample (Dry)	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-12	No Sample (Dry)	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-13	Appendix I, TSS	No Sample (Dry)	Arsenic, Barium, TSS, Acetone	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-14	No Sample (Dry)	No Sample (Dry)		Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
GU-15	No Sample (Insufficient Water)	Appendix I, TSS	Acetone	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
SW-101	Appendix I, TSS	Appendix I, TSS	Acetone	Appendix I, TSS	Appendix I, TSS	Not applicable	Not applicable
MW-P1				Geochemical Parameters	Geochemical Parameters	Not applicable	Not applicable
MWP-7	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable
MWP-14				Geochemical Parameters	Geochemical Parameters		
MW-15	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable
MW-16	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable
MW-17	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable
MW-18	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable
ORG-MW	Trichloroethene	Trichloroethene		Trichloroethene	Trichloroethene	Not applicable	Not applicable

Comments:
Geochemical Parameters include bicarbonate, carbonate, calcium, magnesium, potassium, chloride, sodium, and sulfate.
Natural Attenuation Parameters include total organic carbon, nitrate, manganese, iron, and sulfate.
Arsenic Speciation includes arsenite and arsenate.
Appendix I+ indicates Appendix I plus detected Appendix II parameters outside of Appendix I.

Table 3
Monitoring Well Maintenance and Performance Re-Evaluation Schedule
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Compliance with:	Monitoring Calendar Years				
	2022	2023	2024	2025	2026
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	Completed	Completed	Included	Scheduled	Scheduled
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths	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		Included		Scheduled
Waste separation from ground water 113.6(2)I	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Table 4
Monitoring Well Performance and Maintenance Summary
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Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Initial Flow Rate (L/min) Date	Recent Flow Rate (L/min) Date
					7/2024	11/2024			
UG-90	1389.83	1373.0	26.7	Groundwater Level (ft)	NM	8.56	-0.1		
				Groundwater Elevation (Ft MSL)	NA	1381.27		0.022	0.175
				Measured Well Depth (ft)	NM	26.8		10/3/2018	11/20/2024
				Submerged screen	NA	Y			
UG-201	1411.23	1375.5	55.5	Groundwater Level (ft)	32.59	33.33	1.5		
				Groundwater Elevation (Ft MSL)	1378.64	1377.90		0.0017	0.192
				Measured Well Depth (ft)	54.0	54.4		10/3/2018	11/20/2024
				Submerged screen	Y	Y			
DG-901	1374.69	1364.2	25.5	Groundwater Level (ft)	11.38	16.30	-0.1		
				Groundwater Elevation (Ft MSL)	1363.31	1358.39		0.0023	0.183
				Measured Well Depth (ft)	25.6	25.6		10/3/2018	11/19/2024
				Submerged screen	N	N			
DG-905	1365.56	1354.0	20.8	Groundwater Level (ft)	10.05	11.41	-0.5		
				Groundwater Elevation (Ft MSL)	1355.51	1354.15		0.0025	0.183
				Measured Well Depth (ft)	20.9	21.3		10/3/2018	11/19/2024
				Submerged screen	Y	Y			
DG-1001	1352.93	1345.9	16.0	Groundwater Level (ft)	5.95	7.24	-0.1		
				Groundwater Elevation (Ft MSL)	1346.98	1345.69		0.0026	0.167
				Measured Well Depth (ft)	16.1	16.1		10/3/2018	11/20/2024
				Submerged screen	Y	N			
DG-1005	1352.60	1342.4	20.2	Groundwater Level (ft)	3.75	4.31	4.8		
				Groundwater Elevation (Ft MSL)	1348.85	1348.29		0.0032	0.158
				Measured Well Depth (ft)	15.4	15.4		10/2/2018	11/20/2024
				Submerged screen	Y	Y			
DG-1101	1351.47	1348.6	20.1	Groundwater Level (ft)	6.10	7.29	5.4		
				Groundwater Elevation (Ft MSL)	1345.37	1344.18		0.0022	0.175
				Measured Well Depth (ft)	14.7	14.7		10/3/2018	11/20/2024
				Submerged screen	N	N			
DG-1105R*	1355.21	NA	20.0	Groundwater Level (ft)	2.69	4.25	1.6		
				Groundwater Elevation (Ft MSL)	1352.52	1350.96		0.0024	0.183
				Measured Well Depth (ft)	18.4	18.4		10/3/2018	11/19/2024
				Submerged screen	NA	NA			
DG-1201	1357.59	1350.0	22.8	Groundwater Level (ft)	5.77	NM	7.8		
				Groundwater Elevation (Ft MSL)	1351.82	NA		0.0034	0.167
				Measured Well Depth (ft)	15.0	NM		10/3/2018	7/11/2024
				Submerged screen	Y	NA			
DG-1205	1360.49	1353.7	21.1	Groundwater Level (ft)	6.65	9.67	-0.1		
				Groundwater Elevation (Ft MSL)	1353.84	1350.82		0.0025	0.192
				Measured Well Depth (ft)	21.2	21.2		10/2/2018	11/19/2024
				Submerged screen	Y	N			
DG-1301	1368.75	1353.1	25.1	Groundwater Level (ft)	12.94	16.81	0.9		
				Groundwater Elevation (Ft MSL)	1355.81	1351.94		0.0028	0.175
				Measured Well Depth (ft)	24.2	25.1		10/3/2018	11/19/2024
				Submerged screen	Y	N			
DG-1305	1365.80	1355.1	20.2	Groundwater Level (ft)	8.06	11.91	-0.1		
				Groundwater Elevation (Ft MSL)	1357.74	1353.89		0.0033	0.129
				Measured Well Depth (ft)	20.3	20.2		10/2/2018	11/19/2024
				Submerged screen	Y	N			
DG-1401R	1368.22	1357.3	20.3	Groundwater Level (ft)	7.70	13.47	0.1		
				Groundwater Elevation (Ft MSL)	1360.52	1354.75		0.0037	0.167
				Measured Well Depth (ft)	20.2	20.2		10/2/2018	11/19/2024
				Submerged screen	Y	N			
DGP-1500	1358.94	1340.5	28.4	Groundwater Level (ft)	10.30	12.44	-0.3		
				Groundwater Elevation (Ft MSL)	1348.64	1346.50		0.0025	0.192
				Measured Well Depth (ft)	28.6	28.7		10/2/2018	11/19/2024
				Submerged screen	Y	Y			
TDG-301	1383.26	1372.4	20.3	Groundwater Level (ft)	14.23	7.59	-0.1		
				Groundwater Elevation (Ft MSL)	1369.03	1375.67		0.0036	0.158
				Measured Well Depth (ft)	20.4	20.4		10/3/2018	11/20/2024
				Submerged screen	N	Y			
TDG-305	1378.08	1371.0	16.2	Groundwater Level (ft)	5.25	9.30	-0.1		
				Groundwater Elevation (Ft MSL)	1372.83	1368.78		0.0035	0.150
				Measured Well Depth (ft)	16.3	16.3		10/3/2018	11/20/2024
				Submerged screen	Y	N			

Table 4
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Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Initial Flow Rate (L/min) Date	Recent Flow Rate (L/min) Date
					7/2024	11/2024			
MW-15	1366.00	1348.6	27.4	Groundwater Level (ft)	12.64	21.53	-0.5		
				Groundwater Elevation (Ft MSL)	1353.36	1344.47		0.150	NA
				Measured Well Depth (ft)	27.9	27.9		7/10/2024	
				Submerged screen	Y	N			
MW-16	1368.86	1351.7	27.2	Groundwater Level (ft)	13.12	23.31	-0.2		
				Groundwater Elevation (Ft MSL)	1355.74	1345.55		0.158	NA
				Measured Well Depth (ft)	27.3	27.4		7/10/2024	
				Submerged screen	Y	N			
MW-17	1366.00	1332.3	44.1	Groundwater Level (ft)	12.46	21.10	23.5		
				Groundwater Elevation (Ft MSL)	1353.54	1344.90		0.158	NA
				Measured Well Depth (ft)	20.6	20.6		7/10/2024	
				Submerged screen	Y	Y			
MW-18	1365.50	1335.5	39.2	Groundwater Level (ft)	12.86	20.75	-1.8		
				Groundwater Elevation (Ft MSL)	1352.64	1344.75		0.191	NA
				Measured Well Depth (ft)	40.8	41.0		7/9/2024	
				Submerged screen	Y	Y			
MWP-7	1367.68	NA	NA	Groundwater Level (ft)	12.59	17.20	NA		
				Groundwater Elevation (Ft MSL)	1355.09	1350.48		0.141	NA
				Measured Well Depth (ft)	40.3	40.3		7/10/2024	
				Submerged screen	NA	NA			
Original North Well	NA	NA	NA	Groundwater Level (ft)	13.36	22.11	NA		
				Groundwater Elevation (Ft MSL)	NM	NM		0.0023	0.175
				Measured Well Depth (ft)	32.3	32.3		10/2/2018	11/19/2024
				Submerged screen	NA	NA			

Notes:
NA - Not Available.
NM - Not Measured.

1) Measured depths were within 1.7 feet of the installed depths with the following exceptions:
Monitoring wells DG-1005R, DG-1101, and DG-1201 were measured significantly shallower than their installed depths during the 2024 sampling events. However, the measured depths have remained consistent over multiple years. The monitoring wells consistently produce samples. No maintenance is considered necessary at this time.
Monitoring wells MWP-7, the Original North Well (ORG-MW), and MW-17 measured significanty different from historical depths during the 2024 semi-annual sampling events. It is unknown as to why the measurements changed significantly from the previous reporting period. A verification measurement will be made for these monitiorng wells during the 1st 2025 semi-annual sampling event.

2) Prior to the 2024 reporting period disposable bailers were used to sample monitoring wells MW-15, MW-16, MW-17, MW-18, and MWP-7. Low-flow sampling equipment was used beginning with the 1st 2024 semi-annual sampling event and the flow rate has been reported as the initial flow rate.

* - The top of screen elevations for DG-1105R are unknown. The monitoring well is anticipated to be surveyed in conjunction with construction of the new cell during the 2025 reporting period.

Table 5
Background and GWPS Summary Tables
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
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Interwell Background/GWPS (UG-90 and UG-201)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	70	13	0.000227*	0.0139	0.00260	0.01390	PL (NP)	0.0139	SSS
Arsenic (As)	mg/L	70	23	0.0005 (1/2 RL)	0.00555	0.00120	0.00555	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	70	70	0.0135	0.136	0.02799	0.13600	PL (NP)	2	MCL
Beryllium (Be)	mg/L	70	1	0.000067*	0.0005 (1/2 RL)	0.00049	0.00050	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	70	10	0.00005 (1/2 RL)	0.00075 (1/2 RL)	0.00022	0.00075	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	70	6	0.000443*	0.01 (1/2 RL)	0.00602	0.01000	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	42	31	0.00004*	0.00566	0.00065	0.003517	PL (P)	0.003517	SSS
Copper (Cu)	mg/L	70	15	0.000894*	0.0423	0.00735	0.04230	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	70	25	0.00025 (1/2 RL)	0.00535	0.00143	0.00535	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	70	18	0.001 (1/2 RL)	0.0599	0.01417	0.05990	PL (NP)	0.1	SWS
Selenium (Se)	mg/L	70	22	0.00073*	0.0117	0.00308	0.01170	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	70	6	0.000052*	0.01 (1/2 RL)	0.00518	0.01000	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	70	4	0.000037*	0.0104	0.00093	0.01040	PL (NP)	0.0104	SSS
Vanadium (V)	mg/L	70	12	0.000285*	0.025 (1/2 RL)	0.01323	0.02500	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	70	44	0.005 (1/2 RL)	1.28	0.08852	1.28000	PL (NP)	2	SWS

Intrawell Background/GWPS (GU-13)
(9/24/2014 - 5/25/2021)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	12	1	0.000317	0.003 (1/2 RL)	0.00082	0.003	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	12	6	0.000684	0.00322	0.00110	0.00322	PL (NP)	0.01	MCL
Barium (Ba)	mg/L	12	12	0.0221	0.068	0.04760	0.07512	PL (P)	2	MCL
Beryllium (Be)	mg/L	12	1	0.000088	0.0005 (1/2 RL)	0.00047	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	12	10	0.00005 (1/2 RL)	0.00025 (1/2 RL)	0.00012	0.0002439	PL (P)	0.005	MCL
Chromium (Cr)	mg/L	12	3	0.000491	0.01 (1/2 RL)	0.00279	0.01	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	12	10	0.000108	0.00712	0.00092	0.00712	PL (NP)	0.00712	SSS
Copper (Cu)	mg/L	12	6	0.0025 (1/2 RL)	0.01 (1/2 RL)	0.00362	0.01	PL (P)	1.3	MCL
Lead (Pb)	mg/L	12	5	0.00025 (1/2 RL)	0.002 (1/2 RL)	0.00052	0.002	PL (P)	0.015	MCL
Nickel (Ni)	mg/L	12	12	0.0051	0.0283	0.01114	0.02595	PL (P)	0.1	SWS
Selenium (Se)	mg/L	12	3	0.00107	0.00406	0.00242	0.00406	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	12	1	0.00025 (1/2 RL)	0.01 (1/2 RL)	0.00125	0.01	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	12	1	0.000041	0.001 (1/2 RL)	0.00055	0.001	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	12	10	0.000801	0.025 (1/2 RL)	0.00377	0.025	PL (P)	0.035	SWS
Zinc (Zn)	mg/L	12	1	0.005 (1/2 RL)	0.0141	0.00951	0.0141	PL (NP)	2	SWS

Intrawell Background/GWPS (GU-14)
(9/24/2014 - 10/8/2018)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	8	2	0.000189	0.003 (1/2 RL)	0.00086	0.003	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	8	8	0.000628	0.0077	0.00196	0.01066	PL (P)	0.01	MCL
Barium (Ba)	mg/L	9	9	0.0474	0.141	0.07287	0.1491	PL (P)	2	MCL
Beryllium (Be)	mg/L	8	1	0.000064	0.0005 (1/2 RL)	0.00045	0.0005	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	8	5	0.000085	0.000273	0.00018	0.0003502	PL (P)	0.005	MCL
Chromium (Cr)	mg/L	8	4	0.000512	0.01 (1/2 RL)	0.00284	0.005728	PL (P)	0.1	MCL
Cobalt (Co)	mg/L	8	7	0.000145	0.00155	0.00079	0.00242	PL (P)	0.00242	SSS
Copper (Cu)	mg/L	8	5	0.0025 (1/2 RL)	0.0168	0.00607	0.02024	PL (P)	1.3	MCL
Lead (Pb)	mg/L	8	4	0.00025 (1/2 RL)	0.002 (1/2 RL)	0.00089	0.002518	PL (P)	0.015	MCL
Nickel (Ni)	mg/L	8	8	0.00649	0.0346	0.01616	0.05044	PL (P)	0.1	SWS
Selenium (Se)	mg/L	8	2	0.000586	0.0025 (1/2 RL)	0.00188	0.0025	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	8	1	0.000073	0.01 (1/2 RL)	0.00160	0.01	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	8	1	0.000043	0.001 (1/2 RL)	0.00057	0.001	PL (NP)	0.002	MCL
Vanadium (V)	mg/L	8	7	0.000892	0.00633	0.00260	0.007693	PL (P)	0.035	SWS
Zinc (Zn)	mg/L	8	4	0.00541	0.0173	0.01025	0.02446	PL (P)	2	SWS

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Intrawell Background/GWPS (GU-15)
(7/9/2014 -11/1/2021)

Constituent	Units	Samples	Detections	Min	Max	Mean	Background Level	Statistical Test	GWPS	Source
Antimony (Sb)	mg/L	16	1	0.000402*	0.003 (1/2 RL)	0.00109	0.003	PL (NP)	0.006	MCL
Arsenic (As)	mg/L	16	10	0.0005 (1/2 RL)	0.005 (1/2 RL)	0.00148	0.004132	PL (P)	0.01	MCL
Barium (Ba)	mg/L	19	19	0.0296	0.116	0.05564	0.1373	PL (P)	2	MCL
Beryllium (Be)	mg/L	16	2	0.000075*	0.000762*	0.00049	0.000762	PL (NP)	0.004	MCL
Cadmium (Cd)	mg/L	16	3	0.00005 (1/2 RL)	0.000865	0.00023	0.000865	PL (NP)	0.005	MCL
Chromium (Cr)	mg/L	16	3	0.00111*	0.0125 (1/2 RL)	0.00435	0.0125	PL (NP)	0.1	MCL
Cobalt (Co)	mg/L	17	13	0.000192*	0.00834	0.00170	0.02104	PL (P)	0.02104	SSS
Copper (Cu)	mg/L	16	8	0.00127*	0.02	0.00448	0.02	PL (NP)	1.3	MCL
Lead (Pb)	mg/L	16	8	0.000136*	0.0096	0.00116	0.0096	PL (NP)	0.015	MCL
Nickel (Ni)	mg/L	18	17	0.00183*	0.0485	0.01876	0.1002	PL (P)	0.1002	SSS
Selenium (Se)	mg/L	16	2	0.000646*	0.0125 (1/2 RL)	0.00284	0.0125	PL (NP)	0.05	MCL
Silver (Ag)	mg/L	16	1	0.00025 (1/2 RL)	0.01 (1/2 RL)	0.00184	0.01	PL (NP)	0.1	SWS
Thallium (Tl)	mg/L	16	2	0.000033*	0.0025 (1/2 RL)	0.00069	0.0025	PL (NP)	0.0025	SSS
Vanadium (V)	mg/L	16	9	0.000514*	0.025 (1/2 RL)	0.00577	0.025	PL (NP)	0.035	SWS
Zinc (Zn)	mg/L	16	4	0.005 (1/2 RL)	0.0567	0.01223	0.0567	PL (NP)	2	SWS

Notes:
Background levels based on calculated prediction limits or reporting limits, as applicable.
* - Indicates a J flag. The concentration is above the method detection limit but below the reporting limit and the concentration is estimated.

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

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 for monitoring wells and a 1-of-2 scheme for groundwater underdrain monitoring points.

4) Justification for data exclusion: Laboratory methodology and instrumentation achieved a cobalt reporting limit of 0.02 mg/L prior to and including the September 2012 sampling event. Beginning in 2013, improved laboratory instrumentation provided an increased concentration sensitivity and lower cobalt reporting limit. Due to analytical improvements, cobalt data prior to 2013 is no longer considered representative of groundwater quality at the Landfill and non-detect values of <0.02 mg/L in HMSP monitoring points were removed from the statistical evaluation.

Table 6
Summary of Well/Detected Constituent Pairs With No Previous SSIs
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Well	Constituent	Units	Most recent result	Background Standard
DG-901	Arsenic	mg/L	0.0147	0.00555
	Cobalt	mg/L	0.003545	0.003517
	Acetone	µg/L	<10	<10
	Benzene	µg/L	<0.5	<0.5
DG-1001	Cobalt**	mg/L	0.00234	0.003517
	Acetone***	µg/L	<10	<10
DG-1005	Chromium	mg/L	0.013	0.01
	Cobalt	mg/L	0.0048	0.003517
	Vanadium	mg/L	0.037	0.023
DG-1101	Cobalt	mg/L	0.00259	0.003517
DG-1205	1,2-Dichloropropane	µg/L	1.05	<1
DG-1301	Lead	mg/L	0.000605	0.00535
	1,2-Dichloropropane	µg/L	1.16	<1
TDG-301	Cobalt***	mg/L	0.000413*	0.003517
GU-13	Acetone**	µg/L	<10	<10
	Arsenic**	mg/L	0.0147	0.00322
	Barium**	mg/L	0.0944	0.07512
GU-15	Acetone**	µg/L	16.8	<10
SW-101	Acetone****	µg/L	13.1	<10

Notes:

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

* - Indicates J flag. The concentration is greater than the method detection limit but below the reporting limit. The concentration is estimated.

** - Indicates a constituent/monitoring point pair in detection monitoring with an indicated SSI. Retest will be conducted before the next routine semi-annual sampling event.

*** - Not confirmed by retesting (Doc #111000) or DNR verbal approval.

****- DNR guidance directed that a sample collected from the sedimentation pond that SW-101 discharges to be analyzed to verify if the acetone detection at SW-101 is confirmed.

Comments:

1) Problems with the current detection network: None.

2) Schedule to implement remedies: None.

3) Alternative constituent or sample frequency changes: None.

4) Significant changes to calculated prediction limits: None.

5) Resampling strategy: Retesting is performed on a 1-of-3 retesting scheme for monitoring wells and a 1-of-2 scheme for groundwater underdrain monitoring points.

Table 7
Summary Table of Ongoing and Newly Identified SSIs
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Well	Constituent	Units	Most recent result	Background Standard	Lower Confidence Limit	GWPS	Sample Dates		
							Initial Exceedance	Resample(s)	5th background sample
DG-901	Arsenic	mg/L	0.0147	0.00555	0.00134	0.01	7/9/2024	NA	4/12/2010
	Cobalt	mg/L	0.003545	0.003517	0.000265	0.0035	7/9/2024	NA	4/12/2010
	Acetone	µg/L	<10	<10	5	6300	7/9/2024	NA	4/12/2010
	Benzene	µg/L	<0.5	<0.5	0.25	5	7/9/2024	NA	4/12/2010
DG-905	None								
DG-1001	Cobalt	mg/L	0.00234	0.003517	Detection	0.0035	11/18/2024	Pending	4/12/2010
	Acetone*	µg/L	<10	<10	Detection	6300	7/9/2024	NA	4/12/2010
DG-1005	Chromium	mg/L	0.013	0.01	0.00182	0.1	11/18/2024	NA	4/12/2010
	Cobalt	mg/L	0.0048	0.003517	0.000294	0.0035	11/18/2024	NA	4/12/2010
	Vanadium	mg/L	0.037	0.023	0.001694	0.035	11/18/2024	NA	4/12/2010
DG-1101	Cobalt	mg/L	0.00259	0.003517	0.0003058	0.0035	11/18/2024	NA	12/9/2008
DG-1105R	None								
DG-1201	None								
DG-1205	1,1-Dichloroethane	µg/L	2.7	<1	1.835	140	4/3/2009	NA	4/6/2010
	1,2-Dichloropropane	µg/L	1.05	<1	0.7364	5	7/9/2024	NA	4/6/2010
	Dichlorodifluoromethane	µg/L	6.43	<3	4.102	1000	8/11/2009	NA	12/6/2010
DG-1301	Lead	mg/L	0.000605	0.00535	0.000399	0.015	7/9/2024	NA	12/9/2008
	1,1-Dichloroethane	µg/L	11.5	<1	3.628	140	4/8/2008	NA	12/9/2008
	1,2-Dichloropropane	µg/L	1.16	<1	0.6103	5	11/18/2024	NA	12/9/2008
	cis-1,2-Dichloroethene	µg/L	37.1	<1	2.916	70	6/10/2009	NA	12/9/2008
	Tetrachloroethene	µg/L	1.63	<1	0.5572	5	7/1/2008	NA	12/9/2008
	trans-1,2-Dichloroethene	µg/L	1.25	<1	0.3448	100	5/30/2023	NA	12/9/2008
	Trichloroethene	µg/L	6.34	<1	3.614	5	4/8/2008	NA	12/9/2008
DG-1305	1,1-Dichloroethane	µg/L	1.76	<1	1.507	140	4/3/2009	NA	4/6/2010
	Chlorobenzene	µg/L	2.67	<1	0.4654	100	6/3/2009	NA	4/6/2010
	cis-1,2-Dichloroethene	µg/L	.0722*	<1	0.4696	70	4/3/2009	NA	4/6/2010
DG-1401R	1,1-Dichloroethane	µg/L	2.3	<1	0.7674	140	4/3/2009	NA	4/6/2010
DG-1500	Arsenic	mg/L	0.0167	0.00555	0.01099	0.01	7/9/2024	NA	3/26/2014
	Benzene	µg/L	1.37	<0.5	Thiel-Sen	5	5/30/2023	NA	3/26/2014
TDG-301	Cobalt+	mg/L	0.000413*	0.003517	Detection	0.0035	7/9/2024	NA	12/9/2008
TDG-305	None								
GU-13	Arsenic	mg/L	0.0147	0.00322	Detection	0.01	7/9/2024	Pending	4/11/2017
	Barium	mg/L	0.0944	0.07512	Detection	2	7/9/2024	Pending	4/11/2017
	Acetone**	µg/L	<10	<10	Detection	6300	7/9/2024	Pending	4/11/2017
GU-14	None (no samples)								
GU-15	Acetone**	µg/L	16.8	<10	Detection	6300	11/18/2024	Pending	8/25/2015
SW-101	Acetone***	µg/L	13.1	<10	Detection	6300	11/18/2024	Pending	9/25/2012

Notes:

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

2) Detection - Confidence limits are not calculated for monitoring points in the detection monitoring program.

3) TS - Theil Sen. A lower confidence limit could not be calculated as a statistically significant trend was present.

4) NA - Not Applicable. Resampling does not apply for monitoring points in the assessment and corrective action monitoring programs.

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

** Pending results from retest.

***- DNR guidance directed that a sample collected from the sedimentation pond that SW-101 discharges to be analyzed to verify if the acetone detection at SW-101 is confirmed.

+ - Not confirmed by retesting (Doc #111000) or DNR verbal approval.

Comments:

1) Problems with the current assessment network: None.

2) Proposed remedies: Not applicable.

4) Plume delineation strategies: See discussion of Figure 4.

5) Property owner notifications: Not applicable.

Table 8
Summary Table of Ongoing and Newly Identified SSLs
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Well	Constituent	Unit	Most recent result	Upper Confidence Limit	GWPS	Initial Exceedance	Upper Confidence Limit Below GWPS					
							1st Year		2nd Year		3rd Year	
DG-1301	Trichloroethene	µg/L	6.34	10.43	5	2012	NA	NA	NA	NA	NA	NA
DGP-1500	Arsenic	mg/L	0.0167	0.02398	0.01	2024	NA	NA	NA	NA	NA	NA

1) The SSLs in this table were previously reported.

2) NA indicates that the constituent-monitoring point dataset has not satisfied the statistical requirements of IAC 567-113.10(9)”e”(2), which is identified by the entire confidence interval or any portion of the upper confidence band, as appropriate, being below the GWPS.

Table 9
Summary of Groundwater Chemistry
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

The Summary of Groundwater Chemistry for the HMSP monitoring network is located in Appendix C.

Table 10
Historical SSI and SSL
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Key

SSI - Statistically Significant Increase above background

SSL - Statistically Significant Level above the groundwater protection standard

		Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Well	**Constituent**	2018	2018	2019	2019	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
DG-901	Arsenic														
	Cobalt														
	Thallium														
	Acetone														
	Benzene														
DG-905	None														
DG-1001	Cobalt														
	Acetone													*	
DG-1005	Chromium														
	Cobalt														
	Vanadium														
DG-1101	Cobalt														
DG-1105R	None														
DG-1201	1,1-Dichloroethane														NS
	1,2-Dichloropropane														NS
DG-1205	1,1-Dichloroethane														
	1,2-Dichloropropane														
	Chloromethane														
	Dichlorodifluoromethane														NS
DG-1301	Lead														
	1,1-Dichloroethane										NS				
	1,2-Dichloropropane										NS				
	cis-1,2-Dichloroethene										NS				
	Tetrachloroethene										NS				
	Trichloroethene														
	trans-1,2-Dichloroethene														
	Vinyl Chloride										NS				
	Bis [2-ethylhexyl] phthalate										NS				
DG-1305	Barium														
	1,1-Dichloroethane														
	1,2-Dichloropropane														
	1,4-Dichlorobenzene														
	Chlorobenzene														
	cis-1,2-Dichloroethene														
	Vinyl Chloride														
DG-1401R	1,1-Dichloroethane						NS								
DG-1500	Arsenic														
	Benzene														
	Toluene														
TDG-301	Cobalt													**	
	Carbon Disulfide														
TDG-305	2,4-D														

Table 10
Historical SSI and SSL
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Key

SSI - Statistically Significant Increase above background

SSL - Statistically Significant Level above the groundwater protection standard

		Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Well	**Constituent**	2018	2018	2019	2019	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024
GU-13	Arsenic						NS	NS	NS	NS	NS		NS	***	NS
	Barium						NS	NS	NS	NS	NS		NS	***	NS
	Acetone						NS	NS	NS	NS	NS		NS	***	NS
	Chloroform						NS	NS	NS	NS	NS		NS		NS
GU-14	Copper						NS			NS	NS	***	NS	NS	NS
	Zinc						NS			NS	NS	***	NS	NS	NS
	Acetone						NS			NS	NS		NS	NS	NS
	Bromodichloromethane						NS			NS	NS		NS	NS	NS
	Chloroform						NS			NS	NS		NS	NS	NS
	Toluene						NS			NS	NS		NS	NS	NS
GU-15	Acetone									NS	NS	NS	NS	NS	***
SW-101	Acetone						NS				NS				***

Comments:

1) For the 2022 reporting period and earlier, only initial confirmed SSIs were recorded on this table for inorganic compounds. Beginning in the 2023 reporting period, indicated inorganic SSIs are included in this table.

2) SSIs recorded on this table for monitoring points in the assessment and corrective action monitoring programs are not confirmed.

3) A detection of an organic compound or sulfide is recorded as an SSI for this table.

4) Evaluation for SSIs using intrawell statistical methods for the GUs began with the 1st 2019 statistical evaluation.

5) NS - Not Sampled - The monitoring point did not produce a sample during the sampling event. In accordance with the statistical method, SSIs were not calculated as no samples were collected.

* - Not confirmed by retesting.

** - Not confirmed by alternative retesting schedule (Doc #111000) or DNR verbal approval (October 18, 2024).

*** - Not confirmed pending retesting. GU-13 and GU-14 have been dry since the indicated SSIs so the retests are still pending.

Table 11
Corrective Action Trend Analysis
2024 Annual Water Quality Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Well	Current SSL	Trend	Calculated S	Critical S	Total N	Projected Date to Completion*
DG-1301	Trichloroethene	Stable	-4	-21	8	2031
DGP-1500	Arsenic	Stable	4	21	8	NA

Notes:
N - Number of Samples
S - Mann-Kendall Statistic
NA - Not applicable. A completion date cannot be calculated with an increasing trend.
* - To satisfy IAC 113.10(9)"e"; Projected Year of Completion was based on utilizing the Sen's slope calculation to determine when the concentration would be below the GWPS for eight sampling events and remain there for three consecutive years.

Comments:
1) An ACM was submitted to the DNR on March 28, 2017 (Doc #88848) and was approved in DNR correspondence dated April 20, 2017 (Doc #89172).
2) Subsurface venting wells were installed near DG-1301 to vent the subsurface in an effort to reduce trichloroethene concentrations. The trichloroethene concentrations were below the GWPS during the July 2024 sampling event and above the GWPS during the November 2024 sampling event. Sampling will continue to evaluate the effectiveness of the remedy.

Figures



Monitoring Well	Current Monitoring Program
UG-90	Background
UG-201	Background
DG-901	Assessment
DG-905	Assessment
DG-1001	Detection
DG-1005	Assessment
DG-1101	Assessment
DG-1105R	Detection
DG-1201	Assessment
DG-1205	Assessment
DG-1301	Corrective Action
DG-1305	Assessment
DG-1401R	Assessment
DGP-1500	Assessment
TDG-301	Detection
TDG-305	Detection
GU-9	Detection
GU-10	Detection
GU-11	Detection
GU-12	Detection
GU-13	Detection
GU-14	Detection
GU-15	Detection
SW-101	Detection

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SCS ENGINEERS
environmental consultants and contractors

Approved Monitoring Network

Legend

- HMSP Monitoring Point
- HMSP Groundwater Underdrain
- HMSP Surface Water Monitoring Point
- Impact Delineation Monitoring Point
- Monitoring Well
- Leachate Piezometers
- Gas Vent
- Approximate FML Boundary
- Approximate Future Waste/Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

Figure 1

N W E S

0 265 530 1,060 Feet

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



Groundwater Contours

Legend

- Approximate Groundwater Contour Based on Field Measurments Taken November 18-21, 2024
- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Leachate Piezometers
- Gas Vent
- Approximate FML Boundary
- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

Figure 2

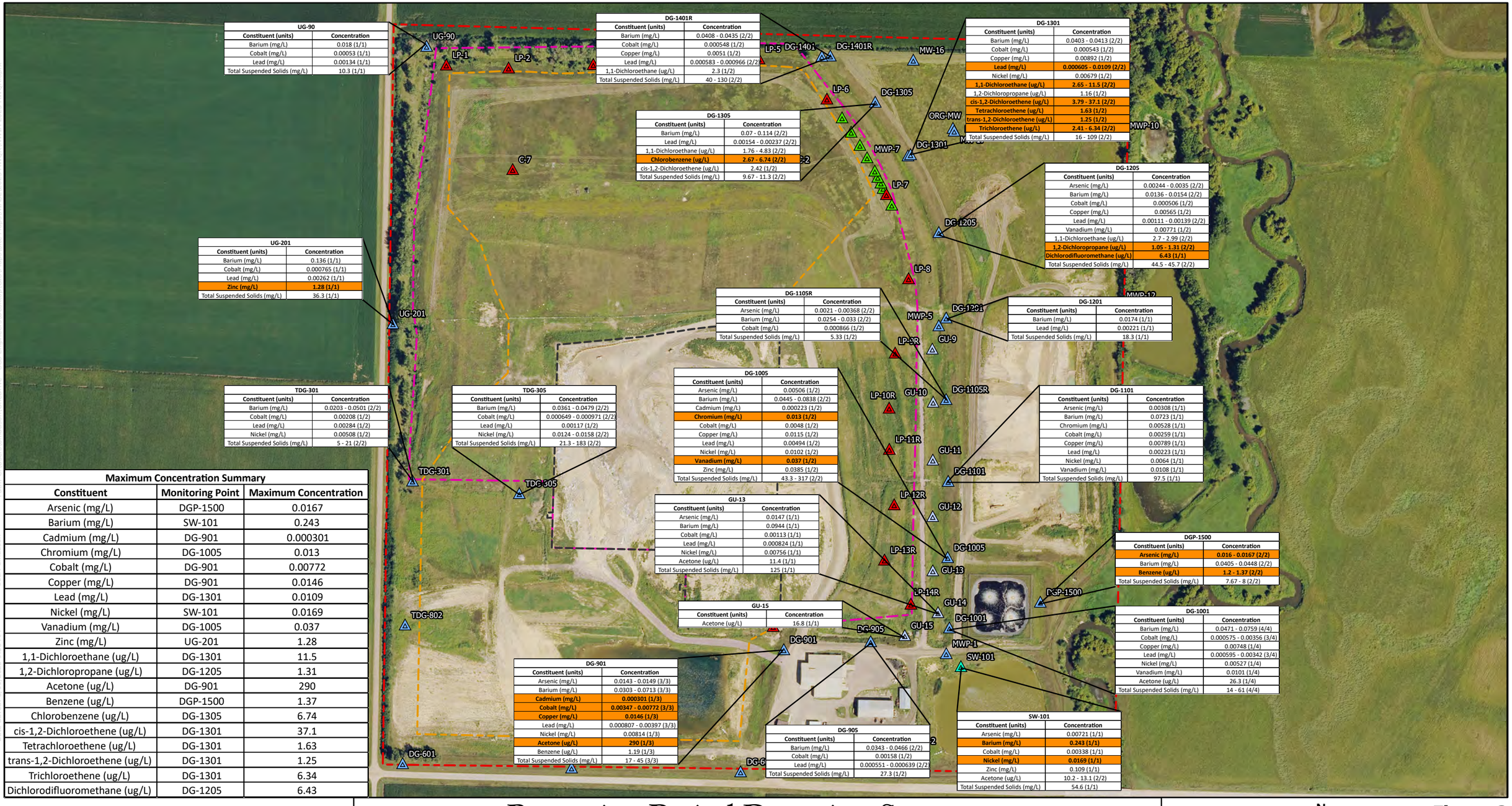
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UG-90

Constituent (units)	Concentration
Barium (mg/L)	0.018 (1/1)
Cobalt (mg/L)	0.00053 (1/1)
Lead (mg/L)	0.00134 (1/1)
Total Suspended Solids (mg/L)	10.3 (1/1)

DG-1401R

Constituent (units)	Concentration
Barium (mg/L)	0.0408 - 0.0435 (2/2)
Cobalt (mg/L)	0.000548 (1/2)
Copper (mg/L)	0.0051 (1/2)
Lead (mg/L)	0.000583 - 0.000966 (2/2)
1,1-Dichloroethane (ug/L)	2.3 (1/2)
Total Suspended Solids (mg/L)	40 - 130 (2/2)

DG-1301

Constituent (units)	Concentration
Barium (mg/L)	0.0403 - 0.0413 (2/2)
Cobalt (mg/L)	0.000543 (1/2)
Copper (mg/L)	0.00892 (1/2)
Lead (mg/L)	**0.000605 - 0.0109 (2/2)**
Nickel (mg/L)	0.00679 (1/2)
1,1-Dichloroethane (ug/L)	**2.65 - 11.5 (2/2)**
1,2-Dichloropropane (ug/L)	1.16 (1/2)
cis-1,2-Dichloroethene (ug/L)	**3.79 - 37.1 (2/2)**
Tetrachloroethene (ug/L)	**1.63 (1/2)**
trans-1,2-Dichloroethene (ug/L)	**1.25 (1/2)**
Trichloroethene (ug/L)	**2.41 - 6.34 (2/2)**
Total Suspended Solids (mg/L)	16 - 109 (2/2)

DG-1305

Constituent (units)	Concentration
Barium (mg/L)	0.07 - 0.114 (2/2)
Lead (mg/L)	0.00154 - 0.00237 (2/2)
1,1-Dichloroethane (ug/L)	1.76 - 4.83 (2/2)
Chlorobenzene (ug/L)	**2.67 - 6.74 (2/2)**
cis-1,2-Dichloroethene (ug/L)	2.42 (1/2)
Total Suspended Solids (mg/L)	9.67 - 11.3 (2/2)

DG-1205

Constituent (units)	Concentration
Arsenic (mg/L)	0.00244 - 0.0035 (2/2)
Barium (mg/L)	0.0136 - 0.0154 (2/2)
Cobalt (mg/L)	0.000506 (1/2)
Copper (mg/L)	0.00565 (1/2)
Lead (mg/L)	0.00111 - 0.00139 (2/2)
Vanadium (mg/L)	0.00771 (1/2)
1,1-Dichloroethane (ug/L)	2.7 - 2.99 (2/2)
1,2-Dichloropropane (ug/L)	**1.05 - 1.31 (2/2)**
Dichlorodifluoromethane (ug/L)	**6.43 (1/1)**
Total Suspended Solids (mg/L)	44.5 - 45.7 (2/2)

UG-201

Constituent (units)	Concentration
Barium (mg/L)	0.136 (1/1)
Cobalt (mg/L)	0.000765 (1/1)
Lead (mg/L)	0.00262 (1/1)
Zinc (mg/L)	**1.28 (1/1)**
Total Suspended Solids (mg/L)	36.3 (1/1)

DG-1105R

Constituent (units)	Concentration
Arsenic (mg/L)	0.0021 - 0.00368 (2/2)
Barium (mg/L)	0.0254 - 0.033 (2/2)
Cobalt (mg/L)	0.000866 (1/2)
Total Suspended Solids (mg/L)	5.33 (1/2)

DG-1201

Constituent (units)	Concentration
Barium (mg/L)	0.0174 (1/1)
Lead (mg/L)	0.00221 (1/1)
Total Suspended Solids (mg/L)	18.3 (1/1)

TDG-301

Constituent (units)	Concentration
Barium (mg/L)	0.0203 - 0.0501 (2/2)
Cobalt (mg/L)	0.00208 (1/2)
Lead (mg/L)	0.00284 (1/2)
Nickel (mg/L)	0.00508 (1/2)
Total Suspended Solids (mg/L)	5 - 21 (2/2)

TDG-305

Constituent (units)	Concentration
Barium (mg/L)	0.0361 - 0.0479 (2/2)
Cobalt (mg/L)	0.000649 - 0.000971 (2/2)
Lead (mg/L)	0.00117 (1/2)
Nickel (mg/L)	0.0124 - 0.0158 (2/2)
Total Suspended Solids (mg/L)	21.3 - 183 (2/2)

DG-1005

Constituent (units)	Concentration
Arsenic (mg/L)	0.00506 (1/2)
Barium (mg/L)	0.0445 - 0.0838 (2/2)
Cadmium (mg/L)	0.000223 (1/2)
Chromium (mg/L)	**0.013 (1/2)**
Cobalt (mg/L)	0.0048 (1/2)
Copper (mg/L)	0.0115 (1/2)
Lead (mg/L)	0.00494 (1/2)
Nickel (mg/L)	0.0102 (1/2)
Vanadium (mg/L)	**0.037 (1/2)**
Zinc (mg/L)	0.0385 (1/2)
Total Suspended Solids (mg/L)	43.3 - 317 (2/2)

DG-1101

Constituent (units)	Concentration
Arsenic (mg/L)	0.00308 (1/1)
Barium (mg/L)	0.0723 (1/1)
Chromium (mg/L)	0.00528 (1/1)
Cobalt (mg/L)	0.00259 (1/1)
Copper (mg/L)	0.00789 (1/1)
Lead (mg/L)	0.00223 (1/1)
Nickel (mg/L)	0.0064 (1/1)
Vanadium (mg/L)	0.0108 (1/1)
Total Suspended Solids (mg/L)	97.5 (1/1)

GU-13

Constituent (units)	Concentration
Arsenic (mg/L)	0.0147 (1/1)
Barium (mg/L)	0.0944 (1/1)
Cobalt (mg/L)	0.00113 (1/1)
Lead (mg/L)	0.000824 (1/1)
Nickel (mg/L)	0.00756 (1/1)
Acetone (ug/L)	11.4 (1/1)
Total Suspended Solids (mg/L)	125 (1/1)

DGP-1500

Constituent (units)	Concentration
Arsenic (mg/L)	**0.016 - 0.0167 (2/2)**
Barium (mg/L)	0.0405 - 0.0448 (2/2)
Benzene (ug/L)	**1.2 - 1.37 (2/2)**
Total Suspended Solids (mg/L)	7.67 - 8 (2/2)

GU-15

Constituent (units)	Concentration
Acetone (ug/L)	16.8 (1/1)

DG-1001

Constituent (units)	Concentration
Barium (mg/L)	0.0471 - 0.0759 (4/4)
Cobalt (mg/L)	0.000575 - 0.00356 (3/4)
Copper (mg/L)	0.00748 (1/4)
Lead (mg/L)	0.000595 - 0.00342 (3/4)
Nickel (mg/L)	0.00527 (1/4)
Vanadium (mg/L)	0.0101 (1/4)
Acetone (ug/L)	26.3 (1/4)
Total Suspended Solids (mg/L)	14 - 61 (4/4)

DG-901

Constituent (units)	Concentration
Arsenic (mg/L)	0.0143 - 0.0149 (3/3)
Barium (mg/L)	0.0303 - 0.0713 (3/3)
Cadmium (mg/L)	**0.000301 (1/3)**
Cobalt (mg/L)	**0.00347 - 0.00772 (3/3)**
Copper (mg/L)	**0.0146 (1/3)**
Lead (mg/L)	0.000807 - 0.00397 (3/3)
Nickel (mg/L)	0.00814 (1/3)
Acetone (ug/L)	**290 (1/3)**
Benzene (ug/L)	1.19 (1/3)
Total Suspended Solids (mg/L)	17 - 45 (3/3)

DG-905

Constituent (units)	Concentration
Barium (mg/L)	0.0343 - 0.0466 (2/2)
Cobalt (mg/L)	0.00158 (1/2)
Lead (mg/L)	0.000551 - 0.000639 (2/2)
Total Suspended Solids (mg/L)	27.3 (1/2)

SW-101

Constituent (units)	Concentration
Arsenic (mg/L)	0.00721 (1/1)
Barium (mg/L)	**0.243 (1/1)**
Cobalt (mg/L)	0.00338 (1/1)
Nickel (mg/L)	**0.0169 (1/1)**
Zinc (mg/L)	0.109 (1/1)
Acetone (ug/L)	10.2 - 13.1 (2/2)
Total Suspended Solids (mg/L)	54.6 (1/1)

Maximum Concentration Summary

Constituent	Monitoring Point	Maximum Concentration
Arsenic (mg/L)	DGP-1500	0.0167
Barium (mg/L)	SW-101	0.243
Cadmium (mg/L)	DG-901	0.000301
Chromium (mg/L)	DG-1005	0.013
Cobalt (mg/L)	DG-901	0.00772
Copper (mg/L)	DG-901	0.0146
Lead (mg/L)	DG-1301	0.0109
Nickel (mg/L)	SW-101	0.0169
Vanadium (mg/L)	DG-1005	0.037
Zinc (mg/L)	UG-201	1.28
1,1-Dichloroethane (ug/L)	DG-1301	11.5
1,2-Dichloropropane (ug/L)	DG-1205	1.31
Acetone (ug/L)	DG-901	290
Benzene (ug/L)	DGP-1500	1.37
Chlorobenzene (ug/L)	DG-1305	6.74
cis-1,2-Dichloroethene (ug/L)	DG-1301	37.1
Tetrachloroethene (ug/L)	DG-1301	1.63
trans-1,2-Dichloroethene (ug/L)	DG-1301	1.25
Trichloroethene (ug/L)	DG-1301	6.34
Dichlorodifluoromethane (ug/L)	DG-1205	6.43

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Reporting Period Detection Summary

Legend

- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Leachate Piezometers
- Gas Vent
- Approximate FML Boundary
- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

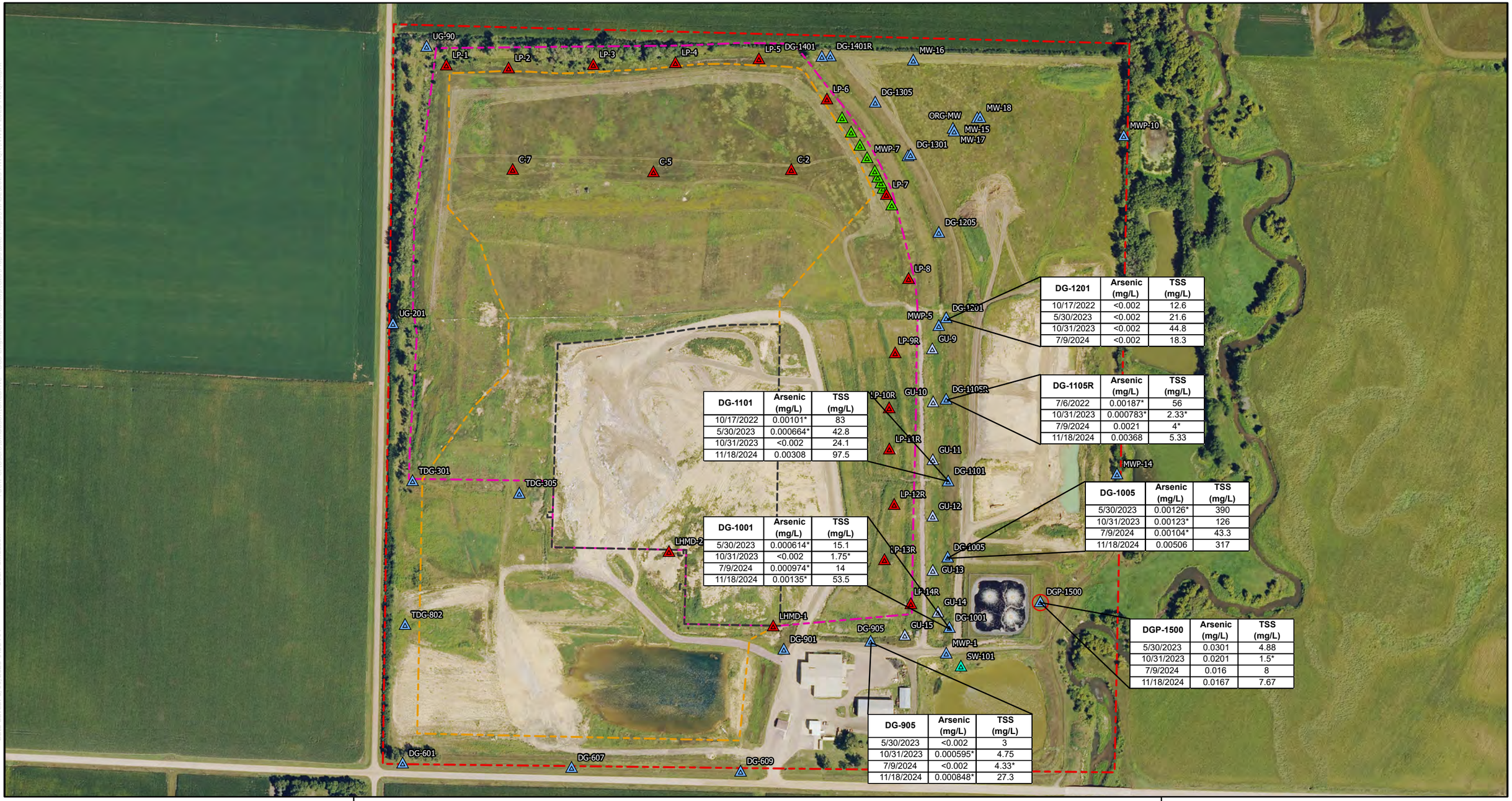
N W E S

0 265 530 1,060 Feet

Figure 3

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

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DG-1201	Arsenic (mg/L)	TSS (mg/L)
10/17/2022	<0.002	12.6
5/30/2023	<0.002	21.6
10/31/2023	<0.002	44.8
7/9/2024	<0.002	18.3

DG-1105R	Arsenic (mg/L)	TSS (mg/L)
7/6/2022	0.00187*	56
10/31/2023	0.000783*	2.33*
7/9/2024	0.0021	4*
11/18/2024	0.00368	5.33

DG-1101	Arsenic (mg/L)	TSS (mg/L)
10/17/2022	0.00101*	83
5/30/2023	0.000664*	42.8
10/31/2023	<0.002	24.1
11/18/2024	0.00308	97.5

DG-1005	Arsenic (mg/L)	TSS (mg/L)
5/30/2023	0.00126*	390
10/31/2023	0.00123*	126
7/9/2024	0.00104*	43.3
11/18/2024	0.00506	317

DG-1001	Arsenic (mg/L)	TSS (mg/L)
5/30/2023	0.000614*	15.1
10/31/2023	<0.002	1.75*
7/9/2024	0.000974*	14
11/18/2024	0.00135*	53.5

DGP-1500	Arsenic (mg/L)	TSS (mg/L)
5/30/2023	0.0301	4.88
10/31/2023	0.0201	1.5*
7/9/2024	0.016	8
11/18/2024	0.0167	7.67

DG-905	Arsenic (mg/L)	TSS (mg/L)
5/30/2023	<0.002	3
10/31/2023	0.000595*	4.75
7/9/2024	<0.002	4.33*
11/18/2024	0.000848*	27.3

Arsenic Concentration Map

Legend

- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Leachate Piezometers
- Gas Vent
- Approximate FML Boundary
- SSL Well

Arsenic Prediction Limit = 0.00555 mg/L

- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

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

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

Figure 4

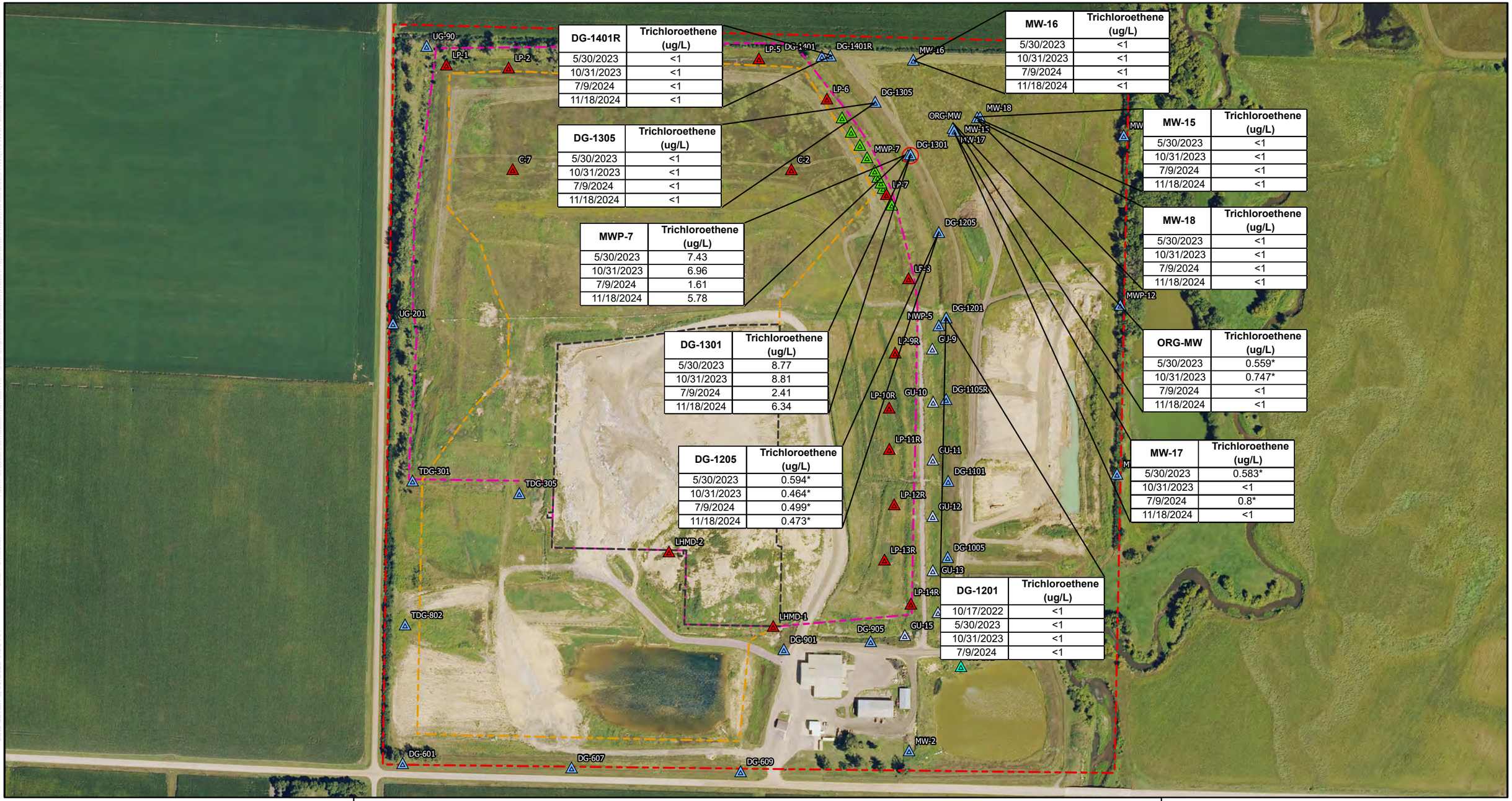
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DG-1401R	Trichloroethene (ug/L)
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1
11/18/2024	<1

DG-1305	Trichloroethene (ug/L)
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1
11/18/2024	<1

MWP-7	Trichloroethene (ug/L)
5/30/2023	7.43
10/31/2023	6.96
7/9/2024	1.61
11/18/2024	5.78

DG-1301	Trichloroethene (ug/L)
5/30/2023	8.77
10/31/2023	8.81
7/9/2024	2.41
11/18/2024	6.34

DG-1205	Trichloroethene (ug/L)
5/30/2023	0.594*
10/31/2023	0.464*
7/9/2024	0.499*
11/18/2024	0.473*

MW-16	Trichloroethene (ug/L)
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1
11/18/2024	<1

MW-15	Trichloroethene (ug/L)
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1
11/18/2024	<1

MW-18	Trichloroethene (ug/L)
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1
11/18/2024	<1

ORG-MW	Trichloroethene (ug/L)
5/30/2023	0.559*
10/31/2023	0.747*
7/9/2024	<1
11/18/2024	<1

MW-17	Trichloroethene (ug/L)
5/30/2023	0.583*
10/31/2023	<1
7/9/2024	0.8*
11/18/2024	<1

DG-1201	Trichloroethene (ug/L)
10/17/2022	<1
5/30/2023	<1
10/31/2023	<1
7/9/2024	<1

Trichloroethene Concentration Map

Figure 5

Legend

Trichloroethene Prediction Limit = < 1 ug/L

- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Leachate Piezometers
- Gas Vent
- Approximate FML Boundary
- SSL Well
- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

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

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

N W E S

0 265 530 1,060 Feet

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Appendix A
Field Sampling Forms

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-901**	Date:	**7/10/2024**
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):	25.6
Initial Static Water Level (feet):	11.38
Initial Groundwater Elevation (ft-amsl):	1363.31
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)	
9:25 AM	Purging start time.						
9:28 AM	14.1	1.3	1824.0	6.38	-76.7	335.2	
9:31 AM	14.1	0.3	1823.0	6.34	-89.5	321.1	
9:34 AM	14.4	0.1	1817.5	6.33	-98.2	314.2	
9:37 AM	14.9	0.1	1821.3	6.32	-103.5	303.1	
	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:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-905**	Date:	**7/10/2024**
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):	20.9
Initial Static Water Level (feet):	10.05
Initial Groundwater Elevation (ft-amsl):	1355.51
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)	
3:30 PM	Purging start time.						
3:33 PM	16.7	1.1	1603.3	6.76	-16.6	383.2	
3:36 PM	16.5	0.4	1517.5	6.72	-14.1	443.3	
3:39 PM	16.6	<0.1	1464.6	6.70	-13.9	526.0	
3:42 PM	16.7	<0.1	1449.9	6.69	-14.3	333.3	
	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:	Color-Clear Odor-Sulfur Raining during sample collection.

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1001**	Date:	**7/9/2024**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	16.1
Initial Static Water Level (feet):	5.95
Initial Groundwater Elevation (ft-amsl):	1346.98
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)	
5:55 PM	Purging start time.						
5:58 PM	22.2	2.0	1699.5	6.79	-7.4	267.2	
6:01 PM	22.6	0.9	1701.3	6.75	-25.2	315.9	
6:04 PM	22.8	0.7	1693.2	6.75	-35.3	393.9	
6:07 PM	22.9	0.6	1687.0	6.75	-41.8	514.6	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs a lid.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1005**	Date:	**7/11/2024**
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):	15.4
Initial Static Water Level (feet):	3.75
Initial Groundwater Elevation (ft-amsl):	1348.85
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
8:28 AM	Purging start time.						
8:31 AM	16.3	2.2	988.7	7.09	38.3	244.9	
8:34 AM	16.6	0.5	983.8	7.04	32.0	314.2	
8:37 AM	16.6	0.1	982.5	7.02	24.7	473.8	
8:40 AM	16.9	<0.1	981.7	7.02	17.9	524.7	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1101**	Date:	**7/11/2024**
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):	14.7
Initial Static Water Level (feet):	6.10
Initial Groundwater Elevation (ft-amsl):	1345.37
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)	
11:08 AM	Purging start time.						
11:11 AM	18.7	3.3	1153.0	7.08	-55.7	1586.1	
11:14 AM	18.6	3.4	1109.8	7.01	-56.8	1473.8	
11:17 AM	18.5	3.6	1085.1	6.99	-54.0	1179.8	
11:20 AM	18.8	3.6	1078.1	6.97	-49.1	997.5	
	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?	Yes	
If yes, explain:	Well needs a ID tag.	

Additional Comments:	Color-Went from clear to light brown Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1105R**	Date:	**7/11/2024**
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):	18.4
Initial Static Water Level (feet):	2.69
Initial Groundwater Elevation (ft-amsl):	1355.21
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)	
9:05 AM	Purging start time.						
9:08 AM	18.7	1.3	1663.6	7.19	-181.5	313.1	
9:11 AM	17.3	0.2	1672.0	7.24	-234.5	330.3	
9:14 AM	17.3	<0.1	1668.5	7.26	-257.7	224.7	
9:17 AM	17.4	<0.1	1665.1	7.27	-272.0	195.0	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1201**	Date:	**7/11/2024**
Gradient:	Down	Sampler:	Konner Roth

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

B. GROUNDWATER ELEVATION MEASUREMENT (+/- 0.01 foot, MSL)	
Measured Well Total Depth (feet):	15.0
Initial Static Water Level (feet):	5.77
Initial Groundwater Elevation (ft-amsl):	1351.82
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	18.3	1.8	1806.6	6.77	-65.7	299.8	
9:47 AM	18.2	1.4	1778.5	6.72	-61.8	288.6	
9:50 AM	17.9	1.3	1748.2	6.70	-60.0	272.6	
9:53 AM	18.1	1.3	1700.6	6.68	-58.2	246.3	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs a cap.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1205**	Date:	**7/11/2024**
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):	21.2
Initial Static Water Level (feet):	6.65
Initial Groundwater Elevation (ft-amsl):	1353.84
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	16.2	0.4	3193.9	6.65	-43.1	752.6	
10:21 AM	16.4	0.1	3198.9	6.61	-46.7	659.0	
10:24 AM	16.9	<0.1	3195.9	6.61	-52.0	532.3	
10:27 AM	17.3	<0.1	3192.6	6.60	-56.6	447.2	
	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:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1301**	Date:	**7/10/2024**
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):	24.2
Initial Static Water Level (feet):	12.94
Initial Groundwater Elevation (ft-amsl):	1355.81
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)	
6:44 PM	Purging start time.						
6:47 PM	15.4	5.6	1086.3	6.90	-23.9	169.4	
6:50 PM	15.4	5.6	1081.9	6.83	-11.6	170.2	
6:53 PM	15.2	5.4	1082.1	6.81	-5.0	171.3	
6:56 PM	15.1	5.5	1083.1	6.79	-0.4	186.4	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1305**	Date:	**7/10/2024**
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):	20.3
Initial Static Water Level (feet):	8.66
Initial Groundwater Elevation (ft-amsl):	1357.14
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)	
6:07 PM	Purging start time.						
6:10 PM	16.8	0.8	1408.6	6.58	-17.8	193.0	
6:13 PM	16.7	0.2	1214.0	6.66	-21.5	185.2	
6:16 PM	16.5	<0.1	1110.8	6.74	-30.5	201.0	
6:19 PM	16.6	<0.1	1033.9	6.76	-43.2	235.8	
6:22 PM	16.6	<0.1	1356.6	6.63	-47.1	241.8	
	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:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1401R**	Date:	**7/10/2024**
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):	20.2
Initial Static Water Level (feet):	7.70
Initial Groundwater Elevation (ft-amsl):	1360.52
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)	
5:33 PM	Purging start time.						
5:36 PM	15.5	6.2	967.1	7.04	-47.9	453.1	
5:39 PM	15.4	6.2	959.9	6.92	-37.4	486.3	
5:42 PM	15.3	6.1	951.5	6.88	-31.9	511.8	
5:45 PM	15.3	6.1	949.8	6.86	-28.1	483.2	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DGP-1500**	Date:	**7/10/2024**
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):	28.6
Initial Static Water Level (feet):	10.30
Initial Groundwater Elevation (ft-amsl):	1348.64
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
4:39 PM	Purging start time.						
4:42 PM	15.0	2.1	843.6	7.40	-174.6	199.6	
4:45 PM	15.0	0.5	825.1	7.45	-235.5	245.5	
4:48 PM	14.9	<0.1	822.9	7.47	-258.5	276.2	
4:51 PM	15.0	<0.1	820.4	7.47	-269.7	272.7	
	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:	Color-Clear with black particles Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-15**	Date:	**7/10/2024**
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):	12.64
Initial Groundwater Elevation (ft-amsl):	1353.36
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)	
10:03 AM	Purging start time.						
10:06 AM	16.3	3.0	609.4	7.04	-81.7	237.5	
10:09 AM	16.1	2.6	589.6	7.04	-72.9	271.0	
10:12 AM	16.1	2.4	590.8	7.03	-67.3	225.9	
10:15 AM	16.1	2.4	593.4	7.02	-63.4	220.7	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-16**	Date:	**7/10/2024**
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):	27.3
Initial Static Water Level (feet):	13.12
Initial Groundwater Elevation (ft-amsl):	1355.74
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)	
12:17 PM	Purging start time.						
12:20 PM	19.5	8.5	924.2	6.80	35.4	389.3	
12:23 PM	19.4	8.8	878.6	6.83	42.4	480.7	
12:26 PM	18.3	9.3	878.1	6.87	47.4	483.8	
12:29 PM	19.0	9.3	877.0	6.87	51.0	527.5	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-17**	Date:	**7/10/2024**
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):	20.6
Initial Static Water Level (feet):	12.46
Initial Groundwater Elevation (ft-amsl):	1353.54
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)	
11:10 AM	Purging start time.						
11:13 AM	16.6	3.9	1708.2	6.90	23.9	188.0	
11:16 AM	16.6	3.5	1732.8	6.88	23.5	181.3	
11:19 AM	16.6	2.5	1774.9	6.82	21.4	180.4	
11:22 AM	16.6	1.5	1794.7	6.80	18.1	178.5	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-18**	Date:	**7/9/2024**
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):	40.8
Initial Static Water Level (feet):	12.86
Initial Groundwater Elevation (ft-amsl):	1352.64
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
5:14 PM	Purging start time.						
5:17 PM	16.8	7.1	1008.9	7.67	61.1	339.3	
5:20 PM	18.1	6.9	1005.4	7.55	80.5	324.8	
5:23 PM	19.4	6.8	1011.8	7.53	90.5	323.4	
5:26 PM	18.4	5.8	1033.2	7.40	96.7	407.9	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MWP-7**	Date:	**7/10/2024**
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):	40.3
Initial Static Water Level (feet):	12.59
Initial Groundwater Elevation (ft-amsl):	1355.09
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)	
11:42 AM	Purging start time.						
11:45 AM	21.9	1.7	1043.4	6.58	30.1	191.3	
11:48 AM	22.0	2.0	942.7	6.57	23.4	203.4	
11:51 AM	21.6	2.5	867.9	6.58	19.3	227.3	
11:54 AM	22.4	3.1	864.3	6.58	17.5	259.3	
	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?	Yes	
If yes, explain:	Well needs the correct label.	

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**ORG-MW**	Date:	**7/10/2024**
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):	32.3
Initial Static Water Level (feet):	13.36
Initial Groundwater Elevation (ft-amsl):	NA
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	15.0	7.2	1040.7	6.88	15.2	259.0	
10:51 AM	15.0	6.8	1039.8	6.85	20.8	457.2	
10:54 AM	14.9	6.7	1039.9	6.84	22.9	604.2	
10:57 AM	15.1	6.7	1036.6	6.83	24.2	360.9	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**TDG-301**	Date:	**7/10/2024**
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):	20.4
Initial Static Water Level (feet):	14.23
Initial Groundwater Elevation (ft-amsl):	1369.03
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)	
2:39 PM	Purging start time.						
2:42 PM	16.4	0.9	3311.9	6.73	10.9	294.3	
2:45 PM	16.3	0.3	3313.7	6.68	-5.5	367.3	
2:48 PM	16.2	<0.1	3312.0	6.67	-17.4	423.2	
2:51 PM	16.4	<0.1	3308.3	6.67	-26.4	456.0	
	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:	Color-Clear Odor-Sulfur Raining during sample collection.

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**TDG-305**	Date:	**7/10/2024**
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):	16.3
Initial Static Water Level (feet):	5.25
Initial Groundwater Elevation (ft-amsl):	1372.83
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)	
12:53 PM	Purging start time.						
12:56 PM	17.3	0.7	2117.5	6.81	-95.8	390.1	
12:59 PM	17.6	0.2	2074.3	6.81	-118.3	473.5	
1:02 PM	17.6	<0.1	2046.3	6.82	-132.0	511.8	
1:05 PM	17.6	<0.1	2018.1	6.82	-140.9	539.0	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**UG-90**	Date:	**7/9/2024**
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):	NM
Initial Static Water Level (feet):	NM
Initial Groundwater Elevation (ft-amsl):	NA
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):	0
Average Purge Rate (mL/min):	0.00

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

Additional Comments:	Well has about a foot of standing water around the outer casing. Could not get a sample because of the flooding.

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**UG-201**	Date:	**7/11/2024**
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):	54.0
Initial Static Water Level (feet):	32.59
Initial Groundwater Elevation (ft-amsl):	NA
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):	0
Average Purge Rate (mL/min):	0.00

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

Additional Comments:	No sample. Pump was malfunctioning and would not pull water up from well.

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-9
Date: 7-9-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry? Yes
Was water flowing? No
Standing Water? ~~No~~ Yes, very little

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

D. FIELD MEASUREMENTS

Weather Conditions: 87°F, Sunny, 5mph wind
Time: 16:15
Field Measurements:

Temperature — Units: Celsius
Equipment Used:

pH — Units: Standard units
Equipment Used:

Spec.Conductance — Units: uS/cm
Equipment Used:

COMMENTS: No Sample collected almost buried

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-10
Date: 7-9-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry?	Yes
Was water flowing?	NO
Standing Water?	NO
Was water discolored?	N/A
Does water have odor?	N/A
Was ground discolored?	NO
Litter present?	NO

D. FIELD MEASUREMENTS

Weather Conditions: 87°F, Sunny, 5mph wind

Time: 16:10

Field Measurements:

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

COMMENTS: No sample collected almost buried

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-11
Date: 7-9-24

Name of Person Sampling: Korner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry? yes
Was water flowing? NO
Standing Water? yes / very little

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

D. FIELD MEASUREMENTS

Weather Conditions: 86°F, Sunny, Smphwing
Time: 16:04
Field Measurements:

Temperature — Units: Celsius
Equipment Used

pH — Units: Standard units
Equipment Used

Spec.Conductance — Units: uS/cm
Equipment Used

COMMENTS: No Sample collected

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name	Northwest Iowa Area Landfill	Permit No.	84-SDP-01-74P
Surface Monitoring Point No.	GU-12	Date	7-9-24
Name of Person Sampling	Konner Roth		

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

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

D. FIELD MEASUREMENTS

Weather Conditions: 86°F, Sunny, 5mph wind

Time: 15:50

Field Measurements:

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

COMMENTS No sample collected

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-13
Date: 7-9-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

all good

Was monitoring point dry? NO
Was water flowing? Yes
Standing Water? Yes

Was water discolored? NO
Does water have odor? Yes – leachate smell
Was ground discolored? NO
Litter present? Yes

D. FIELD MEASUREMENTS

Weather Conditions: 84° F, Sunny, 5mph wind
Time: 15:43
Field Measurements:

Temperature	32.8	Units	Celsius
Equipment Used			
pH	8.22	Units	Standard units
Equipment Used			
Spec Conductance	876	Units	uS/cm
Equipment Used			

COMMENTS

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-14
Date: 7-9-24

Name of Person Sampling: Honner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

looks good, but no water flowing

Was monitoring point dry? Yes
Was water flowing? NO
Standing Water? Barely any

Was water discolored? N/A
Does water have odor? N/A
Was ground discolored? N/A
Litter present? NO

D. FIELD MEASUREMENTS

Weather Conditions: 84°F, Sunny, 5mph wind
Time: 15:27
Field Measurements:

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

COMMENTS: NO Sample taken

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-15
Date: 7-9-24

Name of Person Sampling: Honner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

almost all the way Covered

Was monitoring point dry?	NO
Was water flowing?	yes
Standing Water?	yes
Was water discolored?	yes
Does water have odor?	NO
Was ground discolored?	NO
Litter present?	NO

D. FIELD MEASUREMENTS

Weather Conditions: 84°F, Sunny, 5mph wind
Time: 15:20
Field Measurements:

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

COMMENTS: water was flowing, but not enough for a Sample. very shallow, could not even get a vial to fill.

IDNR Form 542-1324

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: SW-101
Date: 7-9-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Was monitoring point dry? NO
Was water flowing? Yes
Standing Water? Yes

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

D. FIELD MEASUREMENTS

Weather Conditions: 87°F, Sunny, 5mph wind
Time: 16:32
Field Measurements:

Temperature	26.3	Units	Celsius
Equipment Used			
pH	7.70	Units	Standard units
Equipment Used			
Spec.Conductance	1559	Units	uS/cm
Equipment Used			

COMMENTS: Sample collected

IDNR Form 542-1324

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-901**	Date:	**11/19/2024**
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):	25.6
Initial Static Water Level (feet):	16.30
Initial Groundwater Elevation (ft-amsl):	1358.39
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)	
3:08 PM	Purging start time.						
3:11 PM	11.0	3.2	1568.5	6.92	40.4	5.1	
3:14 PM	11.0	1.9	1576.3	6.82	64.8	4.0	
3:17 PM	10.9	1.4	1574.0	6.77	85.9	4.0	
3:20 PM	10.9	1.1	1564.3	6.73	100.3	4.5	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-905**	Date:	**11/19/2024**
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):	21.3
Initial Static Water Level (feet):	11.41
Initial Groundwater Elevation (ft-amsl):	1354.15
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
3:50 PM	Purging start time.						
3:53 PM	11.1	3.6	1358.5	6.99	41.8	20.2	
3:56 PM	11.3	2.0	1337.2	6.90	42.7	21.1	
3:59 PM	11.4	1.4	1299.9	6.87	47.1	20.1	
4:02 PM	11.4	1.1	1255.3	6.86	51.0	18.0	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1001**	Date:	**11/20/2024**
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):	16.1
Initial Static Water Level (feet):	7.24
Initial Groundwater Elevation (ft-amsl):	1345.69
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)	
10:06 AM	Purging start time.						
10:09 AM	8.1	4.0	1893.0	7.03	27.0	58.1	
10:12 AM	8.0	2.5	1780.5	6.99	13.9	72.8	
10:15 AM	8.2	1.8	1760.3	6.96	6.0	94.6	
10:18 AM	8.2	1.6	1751.9	6.95	2.1	90.8	
	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:	Color-Brown tint Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1005**	Date:	**11/20/2024**
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):	15.4
Initial Static Water Level (feet):	4.31
Initial Groundwater Elevation (ft-amsl):	1348.29
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)	
10:44 AM	Purging start time.						
10:47 AM	9.0	4.4	917.8	7.31	54.9	48.0	
10:50 AM	9.3	2.7	912.7	7.24	42.7	81.6	
10:53 AM	9.0	2.0	911.8	7.21	31.0	130.0	
10:56 AM	8.9	1.6	912.3	7.19	22.0	173.8	
	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?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1101**	Date:	**11/20/2024**
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):	14.7
Initial Static Water Level (feet):	7.29
Initial Groundwater Elevation (ft-amsl):	1344.18
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)	
11:14 AM	Purging start time.						
11:17 AM	9.5	4.2	1244.1	7.12	64.7	272.8	
11:20 AM	9.2	3.4	1155.1	7.09	59.9	120.9	
11:23 AM	9.5	3.7	1121.8	7.08	57.5	101.3	
11:26 AM	9.9	3.5	1127.0	7.07	53.3	85.5	
	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:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1105R**	Date:	**11/19/2024**
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):	18.4
Initial Static Water Level (feet):	4.25
Initial Groundwater Elevation (ft-amsl):	1353.65
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)	
1:34 PM	Purging start time.						
1:37 PM	10.8	2.4	1572.1	7.24	53.7	4.0	
1:40 PM	10.9	1.5	1557.7	7.30	91.6	8.1	
1:43 PM	10.8	1.0	1548.3	7.38	128.5	12.5	
1:46 PM	10.8	0.8	1536.7	7.52	179.2	11.2	
	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?	Yes	
If yes, explain:	Well needs an ID tag and lock.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1205**	Date:	**11/19/2024**
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):	21.2
Initial Static Water Level (feet):	9.67
Initial Groundwater Elevation (ft-amsl):	1350.82
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)	
1:05 PM	Purging start time.						
1:08 PM	11.3	3.3	3030.1	6.70	113.3	33.2	
1:11 PM	11.4	1.9	3042.2	6.67	79.4	29.9	
1:14 PM	11.6	1.4	3032.7	6.66	38.5	37.7	
1:17 PM	11.6	1.1	2959.4	6.69	7.1	43.1	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1301**	Date:	**11/19/2024**
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):	25.1
Initial Static Water Level (feet):	16.81
Initial Groundwater Elevation (ft-amsl):	1351.94
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
10:00 AM	Purging start time.						
10:03 AM	11.3	3.1	1575.7	6.50	87.3	6.1	
10:06 AM	11.5	1.7	1575.7	6.49	78.4	8.3	
10:09 AM	11.8	1.2	1572.3	6.50	71.9	13.1	
10:12 AM	11.7	0.9	1573.2	6.50	67.8	13.2	
	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:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1305**	Date:	**11/19/2024**
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):	20.2
Initial Static Water Level (feet):	11.91
Initial Groundwater Elevation (ft-amsl):	1353.89
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)	
9:22 AM	Purging start time.						
9:25 AM	11.3	3.4	1220.6	6.73	152.2	10.8	
9:28 AM	11.4	2.0	1096.3	6.76	120.2	25.6	
9:31 AM	11.5	1.5	983.7	6.88	55.7	47.7	
9:34 AM	11.5	1.2	882.2	6.97	26.7	66.3	
9:37 AM	11.5	1.5	771.9	7.03	7.7	68.0	
9:40 AM	11.6	2.5	729.0	7.06	4.1	22.2	
9:43 AM	11.8	3.9	710.2	7.07	12.4	13.7	
	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):	21:00
Average Purge Rate (mL/min):	128.57

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DG-1401R**	Date:	**11/19/2024**
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):	20.2
Initial Static Water Level (feet):	13.47
Initial Groundwater Elevation (ft-amsl):	1354.75
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
8:52 AM	Purging start time.						
8:55 AM	11.2	4.0	1262.6	6.93	145.0	60.0	
8:58 AM	11.0	2.5	1234.9	6.74	154.7	48.0	
9:01 AM	11.1	2.0	1225.1	6.70	157.1	36.0	
9:04 AM	11.3	1.7	1223.5	6.69	157.5	24.1	
	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:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**DGP-1500**	Date:	**11/19/2024**
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):	28.7
Initial Static Water Level (feet):	12.44
Initial Groundwater Elevation (ft-amsl):	1346.50
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)	
2:08 PM	Purging start time.						
2:11 PM	11.5	2.4	756.5	7.72	176.2	3.7	
2:14 PM	11.5	1.3	754.7	7.75	219.5	3.6	
2:17 PM	11.6	0.9	755.0	7.75	242.6	3.2	
2:20 PM	11.6	0.6	756.2	7.73	254.2	7.0	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear with black particles Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-15**	Date:	**11/19/2024**
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):	21.53
Initial Groundwater Elevation (ft-amsl):	1344.47
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)	
11:20 AM	Purging start time.						
11:23 AM	9.8	8.6	701.2	7.19	111.2	42.8	
11:26 AM	9.9	8.3	707.7	7.13	115.7	68.3	
11:29 AM	9.8	8.0	717.2	7.11	118.2	66.8	
11:32 AM	9.7	7.7	724.3	7.10	120.3	65.0	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Cloudy Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-16**	Date:	**11/19/2024**
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):	27.4
Initial Static Water Level (feet):	23.31
Initial Groundwater Elevation (ft-amsl):	1345.55
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)	
12:07 PM	Purging start time.						
12:10 PM	9.8	8.9	642.8	7.16	118.4	19.5	
12:13 PM	9.9	8.9	626.5	7.09	124.6	24.4	
12:16 PM	10.0	8.9	628.3	7.06	128.0	20.8	
12:19 PM	10.3	8.9	628.5	7.04	130.5	16.5	
	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:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-17**	Date:	**11/19/2024**
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):	20.6
Initial Static Water Level (feet):	21.10
Initial Groundwater Elevation (ft-amsl):	1344.90
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)	
10:32 AM	Purging start time.						
10:35 AM	9.5	3.6	1726.6	6.90	97.5	3.0	
10:38 AM	9.5	2.0	1730.7	6.85	91.5	3.1	
10:41 AM	9.6	1.4	1733.1	6.84	81.6	3.3	
10:44 AM	9.7	1.1	1731.8	6.83	70.9	2.2	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MW-18**	Date:	**11/19/2024**
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):	41.0
Initial Static Water Level (feet):	20.75
Initial Groundwater Elevation (ft-amsl):	1344.75
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)	
11:41 AM	Purging start time.						
11:44 AM	9.7	3.3	1054.8	7.03	115.4	6.2	
11:47 AM	9.7	1.9	1057.7	7.03	110.7	6.5	
11:50 AM	9.7	1.3	1058.3	7.04	106.6	18.7	
11:53 AM	9.7	1.0	1059.2	7.04	103.1	20.3	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**MWP-7**	Date:	**11/19/2024**
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):	40.3
Initial Static Water Level (feet):	17.20
Initial Groundwater Elevation (ft-amsl):	1350.48
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)	
12:33 PM	Purging start time.						
12:36 PM	10.4	3.3	1609.5	6.47	147.9	2.7	
12:39 PM	10.4	1.9	1616.3	6.47	140.2	3.9	
12:42 PM	10.5	1.4	1622.6	6.49	131.5	3.0	
12:45 PM	10.5	1.1	1620.5	6.50	122.6	3.6	
	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?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**ORG-MW**	Date:	**11/19/2024**
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):	32.3
Initial Static Water Level (feet):	22.11
Initial Groundwater Elevation (ft-amsl):	NA
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)	
10:57 AM	Purging start time.						
11:00 AM	9.8	8.3	755.3	7.33	87.4	7.5	
11:03 AM	9.9	8.1	724.4	7.21	95.6	6.4	
11:06 AM	9.9	8.1	722.0	7.15	101.0	6.0	
11:09 AM	9.9	8.1	719.8	7.11	105.3	5.4	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

Does the well require any future maintenance?	Yes	
If yes, explain:	Well needs ID tag.	

Additional Comments:	Color-Clear Odor-None

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**TDG-301**	Date:	**11/20/2024**
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):	20.4
Initial Static Water Level (feet):	7.59
Initial Groundwater Elevation (ft-amsl):	1375.67
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)	
9:31 AM	Purging start time.						
9:34 AM	10.7	3.9	3133.7	6.94	26.2	11.8	
9:37 AM	10.9	2.2	3136.4	6.80	16.9	13.8	
9:40 AM	11.0	1.6	3129.6	6.78	16.2	9.2	
9:43 AM	11.2	1.2	3125.3	6.77	22.0	7.5	
	Parameters stabilized, sample collected.						

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

D. WELL MAINTENANCE

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

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**TDG-305**	Date:	**11/20/2024**
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):	16.3
Initial Static Water Level (feet):	9.30
Initial Groundwater Elevation (ft-amsl):	1368.78
Equipment Used:	Dedicated Tubing – Peristaltic Pump

C. WELL PURGING

FIELD PARAMETERS [stabilization criteria] RECORD EVERY 3 MINUTES

Time	**Temperature (°C) 10%**	Dissolved Oxygen (mg/L)	**Specific Conductivity (µS/cm) +/- 10%**	**pH (S.U.) +/- 0.1**	ORP (mV)	Turbidity (FNU)	
8:55 AM	Purging start time.						
8:58 AM	10.4	4.1	3300.5	7.00	70.4	15.0	
9:01 AM	10.5	2.4	3257.6	6.85	39.3	15.1	
9:04 AM	11.0	1.7	3173.5	6.84	5.4	15.3	
9:07 AM	10.9	1.3	3096.5	6.85	38.3	18.0	
	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:	Color-Dark tint Odor-Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**UG-90**	Date:	**11/20/2024**
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):	26.8
Initial Static Water Level (feet):	8.56
Initial Groundwater Elevation (ft-amsl):	1381.27
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)	
12:30 PM	Purging start time.						
12:33 PM	10.9	1.8	3372.3	6.86	65.0	10.6	
12:36 PM	11.3	1.3	3378.3	6.91	77.1	7.8	
12:39 PM	11.4	1.0	3377.4	7.06	104.2	5.8	
12:42 PM	11.3	0.8	3386.1	7.17	133.0	6.6	
	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:	Color-Clear with black particles Odor-Strong Sulfur

FORM FOR GROUNDWATER SAMPLING

Project:	**Northwest Iowa Sanitary Landfill**		
Monitoring Well/Piezometer ID:	**UG-201**	Date:	**11/20/2024**
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):	54.4
Initial Static Water Level (feet):	33.33
Initial Groundwater Elevation (ft-amsl):	1377.90
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)	
12:00 PM	Purging start time.						
12:03 PM	8.3	5.3	957.2	7.31	15.2	64.3	
12:06 PM	7.8	4.1	961.9	7.32	48.6	64.1	
12:09 PM	7.2	3.6	965.8	7.33	76.2	52.5	
12:12 PM	7.1	3.2	965.6	7.34	98.6	52.4	
	Parameters stabilized, sample collected.						

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

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

Additional Comments:	Color-Clear Odor-Sulfur

FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-9
Date: 11-19-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry?	Yes
Was water flowing?	No
Standing Water?	Yes, not enough for sample though
Was water discolored?	No
Does water have odor?	No
Was ground discolored?	No
Litter present?	No

D. FIELD MEASUREMENTS

Weather Conditions: 47°F, Cloudy, 20mph wind
Time: 17:00
Field Measurements:

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

COMMENTS: Dry/not enough water for sample

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FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-10
Date: 11-19-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

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

D. FIELD MEASUREMENTS

Weather Conditions: 47°F, cloudy, 20mph wind
Time: 17:15
Field Measurements:

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

COMMENTS: Dry

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FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-11
Date: 11-19-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry?	Yes
Was water flowing?	NO
Standing Water?	NO
Was water discolored?	N/A
Does water have odor?	N/A
Was ground discolored?	NO
Litter present?	NO

D. FIELD MEASUREMENTS

Weather Conditions: 47°F, cloudy, 20 mph wind
Time: 17:20
Field Measurements:

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

COMMENTS: Dry

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FORM FOR SURFACE WATER SAMPLING

Site Name	Northwest Iowa Area Landfill	Permit No.	84-SDP-01-74P
Surface Monitoring Point No.	GU-12	Date	11-19-24

Name of Person Sampling: Homer Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Typically dry.

Was monitoring point dry?	Yes		
Was water flowing?	NO		
Standing Water?	NO		
Was water discolored?	N/A		
Does water have odor?	N/A		
Was ground discolored?	No		
Litter present?	No		

D. FIELD MEASUREMENTS

Weather Conditions: 40°F, windy, Cloudy

Time: 08:00

Field Measurements:

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

COMMENTS Dry

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FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-13
Date: ~~11-2~~ 11-19-24

Name of Person Sampling: Honner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

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

D. FIELD MEASUREMENTS

Weather Conditions: 40°F, windy, cloudy
Time: 08:10
Field Measurements:

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

COMMENTS: Dry

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FORM FOR SURFACE WATER SAMPLING

Site Name	Northwest Iowa Area Landfill	Permit No.	84-SDP-01-74P
Surface Monitoring Point No.	GU-14	Date	11-18-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

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

D. FIELD MEASUREMENTS

Weather Conditions: 50°F, Rain/wind

Time: 16:37

Field Measurements:

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

COMMENTS DRY

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FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: GU-15
Date: 11-18-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Was monitoring point dry? No
Was water flowing? Yes
Standing Water? Yes

Was water discolored? Yes
Does water have odor? No
Was ground discolored? Yes / mud
Litter present? No

D. FIELD MEASUREMENTS

Weather Conditions: 50°F, Rain/wind
Time: 15:45
Field Measurements:

Temperature	10.3	Units	Celsius
Equipment Used	Pro DSS		
pH	7.92	Units	Standard units
Equipment Used	Pro DSS		
Spec.Conductance	914	Units	uS/cm
Equipment Used	Pro DSS		

COMMENTS

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FORM FOR SURFACE WATER SAMPLING

Site Name: Northwest Iowa Area Landfill
Permit No.: 84-SDP-01-74P
Surface Monitoring Point No.: SW-101
Date: 11-18-24

Name of Person Sampling: Konner Roth

A. TYPE OF MOINITORING POINT

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

B. PURPOSE OF MONITORING POINT

Upstream		Downstream	
Within Landfill	X	Other	

C. MONITORING POINT CONDITIONS/LOCATION

Was monitoring point dry? NO
Was water flowing? Yes
Standing Water? Yes

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

D. FIELD MEASUREMENTS

Weather Conditions: 50°F, Rain/Wind
Time: 16:15
Field Measurements:

Temperature	8.5	Units	Celsius
Equipment Used			
pH	8.11	Units	Standard units
Equipment Used			
Spec.Conductance	1076	Units	uS/cm
Equipment Used			

COMMENTS

IDNR Form 542-1324

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

Generated 10/11/2024 11:26:08 AM Revision 1

JOB DESCRIPTION

NWIASL 1st 2024 HMSP

JOB NUMBER

310-285765-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

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

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

Authorization



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Revision 1

Authorized for release by
Conner Calhoun, Client Service Manager
Conner.Calhoun@et.eurofinsus.com
Designee for
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

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Job ID: 310-285765-1 — Eurofins Cedar Falls

Job Narrative
310-285765-1

REVISION

The report being provided is a revision of the original report sent on 7/30/2024. The report (revision 1) is being revised due to Full appendix II herbicides list added to report.

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

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

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

Receipt
The samples were received on 7/12/2024 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 4 coolers at receipt time were 0.6°C, 0.8°C, 1.0°C and 2.8°C.

GC/MS VOA
Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: DG-1205 (310-285765-10).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-427529 recovered above the upper control limit for Trichlorofluoromethane (24.3%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 310-427529/4).

Method 8260D: The continuing calibration verification (CCV) associated with batch 310-427531 recovered above the upper control limit for Trichlorofluoromethane (23.8%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 310-427531/4).

Method 8260D: The method requirement for no headspace was not met. The following volatile samples were analyzed with headspace in the sample container: Trip Blank 1 (310-285765-24), Trip Blank 2 (310-285765-25), Trip Blank 3 (310-285765-26) and Trip Blank 4 (310-285765-27).

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 310-427724. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427592 and analytical batch 310-427635 recovered outside acceptance limits for multiple analytes. There was insufficient holding time to perform a re-extraction or re-analysis; 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 310-427592 and analytical batch 310-427635 recovered outside control limits for multiple analytes.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-427592 and analytical batch 310-427942 recovered outside control limits for the following analyte(s): p-Phenylene diamine. p-Phenylene diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-

analysis was not performed

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 310-427592 and analytical batch 310-427942 recovered outside control limits for the following analytes: Famphur. 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 310-427592 and analytical batch 310-427942 recovered outside control limits for multiple analytes.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-427724 and analytical batch 310-428132 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol.

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427724 and analytical batch 310-428132 recovered outside acceptance limits for multiple analytes. There was insufficient holding time to perform a re-extraction or re-analysis; 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 310-427724 and analytical batch 310-428242 recovered outside control limits for the following analytes: Hexachloropropene and Methapyrilene.

Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427724 and analytical batch 310-428242 recovered outside acceptance limits for multiple analytes, There was insufficient holding time to perform a re-extraction or re-analysis; 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.

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

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

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

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

Metals
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: TG-301 (310-285765-1). 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: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-285765-1	TG-301	Water	07/10/24 15:05	07/12/24 16:30
310-285765-2	TG-305	Water	07/10/24 13:17	07/12/24 16:30
310-285765-3	DG-901	Water	07/10/24 09:48	07/12/24 16:30
310-285765-4	DG-905	Water	07/10/24 16:19	07/12/24 16:30
310-285765-5	DG-1001	Water	07/09/24 18:18	07/12/24 16:30
310-285765-6	DG-1005	Water	07/11/24 08:53	07/12/24 16:30
310-285765-7	DG-1101	Water	07/11/24 12:05	07/12/24 16:30
310-285765-8	DG-1105R	Water	07/11/24 09:29	07/12/24 16:30
310-285765-9	DG-1201	Water	07/11/24 10:06	07/12/24 16:30
310-285765-10	DG-1205	Water	07/11/24 10:39	07/12/24 16:30
310-285765-11	DG-1301	Water	07/10/24 19:35	07/12/24 16:30
310-285765-12	DG-1305	Water	07/10/24 18:35	07/12/24 16:30
310-285765-13	DG-1401	Water	07/10/24 17:57	07/12/24 16:30
310-285765-14	DGP-1500	Water	07/10/24 17:04	07/12/24 16:30
310-285765-15	MW-D	Water	07/09/24 18:18	07/12/24 16:30
310-285765-16	GU-13	Water	07/09/24 15:43	07/12/24 16:30
310-285765-17	SW-101	Water	07/09/24 16:32	07/12/24 16:30
310-285765-18	MWP-7	Water	07/10/24 11:58	07/12/24 16:30
310-285765-19	MW-15	Water	07/10/24 10:19	07/12/24 16:30
310-285765-20	MW-16	Water	07/10/24 12:33	07/12/24 16:30
310-285765-21	MW-17	Water	07/10/24 11:26	07/12/24 16:30
310-285765-22	MW-18	Water	07/09/24 17:30	07/12/24 16:30
310-285765-23	ORG-MW	Water	07/10/24 11:01	07/12/24 16:30
310-285765-24	Trip Blank 1	Water	07/09/24 00:00	07/12/24 16:30
310-285765-25	Trip Blank 2	Water	07/09/24 00:00	07/12/24 16:30
310-285765-26	Trip Blank 3	Water	07/09/24 00:00	07/12/24 16:30
310-285765-27	Trip Blank 4	Water	07/09/24 00:00	07/12/24 16:30

Detection Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: TG-301 — Lab Sample ID: 310-285765-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.534	J	1.00	0.450	ug/L	1		8260D	Total/NA
Barium	0.0501		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00208		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00238	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00284		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00508		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00236	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00238	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	21.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: TG-305 — Lab Sample ID: 310-285765-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000907	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0479		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000103	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000649		0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00117		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0158		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00222	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	183		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-901 — Lab Sample ID: 310-285765-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	290		10.0	3.10	ug/L	1		8260D	Total/NA
Benzene	1.19		0.500	0.220	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	7.87	J	10.0	2.10	ug/L	1		8260D	Total/NA
Arsenic	0.0143		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0713		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000301		0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.00772		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0146		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00397		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00814		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00172	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.00457	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	45.0		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-905 — Lab Sample ID: 310-285765-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0343		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000480	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000551		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00256	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00225	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.33	J	5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1001 — Lab Sample ID: 310-285765-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0471		0.00200	0.000660	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cedar Falls

Client Sample ID: DG-1001 (Continued) — Lab Sample ID: 310-285765-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.000575		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00200	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000355	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00527		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00134	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	14.0		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1005 — Lab Sample ID: 310-285765-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00104	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0445		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000294	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000308	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00480	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	43.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1101 — Lab Sample ID: 310-285765-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00441		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0848		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.000332	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000211		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.0123		0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00679		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0158		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.0195		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0140		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00388	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.0283		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0373		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	1800		60.0	44.4	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1105R — Lab Sample ID: 310-285765-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.19	J	10.0	3.10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	4.16	J	10.0	2.10	ug/L	1		8260D	Total/NA
Carbon disulfide	0.569	J	1.00	0.450	ug/L	1		8260D	Total/NA
Arsenic	0.00210		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0254		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000171	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Vanadium	0.00154	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	4.00	J	5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1201 — Lab Sample ID: 310-285765-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0174		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000288	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00371	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00221		0.000500	0.000260	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-1201 (Continued) — Lab Sample ID: 310-285765-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.00236	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	18.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1205 — Lab Sample ID: 310-285765-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.850	J	1.00	0.210	ug/L	1		8260D	Total/NA
Dichlorodifluoromethane	6.43		3.00	0.250	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.99		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	1.31		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	0.499	J	1.00	0.430	ug/L	1		8260D	Total/NA
Vinyl chloride	0.375	J	1.00	0.180	ug/L	1		8260D	Total/NA
Dichlorofluoromethane	21.7		1.00	0.310	ug/L	1		8260D	Total/NA
Arsenic	0.00244		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0136		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000506		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00565		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00139		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00398	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00771		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0144	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	45.7		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1301 — Lab Sample ID: 310-285765-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.79		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.65		1.00	0.220	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.480	J	1.00	0.480	ug/L	1		8260D	Total/NA
Trichloroethene	2.41		1.00	0.430	ug/L	1		8260D	Total/NA
Barium	0.0403		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000543		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00892		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.0109		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00679		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00416	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0160	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	109		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1305 — Lab Sample ID: 310-285765-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	6.74		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.42		1.00	0.210	ug/L	1		8260D	Total/NA
1,4-Dichlorobenzene	0.975	J	1.00	0.230	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	4.83		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.588	J	1.00	0.270	ug/L	1		8260D	Total/NA
Arsenic	0.000672	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0700		0.00200	0.000660	mg/L	1		6020B	Total/NA
Lead	0.00154		0.000500	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00273	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	11.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1401 — Lab Sample ID: 310-285765-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.478	J	1.00	0.220	ug/L	1		8260D	Total/NA
Barium	0.0408		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000548		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00315	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000966		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00236	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00367	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	130		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DGP-1500 — Lab Sample ID: 310-285765-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.20		0.500	0.220	ug/L	1		8260D	Total/NA
Carbon disulfide	0.678	J	1.00	0.450	ug/L	1		8260D	Total/NA
Arsenic	0.0160		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0405		0.00200	0.000660	mg/L	1		6020B	Total/NA
Selenium	0.00205	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Total Suspended Solids	8.00		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D — Lab Sample ID: 310-285765-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	26.3		10.0	3.10	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.258	J	1.00	0.210	ug/L	1		8260D	Total/NA
Arsenic	0.000974	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0759		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000401	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00239	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000595		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00300	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00171	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	51.0		2.50	1.85	mg/L	1		I-3765-85	Total/NA

Client Sample ID: GU-13 — Lab Sample ID: 310-285765-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11.4		10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.0147		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0944		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00113		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00351	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000824		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00756		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00436	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	125		3.75	2.78	mg/L	1		I-3765-85	Total/NA

Client Sample ID: SW-101 — Lab Sample ID: 310-285765-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10.2		10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.00721		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.243		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00338		0.000500	0.000170	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SW-101 (Continued) — Lab Sample ID: 310-285765-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	0.00205	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000470	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0169		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00357	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.109		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	54.6		1.88	1.39	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MWP-7 — Lab Sample ID: 310-285765-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.61		1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: MW-15 — Lab Sample ID: 310-285765-19

No Detections.

Client Sample ID: MW-16 — Lab Sample ID: 310-285765-20

No Detections.

Client Sample ID: MW-17 — Lab Sample ID: 310-285765-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.800	J	1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 310-285765-22

No Detections.

Client Sample ID: ORG-MW — Lab Sample ID: 310-285765-23

No Detections.

Client Sample ID: Trip Blank 1 — Lab Sample ID: 310-285765-24

No Detections.

Client Sample ID: Trip Blank 2 — Lab Sample ID: 310-285765-25

No Detections.

Client Sample ID: Trip Blank 3 — Lab Sample ID: 310-285765-26

No Detections.

Client Sample ID: Trip Blank 4 — Lab Sample ID: 310-285765-27

No Detections.

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: TG-301
Date Collected: 07/10/24 15:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-1
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			07/17/24 13:22	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 13:22	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 13:22	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 13:22	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 13:22	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 13:22	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 13:22	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 13:22	1
Carbon disulfide	**0.534**	**J**	1.00	0.450	ug/L			07/17/24 13:22	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 13:22	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 13:22	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 13:22	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 13:22	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 13:22	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 13:22	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 13:22	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 13:22	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 13:22	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 13:22	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 13:22	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 13:22	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 13:22	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 13:22	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 13:22	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 13:22	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 13:22	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 13:22	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 13:22	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 13:59	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 13:22	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 13:22	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 13:22	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 13:22	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 13:22	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 13:22	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 13:22	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 13:22	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 13:22	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 13:22	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 13:22	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 13:22	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 13:22	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 13:22	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 13:22	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 13:22	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 13:22	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/24 13:22*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: TG-301
Date Collected: 07/10/24 15:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-1
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/18/24 13:59*	*1*
Dibromofluoromethane (Surr)	*118*		*73 - 130*		*07/17/24 13:22*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*07/18/24 13:59*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/17/24 13:22*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 13:59*	*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		07/16/24 09:00	07/22/24 20:20	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:20	1
Barium	**0.0501**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:20	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 16:59	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:20	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:20	1
Cobalt	**0.00208**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:20	1
Copper	**0.00238**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:20	1
Lead	**0.00284**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:20	1
Nickel	**0.00508**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 16:59	1
Selenium	**0.00236**	**J**	0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:20	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:20	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:20	1
Vanadium	**0.00238**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:20	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**21.0**		5.00	3.70	mg/L			07/16/24 09:40	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: TG-305
Date Collected: 07/10/24 13:17
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-2
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			07/17/24 14:53	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 14:53	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 14:53	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 14:53	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 14:53	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 14:53	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 14:53	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 14:53	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 14:53	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 14:53	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 14:53	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 14:53	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 14:53	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 14:53	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 14:53	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 14:53	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 14:53	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 14:53	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 14:53	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 14:53	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 14:53	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 14:53	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 14:53	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 14:53	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 14:53	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 14:53	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 14:53	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 14:53	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 14:22	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 14:53	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 14:53	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 14:53	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 14:53	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 14:53	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 14:53	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 14:53	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 14:53	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 14:53	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 14:53	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 14:53	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 14:53	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 14:53	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 14:53	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 14:53	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 14:53	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 14:53	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/24 14:53*	*1*

Client Sample ID: TG-305
Date Collected: 07/10/24 13:17
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-2
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*		*07/18/24 14:22*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/17/24 14:53*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*07/18/24 14:22*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 14:53*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 14:22*	*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		07/16/24 09:00	07/22/24 20:23	1
Arsenic	**0.000907**	**J**	0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:23	1
Barium	**0.0479**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:23	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:03	1
Cadmium	**0.000103**	**J**	0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:23	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:23	1
Cobalt	**0.000649**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:23	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:23	1
Lead	**0.00117**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:23	1
Nickel	**0.0158**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:03	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:23	1
Silver	<0.00100	F1 F2	0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:23	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:23	1
Vanadium	**0.00222**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:23	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**183**		15.0	11.1	mg/L			07/16/24 09:40	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-901
Date Collected: 07/10/24 09:48
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**290**		10.0	3.10	ug/L			07/18/24 14:44	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 14:44	1
Benzene	**1.19**		0.500	0.220	ug/L			07/18/24 14:44	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 14:44	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 14:44	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 14:44	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 14:44	1
2-Butanone (MEK)	**7.87**	**J**	10.0	2.10	ug/L			07/18/24 14:44	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 14:44	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 14:44	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 14:44	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 14:44	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 14:44	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 14:44	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 14:44	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 14:44	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 14:44	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 14:44	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 14:44	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 14:44	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 14:44	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 14:44	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 14:44	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 14:44	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 14:44	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 14:44	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 14:44	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 14:44	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 14:44	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 14:44	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 14:44	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 14:44	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 14:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 14:44	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 14:44	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 14:44	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 14:44	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 14:44	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 14:44	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 14:44	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 14:44	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 14:44	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 14:44	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 14:44	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 14:44	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 14:44	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/18/24 14:44*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-901

Date Collected: 07/10/24 09:48
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*07/18/24 14:44*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 14:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		07/16/24 09:00	07/22/24 20:34	1
Arsenic	**0.0143**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:34	1
Barium	**0.0713**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:28	1
Cadmium	**0.000301**		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:34	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:34	1
Cobalt	**0.00772**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:34	1
Copper	**0.0146**		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:34	1
Lead	**0.00397**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:34	1
Nickel	**0.00814**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:28	1
Selenium	**0.00172**	**J**	0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:34	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:34	1
Vanadium	**0.00457**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:34	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**45.0**		15.0	11.1	mg/L			07/16/24 09:40	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
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			07/18/24 15:07	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 15:07	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 15:07	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 15:07	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 15:07	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 15:07	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 15:07	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 15:07	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 15:07	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 15:07	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 15:07	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 15:07	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 15:07	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 15:07	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 15:07	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 15:07	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 15:07	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 15:07	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 15:07	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 15:07	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 15:07	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 15:07	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 15:07	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 15:07	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 15:07	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 15:07	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 15:07	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 15:07	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 15:07	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 15:07	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 15:07	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 15:07	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 15:07	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 15:07	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 15:07	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 15:07	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 15:07	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 15:07	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 15:07	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 15:07	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 15:07	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 15:07	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 15:07	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 15:07	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 15:07	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 15:07	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 15:07	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 15:07	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 15:07	1

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
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			07/18/24 15:07	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 15:07	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 15:07	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 15:07	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 15:07	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 15:07	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 15:07	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 15:07	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 15:07	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 15:07	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 15:07	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/18/24 15:07*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*07/18/24 15:07*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 15:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<10.0		10.0	0.640	ug/L		07/17/24 15:18	07/18/24 17:36	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		07/17/24 15:18	07/18/24 17:36	1
Acetophenone	<10.0		10.0	0.690	ug/L		07/17/24 15:18	07/18/24 17:36	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/22/24 11:29	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/22/24 11:29	1
Anthracene	<10.0	*+	10.0	0.870	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/18/24 17:36	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		07/17/24 15:18	07/18/24 17:36	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		07/17/24 15:18	07/18/24 17:36	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		07/17/24 15:18	07/18/24 17:36	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		07/17/24 15:18	07/18/24 17:36	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Bromophenyl phenyl ether	<10.0	*+	10.0	0.700	ug/L		07/17/24 15:18	07/18/24 17:36	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		07/17/24 15:18	07/18/24 17:36	1
Chlorobenzilate	<10.0	*1	10.0	3.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		07/17/24 15:18	07/18/24 17:36	1
2-Chloronaphthalene	<10.0	*+	10.0	0.640	ug/L		07/17/24 15:18	07/18/24 17:36	1
2-Chlorophenol	<10.0	*1	10.0	0.540	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		07/17/24 15:18	07/18/24 17:36	1
Chrysene	<10.0		10.0	0.870	ug/L		07/17/24 15:18	07/18/24 17:36	1
Diallate	<10.0		10.0	4.00	ug/L		07/17/24 15:18	07/22/24 11:29	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		07/17/24 15:18	07/18/24 17:36	1
Dibenzofuran	<10.0	*+	10.0	0.740	ug/L		07/17/24 15:18	07/18/24 17:36	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,4-Dichlorophenol	<10.0	*1	10.0	0.850	ug/L		07/17/24 15:18	07/18/24 17:36	1

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dichlorophenol	<10.0	*- *1	10.0	0.690	ug/L		07/17/24 15:18	07/18/24 17:36	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		07/17/24 15:18	07/18/24 17:36	1
Dimethoate	<10.0	*1	10.0	3.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		07/17/24 15:18	07/22/24 11:29	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		07/17/24 15:18	07/18/24 17:36	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		07/17/24 15:18	07/18/24 17:36	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		07/17/24 15:18	07/18/24 17:36	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		07/17/24 15:18	07/18/24 17:36	1
4,6-Dinitro-2-methylphenol	<10.0	*- *1	10.0	6.90	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,4-Dinitrophenol	<20.0	*- *1	20.0	13.0	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		07/17/24 15:18	07/18/24 17:36	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		07/17/24 15:18	07/18/24 17:36	1
Dinoseb	<10.0	*1	10.0	2.40	ug/L		07/17/24 15:18	07/22/24 11:29	1
Diphenylamine	<10.0		10.0	6.00	ug/L		07/17/24 15:18	07/18/24 17:36	1
Disulfoton	<10.0	*1	10.0	2.40	ug/L		07/17/24 15:18	07/22/24 11:29	1
Ethyl methanesulfonate	<10.0	*1	10.0	3.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
Ethyl Parathion	<10.0	*1	10.0	2.20	ug/L		07/17/24 15:18	07/22/24 11:29	1
Famphur	<10.0	*+	10.0	3.80	ug/L		07/17/24 15:18	07/22/24 11:29	1
Fluoranthene	<10.0		10.0	1.70	ug/L		07/17/24 15:18	07/18/24 17:36	1
Fluorene	<10.0		10.0	0.790	ug/L		07/17/24 15:18	07/18/24 17:36	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		07/17/24 15:18	07/18/24 17:36	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		07/17/24 15:18	07/18/24 17:36	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		07/17/24 15:18	07/18/24 17:36	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		07/17/24 15:18	07/18/24 17:36	1
Hexachloropropene	<10.0	*1	10.0	2.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		07/17/24 15:18	07/18/24 17:36	1
Isodrin	<10.0	*1	10.0	4.70	ug/L		07/17/24 15:18	07/22/24 11:29	1
Isophorone	<10.0		10.0	0.930	ug/L		07/17/24 15:18	07/18/24 17:36	1
Isosafrole	<10.0	*1	10.0	2.30	ug/L		07/17/24 15:18	07/22/24 11:29	1
Kepone	<10.0	*1	10.0	1.00	ug/L		07/17/24 15:18	07/22/24 11:29	1
Methapyrilene	<10.0	*1	10.0	0.760	ug/L		07/17/24 15:18	07/22/24 11:29	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		07/17/24 15:18	07/22/24 11:29	1
Methyl methanesulfonate	<10.0	*1	10.0	3.30	ug/L		07/17/24 15:18	07/22/24 11:29	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		07/17/24 15:18	07/18/24 17:36	1
Methyl parathion	<10.0	*1	10.0	2.30	ug/L		07/17/24 15:18	07/22/24 11:29	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		07/17/24 15:18	07/18/24 17:36	1
1,4-Naphthoquinone	<10.0	*1	10.0	3.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		07/17/24 15:18	07/22/24 11:29	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		07/17/24 15:18	07/22/24 11:29	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		07/17/24 15:18	07/18/24 17:36	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		07/17/24 15:18	07/18/24 17:36	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		07/17/24 15:18	07/18/24 17:36	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		07/17/24 15:18	07/22/24 11:29	1
2-Nitrophenol	<10.0	*- *1	10.0	6.80	ug/L		07/17/24 15:18	07/18/24 17:36	1
4-Nitrophenol	<10.0	*- *1	10.0	7.60	ug/L		07/17/24 15:18	07/18/24 17:36	1

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		07/17/24 15:18	07/22/24 11:29	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		07/17/24 15:18	07/18/24 17:36	1
N-Nitrosodi-n-butylamine	<10.0	*1	10.0	3.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		07/17/24 15:18	07/18/24 17:36	1
N-Nitrosodiphenylamine	<10.0	*+	10.0	0.750	ug/L		07/17/24 15:18	07/18/24 17:36	1
N-Nitrosomethylethylamine	<10.0	*1	10.0	4.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/22/24 11:29	1
N-Nitrosopyrrolidine	<10.0	*1	10.0	3.60	ug/L		07/17/24 15:18	07/22/24 11:29	1
o,o',o''-Triethylphosphorothioate	<10.0	*1	10.0	3.20	ug/L		07/17/24 15:18	07/22/24 11:29	1
o-Toluidine	<10.0		10.0	2.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
p-Dimethylamino azobenzene	<10.0	*1	10.0	2.20	ug/L		07/17/24 15:18	07/22/24 11:29	1
Pentachlorobenzene	<10.0	*1	10.0	2.80	ug/L		07/17/24 15:18	07/22/24 11:29	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		07/17/24 15:18	07/22/24 11:29	1
Pentachlorophenol	<10.0	*- *1	10.0	9.60	ug/L		07/17/24 15:18	07/18/24 17:36	1
Phenacetin	<10.0	*1	10.0	1.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
Phenanthrene	<10.0	*+	10.0	0.790	ug/L		07/17/24 15:18	07/18/24 17:36	1
Phenol	<10.0	*1	10.0	1.10	ug/L		07/17/24 15:18	07/18/24 17:36	1
1,4-Phenylenediamine	<10.0	*-	10.0	1.90	ug/L		07/17/24 15:18	07/22/24 11:29	1
Phorate	<10.0	*1	10.0	3.20	ug/L		07/17/24 15:18	07/22/24 11:29	1
Pronamide	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/22/24 11:29	1
Pyrene	<10.0		10.0	0.790	ug/L		07/17/24 15:18	07/18/24 17:36	1
Safrole	<10.0	*1	10.0	2.80	ug/L		07/17/24 15:18	07/22/24 11:29	1
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,3,4,6-Tetrachlorophenol	<10.0	*- *1	10.0	5.30	ug/L		07/17/24 15:18	07/18/24 17:36	1
Thionazin	<10.0	*1	10.0	3.50	ug/L		07/17/24 15:18	07/22/24 11:29	1
2,4,5-Trichlorophenol	<10.0	*1	10.0	5.30	ug/L		07/17/24 15:18	07/18/24 17:36	1
2,4,6-Trichlorophenol	<10.0	*- *1	10.0	5.00	ug/L		07/17/24 15:18	07/18/24 17:36	1
1,3,5-Trinitrobenzene	<10.0	*1	10.0	2.30	ug/L		07/17/24 15:18	07/22/24 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*104*		*39 - 118*	*07/17/24 15:18*	*07/18/24 17:36*	*1*
2-Fluorophenol (Surr)	*72*		*25 - 110*	*07/17/24 15:18*	*07/18/24 17:36*	*1*
Nitrobenzene-d5 (Surr)	*107*		*45 - 129*	*07/17/24 15:18*	*07/18/24 17:36*	*1*
Phenol-d5 (Surr)	*67*		*21 - 110*	*07/17/24 15:18*	*07/18/24 17:36*	*1*
Terphenyl-d14 (Surr)	*118*		*12 - 144*	*07/17/24 15:18*	*07/18/24 17:36*	*1*
2,4,6-Tribromophenol (Surr)	*109*		*27 - 136*	*07/17/24 15:18*	*07/18/24 17:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	2.60	mg/L			07/17/24 09:57	1
Isobutanol	<10.0		10.0	2.40	mg/L			07/17/24 09:57	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0954		0.0954	0.0238	ug/L		07/16/24 12:34	07/22/24 12:50	1
4,4'-DDE	<0.0954		0.0954	0.0286	ug/L		07/16/24 12:34	07/22/24 12:50	1
4,4'-DDT	<0.0954		0.0954	0.0191	ug/L		07/16/24 12:34	07/22/24 12:50	1
Aldrin	<0.0954		0.0954	0.0210	ug/L		07/16/24 12:34	07/22/24 12:50	1
alpha-BHC	<0.0954		0.0954	0.00954	ug/L		07/16/24 12:34	07/22/24 12:50	1
beta-BHC	<0.0954		0.0954	0.0401	ug/L		07/16/24 12:34	07/22/24 12:50	1

Client Sample ID: DG-905

Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	<1.91		1.91	0.372	ug/L		07/16/24 12:34	07/22/24 12:50	1
delta-BHC	<0.0954		0.0954	0.0305	ug/L		07/16/24 12:34	07/22/24 12:50	1
Dieldrin	<0.0954		0.0954	0.0200	ug/L		07/16/24 12:34	07/22/24 12:50	1
Endosulfan I	<0.0954		0.0954	0.0267	ug/L		07/16/24 12:34	07/22/24 12:50	1
Endosulfan II	<0.0954		0.0954	0.0248	ug/L		07/16/24 12:34	07/22/24 12:50	1
Endosulfan sulfate	<0.0954		0.0954	0.0172	ug/L		07/16/24 12:34	07/22/24 12:50	1
Endrin	<0.0954		0.0954	0.0267	ug/L		07/16/24 12:34	07/22/24 12:50	1
Endrin aldehyde	<0.0954		0.0954	0.0257	ug/L		07/16/24 12:34	07/22/24 12:50	1
gamma-BHC (Lindane)	<0.0954		0.0954	0.00954	ug/L		07/16/24 12:34	07/22/24 12:50	1
Heptachlor	<0.0954		0.0954	0.0219	ug/L		07/16/24 12:34	07/22/24 12:50	1
Heptachlor epoxide	<0.0954		0.0954	0.0305	ug/L		07/16/24 12:34	07/22/24 12:50	1
Methoxychlor	<0.0954		0.0954	0.0305	ug/L		07/16/24 12:34	07/22/24 12:50	1
Toxaphene	<1.91		1.91	0.954	ug/L		07/16/24 12:34	07/22/24 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*10 - 136*	*07/16/24 12:34*	*07/22/24 12:50*	*1*
Tetrachloro-m-xylene	*90*		*10 - 130*	*07/16/24 12:34*	*07/22/24 12:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.91		1.91	0.782	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1221	<1.91		1.91	0.782	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1232	<1.91		1.91	0.782	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1242	<1.91		1.91	0.782	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1248	<1.91		1.91	0.658	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1254	<1.91		1.91	0.658	ug/L		07/16/24 12:34	07/22/24 12:50	1
PCB-1260	<1.91		1.91	0.658	ug/L		07/16/24 12:34	07/22/24 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*10 - 136*	*07/16/24 12:34*	*07/22/24 12:50*	*1*
Tetrachloro-m-xylene	*90*		*10 - 130*	*07/16/24 12:34*	*07/22/24 12:50*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.619		0.619	0.258	ug/L		07/17/24 14:47	07/18/24 06:32	1
Silvex (2,4,5-TP)	<0.0516		0.0516	0.0227	ug/L		07/17/24 14:47	07/18/24 06:32	1
2,4,5-T	<0.155		0.155	0.0671	ug/L		07/17/24 14:47	07/18/24 06:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*77*		*34 - 142*	*07/17/24 14:47*	*07/18/24 06:32*	*1*
DCAA	*65*		*34 - 142*	*07/17/24 14:47*	*07/18/24 06:32*	*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		07/16/24 09:00	07/22/24 20:36	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:36	1
Barium	**0.0343**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:36	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:32	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:36	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:36	1
Cobalt	**0.000480**	**J**	0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:36	1

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:36	1
Lead	**0.000551**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:36	1
Nickel	**0.00256**	**J**	0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:32	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:36	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:36	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:36	1
Vanadium	**0.00225**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:36	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:36	1
Tin	<0.00500		0.00500	0.00230	mg/L		07/16/24 09:00	07/22/24 20:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		07/28/24 17:30	07/29/24 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00350	mg/L		07/17/24 10:31	07/19/24 18:06	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		07/17/24 18:10	07/17/24 22:25	1
Total Suspended Solids (USGS I-3765-85)	**4.33**	**J**	5.00	3.70	mg/L			07/16/24 09:40	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1001
Date Collected: 07/09/24 18:18
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-5
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			07/17/24 16:01	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 16:01	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 16:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 16:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 16:01	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 16:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 16:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 16:01	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 16:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 16:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 16:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 16:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 16:01	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 16:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 16:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 16:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 16:01	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 16:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 16:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 16:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 16:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 16:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 16:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 16:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 16:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 16:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 16:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 16:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 15:29	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 16:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 16:01	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 16:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 16:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 16:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 16:01	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 16:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 16:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 16:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 16:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 16:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 16:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 16:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 16:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 16:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 16:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 16:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/17/24 16:01*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1001
Date Collected: 07/09/24 18:18
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/18/24 15:29*	*1*
Dibromofluoromethane (Surr)	*118*		*73 - 130*		*07/17/24 16:01*	*1*
Dibromofluoromethane (Surr)	*102*		*73 - 130*		*07/18/24 15:29*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/17/24 16:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/18/24 15:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		07/16/24 09:00	07/22/24 20:47	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:47	1
Barium	**0.0471**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:47	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:35	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:47	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:47	1
Cobalt	**0.000575**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:47	1
Copper	**0.00200**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:47	1
Lead	**0.000355**	**J**	0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:47	1
Nickel	**0.00527**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:35	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:47	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:47	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:47	1
Vanadium	**0.00134**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:47	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**14.0**		1.88	1.39	mg/L			07/15/24 13:01	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1005
Date Collected: 07/11/24 08:53
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-6
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			07/17/24 16:24	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 16:24	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 16:24	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 16:24	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 16:24	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 16:24	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 16:24	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 16:24	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 16:24	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 16:24	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 16:24	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 16:24	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 16:24	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 16:24	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 16:24	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 16:24	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 16:24	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 16:24	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 16:24	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 16:24	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 16:24	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 16:24	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 16:24	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 16:24	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 16:24	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 16:24	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 16:24	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 16:24	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 15:52	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 16:24	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 16:24	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 16:24	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 16:24	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 16:24	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 16:24	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 16:24	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 16:24	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 16:24	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 16:24	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 16:24	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 16:24	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 16:24	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 16:24	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 16:24	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 16:24	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 16:24	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 16:24*	*1*

Client Sample ID: DG-1005
Date Collected: 07/11/24 08:53
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/18/24 15:52*	*1*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*07/17/24 16:24*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*07/18/24 15:52*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 16:24*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 15:52*	*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		07/16/24 09:00	07/22/24 20:49	1
Arsenic	**0.00104**	**J**	0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:49	1
Barium	**0.0445**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:49	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:39	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:49	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:49	1
Cobalt	**0.000294**	**J**	0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:49	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:49	1
Lead	**0.000308**	**J**	0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:49	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:39	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:49	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:49	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:49	1
Vanadium	**0.00480**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:49	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**43.3**		5.00	3.70	mg/L			07/17/24 11:57	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
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			07/17/24 16:47	1
Acrolein	<10.0		10.0	3.60	ug/L			07/17/24 16:47	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 16:47	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/17/24 16:47	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 16:47	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 16:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 16:47	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 16:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 16:47	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 16:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 16:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 16:47	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 16:47	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 16:47	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 16:47	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 16:47	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 16:47	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/17/24 16:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 16:47	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 16:47	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 16:47	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 16:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 16:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 16:47	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/17/24 16:47	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 16:47	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/17/24 16:47	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 16:47	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 16:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 16:47	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 16:47	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/17/24 16:47	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/17/24 16:47	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/17/24 16:47	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 16:47	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/17/24 16:47	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 16:47	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 16:14	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/17/24 16:47	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 16:47	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/17/24 16:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 16:47	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/17/24 16:47	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/17/24 16:47	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 16:47	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 16:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 16:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 16:47	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 16:47	1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
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			07/17/24 16:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 16:47	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 16:47	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/17/24 16:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 16:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 16:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 16:47	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 16:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 16:47	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 16:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 16:47	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 16:47*	*1*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/18/24 16:14*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/17/24 16:47*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/18/24 16:14*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 16:47*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 16:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<10.0	*-	10.0	0.640	ug/L		07/18/24 13:11	07/23/24 17:45	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		07/18/24 13:11	07/23/24 17:45	1
Acetophenone	<10.0	*-	10.0	0.690	ug/L		07/18/24 13:11	07/23/24 17:45	1
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/24/24 14:48	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/24/24 14:48	1
Anthracene	<10.0		10.0	0.870	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/23/24 17:45	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		07/18/24 13:11	07/23/24 17:45	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		07/18/24 13:11	07/23/24 17:45	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		07/18/24 13:11	07/23/24 17:45	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		07/18/24 13:11	07/23/24 17:45	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 17:45	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		07/18/24 13:11	07/23/24 17:45	1
Chlorobenzilate	<10.0	*-	10.0	3.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
4-Chloro-3-methylphenol	<10.0	*-	10.0	0.840	ug/L		07/18/24 13:11	07/23/24 17:45	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		07/18/24 13:11	07/23/24 17:45	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Chlorophenyl phenyl ether	<10.0	*-	10.0	0.690	ug/L		07/18/24 13:11	07/23/24 17:45	1
Chrysene	<10.0		10.0	0.870	ug/L		07/18/24 13:11	07/23/24 17:45	1
Diallate	<10.0	*-	10.0	4.00	ug/L		07/18/24 13:11	07/24/24 14:48	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		07/18/24 13:11	07/23/24 17:45	1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	<10.0	*-	10.0	0.740	ug/L		07/18/24 13:11	07/23/24 17:45	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,4-Dichlorophenol	<10.0	*-	10.0	0.850	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		07/18/24 13:11	07/23/24 17:45	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		07/18/24 13:11	07/23/24 17:45	1
Dimethoate	<10.0	*-	10.0	3.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
7,12-Dimethylbenz(a)anthracene	<10.0	*-	10.0	1.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		07/18/24 13:11	07/24/24 14:48	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		07/18/24 13:11	07/23/24 17:45	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		07/18/24 13:11	07/23/24 17:45	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		07/18/24 13:11	07/23/24 17:45	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		07/18/24 13:11	07/23/24 17:45	1
4,6-Dinitro-2-methylphenol	<10.0	*1	10.0	6.90	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,4-Dinitrophenol	<20.0	*1	20.0	13.0	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,6-Dinitrotoluene	<10.0	*-	10.0	0.520	ug/L		07/18/24 13:11	07/23/24 17:45	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		07/18/24 13:11	07/23/24 17:45	1
Dinoseb	<10.0		10.0	2.40	ug/L		07/18/24 13:11	07/24/24 14:48	1
Diphenylamine	<10.0		10.0	6.00	ug/L		07/18/24 13:11	07/23/24 17:45	1
Disulfoton	<10.0	*-	10.0	2.40	ug/L		07/18/24 13:11	07/24/24 14:48	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
Ethyl Parathion	<10.0	*-	10.0	2.20	ug/L		07/18/24 13:11	07/24/24 14:48	1
Famphur	<10.0		10.0	3.80	ug/L		07/18/24 13:11	07/24/24 14:48	1
Fluoranthene	<10.0		10.0	1.70	ug/L		07/18/24 13:11	07/23/24 17:45	1
Fluorene	<10.0	*-	10.0	0.790	ug/L		07/18/24 13:11	07/23/24 17:45	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 17:45	1
Hexachlorobutadiene	<10.0	*-	10.0	0.860	ug/L		07/18/24 13:11	07/23/24 17:45	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		07/18/24 13:11	07/23/24 17:45	1
Hexachloroethane	<10.0	*-	10.0	0.970	ug/L		07/18/24 13:11	07/23/24 17:45	1
Hexachloropropene	<10.0	*1	10.0	2.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		07/18/24 13:11	07/23/24 17:45	1
Isodrin	<10.0	*-	10.0	4.70	ug/L		07/18/24 13:11	07/24/24 14:48	1
Isophorone	<10.0	*-	10.0	0.930	ug/L		07/18/24 13:11	07/23/24 17:45	1
Isosafrole	<10.0		10.0	2.30	ug/L		07/18/24 13:11	07/24/24 14:48	1
Kepone	<10.0		10.0	1.00	ug/L		07/18/24 13:11	07/24/24 14:48	1
Methapyrilene	<10.0	*- *1	10.0	0.760	ug/L		07/18/24 13:11	07/24/24 14:48	1
3-Methylcholanthrene	<10.0	*-	10.0	0.320	ug/L		07/18/24 13:11	07/24/24 14:48	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		07/18/24 13:11	07/24/24 14:48	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		07/18/24 13:11	07/23/24 17:45	1
Methyl parathion	<10.0	*-	10.0	2.30	ug/L		07/18/24 13:11	07/24/24 14:48	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 17:45	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		07/18/24 13:11	07/24/24 14:48	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		07/18/24 13:11	07/24/24 14:48	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		07/18/24 13:11	07/23/24 17:45	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		07/18/24 13:11	07/23/24 17:45	1
Nitrobenzene	<10.0	*-	10.0	0.800	ug/L		07/18/24 13:11	07/23/24 17:45	1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		07/18/24 13:11	07/24/24 14:48	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		07/18/24 13:11	07/23/24 17:45	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		07/18/24 13:11	07/23/24 17:45	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		07/18/24 13:11	07/24/24 14:48	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		07/18/24 13:11	07/23/24 17:45	1
N-Nitrosodi-n-butylamine	<10.0	*-	10.0	3.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		07/18/24 13:11	07/23/24 17:45	1
N-Nitrosodiphenylamine	<10.0	*-	10.0	0.750	ug/L		07/18/24 13:11	07/23/24 17:45	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
N-Nitrosopiperidine	<10.0	*-	10.0	2.70	ug/L		07/18/24 13:11	07/24/24 14:48	1
N-Nitrosopyrrolidine	<10.0	*-	10.0	3.60	ug/L		07/18/24 13:11	07/24/24 14:48	1
o,o',o''-Triethylphosphorothioate	<10.0	*-	10.0	3.20	ug/L		07/18/24 13:11	07/24/24 14:48	1
o-Toluidine	<10.0		10.0	2.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/24/24 14:48	1
Pentachlorobenzene	<10.0	*-	10.0	2.80	ug/L		07/18/24 13:11	07/24/24 14:48	1
Pentachloronitrobenzene	<10.0	*-	10.0	5.80	ug/L		07/18/24 13:11	07/24/24 14:48	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		07/18/24 13:11	07/23/24 17:45	1
Phenacetin	<10.0	*-	10.0	1.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
Phenanthrene	<10.0		10.0	0.790	ug/L		07/18/24 13:11	07/23/24 17:45	1
Phenol	<10.0		10.0	1.10	ug/L		07/18/24 13:11	07/23/24 17:45	1
1,4-Phenylenediamine	<10.0	*-	10.0	1.90	ug/L		07/18/24 13:11	07/24/24 14:48	1
Phorate	<10.0	*-	10.0	3.20	ug/L		07/18/24 13:11	07/24/24 14:48	1
Pronamide	<10.0	*-	10.0	2.70	ug/L		07/18/24 13:11	07/24/24 14:48	1
Pyrene	<10.0		10.0	0.790	ug/L		07/18/24 13:11	07/23/24 17:45	1
Safrole	<10.0	*-	10.0	2.80	ug/L		07/18/24 13:11	07/24/24 14:48	1
1,2,4,5-Tetrachlorobenzene	<10.0	*-	10.0	0.540	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		07/18/24 13:11	07/23/24 17:45	1
Thionazin	<10.0	*-	10.0	3.50	ug/L		07/18/24 13:11	07/24/24 14:48	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		07/18/24 13:11	07/23/24 17:45	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		07/18/24 13:11	07/23/24 17:45	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		07/18/24 13:11	07/24/24 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*39 - 118*	*07/18/24 13:11*	*07/23/24 17:45*	*1*
2-Fluorophenol (Surr)	*54*		*25 - 110*	*07/18/24 13:11*	*07/23/24 17:45*	*1*
Nitrobenzene-d5 (Surr)	*81*		*45 - 129*	*07/18/24 13:11*	*07/23/24 17:45*	*1*
Phenol-d5 (Surr)	*52*		*21 - 110*	*07/18/24 13:11*	*07/23/24 17:45*	*1*
Terphenyl-d14 (Surr)	*66*		*12 - 144*	*07/18/24 13:11*	*07/23/24 17:45*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*27 - 136*	*07/18/24 13:11*	*07/23/24 17:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	<10.0		10.0	2.60	mg/L			07/17/24 10:17	1
Isobutanol	<10.0		10.0	2.40	mg/L			07/17/24 10:17	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0895		0.0895	0.0224	ug/L		07/16/24 12:34	07/16/24 21:34	1
4,4'-DDE	<0.0895		0.0895	0.0269	ug/L		07/16/24 12:34	07/16/24 21:34	1
4,4'-DDT	<0.0895		0.0895	0.0179	ug/L		07/16/24 12:34	07/16/24 21:34	1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0895		0.0895	0.0197	ug/L		07/16/24 12:34	07/16/24 21:34	1
alpha-BHC	<0.0895		0.0895	0.00895	ug/L		07/16/24 12:34	07/16/24 21:34	1
beta-BHC	<0.0895		0.0895	0.0376	ug/L		07/16/24 12:34	07/16/24 21:34	1
Chlordane (technical)	<1.79		1.79	0.349	ug/L		07/16/24 12:34	07/16/24 21:34	1
delta-BHC	<0.0895		0.0895	0.0286	ug/L		07/16/24 12:34	07/16/24 21:34	1
Dieldrin	<0.0895		0.0895	0.0188	ug/L		07/16/24 12:34	07/16/24 21:34	1
Endosulfan I	<0.0895		0.0895	0.0251	ug/L		07/16/24 12:34	07/16/24 21:34	1
Endosulfan II	<0.0895		0.0895	0.0233	ug/L		07/16/24 12:34	07/16/24 21:34	1
Endosulfan sulfate	<0.0895		0.0895	0.0161	ug/L		07/16/24 12:34	07/16/24 21:34	1
Endrin	<0.0895		0.0895	0.0251	ug/L		07/16/24 12:34	07/16/24 21:34	1
Endrin aldehyde	<0.0895		0.0895	0.0242	ug/L		07/16/24 12:34	07/16/24 21:34	1
gamma-BHC (Lindane)	<0.0895		0.0895	0.00895	ug/L		07/16/24 12:34	07/16/24 21:34	1
Heptachlor	<0.0895		0.0895	0.0206	ug/L		07/16/24 12:34	07/16/24 21:34	1
Heptachlor epoxide	<0.0895		0.0895	0.0286	ug/L		07/16/24 12:34	07/16/24 21:34	1
Methoxychlor	<0.0895		0.0895	0.0286	ug/L		07/16/24 12:34	07/16/24 21:34	1
Toxaphene	<1.79		1.79	0.895	ug/L		07/16/24 12:34	07/16/24 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*47*		*10 - 136*	*07/16/24 12:34*	*07/16/24 21:34*	*1*
Tetrachloro-m-xylene	*111*		*10 - 130*	*07/16/24 12:34*	*07/16/24 21:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.79		1.79	0.734	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1221	<1.79		1.79	0.734	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1232	<1.79		1.79	0.734	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1242	<1.79		1.79	0.734	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1248	<1.79		1.79	0.618	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1254	<1.79		1.79	0.618	ug/L		07/16/24 12:34	07/16/24 21:34	1
PCB-1260	<1.79		1.79	0.618	ug/L		07/16/24 12:34	07/16/24 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*47*		*10 - 136*	*07/16/24 12:34*	*07/16/24 21:34*	*1*
Tetrachloro-m-xylene	*111*		*10 - 130*	*07/16/24 12:34*	*07/16/24 21:34*	*1*

Method: SW846 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.607		0.607	0.253	ug/L		07/17/24 14:47	07/18/24 07:00	1
Silvex (2,4,5-TP)	<0.0506		0.0506	0.0223	ug/L		07/17/24 14:47	07/18/24 07:00	1
2,4,5-T	<0.152		0.152	0.0658	ug/L		07/17/24 14:47	07/18/24 07:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*59*		*34 - 142*	*07/17/24 14:47*	*07/18/24 07:00*	*1*
DCAA	*62*		*34 - 142*	*07/17/24 14:47*	*07/18/24 07:00*	*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		07/16/24 09:00	07/22/24 20:51	1
Arsenic	**0.00441**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:51	1
Barium	**0.0848**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:51	1
Beryllium	**0.000332**	**J**	0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:43	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1101

Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000211		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:51	1
Chromium	0.0123		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:51	1
Cobalt	0.00679		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:51	1
Copper	0.0158		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:51	1
Lead	0.0195		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:51	1
Nickel	0.0140		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:43	1
Selenium	0.00388	J	0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:51	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:51	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:51	1
Vanadium	0.0283		0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:51	1
Zinc	0.0373		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:51	1
Tin	<0.00500		0.00500	0.00230	mg/L		07/16/24 09:00	07/22/24 20:51	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		07/28/24 17:30	07/29/24 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.0100		0.0100	0.00350	mg/L		07/17/24 10:31	07/19/24 18:13	1
Sulfide (SW846 9034)	<1.00		1.00	0.231	mg/L		07/17/24 18:15	07/17/24 22:40	1
Total Suspended Solids (USGS I-3765-85)	1800		60.0	44.4	mg/L			07/17/24 11:57	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1105R
Date Collected: 07/11/24 09:29
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.19**	**J**	10.0	3.10	ug/L			07/17/24 17:09	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 17:09	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 17:09	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 17:09	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 17:09	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 17:09	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 17:09	1
2-Butanone (MEK)	**4.16**	**J**	10.0	2.10	ug/L			07/17/24 17:09	1
Carbon disulfide	**0.569**	**J**	1.00	0.450	ug/L			07/17/24 17:09	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 17:09	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 17:09	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 17:09	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 17:09	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 17:09	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 17:09	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 17:09	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 17:09	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 17:09	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 17:09	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 17:09	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 17:09	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 17:09	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 17:09	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 17:09	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 17:09	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 17:09	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 17:09	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 17:09	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 16:37	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 17:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 17:09	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 17:09	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 17:09	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 17:09	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 17:09	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 17:09	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 17:09	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 17:09	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 17:09	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 17:09	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 17:09	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 17:09	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 17:09	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 17:09	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 17:09	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 17:09	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/17/24 17:09*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1105R
Date Collected: 07/11/24 09:29
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-8
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/18/24 16:37*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 130*		*07/17/24 17:09*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/18/24 16:37*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 17:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 16:37*	*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		07/16/24 09:00	07/22/24 20:54	1
Arsenic	**0.00210**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:54	1
Barium	**0.0254**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:54	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:46	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:54	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:54	1
Cobalt	**0.000171**	**J**	0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:54	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:54	1
Lead	<0.000500		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:54	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:46	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:54	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:54	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:54	1
Vanadium	**0.00154**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:54	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**4.00**	**J**	5.00	3.70	mg/L			07/17/24 11:57	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1201
Date Collected: 07/11/24 10:06
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-9
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			07/17/24 17:32	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 17:32	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 17:32	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 17:32	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 17:32	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 17:32	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 17:32	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 17:32	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 17:32	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 17:32	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 17:32	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 17:32	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 17:32	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 17:32	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 17:32	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 17:32	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 17:32	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 17:32	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 17:32	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 17:32	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 17:32	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 17:32	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 17:32	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 17:32	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 17:32	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 17:32	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 17:32	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 17:32	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 17:00	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 17:32	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 17:32	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 17:32	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 17:32	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 17:32	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 17:32	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 17:32	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 17:32	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 17:32	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 17:32	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 17:32	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 17:32	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 17:32	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 17:32	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 17:32	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 17:32	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 17:32	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 17:32*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1201

Date Collected: 07/11/24 10:06
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-9

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*07/18/24 17:00*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/17/24 17:32*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*07/18/24 17:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 17:32*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 17:00*	*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		07/16/24 09:00	07/22/24 20:56	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:56	1
Barium	**0.0174**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:56	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:50	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:56	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:56	1
Cobalt	**0.000288**	**J**	0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:56	1
Copper	**0.00371**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:56	1
Lead	**0.00221**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:56	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:50	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:56	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:56	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:56	1
Vanadium	**0.00236**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:56	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**18.3**		5.00	3.70	mg/L			07/17/24 11:57	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1205

Date Collected: 07/11/24 10:39
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-10

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			07/17/24 17:55	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 17:55	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 17:55	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 17:55	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 17:55	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 17:55	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 17:55	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 17:55	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 17:55	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 17:55	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 17:55	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 17:55	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 17:55	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 17:55	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 17:55	1
cis-1,2-Dichloroethene	**0.850**	**J**	1.00	0.210	ug/L			07/17/24 17:55	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 17:55	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 17:55	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 17:55	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 17:55	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 17:55	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 17:55	1
Dichlorodifluoromethane	**6.43**		3.00	0.250	ug/L			07/17/24 17:55	1
1,1-Dichloroethane	**2.99**		1.00	0.220	ug/L			07/17/24 17:55	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 17:55	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 17:55	1
1,2-Dichloropropane	**1.31**		1.00	0.270	ug/L			07/17/24 17:55	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 17:55	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 17:55	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 17:23	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 17:55	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 17:55	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 17:55	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 17:55	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 17:55	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 17:55	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 17:55	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 17:55	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 17:55	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 17:55	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 17:55	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 17:55	1
Trichloroethene	**0.499**	**J**	1.00	0.430	ug/L			07/17/24 17:55	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 17:55	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 17:55	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 17:55	1
Vinyl chloride	**0.375**	**J**	1.00	0.180	ug/L			07/17/24 17:55	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 17:55	1
Dichlorofluoromethane	**21.7**		1.00	0.310	ug/L			07/17/24 17:55	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1205

Date Collected: 07/11/24 10:39
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/24 17:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/18/24 17:23*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*07/17/24 17:55*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/18/24 17:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/17/24 17:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/18/24 17:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		07/16/24 09:00	07/22/24 20:58	1
Arsenic	**0.00244**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:58	1
Barium	**0.0136**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:58	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 17:54	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:58	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:58	1
Cobalt	**0.000506**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:58	1
Copper	**0.00565**		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:58	1
Lead	**0.00139**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:58	1
Nickel	**0.00398**	**J**	0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 17:54	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:58	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:58	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:58	1
Vanadium	**0.00771**		0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:58	1
Zinc	**0.0144**	**J**	0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**45.7**		5.00	3.70	mg/L			07/17/24 11:57	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1301
Date Collected: 07/10/24 19:35
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-11
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			07/17/24 18:18	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 18:18	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 18:18	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 18:18	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 18:18	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 18:18	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 18:18	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 18:18	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 18:18	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 18:18	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 18:18	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 18:18	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 18:18	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 18:18	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 18:18	1
cis-1,2-Dichloroethene	**3.79**		1.00	0.210	ug/L			07/17/24 18:18	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 18:18	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 18:18	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 18:18	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 18:18	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 18:18	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 18:18	1
1,1-Dichloroethane	**2.65**		1.00	0.220	ug/L			07/17/24 18:18	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 18:18	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 18:18	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 18:18	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 18:18	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 18:18	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 17:46	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 18:18	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 18:18	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 18:18	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 18:18	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 18:18	1
Tetrachloroethene	**0.480**	**J**	1.00	0.480	ug/L			07/17/24 18:18	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 18:18	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 18:18	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 18:18	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 18:18	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 18:18	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 18:18	1
Trichloroethene	**2.41**		1.00	0.430	ug/L			07/17/24 18:18	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 18:18	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 18:18	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 18:18	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 18:18	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 18:18*	*1*

Client Sample ID: DG-1301
Date Collected: 07/10/24 19:35
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-11
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*07/18/24 17:46*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/17/24 18:18*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*07/18/24 17:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 18:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/18/24 17:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.4		10.4	5.73	ug/L		07/17/24 15:18	07/18/24 18:02	1
Di-n-butyl phthalate	<10.4		10.4	5.83	ug/L		07/17/24 15:18	07/18/24 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*79*		*45 - 129*	*07/17/24 15:18*	*07/18/24 18:02*	*1*
2-Fluorobiphenyl (Surr)	*77*		*39 - 118*	*07/17/24 15:18*	*07/18/24 18:02*	*1*
Terphenyl-d14 (Surr)	*82*		*12 - 144*	*07/17/24 15:18*	*07/18/24 18:02*	*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		07/16/24 09:00	07/22/24 21:00	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:00	1
Barium	**0.0403**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:00	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:12	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:00	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:00	1
Cobalt	**0.000543**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:00	1
Copper	**0.00892**		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:00	1
Lead	**0.0109**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:00	1
Nickel	**0.00679**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:12	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:00	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:00	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:00	1
Vanadium	**0.00416**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:00	1
Zinc	**0.0160**	**J**	0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**109**		15.0	11.1	mg/L			07/16/24 13:15	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1305
Date Collected: 07/10/24 18:35
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-12
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			07/17/24 18:41	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 18:41	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 18:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 18:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 18:41	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 18:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 18:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 18:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 18:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 18:41	1
Chlorobenzene	**6.74**		1.00	0.400	ug/L			07/17/24 18:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 18:41	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 18:41	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 18:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 18:41	1
cis-1,2-Dichloroethene	**2.42**		1.00	0.210	ug/L			07/17/24 18:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 18:41	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 18:41	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 18:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 18:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 18:41	1
1,4-Dichlorobenzene	**0.975**	**J**	1.00	0.230	ug/L			07/17/24 18:41	1
1,1-Dichloroethane	**4.83**		1.00	0.220	ug/L			07/17/24 18:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 18:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 18:41	1
1,2-Dichloropropane	**0.588**	**J**	1.00	0.270	ug/L			07/17/24 18:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 18:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 18:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 18:08	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 18:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 18:41	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 18:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 18:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 18:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 18:41	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 18:41	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 18:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 18:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 18:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 18:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 18:41	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 18:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 18:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 18:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 18:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 18:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/17/24 18:41*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1305

Date Collected: 07/10/24 18:35
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-12

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*07/18/24 18:08*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 130*		*07/17/24 18:41*	*1*
Dibromofluoromethane (Surr)	*105*		*73 - 130*		*07/18/24 18:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 18:41*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/18/24 18:08*	*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		07/16/24 09:00	07/22/24 21:05	1
Arsenic	**0.000672**	**J**	0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:05	1
Barium	**0.0700**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:05	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:19	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:05	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:05	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:05	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:05	1
Lead	**0.00154**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:05	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:19	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:05	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:05	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:05	1
Vanadium	**0.00273**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:05	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**11.3**		5.00	3.70	mg/L			07/16/24 13:44	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1401
Date Collected: 07/10/24 17:57
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-13
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			07/17/24 19:03	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 19:03	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 19:03	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 19:03	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 19:03	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 19:03	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 19:03	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 19:03	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 19:03	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 19:03	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 19:03	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 19:03	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 19:03	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 19:03	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 19:03	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 19:03	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 19:03	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 19:03	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 19:03	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 19:03	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 19:03	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 19:03	1
1,1-Dichloroethane	**0.478**	**J**	1.00	0.220	ug/L			07/17/24 19:03	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 19:03	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 19:03	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 19:03	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 19:03	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 19:03	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 18:31	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 19:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 19:03	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 19:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 19:03	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 19:03	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 19:03	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 19:03	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 19:03	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 19:03	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 19:03	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 19:03	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 19:03	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 19:03	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 19:03	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 19:03	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 19:03	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 19:03	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 19:03*	*1*

Client Sample ID: DG-1401
Date Collected: 07/10/24 17:57
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-13
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/18/24 18:31*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*07/17/24 19:03*	*1*
Dibromofluoromethane (Surr)	*99*		*73 - 130*		*07/18/24 18:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 19:03*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 18:31*	*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		07/16/24 09:00	07/22/24 21:07	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:07	1
Barium	**0.0408**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:07	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:23	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:07	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:07	1
Cobalt	**0.000548**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:07	1
Copper	**0.00315**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:07	1
Lead	**0.000966**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:07	1
Nickel	**0.00236**	**J**	0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:23	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:07	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:07	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:07	1
Vanadium	**0.00367**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:07	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**130**		7.50	5.55	mg/L			07/16/24 13:44	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DGP-1500
Date Collected: 07/10/24 17:04
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-14
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			07/18/24 03:01	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 03:01	1
Benzene	**1.20**		0.500	0.220	ug/L			07/18/24 03:01	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 03:01	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 03:01	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 03:01	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 03:01	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 03:01	1
Carbon disulfide	**0.678**	**J**	1.00	0.450	ug/L			07/18/24 03:01	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 03:01	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 03:01	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 03:01	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 03:01	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 03:01	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 03:01	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 03:01	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 03:01	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 03:01	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 03:01	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 03:01	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 03:01	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 03:01	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 03:01	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 03:01	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 03:01	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 03:01	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 03:01	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 03:01	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/19/24 14:07	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 03:01	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 03:01	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 03:01	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 03:01	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 03:01	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 03:01	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 03:01	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 03:01	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 03:01	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 03:01	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 03:01	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 03:01	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 03:01	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 03:01	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 03:01	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 03:01	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 03:01	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 03:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/18/24 03:01*	*1*

Client Sample ID: DGP-1500
Date Collected: 07/10/24 17:04
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-14
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*07/19/24 14:07*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 130*		*07/18/24 03:01*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*07/19/24 14:07*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 03:01*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/19/24 14:07*	*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		07/16/24 09:00	07/22/24 21:18	1
Arsenic	**0.0160**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:18	1
Barium	**0.0405**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:18	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:26	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:18	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:18	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:18	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:18	1
Lead	<0.000500		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:18	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:26	1
Selenium	**0.00205**	**J**	0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:18	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:18	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:18	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:18	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**8.00**		5.00	3.70	mg/L			07/16/24 13:44	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-D
Date Collected: 07/09/24 18:18
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**26.3**		10.0	3.10	ug/L			07/18/24 03:23	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 03:23	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 03:23	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 03:23	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 03:23	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 03:23	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 03:23	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 03:23	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 03:23	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 03:23	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 03:23	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 03:23	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 03:23	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 03:23	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 03:23	1
cis-1,2-Dichloroethene	**0.258**	**J**	1.00	0.210	ug/L			07/18/24 03:23	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 03:23	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 03:23	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 03:23	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 03:23	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 03:23	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 03:23	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 03:23	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 03:23	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 03:23	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 03:23	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 03:23	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 03:23	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/19/24 14:29	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 03:23	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 03:23	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 03:23	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 03:23	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 03:23	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 03:23	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 03:23	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 03:23	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 03:23	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 03:23	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 03:23	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 03:23	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 03:23	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 03:23	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 03:23	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 03:23	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 03:23	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/18/24 03:23*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-D

Date Collected: 07/09/24 18:18
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-15

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/19/24 14:29*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/18/24 03:23*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 130*		*07/19/24 14:29*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 03:23*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*07/19/24 14:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		07/16/24 09:00	07/22/24 21:21	1
Arsenic	**0.000974**	**J**	0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:21	1
Barium	**0.0759**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:21	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:30	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:21	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:21	1
Cobalt	**0.000401**	**J**	0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:21	1
Copper	**0.00239**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:21	1
Lead	**0.000595**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:21	1
Nickel	**0.00300**	**J**	0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:30	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:21	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:21	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:21	1
Vanadium	**0.00171**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:21	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**51.0**		2.50	1.85	mg/L			07/15/24 13:01	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: GU-13
Date Collected: 07/09/24 15:43
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11.4**		10.0	3.10	ug/L			07/18/24 03:46	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 03:46	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 03:46	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 03:46	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 03:46	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 03:46	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 03:46	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 03:46	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 03:46	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 03:46	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 03:46	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 03:46	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 03:46	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 03:46	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 03:46	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 03:46	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 03:46	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 03:46	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 03:46	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 03:46	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 03:46	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 03:46	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 03:46	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 03:46	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 03:46	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 03:46	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 03:46	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 03:46	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/19/24 14:51	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 03:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 03:46	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 03:46	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 03:46	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 03:46	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 03:46	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 03:46	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 03:46	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 03:46	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 03:46	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 03:46	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 03:46	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 03:46	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 03:46	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 03:46	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 03:46	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 03:46	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*07/18/24 03:46*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: GU-13
Date Collected: 07/09/24 15:43
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-16
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*07/19/24 14:51*	*1*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*07/18/24 03:46*	*1*
Dibromofluoromethane (Surr)	*103*		*73 - 130*		*07/19/24 14:51*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 03:46*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/19/24 14:51*	*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		07/16/24 09:00	07/22/24 21:23	1
Arsenic	**0.0147**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:23	1
Barium	**0.0944**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:23	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:23	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:23	1
Cobalt	**0.00113**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:23	1
Copper	**0.00351**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:23	1
Lead	**0.000824**		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:23	1
Nickel	**0.00756**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:23	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:23	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:23	1
Vanadium	**0.00436**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:23	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**125**		3.75	2.78	mg/L			07/15/24 13:01	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: SW-101
Date Collected: 07/09/24 16:32
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**10.2**		10.0	3.10	ug/L			07/18/24 04:09	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 04:09	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 04:09	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 04:09	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 04:09	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 04:09	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 04:09	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 04:09	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 04:09	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 04:09	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 04:09	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 04:09	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 04:09	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 04:09	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 04:09	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 04:09	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 04:09	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 04:09	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 04:09	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 04:09	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 04:09	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 04:09	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 04:09	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 04:09	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 04:09	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 04:09	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 04:09	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 04:09	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 18:53	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 04:09	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 04:09	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 04:09	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 04:09	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 04:09	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 04:09	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 04:09	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 04:09	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 04:09	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 04:09	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 04:09	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 04:09	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 04:09	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 04:09	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 04:09	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 04:09	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 04:09	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/18/24 04:09*	*1*

Client Sample ID: SW-101
Date Collected: 07/09/24 16:32
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-17
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*		*07/18/24 18:53*	*1*
Dibromofluoromethane (Surr)	*115*		*73 - 130*		*07/18/24 04:09*	*1*
Dibromofluoromethane (Surr)	*107*		*73 - 130*		*07/18/24 18:53*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/18/24 04:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 18:53*	*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		07/16/24 09:00	07/22/24 21:25	1
Arsenic	**0.00721**		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 21:25	1
Barium	**0.243**		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 21:25	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 18:37	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 21:25	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 21:25	1
Cobalt	**0.00338**		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 21:25	1
Copper	**0.00205**	**J**	0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 21:25	1
Lead	**0.000470**	**J**	0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 21:25	1
Nickel	**0.0169**		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 18:37	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 21:25	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 21:25	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 21:25	1
Vanadium	**0.00357**	**J**	0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 21:25	1
Zinc	**0.109**		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**54.6**		1.88	1.39	mg/L			07/15/24 13:01	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MWP-7
Date Collected: 07/10/24 11:58
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.61		1.00	0.430	ug/L			07/17/24 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/17/24 05:13*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 05:13*	*1*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*07/17/24 05:13*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-15

Date Collected: 07/10/24 10:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-19

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 05:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*73 - 130*		*07/17/24 05:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 05:36*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/17/24 05:36*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-16
Date Collected: 07/10/24 12:33
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/17/24 05:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 05:59*	*1*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 05:59*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-17
Date Collected: 07/10/24 11:26
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.800	J	1.00	0.430	ug/L			07/17/24 06:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*73 - 130*		*07/17/24 06:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/17/24 06:21*	*1*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*07/17/24 06:21*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-18
Date Collected: 07/09/24 17:30
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 06:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*99*		*73 - 130*		*07/17/24 06:44*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/17/24 06:44*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/17/24 06:44*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: ORG-MW
Date Collected: 07/10/24 11:01
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 07:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*102*		*73 - 130*		*07/17/24 07:07*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/17/24 07:07*	*1*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/17/24 07:07*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 1

Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-24

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			07/18/24 11:19	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 11:19	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 11:19	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 11:19	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 11:19	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 11:19	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 11:19	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 11:19	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 11:19	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 11:19	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 11:19	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 11:19	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 11:19	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 11:19	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 11:19	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 11:19	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 11:19	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 11:19	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 11:19	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 11:19	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 11:19	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 11:19	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 11:19	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 11:19	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 11:19	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 11:19	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 11:19	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 11:19	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 11:19	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 11:19	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 11:19	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 11:19	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 11:19	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 11:19	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 11:19	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 11:19	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 11:19	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 11:19	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 11:19	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 11:19	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 11:19	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 11:19	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 11:19	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 11:19	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 11:19	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 11:19	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 11:19	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 11:19	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 11:19	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 1
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-24
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			07/18/24 11:19	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 11:19	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 11:19	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 11:19	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 11:19	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 11:19	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 11:19	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 11:19	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 11:19	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 11:19	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 11:19	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/18/24 11:19*	*1*
Dibromofluoromethane (Surr)	*106*		*73 - 130*		*07/18/24 11:19*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 11:19*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 2
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-25
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			07/18/24 11:41	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 11:41	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 11:41	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 11:41	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 11:41	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 11:41	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 11:41	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 11:41	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 11:41	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 11:41	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 11:41	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 11:41	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 11:41	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 11:41	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 11:41	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 11:41	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 11:41	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 11:41	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 11:41	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 11:41	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 11:41	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 11:41	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 11:41	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 11:41	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 11:41	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 11:41	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 11:41	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 11:41	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 11:41	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 11:41	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 11:41	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 11:41	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 11:41	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 11:41	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 11:41	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 11:41	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 11:41	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 11:41	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 11:41	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 11:41	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 11:41	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 11:41	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 11:41	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 11:41	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 11:41	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 11:41	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 11:41	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 11:41	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 11:41	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 2
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-25
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			07/18/24 11:41	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 11:41	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 11:41	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 11:41	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 11:41	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 11:41	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 11:41	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 11:41	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 11:41	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 11:41	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 11:41	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/18/24 11:41*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*07/18/24 11:41*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 11:41*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 3

Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-26

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			07/18/24 12:03	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 12:03	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 12:03	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 12:03	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 12:03	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 12:03	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 12:03	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 12:03	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 12:03	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 12:03	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 12:03	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 12:03	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 12:03	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 12:03	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 12:03	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 12:03	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 12:03	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 12:03	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 12:03	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 12:03	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 12:03	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 12:03	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 12:03	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 12:03	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 12:03	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 12:03	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 12:03	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 12:03	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 12:03	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 12:03	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 12:03	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 12:03	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 12:03	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 12:03	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 12:03	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 12:03	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 12:03	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 12:03	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 12:03	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 12:03	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 12:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 12:03	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 12:03	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 12:03	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 12:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 12:03	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 12:03	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 12:03	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 12:03	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 3
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-26
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			07/18/24 12:03	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 12:03	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 12:03	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 12:03	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 12:03	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 12:03	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 12:03	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 12:03	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 12:03	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 12:03	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 12:03	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*07/18/24 12:03*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*07/18/24 12:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/18/24 12:03*	*1*

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 4

Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-27

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			07/18/24 12:25	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 12:25	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 12:25	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 12:25	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 12:25	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 12:25	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 12:25	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 12:25	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 12:25	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 12:25	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 12:25	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 12:25	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 12:25	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 12:25	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 12:25	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 12:25	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 12:25	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 12:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 12:25	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 12:25	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 12:25	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 12:25	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 12:25	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 12:25	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 12:25	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 12:25	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 12:25	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 12:25	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 12:25	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 12:25	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 12:25	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 12:25	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 12:25	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 12:25	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 12:25	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 12:25	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 12:25	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 12:25	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 12:25	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 12:25	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 12:25	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 12:25	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 12:25	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 12:25	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 12:25	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 12:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 12:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 12:25	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 12:25	1

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: Trip Blank 4
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-27
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			07/18/24 12:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 12:25	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 12:25	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 12:25	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 12:25	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 12:25	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 12:25	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 12:25	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 12:25	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 12:25	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 12:25	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/18/24 12:25*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*07/18/24 12:25*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 12:25*	*1*

Definitions/Glossary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	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.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

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.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

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)	(73-130)	(80-120)
310-285765-1	TG-301	103	118	96
310-285765-1	TG-301	104	104	97
310-285765-1 MS	TG-301	97	104	98
310-285765-1 MSD	TG-301	99	104	98
310-285765-2	TG-305	103	116	98
310-285765-2	TG-305	102	101	97
310-285765-3	DG-901	105	105	97
310-285765-4	DG-905	107	105	96
310-285765-5	DG-1001	101	118	100
310-285765-5	DG-1001	105	102	98
310-285765-6	DG-1005	104	113	98
310-285765-6	DG-1005	107	101	97
310-285765-7	DG-1101	104	116	98
310-285765-7	DG-1101	102	106	97
310-285765-8	DG-1105R	102	117	97
310-285765-8	DG-1105R	105	106	97
310-285765-9	DG-1201	104	116	98
310-285765-9	DG-1201	106	104	96
310-285765-10	DG-1205	103	114	99
310-285765-10	DG-1205	104	106	100
310-285765-11	DG-1301	104	116	98
310-285765-11	DG-1301	108	104	99
310-285765-12	DG-1305	103	115	98
310-285765-12	DG-1305	106	105	99
310-285765-13	DG-1401	104	114	98
310-285765-13	DG-1401	104	99	96
310-285765-14	DGP-1500	102	115	97
310-285765-14	DGP-1500	108	104	96
310-285765-15	MW-D	103	116	97
310-285765-15	MW-D	105	107	95
310-285765-16	GU-13	103	116	96
310-285765-16	GU-13	106	103	96
310-285765-17	SW-101	104	115	96
310-285765-17	SW-101	100	107	97
310-285765-18	MWP-7	107	106	97
310-285765-18 MS	MWP-7	104	98	98
310-285765-18 MSD	MWP-7	106	98	98
310-285765-19	MW-15	105	100	97
310-285765-20	MW-16	104	106	98
310-285765-21	MW-17	110	107	98
310-285765-22	MW-18	105	99	100
310-285765-23	ORG-MW	105	102	100
310-285765-24	Trip Blank 1	101	106	97
310-285765-25	Trip Blank 2	101	110	97
310-285765-26	Trip Blank 3	102	110	98
310-285765-27	Trip Blank 4	101	110	97
LCS 310-427440/6	Lab Control Sample	99	95	100
LCS 310-427529/6	Lab Control Sample	98	104	100
LCS 310-427529/7	Lab Control Sample	102	118	97

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)	(73-130)	(80-120)
LCS 310-427531/6	Lab Control Sample	98	103	99
LCS 310-427531/7	Lab Control Sample	101	118	99
LCS 310-427650/6	Lab Control Sample	101	88	97
LCS 310-427650/7	Lab Control Sample	101	107	98
LCS 310-427716/6	Lab Control Sample	104	94	102
LCS 310-427716/7	Lab Control Sample	102	109	99
LCS 310-427851/6	Lab Control Sample	96	96	98
LCS 310-427851/7	Lab Control Sample	102	104	97
MB 310-427440/5	Method Blank	105	101	97
MB 310-427529/5	Method Blank	104	117	97
MB 310-427531/5	Method Blank	103	116	98
MB 310-427650/5	Method Blank	101	110	97
MB 310-427716/5	Method Blank	109	109	97
MB 310-427851/5	Method Blank	100	104	99

Surrogate Legend

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

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	FBP	TPHL	2FP	PHL	TBP
Lab Sample ID	Client Sample ID	(45-129)	(39-118)	(12-144)	(25-110)	(21-110)	(27-136)
310-285765-4	DG-905	107	104	118	72	67	109
310-285765-7	DG-1101	81	61	66	54	52	63
310-285765-11	DG-1301	79	77	82			
LCS 310-427592/2-A	Lab Control Sample	89	86	93	20 S1-	40	38
LCS 310-427724/2-A	Lab Control Sample	50	42	60	46	44	53
LCSD 310-427592/3-A	Lab Control Sample Dup	112	106	120	80	74	123
LCSD 310-427724/3-A	Lab Control Sample Dup	50	40	57	44	44	46
MB 310-427592/1-A	Method Blank	96	88	105	66	62	102
MB 310-427724/1-A	Method Blank	79	58	73	55	52	76

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)
2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
TBP = 2,4,6-Tribromophenol (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)
310-285765-4	DG-905	69	90
310-285765-7	DG-1101	47	111

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB1 (10-136)	TCX1 (10-130)
LCS 310-427419/22-A	Lab Control Sample	77	65
MB 310-427419/1-A	Method Blank	64	68

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)	
Lab Sample ID	Client Sample ID	DCB1 (10-136)	TCX1 (10-130)
310-285765-4	DG-905	69	90
310-285765-7	DG-1101	47	111
LCS 310-427419/23-A	Lab Control Sample	20	50
MB 310-427419/1-A	Method Blank	64	68

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)	
Lab Sample ID	Client Sample ID	DCPAA1 (34-142)	DCPAA2 (34-142)
310-285765-4	DG-905	77	65
310-285765-7	DG-1101	59	62
LCS 410-529394/2-A	Lab Control Sample	44	49
LCSD 410-529394/3-A	Lab Control Sample Dup	51	55
MB 410-529394/1-A	Method Blank	43	41

Surrogate Legend

DCPAA = DCAA

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

Lab Sample ID: MB 310-427440/5
Matrix: Water
Analysis Batch: 427440

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 03:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*07/17/24 03:20*	*1*
Dibromofluoromethane (Surr)	*101*		*73 - 130*		*07/17/24 03:20*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 03:20*	*1*

Lab Sample ID: LCS 310-427440/6
Matrix: Water
Analysis Batch: 427440

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichloroethene			20.0	20.97		ug/L		105	72 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*73 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 310-285765-18 MS
Matrix: Water
Analysis Batch: 427440

Client Sample ID: MWP-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Trichloroethene	1.61		20.0	21.08		ug/L		97	51 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 310-285765-18 MSD
Matrix: Water
Analysis Batch: 427440

Client Sample ID: MWP-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichloroethene	1.61		20.0	20.42		ug/L		94	51 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 310-427529/5
Matrix: Water
Analysis Batch: 427529

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			07/17/24 12:13	1
Acrolein	<10.0		10.0	3.60	ug/L			07/17/24 12:13	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 12:13	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/17/24 12:13	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 12:13	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 12:13	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 12:13	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 12:13	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 12:13	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 12:13	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 12:13	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 12:13	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 12:13	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 12:13	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 12:13	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 12:13	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 12:13	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/17/24 12:13	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 12:13	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 12:13	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 12:13	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 12:13	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 12:13	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 12:13	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/17/24 12:13	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 12:13	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/17/24 12:13	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 12:13	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 12:13	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 12:13	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 12:13	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/17/24 12:13	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/17/24 12:13	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/17/24 12:13	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 12:13	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/17/24 12:13	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 12:13	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/17/24 12:13	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/17/24 12:13	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 12:13	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/17/24 12:13	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 12:13	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/17/24 12:13	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/17/24 12:13	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 12:13	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 12:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 12:13	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 12:13	1

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

Lab Sample ID: MB 310-427529/5
Matrix: Water
Analysis Batch: 427529

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			07/17/24 12:13	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 12:13	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 12:13	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 12:13	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/17/24 12:13	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 12:13	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 12:13	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 12:13	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 12:13	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 12:13	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 12:13	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 12:13	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 12:13	1
Dichlorofluoromethane	<1.00		1.00	0.310	ug/L			07/17/24 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*07/17/24 12:13*	*1*
Dibromofluoromethane (Surr)	*117*		*73 - 130*		*07/17/24 12:13*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/17/24 12:13*	*1*

Lab Sample ID: LCS 310-427529/6
Matrix: Water
Analysis Batch: 427529

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	47.22		ug/L		118	50 - 150
Acrolein	94.8	104.9		ug/L		111	49 - 150
Acrylonitrile	200	242.1		ug/L		121	50 - 150
Allyl chloride	20.0	19.91		ug/L		100	49 - 150
Benzene	20.0	19.26		ug/L		96	72 - 124
Bromochloromethane	20.0	19.01		ug/L		95	73 - 130
Bromodichloromethane	20.0	18.81		ug/L		94	74 - 122
Bromoform	20.0	16.70		ug/L		83	61 - 122
2-Butanone (MEK)	40.0	47.41		ug/L		119	50 - 150
Carbon disulfide	20.0	20.18		ug/L		101	59 - 135
Carbon tetrachloride	20.0	19.84		ug/L		99	67 - 132
Chlorobenzene	20.0	17.90		ug/L		90	76 - 120
Chlorodibromomethane	20.0	18.36		ug/L		92	71 - 121
Chloroform	20.0	19.79		ug/L		99	72 - 125
Chloroprene	20.0	23.01		ug/L		115	69 - 133
cis-1,2-Dichloroethene	20.0	18.80		ug/L		94	74 - 123
cis-1,3-Dichloropropene	20.0	18.72		ug/L		94	71 - 125
1,2-Dibromo-3-chloropropane	20.0	17.35		ug/L		87	50 - 150
1,2-Dibromoethane (EDB)	20.0	18.42		ug/L		92	75 - 125
Dibromomethane	20.0	19.11		ug/L		96	74 - 125
1,2-Dichlorobenzene	20.0	18.00		ug/L		90	74 - 120
1,3-Dichlorobenzene	20.0	17.87		ug/L		89	72 - 120
1,4-Dichlorobenzene	20.0	17.57		ug/L		88	72 - 120

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

Lab Sample ID: LCS 310-427529/6
Matrix: Water
Analysis Batch: 427529

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	20.0	21.29		ug/L		106	70 - 127
1,2-Dichloroethane	20.0	21.53		ug/L		108	71 - 125
1,1-Dichloroethene	20.0	20.03		ug/L		100	63 - 132
1,2-Dichloropropane	20.0	21.10		ug/L		105	73 - 124
1,3-Dichloropropane	20.0	19.45		ug/L		97	72 - 125
2,2-Dichloropropane	20.0	20.27		ug/L		101	50 - 150
1,1-Dichloropropene	20.0	20.16		ug/L		101	69 - 132
Ethylbenzene	20.0	18.59		ug/L		93	74 - 122
Ethyl methacrylate	20.0	16.44		ug/L		82	70 - 129
2-Hexanone	40.0	39.58		ug/L		99	60 - 140
Iodomethane	20.0	7.253	J	ug/L		36	10 - 150
Methacrylonitrile	200	197.6		ug/L		99	69 - 129
Methylene chloride	20.0	19.75		ug/L		99	50 - 150
Methyl methacrylate	40.0	36.23		ug/L		91	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	41.67		ug/L		104	60 - 139
Naphthalene	20.0	16.91		ug/L		85	50 - 150
Propionitrile	200	233.0		ug/L		116	63 - 135
Styrene	20.0	18.01		ug/L		90	74 - 121
1,1,1,2-Tetrachloroethane	20.0	17.87		ug/L		89	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.19		ug/L		91	68 - 124
Tetrachloroethene	20.0	18.85		ug/L		94	71 - 130
Toluene	20.0	18.54		ug/L		93	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.49		ug/L		92	50 - 150
trans-1,2-Dichloroethene	20.0	19.01		ug/L		95	70 - 126
trans-1,3-Dichloropropene	20.0	17.98		ug/L		90	69 - 123
1,2,4-Trichlorobenzene	20.0	17.02		ug/L		85	68 - 124
1,1,1-Trichloroethane	20.0	19.51		ug/L		98	73 - 129
1,1,2-Trichloroethane	20.0	18.14		ug/L		91	73 - 123
Trichloroethene	20.0	19.04		ug/L		95	72 - 126
1,2,3-Trichloropropane	20.0	18.58		ug/L		93	65 - 127
Vinyl acetate	40.0	36.66		ug/L		92	50 - 150
Xylenes, Total	40.0	36.89		ug/L		92	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*73 - 130*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCS 310-427529/7
Matrix: Water
Analysis Batch: 427529

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	17.07		ug/L		85	23 - 150
Chloroethane	20.0	21.13		ug/L		106	54 - 136
Chloromethane	20.0	24.59		ug/L		123	38 - 150
Dichlorodifluoromethane	20.0	23.49		ug/L		117	39 - 150
Trichlorofluoromethane	20.0	24.56		ug/L		123	54 - 149

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

Lab Sample ID: LCS 310-427529/7
Matrix: Water
Analysis Batch: 427529

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			20.0	21.99		ug/L		110	56 - 140		
Dichlorofluoromethane			20.0	21.47		ug/L		107	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*118*		*73 - 130*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 310-285765-1 MS
Matrix: Water
Analysis Batch: 427529

Client Sample ID: TG-301
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	40.76		ug/L		102	31 - 150		
Acrolein	<10.0		94.8	90.75		ug/L		96	25 - 150		
Acrylonitrile	<5.00		200	211.0		ug/L		105	40 - 150		
Allyl chloride	<2.00		20.0	17.31		ug/L		87	28 - 150		
Benzene	<0.500		20.0	16.93		ug/L		85	46 - 130		
Bromochloromethane	<5.00		20.0	17.43		ug/L		87	57 - 130		
Bromodichloromethane	<1.00		20.0	15.99		ug/L		80	57 - 130		
Bromoform	<5.00		20.0	13.18		ug/L		66	44 - 130		
2-Butanone (MEK)	<10.0		40.0	40.57		ug/L		101	38 - 150		
Carbon disulfide	0.534	J	20.0	18.61		ug/L		90	38 - 135		
Carbon tetrachloride	<2.00		20.0	14.71		ug/L		74	45 - 132		
Chlorobenzene	<1.00		20.0	15.22		ug/L		76	59 - 130		
Chlorodibromomethane	<5.00		20.0	14.65		ug/L		73	54 - 130		
Chloroform	<3.00		20.0	17.40		ug/L		87	51 - 130		
Chloroprene	<1.00		20.0	18.25		ug/L		91	43 - 133		
cis-1,2-Dichloroethene	<1.00		20.0	16.75		ug/L		84	45 - 130		
cis-1,3-Dichloropropene	<5.00		20.0	15.35		ug/L		77	53 - 130		
1,2-Dibromo-3-chloropropane	<5.00		20.0	13.74		ug/L		69	38 - 150		
1,2-Dibromoethane (EDB)	<1.00		20.0	15.67		ug/L		78	60 - 130		
Dibromomethane	<1.00		20.0	17.00		ug/L		85	59 - 130		
1,2-Dichlorobenzene	<1.00		20.0	15.20		ug/L		76	59 - 130		
1,3-Dichlorobenzene	<1.00		20.0	15.14		ug/L		76	57 - 130		
1,4-Dichlorobenzene	<1.00		20.0	15.05		ug/L		75	57 - 130		
1,1-Dichloroethane	<1.00		20.0	18.91		ug/L		95	49 - 130		
1,2-Dichloroethane	<1.00		20.0	19.13		ug/L		96	51 - 130		
1,1-Dichloroethene	<2.00		20.0	16.73		ug/L		84	37 - 132		
1,2-Dichloropropane	<1.00		20.0	18.25		ug/L		91	57 - 130		
1,3-Dichloropropane	<1.00		20.0	16.73		ug/L		84	56 - 130		
2,2-Dichloropropane	<4.00		20.0	15.45		ug/L		77	25 - 150		
1,1-Dichloropropene	<1.00		20.0	16.11		ug/L		81	50 - 132		
Ethylbenzene	<1.00		20.0	15.70		ug/L		78	45 - 130		
Ethyl methacrylate	<2.00		20.0	14.01		ug/L		70	54 - 130		
2-Hexanone	<10.0		40.0	31.73		ug/L		79	46 - 140		
Iodomethane	<10.0		20.0	8.778	J	ug/L		44	10 - 150		
Methacrylonitrile	<10.0		200	173.3		ug/L		87	55 - 130		

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

Lab Sample ID: 310-285765-1 MS
Matrix: Water
Analysis Batch: 427529

Client Sample ID: TG-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene chloride	<5.00		20.0	17.71		ug/L		89	37 - 150
Methyl methacrylate	<2.00		40.0	31.23		ug/L		78	44 - 139
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	36.03		ug/L		90	47 - 139
Naphthalene	<5.00		20.0	16.65		ug/L		83	40 - 150
Propionitrile	<10.0		200	201.6		ug/L		101	49 - 135
Styrene	<1.00		20.0	15.39		ug/L		77	47 - 130
1,1,1,2-Tetrachloroethane	<1.00		20.0	14.64		ug/L		73	55 - 130
1,1,2,2-Tetrachloroethane	<1.00		20.0	15.39		ug/L		77	54 - 130
Tetrachloroethene	<1.00		20.0	14.02		ug/L		70	47 - 130
Toluene	<1.00		20.0	15.65		ug/L		78	51 - 130
trans-1,4-Dichloro-2-butene	<10.0		20.0	13.40		ug/L		67	26 - 150
trans-1,2-Dichloroethene	<1.00		20.0	16.63		ug/L		83	48 - 130
trans-1,3-Dichloropropene	<5.00		20.0	15.08		ug/L		75	50 - 130
1,2,4-Trichlorobenzene	<5.00		20.0	14.01		ug/L		70	55 - 130
1,1,1-Trichloroethane	<1.00		20.0	15.64		ug/L		78	52 - 130
1,1,2-Trichloroethane	<1.00		20.0	15.47		ug/L		77	58 - 130
Trichloroethene	<1.00		20.0	16.12		ug/L		81	51 - 130
1,2,3-Trichloropropane	<1.00		20.0	15.95		ug/L		80	49 - 130
Vinyl acetate	<10.0		40.0	30.96		ug/L		77	29 - 150
Xylenes, Total	<3.00		40.0	31.64		ug/L		79	43 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 310-285765-1 MSD
Matrix: Water
Analysis Batch: 427529

Client Sample ID: TG-301
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	39.51		ug/L		99	31 - 150	3	29
Acrolein	<10.0		94.8	88.66		ug/L		94	25 - 150	2	31
Acrylonitrile	<5.00		200	212.7		ug/L		106	40 - 150	1	20
Allyl chloride	<2.00		20.0	15.89		ug/L		79	28 - 150	9	35
Benzene	<0.500		20.0	16.67		ug/L		83	46 - 130	2	20
Bromochloromethane	<5.00		20.0	17.14		ug/L		86	57 - 130	2	20
Bromodichloromethane	<1.00		20.0	16.11		ug/L		81	57 - 130	1	20
Bromoform	<5.00		20.0	13.34		ug/L		67	44 - 130	1	20
2-Butanone (MEK)	<10.0		40.0	41.09		ug/L		103	38 - 150	1	20
Carbon disulfide	0.534	J	20.0	17.15		ug/L		83	38 - 135	8	30
Carbon tetrachloride	<2.00		20.0	14.96		ug/L		75	45 - 132	2	20
Chlorobenzene	<1.00		20.0	15.14		ug/L		76	59 - 130	1	20
Chlorodibromomethane	<5.00		20.0	15.05		ug/L		75	54 - 130	3	20
Chloroform	<3.00		20.0	17.02		ug/L		85	51 - 130	2	20
Chloroprene	<1.00		20.0	17.75		ug/L		89	43 - 133	3	20
cis-1,2-Dichloroethene	<1.00		20.0	16.43		ug/L		82	45 - 130	2	20
cis-1,3-Dichloropropene	<5.00		20.0	15.72		ug/L		79	53 - 130	2	20

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

Lab Sample ID: 310-285765-1 MSD
Matrix: Water
Analysis Batch: 427529

Client Sample ID: TG-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-chloropropane	<5.00		20.0	15.18		ug/L		76	38 - 150	10	20
1,2-Dibromoethane (EDB)	<1.00		20.0	15.71		ug/L		79	60 - 130	0	20
Dibromomethane	<1.00		20.0	16.60		ug/L		83	59 - 130	2	20
1,2-Dichlorobenzene	<1.00		20.0	15.83		ug/L		79	59 - 130	4	20
1,3-Dichlorobenzene	<1.00		20.0	15.54		ug/L		78	57 - 130	3	20
1,4-Dichlorobenzene	<1.00		20.0	15.26		ug/L		76	57 - 130	1	20
1,1-Dichloroethane	<1.00		20.0	18.55		ug/L		93	49 - 130	2	20
1,2-Dichloroethane	<1.00		20.0	18.82		ug/L		94	51 - 130	2	20
1,1-Dichloroethene	<2.00		20.0	16.28		ug/L		81	37 - 132	3	26
1,2-Dichloropropane	<1.00		20.0	18.24		ug/L		91	57 - 130	0	20
1,3-Dichloropropane	<1.00		20.0	16.80		ug/L		84	56 - 130	0	20
2,2-Dichloropropane	<4.00		20.0	15.10		ug/L		75	25 - 150	2	25
1,1-Dichloropropene	<1.00		20.0	15.86		ug/L		79	50 - 132	2	20
Ethylbenzene	<1.00		20.0	15.38		ug/L		77	45 - 130	2	20
Ethyl methacrylate	<2.00		20.0	14.31		ug/L		72	54 - 130	2	20
2-Hexanone	<10.0		40.0	32.84		ug/L		82	46 - 140	3	20
Iodomethane	<10.0		20.0	9.152	J	ug/L		46	10 - 150	4	35
Methacrylonitrile	<10.0		200	173.7		ug/L		87	55 - 130	0	20
Methylene chloride	<5.00		20.0	17.84		ug/L		89	37 - 150	1	24
Methyl methacrylate	<2.00		40.0	31.39		ug/L		78	44 - 139	1	20
4-Methyl-2-pentanone (MIBK)	<10.0		40.0	37.01		ug/L		93	47 - 139	3	20
Naphthalene	<5.00		20.0	16.39		ug/L		82	40 - 150	2	30
Propionitrile	<10.0		200	202.8		ug/L		101	49 - 135	1	20
Styrene	<1.00		20.0	15.08		ug/L		75	47 - 130	2	20
1,1,1,2-Tetrachloroethane	<1.00		20.0	14.81		ug/L		74	55 - 130	1	20
1,1,2,2-Tetrachloroethane	<1.00		20.0	15.74		ug/L		79	54 - 130	2	20
Tetrachloroethene	<1.00		20.0	14.29		ug/L		71	47 - 130	2	20
Toluene	<1.00		20.0	15.39		ug/L		77	51 - 130	2	20
trans-1,4-Dichloro-2-butene	<10.0		20.0	13.73		ug/L		69	26 - 150	2	23
trans-1,2-Dichloroethene	<1.00		20.0	15.98		ug/L		80	48 - 130	4	22
trans-1,3-Dichloropropene	<5.00		20.0	15.17		ug/L		76	50 - 130	1	20
1,2,4-Trichlorobenzene	<5.00		20.0	15.66		ug/L		78	55 - 130	11	20
1,1,1-Trichloroethane	<1.00		20.0	15.62		ug/L		78	52 - 130	0	20
1,1,2-Trichloroethane	<1.00		20.0	15.53		ug/L		78	58 - 130	0	20
Trichloroethene	<1.00		20.0	15.78		ug/L		79	51 - 130	2	20
1,2,3-Trichloropropane	<1.00		20.0	15.84		ug/L		79	49 - 130	1	26
Vinyl acetate	<10.0		40.0	31.60		ug/L		79	29 - 150	2	23
Xylenes, Total	<3.00		40.0	31.29		ug/L		78	43 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 310-427531/5
Matrix: Water
Analysis Batch: 427531

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			07/17/24 23:13	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/17/24 23:13	1
Benzene	<0.500		0.500	0.220	ug/L			07/17/24 23:13	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/17/24 23:13	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/17/24 23:13	1
Bromoform	<5.00		5.00	0.780	ug/L			07/17/24 23:13	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/17/24 23:13	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/17/24 23:13	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/17/24 23:13	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/17/24 23:13	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/17/24 23:13	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/17/24 23:13	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/17/24 23:13	1
Chloroform	<3.00		3.00	1.30	ug/L			07/17/24 23:13	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/17/24 23:13	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/17/24 23:13	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/17/24 23:13	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/17/24 23:13	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/17/24 23:13	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/17/24 23:13	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/17/24 23:13	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/17/24 23:13	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/17/24 23:13	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/17/24 23:13	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/17/24 23:13	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/17/24 23:13	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/17/24 23:13	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/17/24 23:13	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/17/24 23:13	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/17/24 23:13	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/17/24 23:13	1
Styrene	<1.00		1.00	0.370	ug/L			07/17/24 23:13	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/17/24 23:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/17/24 23:13	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/17/24 23:13	1
Toluene	<1.00		1.00	0.430	ug/L			07/17/24 23:13	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/17/24 23:13	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/17/24 23:13	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/17/24 23:13	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/17/24 23:13	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/17/24 23:13	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/17/24 23:13	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/17/24 23:13	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/17/24 23:13	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/17/24 23:13	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/17/24 23:13	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/17/24 23:13	1

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

Lab Sample ID: MB 310-427531/5
Matrix: Water
Analysis Batch: 427531

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		07/17/24 23:13	1
Dibromofluoromethane (Surr)	116		73 - 130		07/17/24 23:13	1
Toluene-d8 (Surr)	98		80 - 120		07/17/24 23:13	1

Lab Sample ID: LCS 310-427531/6
Matrix: Water
Analysis Batch: 427531

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	45.55		ug/L		114	50 - 150
Acrylonitrile	200	241.7		ug/L		121	50 - 150
Benzene	20.0	18.92		ug/L		95	72 - 124
Bromochloromethane	20.0	19.73		ug/L		99	73 - 130
Bromodichloromethane	20.0	18.68		ug/L		93	74 - 122
Bromoform	20.0	15.93		ug/L		80	61 - 122
2-Butanone (MEK)	40.0	47.02		ug/L		118	50 - 150
Carbon disulfide	20.0	19.10		ug/L		96	59 - 135
Carbon tetrachloride	20.0	18.66		ug/L		93	67 - 132
Chlorobenzene	20.0	17.48		ug/L		87	76 - 120
Chlorodibromomethane	20.0	17.78		ug/L		89	71 - 121
Chloroform	20.0	19.37		ug/L		97	72 - 125
cis-1,2-Dichloroethene	20.0	18.46		ug/L		92	74 - 123
cis-1,3-Dichloropropene	20.0	18.02		ug/L		90	71 - 125
1,2-Dibromo-3-chloropropane	20.0	16.18		ug/L		81	50 - 150
1,2-Dibromoethane (EDB)	20.0	18.62		ug/L		93	75 - 125
Dibromomethane	20.0	19.49		ug/L		97	74 - 125
1,2-Dichlorobenzene	20.0	18.11		ug/L		91	74 - 120
1,4-Dichlorobenzene	20.0	17.63		ug/L		88	72 - 120
1,1-Dichloroethane	20.0	21.04		ug/L		105	70 - 127
1,2-Dichloroethane	20.0	22.03		ug/L		110	71 - 125
1,1-Dichloroethene	20.0	19.10		ug/L		96	63 - 132
1,2-Dichloropropane	20.0	21.02		ug/L		105	73 - 124
Ethylbenzene	20.0	18.11		ug/L		91	74 - 122
2-Hexanone	40.0	38.10		ug/L		95	60 - 140
Iodomethane	20.0	<10.0		ug/L		27	10 - 150
Methylene chloride	20.0	20.02		ug/L		100	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	41.32		ug/L		103	60 - 139
Styrene	20.0	18.01		ug/L		90	74 - 121
1,1,1,2-Tetrachloroethane	20.0	17.48		ug/L		87	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.00		ug/L		90	68 - 124
Tetrachloroethene	20.0	17.55		ug/L		88	71 - 130
Toluene	20.0	17.92		ug/L		90	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.63		ug/L		93	50 - 150
trans-1,2-Dichloroethene	20.0	18.30		ug/L		92	70 - 126
trans-1,3-Dichloropropene	20.0	17.59		ug/L		88	69 - 123
1,1,1-Trichloroethane	20.0	18.57		ug/L		93	73 - 129
1,1,2-Trichloroethane	20.0	18.31		ug/L		92	73 - 123
Trichloroethene	20.0	18.59		ug/L		93	72 - 126

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

Lab Sample ID: LCS 310-427531/6
Matrix: Water
Analysis Batch: 427531

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	18.09		ug/L		90	65 - 127
Vinyl acetate	40.0	35.72		ug/L		89	50 - 150
Xylenes, Total	40.0	36.62		ug/L		92	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCS 310-427531/7
Matrix: Water
Analysis Batch: 427531

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	16.35		ug/L		82	23 - 150
Chloroethane	20.0	21.02		ug/L		105	54 - 136
Chloromethane	20.0	23.68		ug/L		118	38 - 150
Trichlorofluoromethane	20.0	23.76		ug/L		119	54 - 149
Vinyl chloride	20.0	21.26		ug/L		106	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*118*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-427650/5
Matrix: Water
Analysis Batch: 427650

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			07/18/24 10:13	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 10:13	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 10:13	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 10:13	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 10:13	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 10:13	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 10:13	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 10:13	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 10:13	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 10:13	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 10:13	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 10:13	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 10:13	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 10:13	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 10:13	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 10:13	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 10:13	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 10:13	1

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

Lab Sample ID: MB 310-427650/5
Matrix: Water
Analysis Batch: 427650

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 10:13	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 10:13	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 10:13	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 10:13	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 10:13	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 10:13	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 10:13	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 10:13	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 10:13	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 10:13	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 10:13	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 10:13	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 10:13	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 10:13	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 10:13	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 10:13	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 10:13	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 10:13	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 10:13	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 10:13	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 10:13	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 10:13	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 10:13	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 10:13	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 10:13	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 10:13	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 10:13	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 10:13	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 10:13	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 10:13	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 10:13	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 10:13	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 10:13	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 10:13	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 10:13	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 10:13	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 10:13	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 10:13	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 10:13	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 10:13	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 10:13	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 10:13	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*07/18/24 10:13*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*07/18/24 10:13*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*07/18/24 10:13*	*1*

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

Lab Sample ID: LCS 310-427650/6
Matrix: Water
Analysis Batch: 427650

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	29.03		ug/L		73	50 - 150
Acrolein	94.8	75.53		ug/L		80	49 - 150
Acrylonitrile	200	162.3		ug/L		81	50 - 150
Allyl chloride	20.0	18.65		ug/L		93	49 - 150
Benzene	20.0	18.23		ug/L		91	72 - 124
Bromochloromethane	20.0	17.61		ug/L		88	73 - 130
Bromodichloromethane	20.0	16.23		ug/L		81	74 - 122
Bromoform	20.0	17.48		ug/L		87	61 - 122
2-Butanone (MEK)	40.0	28.36		ug/L		71	50 - 150
Carbon disulfide	20.0	19.55		ug/L		98	59 - 135
Carbon tetrachloride	20.0	18.00		ug/L		90	67 - 132
Chlorobenzene	20.0	18.44		ug/L		92	76 - 120
Chlorodibromomethane	20.0	16.80		ug/L		84	71 - 121
Chloroform	20.0	17.01		ug/L		85	72 - 125
Chloroprene	20.0	17.64		ug/L		88	69 - 133
cis-1,2-Dichloroethene	20.0	17.44		ug/L		87	74 - 123
cis-1,3-Dichloropropene	20.0	17.52		ug/L		88	71 - 125
1,2-Dibromo-3-chloropropane	20.0	17.35		ug/L		87	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.93		ug/L		90	75 - 125
Dibromomethane	20.0	17.92		ug/L		90	74 - 125
1,2-Dichlorobenzene	20.0	19.62		ug/L		98	74 - 120
1,3-Dichlorobenzene	20.0	19.47		ug/L		97	72 - 120
1,4-Dichlorobenzene	20.0	19.44		ug/L		97	72 - 120
1,1-Dichloroethane	20.0	17.12		ug/L		86	70 - 127
1,2-Dichloroethane	20.0	16.31		ug/L		82	71 - 125
1,1-Dichloroethene	20.0	19.46		ug/L		97	63 - 132
1,2-Dichloropropane	20.0	17.75		ug/L		89	73 - 124
1,3-Dichloropropane	20.0	17.50		ug/L		88	72 - 125
2,2-Dichloropropane	20.0	18.37		ug/L		92	50 - 150
1,1-Dichloropropene	20.0	18.47		ug/L		92	69 - 132
Ethylbenzene	20.0	19.22		ug/L		96	74 - 122
Ethyl methacrylate	20.0	16.80		ug/L		84	70 - 129
2-Hexanone	40.0	32.15		ug/L		80	60 - 140
Iodomethane	20.0	18.80		ug/L		94	10 - 150
Methacrylonitrile	200	162.7		ug/L		81	69 - 129
Methylene chloride	20.0	19.56		ug/L		98	50 - 150
Methyl methacrylate	40.0	33.42		ug/L		84	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	30.90		ug/L		77	60 - 139
Naphthalene	20.0	18.37		ug/L		92	50 - 150
Propionitrile	200	157.6		ug/L		79	63 - 135
Styrene	20.0	18.90		ug/L		94	74 - 121
1,1,1,2-Tetrachloroethane	20.0	17.30		ug/L		87	71 - 120
1,1,2,2-Tetrachloroethane	20.0	17.63		ug/L		88	68 - 124
Tetrachloroethene	20.0	19.02		ug/L		95	71 - 130
Toluene	20.0	17.82		ug/L		89	74 - 123
trans-1,4-Dichloro-2-butene	20.0	16.51		ug/L		83	50 - 150
trans-1,2-Dichloroethene	20.0	17.81		ug/L		89	70 - 126
trans-1,3-Dichloropropene	20.0	17.14		ug/L		86	69 - 123

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

Lab Sample ID: LCS 310-427650/6
Matrix: Water
Analysis Batch: 427650

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	20.0	19.92		ug/L		100	68 - 124
1,1,1-Trichloroethane	20.0	17.41		ug/L		87	73 - 129
1,1,2-Trichloroethane	20.0	17.22		ug/L		86	73 - 123
Trichloroethene	20.0	18.07		ug/L		90	72 - 126
1,2,3-Trichloropropane	20.0	17.75		ug/L		89	65 - 127
Vinyl acetate	40.0	31.83		ug/L		80	50 - 150
Xylenes, Total	40.0	38.14		ug/L		95	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*88*		*73 - 130*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: LCS 310-427650/7
Matrix: Water
Analysis Batch: 427650

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	12.96		ug/L		65	23 - 150
Chloroethane	20.0	16.76		ug/L		84	54 - 136
Chloromethane	20.0	13.11		ug/L		66	38 - 150
Dichlorodifluoromethane	20.0	16.41		ug/L		82	39 - 150
Trichlorofluoromethane	20.0	17.27		ug/L		86	54 - 149
Vinyl chloride	20.0	16.54		ug/L		83	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 310-427716/5
Matrix: Water
Analysis Batch: 427716

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			07/18/24 12:50	1
Acrolein	<10.0		10.0	3.60	ug/L			07/18/24 12:50	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/18/24 12:50	1
Allyl chloride	<2.00		2.00	0.700	ug/L			07/18/24 12:50	1
Benzene	<0.500		0.500	0.220	ug/L			07/18/24 12:50	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/18/24 12:50	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/18/24 12:50	1
Bromoform	<5.00		5.00	0.780	ug/L			07/18/24 12:50	1
Bromomethane	<4.00		4.00	1.10	ug/L			07/18/24 12:50	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/18/24 12:50	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/18/24 12:50	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/18/24 12:50	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/18/24 12:50	1

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

Lab Sample ID: MB 310-427716/5
Matrix: Water
Analysis Batch: 427716

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/18/24 12:50	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/18/24 12:50	1
Chloroform	<3.00		3.00	1.30	ug/L			07/18/24 12:50	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/18/24 12:50	1
Chloroprene	<1.00		1.00	0.230	ug/L			07/18/24 12:50	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/18/24 12:50	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/18/24 12:50	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/18/24 12:50	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/18/24 12:50	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/18/24 12:50	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/18/24 12:50	1
1,3-Dichlorobenzene	<1.00		1.00	0.300	ug/L			07/18/24 12:50	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/18/24 12:50	1
Dichlorodifluoromethane	<3.00		3.00	0.250	ug/L			07/18/24 12:50	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/18/24 12:50	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/18/24 12:50	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/18/24 12:50	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/18/24 12:50	1
1,3-Dichloropropane	<1.00		1.00	0.400	ug/L			07/18/24 12:50	1
2,2-Dichloropropane	<4.00		4.00	0.690	ug/L			07/18/24 12:50	1
1,1-Dichloropropene	<1.00		1.00	0.430	ug/L			07/18/24 12:50	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/18/24 12:50	1
Ethyl methacrylate	<2.00		2.00	0.680	ug/L			07/18/24 12:50	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/18/24 12:50	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/18/24 12:50	1
Methacrylonitrile	<10.0		10.0	3.30	ug/L			07/18/24 12:50	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/18/24 12:50	1
Methyl methacrylate	<2.00		2.00	0.760	ug/L			07/18/24 12:50	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/18/24 12:50	1
Naphthalene	<5.00		5.00	3.00	ug/L			07/18/24 12:50	1
Propionitrile	<10.0		10.0	3.40	ug/L			07/18/24 12:50	1
Styrene	<1.00		1.00	0.370	ug/L			07/18/24 12:50	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/18/24 12:50	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/18/24 12:50	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/18/24 12:50	1
Toluene	<1.00		1.00	0.430	ug/L			07/18/24 12:50	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/18/24 12:50	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/18/24 12:50	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/18/24 12:50	1
1,2,4-Trichlorobenzene	<5.00		5.00	0.750	ug/L			07/18/24 12:50	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/18/24 12:50	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/18/24 12:50	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/18/24 12:50	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/18/24 12:50	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/18/24 12:50	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/18/24 12:50	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/18/24 12:50	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/18/24 12:50	1
Dichlorofluoromethane	<1.00		1.00	0.310	ug/L			07/18/24 12:50	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		80 - 120		07/18/24 12:50	1
Dibromofluoromethane (Surr)	109		73 - 130		07/18/24 12:50	1
Toluene-d8 (Surr)	97		80 - 120		07/18/24 12:50	1

Lab Sample ID: LCS 310-427716/6
Matrix: Water
Analysis Batch: 427716

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	50.12		ug/L		125	50 - 150
Acrolein	94.8	94.43		ug/L		100	49 - 150
Acrylonitrile	200	204.3		ug/L		102	50 - 150
Allyl chloride	20.0	16.04		ug/L		80	49 - 150
Benzene	20.0	19.63		ug/L		98	72 - 124
Bromochloromethane	20.0	19.69		ug/L		98	73 - 130
Bromodichloromethane	20.0	21.23		ug/L		106	74 - 122
Bromoform	20.0	19.44		ug/L		97	61 - 122
2-Butanone (MEK)	40.0	42.71		ug/L		107	50 - 150
Carbon disulfide	20.0	21.54		ug/L		108	59 - 135
Carbon tetrachloride	20.0	20.34		ug/L		102	67 - 132
Chlorobenzene	20.0	19.78		ug/L		99	76 - 120
Chlorodibromomethane	20.0	20.55		ug/L		103	71 - 121
Chloroform	20.0	19.88		ug/L		99	72 - 125
Chloroprene	20.0	23.53		ug/L		118	69 - 133
cis-1,2-Dichloroethene	20.0	19.56		ug/L		98	74 - 123
cis-1,3-Dichloropropene	20.0	21.15		ug/L		106	71 - 125
1,2-Dibromo-3-chloropropane	20.0	23.28		ug/L		116	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.08		ug/L		95	75 - 125
Dibromomethane	20.0	20.72		ug/L		104	74 - 125
1,2-Dichlorobenzene	20.0	20.89		ug/L		104	74 - 120
1,3-Dichlorobenzene	20.0	20.85		ug/L		104	72 - 120
1,4-Dichlorobenzene	20.0	20.40		ug/L		102	72 - 120
1,1-Dichloroethane	20.0	21.70		ug/L		108	70 - 127
1,2-Dichloroethane	20.0	21.44		ug/L		107	71 - 125
1,1-Dichloroethene	20.0	23.05		ug/L		115	63 - 132
1,2-Dichloropropane	20.0	21.30		ug/L		106	73 - 124
1,3-Dichloropropane	20.0	18.76		ug/L		94	72 - 125
2,2-Dichloropropane	20.0	22.72		ug/L		114	50 - 150
1,1-Dichloropropene	20.0	21.41		ug/L		107	69 - 132
Ethylbenzene	20.0	20.12		ug/L		101	74 - 122
Ethyl methacrylate	20.0	22.68		ug/L		113	70 - 129
2-Hexanone	40.0	45.79		ug/L		114	60 - 140
Iodomethane	20.0	18.04		ug/L		90	10 - 150
Methacrylonitrile	200	191.8		ug/L		96	69 - 129
Methylene chloride	20.0	20.35		ug/L		102	50 - 150
Methyl methacrylate	40.0	42.58		ug/L		106	68 - 131
4-Methyl-2-pentanone (MIBK)	40.0	43.54		ug/L		109	60 - 139
Naphthalene	20.0	19.81		ug/L		99	50 - 150
Propionitrile	200	214.2		ug/L		107	63 - 135
Styrene	20.0	20.10		ug/L		101	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.72		ug/L		99	71 - 120

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

Lab Sample ID: LCS 310-427716/6
Matrix: Water
Analysis Batch: 427716

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2,2-Tetrachloroethane	20.0	20.07		ug/L		100	68 - 124
Tetrachloroethene	20.0	21.31		ug/L		107	71 - 130
Toluene	20.0	19.59		ug/L		98	74 - 123
trans-1,4-Dichloro-2-butene	20.0	19.65		ug/L		98	50 - 150
trans-1,2-Dichloroethene	20.0	19.08		ug/L		95	70 - 126
trans-1,3-Dichloropropene	20.0	21.86		ug/L		109	69 - 123
1,2,4-Trichlorobenzene	20.0	21.76		ug/L		109	68 - 124
1,1,1-Trichloroethane	20.0	22.56		ug/L		113	73 - 129
1,1,2-Trichloroethane	20.0	19.55		ug/L		98	73 - 123
Trichloroethene	20.0	20.88		ug/L		104	72 - 126
1,2,3-Trichloropropane	20.0	19.16		ug/L		96	65 - 127
Vinyl acetate	40.0	40.84		ug/L		102	50 - 150
Xylenes, Total	40.0	41.37		ug/L		103	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*73 - 130*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCS 310-427716/7
Matrix: Water
Analysis Batch: 427716

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	15.51		ug/L		78	23 - 150
Chloroethane	20.0	21.21		ug/L		106	54 - 136
Chloromethane	20.0	18.15		ug/L		91	38 - 150
Dichlorodifluoromethane	20.0	20.51		ug/L		103	39 - 150
Trichlorofluoromethane	20.0	18.40		ug/L		92	54 - 149
Vinyl chloride	20.0	20.26		ug/L		101	56 - 140
Dichlorofluoromethane	20.0	23.00		ug/L		115	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*73 - 130*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 310-427851/5
Matrix: Water
Analysis Batch: 427851

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			07/19/24 12:14	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			07/19/24 12:14	1
Benzene	<0.500		0.500	0.220	ug/L			07/19/24 12:14	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			07/19/24 12:14	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			07/19/24 12:14	1
Bromoform	<5.00		5.00	0.780	ug/L			07/19/24 12:14	1

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

Lab Sample ID: MB 310-427851/5
Matrix: Water
Analysis Batch: 427851

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	<4.00		4.00	1.10	ug/L			07/19/24 12:14	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			07/19/24 12:14	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			07/19/24 12:14	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			07/19/24 12:14	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			07/19/24 12:14	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			07/19/24 12:14	1
Chloroethane	<4.00		4.00	0.790	ug/L			07/19/24 12:14	1
Chloroform	<3.00		3.00	1.30	ug/L			07/19/24 12:14	1
Chloromethane	<3.00		3.00	0.610	ug/L			07/19/24 12:14	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			07/19/24 12:14	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			07/19/24 12:14	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			07/19/24 12:14	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			07/19/24 12:14	1
Dibromomethane	<1.00		1.00	0.330	ug/L			07/19/24 12:14	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			07/19/24 12:14	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			07/19/24 12:14	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			07/19/24 12:14	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			07/19/24 12:14	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			07/19/24 12:14	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			07/19/24 12:14	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			07/19/24 12:14	1
2-Hexanone	<10.0		10.0	2.00	ug/L			07/19/24 12:14	1
Iodomethane	<10.0		10.0	7.00	ug/L			07/19/24 12:14	1
Methylene chloride	<5.00		5.00	1.70	ug/L			07/19/24 12:14	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			07/19/24 12:14	1
Styrene	<1.00		1.00	0.370	ug/L			07/19/24 12:14	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			07/19/24 12:14	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			07/19/24 12:14	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			07/19/24 12:14	1
Toluene	<1.00		1.00	0.430	ug/L			07/19/24 12:14	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			07/19/24 12:14	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			07/19/24 12:14	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			07/19/24 12:14	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			07/19/24 12:14	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			07/19/24 12:14	1
Trichloroethene	<1.00		1.00	0.430	ug/L			07/19/24 12:14	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			07/19/24 12:14	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			07/19/24 12:14	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			07/19/24 12:14	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			07/19/24 12:14	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			07/19/24 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/19/24 12:14*	*1*
Dibromofluoromethane (Surr)	*104*		*73 - 130*		*07/19/24 12:14*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/19/24 12:14*	*1*

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

Lab Sample ID: LCS 310-427851/6
Matrix: Water
Analysis Batch: 427851

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	37.45		ug/L		94	50 - 150
Acrylonitrile	200	185.7		ug/L		93	50 - 150
Benzene	20.0	19.92		ug/L		100	72 - 124
Bromochloromethane	20.0	18.93		ug/L		95	73 - 130
Bromodichloromethane	20.0	21.14		ug/L		106	74 - 122
Bromoform	20.0	18.07		ug/L		90	61 - 122
2-Butanone (MEK)	40.0	33.44		ug/L		84	50 - 150
Carbon disulfide	20.0	21.92		ug/L		110	59 - 135
Carbon tetrachloride	20.0	22.79		ug/L		114	67 - 132
Chlorobenzene	20.0	19.23		ug/L		96	76 - 120
Chlorodibromomethane	20.0	18.96		ug/L		95	71 - 121
Chloroform	20.0	20.93		ug/L		105	72 - 125
cis-1,2-Dichloroethene	20.0	20.49		ug/L		102	74 - 123
cis-1,3-Dichloropropene	20.0	19.50		ug/L		97	71 - 125
1,2-Dibromo-3-chloropropane	20.0	23.55		ug/L		118	50 - 150
1,2-Dibromoethane (EDB)	20.0	17.76		ug/L		89	75 - 125
Dibromomethane	20.0	21.19		ug/L		106	74 - 125
1,2-Dichlorobenzene	20.0	20.16		ug/L		101	74 - 120
1,4-Dichlorobenzene	20.0	19.38		ug/L		97	72 - 120
1,1-Dichloroethane	20.0	21.64		ug/L		108	70 - 127
1,2-Dichloroethane	20.0	21.33		ug/L		107	71 - 125
1,1-Dichloroethene	20.0	23.06		ug/L		115	63 - 132
1,2-Dichloropropane	20.0	21.80		ug/L		109	73 - 124
Ethylbenzene	20.0	19.94		ug/L		100	74 - 122
2-Hexanone	40.0	39.37		ug/L		98	60 - 140
Iodomethane	20.0	19.33		ug/L		97	10 - 150
Methylene chloride	20.0	20.38		ug/L		102	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	37.66		ug/L		94	60 - 139
Styrene	20.0	19.83		ug/L		99	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.19		ug/L		96	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.83		ug/L		94	68 - 124
Tetrachloroethene	20.0	20.59		ug/L		103	71 - 130
Toluene	20.0	19.36		ug/L		97	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.30		ug/L		91	50 - 150
trans-1,2-Dichloroethene	20.0	19.74		ug/L		99	70 - 126
trans-1,3-Dichloropropene	20.0	20.41		ug/L		102	69 - 123
1,1,1-Trichloroethane	20.0	23.11		ug/L		116	73 - 129
1,1,2-Trichloroethane	20.0	17.87		ug/L		89	73 - 123
Trichloroethene	20.0	19.52		ug/L		98	72 - 126
1,2,3-Trichloropropane	20.0	19.48		ug/L		97	65 - 127
Vinyl acetate	40.0	38.76		ug/L		97	50 - 150
Xylenes, Total	40.0	40.34		ug/L		101	73 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*73 - 130*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: LCS 310-427851/7
Matrix: Water
Analysis Batch: 427851

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	15.44		ug/L		77	23 - 150
Chloroethane	20.0	17.90		ug/L		89	54 - 136
Chloromethane	20.0	17.96		ug/L		90	38 - 150
Trichlorofluoromethane	20.0	18.73		ug/L		94	54 - 149
Vinyl chloride	20.0	19.40		ug/L		97	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*73 - 130*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 310-427592/1-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<10.0		10.0	0.640	ug/L		07/17/24 15:18	07/18/24 15:53	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		07/17/24 15:18	07/18/24 15:53	1
Acetophenone	<10.0		10.0	0.690	ug/L		07/17/24 15:18	07/18/24 15:53	1
Anthracene	<10.0		10.0	0.870	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/18/24 15:53	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		07/17/24 15:18	07/18/24 15:53	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		07/17/24 15:18	07/18/24 15:53	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		07/17/24 15:18	07/18/24 15:53	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		07/17/24 15:18	07/18/24 15:53	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		07/17/24 15:18	07/18/24 15:53	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		07/17/24 15:18	07/18/24 15:53	1
Chrysene	<10.0		10.0	0.870	ug/L		07/17/24 15:18	07/18/24 15:53	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		07/17/24 15:18	07/18/24 15:53	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		07/17/24 15:18	07/18/24 15:53	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		07/17/24 15:18	07/18/24 15:53	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		07/17/24 15:18	07/18/24 15:53	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		07/17/24 15:18	07/18/24 15:53	1

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

Lab Sample ID: MB 310-427592/1-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		07/17/24 15:18	07/18/24 15:53	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		07/17/24 15:18	07/18/24 15:53	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		07/17/24 15:18	07/18/24 15:53	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		07/17/24 15:18	07/18/24 15:53	1
Diphenylamine	<10.0		10.0	6.00	ug/L		07/17/24 15:18	07/18/24 15:53	1
Fluoranthene	<10.0		10.0	1.70	ug/L		07/17/24 15:18	07/18/24 15:53	1
Fluorene	<10.0		10.0	0.790	ug/L		07/17/24 15:18	07/18/24 15:53	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		07/17/24 15:18	07/18/24 15:53	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		07/17/24 15:18	07/18/24 15:53	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		07/17/24 15:18	07/18/24 15:53	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		07/17/24 15:18	07/18/24 15:53	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		07/17/24 15:18	07/18/24 15:53	1
Isophorone	<10.0		10.0	0.930	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		07/17/24 15:18	07/18/24 15:53	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		07/17/24 15:18	07/18/24 15:53	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		07/17/24 15:18	07/18/24 15:53	1
2-Nitrophenol	<10.0		10.0	6.80	ug/L		07/17/24 15:18	07/18/24 15:53	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		07/17/24 15:18	07/18/24 15:53	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		07/17/24 15:18	07/18/24 15:53	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		07/17/24 15:18	07/18/24 15:53	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		07/17/24 15:18	07/18/24 15:53	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		07/17/24 15:18	07/18/24 15:53	1
Phenanthrene	<10.0		10.0	0.790	ug/L		07/17/24 15:18	07/18/24 15:53	1
Phenol	<10.0		10.0	1.10	ug/L		07/17/24 15:18	07/18/24 15:53	1
Pyrene	<10.0		10.0	0.790	ug/L		07/17/24 15:18	07/18/24 15:53	1
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		07/17/24 15:18	07/18/24 15:53	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		07/17/24 15:18	07/18/24 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*39 - 118*	*07/17/24 15:18*	*07/18/24 15:53*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 110*	*07/17/24 15:18*	*07/18/24 15:53*	*1*
Nitrobenzene-d5 (Surr)	*96*		*45 - 129*	*07/17/24 15:18*	*07/18/24 15:53*	*1*
Phenol-d5 (Surr)	*62*		*21 - 110*	*07/17/24 15:18*	*07/18/24 15:53*	*1*
Terphenyl-d14 (Surr)	*105*		*12 - 144*	*07/17/24 15:18*	*07/18/24 15:53*	*1*
2,4,6-Tribromophenol (Surr)	*102*		*27 - 136*	*07/17/24 15:18*	*07/18/24 15:53*	*1*

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

Lab Sample ID: MB 310-427592/1-A
Matrix: Water
Analysis Batch: 427942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427592

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/22/24 10:14	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/22/24 10:14	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
Diallate	<10.0		10.0	4.00	ug/L		07/17/24 15:18	07/22/24 10:14	1
Dimethoate	<10.0		10.0	3.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		07/17/24 15:18	07/22/24 10:14	1
Dinoseb	<10.0		10.0	2.40	ug/L		07/17/24 15:18	07/22/24 10:14	1
Disulfoton	<10.0		10.0	2.40	ug/L		07/17/24 15:18	07/22/24 10:14	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
Ethyl Parathion	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/22/24 10:14	1
Famphur	<10.0		10.0	3.80	ug/L		07/17/24 15:18	07/22/24 10:14	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
Isodrin	<10.0		10.0	4.70	ug/L		07/17/24 15:18	07/22/24 10:14	1
Isosafrole	<10.0		10.0	2.30	ug/L		07/17/24 15:18	07/22/24 10:14	1
Kepone	<10.0		10.0	1.00	ug/L		07/17/24 15:18	07/22/24 10:14	1
Methapyrilene	<10.0		10.0	0.760	ug/L		07/17/24 15:18	07/22/24 10:14	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		07/17/24 15:18	07/22/24 10:14	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		07/17/24 15:18	07/22/24 10:14	1
Methyl parathion	<10.0		10.0	2.30	ug/L		07/17/24 15:18	07/22/24 10:14	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
1-Naphthylamine	<10.0		10.0	2.50	ug/L		07/17/24 15:18	07/22/24 10:14	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		07/17/24 15:18	07/22/24 10:14	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		07/17/24 15:18	07/22/24 10:14	1
o,o',o''-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		07/17/24 15:18	07/22/24 10:14	1
o-Toluidine	<10.0		10.0	2.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		07/17/24 15:18	07/22/24 10:14	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		07/17/24 15:18	07/22/24 10:14	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		07/17/24 15:18	07/22/24 10:14	1
Phenacetin	<10.0		10.0	1.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
1,4-Phenylenediamine	<10.0		10.0	1.90	ug/L		07/17/24 15:18	07/22/24 10:14	1
Phorate	<10.0		10.0	3.20	ug/L		07/17/24 15:18	07/22/24 10:14	1
Pronamide	<10.0		10.0	2.70	ug/L		07/17/24 15:18	07/22/24 10:14	1
Safrole	<10.0		10.0	2.80	ug/L		07/17/24 15:18	07/22/24 10:14	1
Thionazin	<10.0		10.0	3.50	ug/L		07/17/24 15:18	07/22/24 10:14	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		07/17/24 15:18	07/22/24 10:14	1

Lab Sample ID: LCS 310-427592/2-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	85.82		ug/L		86	43 - 110
Acenaphthylene	100	90.88		ug/L		91	40 - 110
Acetophenone	100	83.27		ug/L		83	48 - 119
Anthracene	100	103.8		ug/L		104	51 - 120
Benzo[a]anthracene	100	84.53		ug/L		85	51 - 123

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

Lab Sample ID: LCS 310-427592/2-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	100	82.51		ug/L		83	48 - 125
Benzo(b)fluoranthene	100	86.40		ug/L		86	49 - 129
Benzo[g,h,i]perylene	100	80.99		ug/L		81	43 - 139
Benzo[k]fluoranthene	100	100.2		ug/L		100	47 - 130
Benzyl alcohol	100	79.54		ug/L		80	39 - 128
Bis(2-chloroethoxy)methane	100	93.11		ug/L		93	48 - 121
Bis(2-chloroethyl)ether	100	76.00		ug/L		76	43 - 123
bis (2-chloroisopropyl) ether	100	75.30		ug/L		75	34 - 123
Bis(2-ethylhexyl) phthalate	100	83.45		ug/L		83	43 - 143
4-Bromophenyl phenyl ether	100	100.4		ug/L		100	45 - 119
Butyl benzyl phthalate	100	91.74		ug/L		92	46 - 135
4-Chloroaniline	100	92.11		ug/L		92	21 - 139
4-Chloro-3-methylphenol	100	80.91		ug/L		81	49 - 130
2-Chloronaphthalene	100	93.63		ug/L		94	37 - 110
2-Chlorophenol	100	44.95		ug/L		45	44 - 117
4-Chlorophenyl phenyl ether	100	84.82		ug/L		85	44 - 116
Chrysene	100	88.07		ug/L		88	51 - 125
Dibenz(a,h)anthracene	100	92.69		ug/L		93	38 - 149
Dibenzofuran	100	94.64		ug/L		95	45 - 112
2,4-Dichlorophenol	100	46.42		ug/L		46	41 - 124
2,6-Dichlorophenol	100	19.47	*-	ug/L		19	30 - 130
Diethyl phthalate	100	91.04		ug/L		91	43 - 135
2,4-Dimethylphenol	100	91.30		ug/L		91	31 - 142
Dimethyl phthalate	100	99.06		ug/L		99	43 - 129
Di-n-butyl phthalate	100	93.92		ug/L		94	50 - 133
1,3-Dinitrobenzene	100	100.5		ug/L		101	45 - 138
4,6-Dinitro-2-methylphenol	200	7.873	J *-	ug/L		4	22 - 143
2,4-Dinitrophenol	200	<20.0	*-	ug/L		4	10 - 138
2,4-Dinitrotoluene	100	90.57		ug/L		91	47 - 137
2,6-Dinitrotoluene	100	94.11		ug/L		94	51 - 130
Di-n-octyl phthalate	100	75.82		ug/L		76	34 - 150
Diphenylamine	85.0	88.18		ug/L		104	48 - 122
Fluoranthene	100	99.71		ug/L		100	47 - 128
Fluorene	100	88.36		ug/L		88	45 - 119
Hexachlorobenzene	100	94.89		ug/L		95	48 - 119
Hexachlorobutadiene	100	61.77		ug/L		62	32 - 110
Hexachlorocyclopentadiene	100	39.03		ug/L		39	10 - 110
Hexachloroethane	100	55.17		ug/L		55	31 - 110
Indeno[1,2,3-cd]pyrene	100	95.08		ug/L		95	37 - 150
Isophorone	100	92.64		ug/L		93	50 - 125
2-Methylnaphthalene	100	73.09		ug/L		73	33 - 110
2-Methylphenol	100	80.24		ug/L		80	47 - 118
4-Methylphenol (and/or 3-Methylphenol)	100	70.74		ug/L		71	46 - 117
2-Nitroaniline	100	89.52		ug/L		90	50 - 135
3-Nitroaniline	100	104.7		ug/L		105	42 - 139
4-Nitroaniline	100	98.42		ug/L		98	31 - 145
Nitrobenzene	100	88.12		ug/L		88	47 - 116
2-Nitrophenol	100	39.10	*-	ug/L		39	41 - 129

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

Lab Sample ID: LCS 310-427592/2-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitrophenol	200	<10.0	*-	ug/L		0.7	18 - 110
N-Nitrosodimethylamine	100	66.36		ug/L		66	37 - 110
N-Nitrosodi-n-propylamine	100	93.63		ug/L		94	45 - 130
N-Nitrosodiphenylamine	100	103.7		ug/L		104	49 - 121
Pentachlorophenol	200	<10.0	*-	ug/L		5	26 - 133
Phenanthrene	100	99.38		ug/L		99	51 - 117
Phenol	100	39.81		ug/L		40	29 - 110
Pyrene	100	97.27		ug/L		97	48 - 127
1,2,4,5-Tetrachlorobenzene	100	70.76		ug/L		71	36 - 110
2,3,4,6-Tetrachlorophenol	100	10.30	*-	ug/L		10	33 - 134
2,4,5-Trichlorophenol	100	36.82		ug/L		37	35 - 133
2,4,6-Trichlorophenol	100	17.66	*-	ug/L		18	28 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*39 - 118*
2-Fluorophenol (Surr)	*20*	*S1-*	*25 - 110*
Nitrobenzene-d5 (Surr)	*89*		*45 - 129*
Phenol-d5 (Surr)	*40*		*21 - 110*
Terphenyl-d14 (Surr)	*93*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*38*		*27 - 136*

Lab Sample ID: LCS 310-427592/2-A
Matrix: Water
Analysis Batch: 427942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Acetylaminofluorene	64.0	45.92		ug/L		72	35 - 150
4-Aminobiphenyl	64.0	44.34		ug/L		69	24 - 138
Chlorobenzilate	64.0	49.38		ug/L		77	52 - 138
Diallate	64.0	48.66		ug/L		76	42 - 141
Dimethoate	64.0	56.79		ug/L		89	51 - 150
7,12-Dimethylbenz(a)anthracene	64.0	51.11		ug/L		80	51 - 129
3,3'-Dimethylbenzidine	64.0	48.58		ug/L		76	10 - 150
Dinoseb	64.0	18.39		ug/L		29	25 - 146
Disulfoton	64.0	38.81		ug/L		61	54 - 131
Ethyl methanesulfonate	64.0	40.43		ug/L		63	48 - 120
Ethyl Parathion	64.0	49.69		ug/L		78	52 - 149
Famphur	64.0	90.18	E	ug/L		141	44 - 150
Hexachloropropene	64.0	11.10		ug/L		17	10 - 110
Isodrin	64.0	50.09		ug/L		78	52 - 125
Isosafrole	64.0	40.04		ug/L		63	31 - 123
Kepone	64.0	52.87		ug/L		83	10 - 150
Methapyrilene	64.0	28.65		ug/L		45	10 - 110
3-Methylcholanthrene	64.0	50.11		ug/L		78	43 - 150
Methyl methanesulfonate	64.0	24.74		ug/L		39	36 - 110
Methyl parathion	64.0	54.09		ug/L		85	50 - 150
1,4-Naphthoquinone	64.0	41.57		ug/L		65	37 - 149
1-Naphthylamine	64.0	31.35		ug/L		49	19 - 110

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

Lab Sample ID: LCS 310-427592/2-A
Matrix: Water
Analysis Batch: 427942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Naphthylamine	64.0	39.22		ug/L		61	18 - 127
N-Nitrosodi-n-butylamine	64.0	42.57		ug/L		67	52 - 142
N-Nitrosomethylethylamine	64.0	45.63		ug/L		71	54 - 123
N-Nitrosopyrrolidine	64.0	46.56		ug/L		73	56 - 143
o,o',o''-Triethylphosphorothioate	64.0	37.06		ug/L		58	45 - 113
o-Toluidine	64.0	42.53		ug/L		66	24 - 142
p-Dimethylamino azobenzene	64.0	49.97		ug/L		78	42 - 138
Pentachlorobenzene	64.0	42.23		ug/L		66	33 - 110
Pentachloronitrobenzene	64.0	52.05		ug/L		81	65 - 127
Phenacetin	64.0	53.64		ug/L		84	56 - 146
1,4-Phenylenediamine	64.0	<10.0	*-	ug/L		-0.9	20 - 120
Phorate	64.0	43.99		ug/L		69	57 - 135
Pronamide	64.0	55.72		ug/L		87	61 - 144
Safrole	64.0	33.63		ug/L		53	34 - 110
Thionazin	64.0	45.05		ug/L		70	52 - 147
1,3,5-Trinitrobenzene	64.0	43.25		ug/L		68	39 - 144

Lab Sample ID: LCSD 310-427592/3-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427592

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	100	103.5		ug/L		103	43 - 110	19	35
Acenaphthylene	100	108.4		ug/L		108	40 - 110	18	35
Acetophenone	100	102.8		ug/L		103	48 - 119	21	35
Anthracene	100	121.7	*+	ug/L		122	51 - 120	16	35
Benzo[a]anthracene	100	103.5		ug/L		104	51 - 123	20	35
Benzo[a]pyrene	100	100.7		ug/L		101	48 - 125	20	35
Benzo(b)fluoranthene	100	104.6		ug/L		105	49 - 129	19	35
Benzo[g,h,i]perylene	100	94.86		ug/L		95	43 - 139	16	35
Benzo[k]fluoranthene	100	119.8		ug/L		120	47 - 130	18	35
Benzyl alcohol	100	96.60		ug/L		97	39 - 128	19	35
Bis(2-chloroethoxy)methane	100	112.0		ug/L		112	48 - 121	18	35
Bis(2-chloroethyl)ether	100	91.57		ug/L		92	43 - 123	19	35
bis (2-chloroisopropyl) ether	100	90.90		ug/L		91	34 - 123	19	35
Bis(2-ethylhexyl) phthalate	100	99.73		ug/L		100	43 - 143	18	35
4-Bromophenyl phenyl ether	100	121.0	*+	ug/L		121	45 - 119	19	35
Butyl benzyl phthalate	100	111.0		ug/L		111	46 - 135	19	35
4-Chloroaniline	100	109.7		ug/L		110	21 - 139	17	35
4-Chloro-3-methylphenol	100	108.0		ug/L		108	49 - 130	29	35
2-Chloronaphthalene	100	111.2	*+	ug/L		111	37 - 110	17	35
2-Chlorophenol	100	97.41	*1	ug/L		97	44 - 117	74	35
4-Chlorophenyl phenyl ether	100	102.8		ug/L		103	44 - 116	19	35
Chrysene	100	105.0		ug/L		105	51 - 125	18	35
Dibenz(a,h)anthracene	100	107.6		ug/L		108	38 - 149	15	35
Dibenzofuran	100	114.1	*+	ug/L		114	45 - 112	19	35
2,4-Dichlorophenol	100	103.3	*1	ug/L		103	41 - 124	76	35
2,6-Dichlorophenol	100	104.7	*1	ug/L		105	30 - 130	137	35
Diethyl phthalate	100	108.0		ug/L		108	43 - 135	17	35

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

Lab Sample ID: LCSD 310-427592/3-A
Matrix: Water
Analysis Batch: 427635

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427592

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dimethylphenol			100	110.2		ug/L		110	31 - 142	19	35
Dimethyl phthalate			100	114.1		ug/L		114	43 - 129	14	35
Di-n-butyl phthalate			100	108.9		ug/L		109	50 - 133	15	35
1,3-Dinitrobenzene			100	122.5		ug/L		123	45 - 138	20	35
4,6-Dinitro-2-methylphenol			200	228.7	*1	ug/L		114	22 - 143	187	35
2,4-Dinitrophenol			200	184.2	*1	ug/L		92	10 - 138	183	35
2,4-Dinitrotoluene			100	109.1		ug/L		109	47 - 137	19	35
2,6-Dinitrotoluene			100	110.6		ug/L		111	51 - 130	16	35
Di-n-octyl phthalate			100	93.69		ug/L		94	34 - 150	21	35
Diphenylamine			85.0	104.0		ug/L		122	48 - 122	16	35
Fluoranthene			100	115.3		ug/L		115	47 - 128	14	35
Fluorene			100	106.4		ug/L		106	45 - 119	19	35
Hexachlorobenzene			100	112.8		ug/L		113	48 - 119	17	35
Hexachlorobutadiene			100	85.21		ug/L		85	32 - 110	32	35
Hexachlorocyclopentadiene			100	53.21		ug/L		53	10 - 110	31	35
Hexachloroethane			100	76.23		ug/L		76	31 - 110	32	35
Indeno[1,2,3-cd]pyrene			100	111.0		ug/L		111	37 - 150	15	35
Isophorone			100	108.8		ug/L		109	50 - 125	16	35
2-Methylnaphthalene			100	94.98		ug/L		95	33 - 110	26	35
2-Methylphenol			100	105.7		ug/L		106	47 - 118	27	35
4-Methylphenol (and/or 3-Methylphenol)			100	97.72		ug/L		98	46 - 117	32	35
2-Nitroaniline			100	104.7		ug/L		105	50 - 135	16	35
3-Nitroaniline			100	123.2		ug/L		123	42 - 139	16	35
4-Nitroaniline			100	118.1		ug/L		118	31 - 145	18	35
Nitrobenzene			100	106.4		ug/L		106	47 - 116	19	35
2-Nitrophenol			100	103.5	*1	ug/L		103	41 - 129	90	35
4-Nitrophenol			200	142.0	*1	ug/L		71	18 - 110	196	35
N-Nitrosodimethylamine			100	80.04		ug/L		80	37 - 110	19	35
N-Nitrosodi-n-propylamine			100	113.6		ug/L		114	45 - 130	19	35
N-Nitrosodiphenylamine			100	122.4	*+	ug/L		122	49 - 121	16	35
Pentachlorophenol			200	245.2	*1	ug/L		123	26 - 133	185	35
Phenanthrene			100	117.8	*+	ug/L		118	51 - 117	17	35
Phenol			100	70.84	*1	ug/L		71	29 - 110	56	35
Pyrene			100	116.1		ug/L		116	48 - 127	18	35
1,2,4,5-Tetrachlorobenzene			100	93.69		ug/L		94	36 - 110	28	35
2,3,4,6-Tetrachlorophenol			100	116.1	*1	ug/L		116	33 - 134	167	35
2,4,5-Trichlorophenol			100	109.8	*1	ug/L		110	35 - 133	100	35
2,4,6-Trichlorophenol			100	100.5	*1	ug/L		100	28 - 139	140	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*106*		*39 - 118*
2-Fluorophenol (Surr)	*80*		*25 - 110*
Nitrobenzene-d5 (Surr)	*112*		*45 - 129*
Phenol-d5 (Surr)	*74*		*21 - 110*
Terphenyl-d14 (Surr)	*120*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*123*		*27 - 136*

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

Lab Sample ID: LCSD 310-427592/3-A
Matrix: Water
Analysis Batch: 427942

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427592

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Acetylaminofluorene			64.0	61.00		ug/L		95	35 - 150	28	28
4-Aminobiphenyl			64.0	62.01		ug/L		97	24 - 138	33	35
Chlorobenzilate			64.0	66.48	*1	ug/L		104	52 - 138	30	28
Diallate			64.0	67.46		ug/L		105	42 - 141	32	35
Dimethoate			64.0	84.36	*1	ug/L		132	51 - 150	39	26
7,12-Dimethylbenz(a)anthracene			64.0	67.85		ug/L		106	51 - 129	28	28
3,3'-Dimethylbenzidine			64.0	56.42		ug/L		88	10 - 150	15	35
Dinoseb			64.0	74.00	*1	ug/L		116	25 - 146	120	35
Disulfoton			64.0	51.86	*1	ug/L		81	54 - 131	29	24
Ethyl methanesulfonate			64.0	54.59	*1	ug/L		85	48 - 120	30	27
Ethyl Parathion			64.0	69.70	*1	ug/L		109	52 - 149	34	26
Famphur			64.0	128.3	E *+	ug/L		200	44 - 150	35	35
Hexachloropropene			64.0	25.21	*1	ug/L		39	10 - 110	78	35
Isodrin			64.0	65.53	*1	ug/L		102	52 - 125	27	26
Isosafrole			64.0	57.91	*1	ug/L		90	31 - 123	36	35
Kepone			64.0	88.72	*1	ug/L		139	10 - 150	51	35
Methapyrilene			64.0	10.70	*1	ug/L		17	10 - 110	91	35
3-Methylcholanthrene			64.0	63.23		ug/L		99	43 - 150	23	32
Methyl methanesulfonate			64.0	32.50	*1	ug/L		51	36 - 110	27	26
Methyl parathion			64.0	82.01	*1	ug/L		128	50 - 150	41	25
1,4-Naphthoquinone			64.0	56.78	*1	ug/L		89	37 - 149	31	29
1-Naphthylamine			64.0	36.52		ug/L		57	19 - 110	15	35
2-Naphthylamine			64.0	49.38		ug/L		77	18 - 127	23	35
N-Nitrosodi-n-butylamine			64.0	58.67	*1	ug/L		92	52 - 142	32	27
N-Nitrosomethylethylamine			64.0	61.16	*1	ug/L		96	54 - 123	29	26
N-Nitrosopyrrolidine			64.0	62.00	*1	ug/L		97	56 - 143	28	25
o,o',o''-Triethylphosphorothioate			64.0	58.51	*1	ug/L		91	45 - 113	45	33
o-Toluidine			64.0	55.93		ug/L		87	24 - 142	27	35
p-Dimethylamino azobenzene			64.0	68.10	*1	ug/L		106	42 - 138	31	29
Pentachlorobenzene			64.0	60.50	*1	ug/L		95	33 - 110	36	35
Pentachloronitrobenzene			64.0	67.84		ug/L		106	65 - 127	26	29
Phenacetin			64.0	72.41	*1	ug/L		113	56 - 146	30	25
1,4-Phenylenediamine			64.0	<10.0	*-	ug/L		-1	20 - 120	7	35
Phorate			64.0	61.54	*1	ug/L		96	57 - 135	33	26
Pronamide			64.0	66.39		ug/L		104	61 - 144	17	27
Safrole			64.0	53.72	*1	ug/L		84	34 - 110	46	35
Thionazin			64.0	62.73	*1	ug/L		98	52 - 147	33	28
1,3,5-Trinitrobenzene			64.0	64.62	*1	ug/L		101	39 - 144	40	35

Lab Sample ID: MB 310-427724/1-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<10.0		10.0	0.640	ug/L		07/18/24 13:11	07/23/24 13:23	1
Acenaphthylene	<10.0		10.0	0.720	ug/L		07/18/24 13:11	07/23/24 13:23	1
Acetophenone	<10.0		10.0	0.690	ug/L		07/18/24 13:11	07/23/24 13:23	1
Anthracene	<10.0		10.0	0.870	ug/L		07/18/24 13:11	07/23/24 13:23	1
Benzo[a]anthracene	<10.0		10.0	0.850	ug/L		07/18/24 13:11	07/23/24 13:23	1

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

Lab Sample ID: MB 310-427724/1-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<10.0		10.0	8.10	ug/L		07/18/24 13:11	07/23/24 13:23	1
Benzo(b)fluoranthene	<10.0		10.0	4.90	ug/L		07/18/24 13:11	07/23/24 13:23	1
Benzo[g,h,i]perylene	<10.0		10.0	6.30	ug/L		07/18/24 13:11	07/23/24 13:23	1
Benzo[k]fluoranthene	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/23/24 13:23	1
Benzyl alcohol	<10.0		10.0	1.30	ug/L		07/18/24 13:11	07/23/24 13:23	1
Bis(2-chloroethoxy)methane	<10.0		10.0	0.760	ug/L		07/18/24 13:11	07/23/24 13:23	1
Bis(2-chloroethyl)ether	<10.0		10.0	0.820	ug/L		07/18/24 13:11	07/23/24 13:23	1
bis (2-chloroisopropyl) ether	<10.0		10.0	0.540	ug/L		07/18/24 13:11	07/23/24 13:23	1
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Bromophenyl phenyl ether	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 13:23	1
Butyl benzyl phthalate	<10.0		10.0	5.40	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Chloroaniline	<10.0		10.0	0.620	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Chloro-3-methylphenol	<10.0		10.0	0.840	ug/L		07/18/24 13:11	07/23/24 13:23	1
2-Chloronaphthalene	<10.0		10.0	0.640	ug/L		07/18/24 13:11	07/23/24 13:23	1
2-Chlorophenol	<10.0		10.0	0.540	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Chlorophenyl phenyl ether	<10.0		10.0	0.690	ug/L		07/18/24 13:11	07/23/24 13:23	1
Chrysene	<10.0		10.0	0.870	ug/L		07/18/24 13:11	07/23/24 13:23	1
Dibenz(a,h)anthracene	<10.0		10.0	3.90	ug/L		07/18/24 13:11	07/23/24 13:23	1
Dibenzofuran	<10.0		10.0	0.740	ug/L		07/18/24 13:11	07/23/24 13:23	1
3,3'-Dichlorobenzidine	<10.0		10.0	1.40	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4-Dichlorophenol	<10.0		10.0	0.850	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,6-Dichlorophenol	<10.0		10.0	0.690	ug/L		07/18/24 13:11	07/23/24 13:23	1
Diethyl phthalate	<10.0		10.0	1.70	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4-Dimethylphenol	<10.0		10.0	0.580	ug/L		07/18/24 13:11	07/23/24 13:23	1
Dimethyl phthalate	<10.0		10.0	1.00	ug/L		07/18/24 13:11	07/23/24 13:23	1
Di-n-butyl phthalate	<10.0		10.0	5.60	ug/L		07/18/24 13:11	07/23/24 13:23	1
1,3-Dinitrobenzene	<10.0		10.0	3.20	ug/L		07/18/24 13:11	07/23/24 13:23	1
4,6-Dinitro-2-methylphenol	<10.0		10.0	6.90	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4-Dinitrophenol	<20.0		20.0	13.0	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4-Dinitrotoluene	<10.0		10.0	6.40	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,6-Dinitrotoluene	<10.0		10.0	0.520	ug/L		07/18/24 13:11	07/23/24 13:23	1
Di-n-octyl phthalate	<20.0		20.0	7.00	ug/L		07/18/24 13:11	07/23/24 13:23	1
Diphenylamine	<10.0		10.0	6.00	ug/L		07/18/24 13:11	07/23/24 13:23	1
Fluoranthene	<10.0		10.0	1.70	ug/L		07/18/24 13:11	07/23/24 13:23	1
Fluorene	<10.0		10.0	0.790	ug/L		07/18/24 13:11	07/23/24 13:23	1
Hexachlorobenzene	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 13:23	1
Hexachlorobutadiene	<10.0		10.0	0.860	ug/L		07/18/24 13:11	07/23/24 13:23	1
Hexachlorocyclopentadiene	<10.0		10.0	5.10	ug/L		07/18/24 13:11	07/23/24 13:23	1
Hexachloroethane	<10.0		10.0	0.970	ug/L		07/18/24 13:11	07/23/24 13:23	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	4.20	ug/L		07/18/24 13:11	07/23/24 13:23	1
Isophorone	<10.0		10.0	0.930	ug/L		07/18/24 13:11	07/23/24 13:23	1
2-Methylnaphthalene	<10.0		10.0	0.590	ug/L		07/18/24 13:11	07/23/24 13:23	1
2-Methylphenol	<10.0		10.0	0.650	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Methylphenol (and/or 3-Methylphenol)	<10.0		10.0	0.700	ug/L		07/18/24 13:11	07/23/24 13:23	1
2-Nitroaniline	<10.0		10.0	5.90	ug/L		07/18/24 13:11	07/23/24 13:23	1
3-Nitroaniline	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Nitroaniline	<10.0		10.0	1.30	ug/L		07/18/24 13:11	07/23/24 13:23	1
Nitrobenzene	<10.0		10.0	0.800	ug/L		07/18/24 13:11	07/23/24 13:23	1

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

Lab Sample ID: MB 310-427724/1-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	<10.0		10.0	6.80	ug/L		07/18/24 13:11	07/23/24 13:23	1
4-Nitrophenol	<10.0		10.0	7.60	ug/L		07/18/24 13:11	07/23/24 13:23	1
N-Nitrosodimethylamine	<10.0		10.0	0.720	ug/L		07/18/24 13:11	07/23/24 13:23	1
N-Nitrosodi-n-propylamine	<10.0		10.0	0.920	ug/L		07/18/24 13:11	07/23/24 13:23	1
N-Nitrosodiphenylamine	<10.0		10.0	0.750	ug/L		07/18/24 13:11	07/23/24 13:23	1
Pentachlorophenol	<10.0		10.0	9.60	ug/L		07/18/24 13:11	07/23/24 13:23	1
Phenanthrene	<10.0		10.0	0.790	ug/L		07/18/24 13:11	07/23/24 13:23	1
Phenol	<10.0		10.0	1.10	ug/L		07/18/24 13:11	07/23/24 13:23	1
Pyrene	<10.0		10.0	0.790	ug/L		07/18/24 13:11	07/23/24 13:23	1
1,2,4,5-Tetrachlorobenzene	<10.0		10.0	0.540	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,3,4,6-Tetrachlorophenol	<10.0		10.0	5.30	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4,5-Trichlorophenol	<10.0		10.0	5.30	ug/L		07/18/24 13:11	07/23/24 13:23	1
2,4,6-Trichlorophenol	<10.0		10.0	5.00	ug/L		07/18/24 13:11	07/23/24 13:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*39 - 118*	*07/18/24 13:11*	*07/23/24 13:23*	*1*
2-Fluorophenol (Surr)	*55*		*25 - 110*	*07/18/24 13:11*	*07/23/24 13:23*	*1*
Nitrobenzene-d5 (Surr)	*79*		*45 - 129*	*07/18/24 13:11*	*07/23/24 13:23*	*1*
Phenol-d5 (Surr)	*52*		*21 - 110*	*07/18/24 13:11*	*07/23/24 13:23*	*1*
Terphenyl-d14 (Surr)	*73*		*12 - 144*	*07/18/24 13:11*	*07/23/24 13:23*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*27 - 136*	*07/18/24 13:11*	*07/23/24 13:23*	*1*

Lab Sample ID: MB 310-427724/1-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Acetylaminofluorene	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/24/24 13:33	1
4-Aminobiphenyl	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/24/24 13:33	1
Chlorobenzilate	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 13:33	1
Diallate	<10.0		10.0	4.00	ug/L		07/18/24 13:11	07/24/24 13:33	1
Dimethoate	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 13:33	1
7,12-Dimethylbenz(a)anthracene	<10.0		10.0	1.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
3,3'-Dimethylbenzidine	<10.0		10.0	1.50	ug/L		07/18/24 13:11	07/24/24 13:33	1
Dinoseb	<10.0		10.0	2.40	ug/L		07/18/24 13:11	07/24/24 13:33	1
Disulfoton	<10.0		10.0	2.40	ug/L		07/18/24 13:11	07/24/24 13:33	1
Ethyl methanesulfonate	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 13:33	1
Ethyl Parathion	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/24/24 13:33	1
Famphur	<10.0		10.0	3.80	ug/L		07/18/24 13:11	07/24/24 13:33	1
Hexachloropropene	<10.0		10.0	2.60	ug/L		07/18/24 13:11	07/24/24 13:33	1
Isodrin	<10.0		10.0	4.70	ug/L		07/18/24 13:11	07/24/24 13:33	1
Isosafrole	<10.0		10.0	2.30	ug/L		07/18/24 13:11	07/24/24 13:33	1
Kepone	<10.0		10.0	1.00	ug/L		07/18/24 13:11	07/24/24 13:33	1
Methapyrilene	<10.0		10.0	0.760	ug/L		07/18/24 13:11	07/24/24 13:33	1
3-Methylcholanthrene	<10.0		10.0	0.320	ug/L		07/18/24 13:11	07/24/24 13:33	1
Methyl methanesulfonate	<10.0		10.0	3.30	ug/L		07/18/24 13:11	07/24/24 13:33	1
Methyl parathion	<10.0		10.0	2.30	ug/L		07/18/24 13:11	07/24/24 13:33	1
1,4-Naphthoquinone	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 13:33	1

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

Lab Sample ID: MB 310-427724/1-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Naphthylamine	<10.0		10.0	2.50	ug/L		07/18/24 13:11	07/24/24 13:33	1
2-Naphthylamine	<10.0		10.0	2.10	ug/L		07/18/24 13:11	07/24/24 13:33	1
5-Nitro-o-toluidine	<10.0		10.0	2.80	ug/L		07/18/24 13:11	07/24/24 13:33	1
N-Nitrosodiethylamine	<10.0		10.0	3.40	ug/L		07/18/24 13:11	07/24/24 13:33	1
N-Nitrosodi-n-butylamine	<10.0		10.0	3.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
N-Nitrosomethylethylamine	<10.0		10.0	4.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
N-Nitrosopiperidine	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/24/24 13:33	1
N-Nitrosopyrrolidine	<10.0		10.0	3.60	ug/L		07/18/24 13:11	07/24/24 13:33	1
o,o',o''-Triethylphosphorothioate	<10.0		10.0	3.20	ug/L		07/18/24 13:11	07/24/24 13:33	1
o-Toluidine	<10.0		10.0	2.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
p-Dimethylamino azobenzene	<10.0		10.0	2.20	ug/L		07/18/24 13:11	07/24/24 13:33	1
Pentachlorobenzene	<10.0		10.0	2.80	ug/L		07/18/24 13:11	07/24/24 13:33	1
Pentachloronitrobenzene	<10.0		10.0	5.80	ug/L		07/18/24 13:11	07/24/24 13:33	1
Phenacetin	<10.0		10.0	1.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
1,4-Phenylenediamine	<10.0		10.0	1.90	ug/L		07/18/24 13:11	07/24/24 13:33	1
Phorate	<10.0		10.0	3.20	ug/L		07/18/24 13:11	07/24/24 13:33	1
Pronamide	<10.0		10.0	2.70	ug/L		07/18/24 13:11	07/24/24 13:33	1
Safrole	<10.0		10.0	2.80	ug/L		07/18/24 13:11	07/24/24 13:33	1
Thionazin	<10.0		10.0	3.50	ug/L		07/18/24 13:11	07/24/24 13:33	1
1,3,5-Trinitrobenzene	<10.0		10.0	2.30	ug/L		07/18/24 13:11	07/24/24 13:33	1

Lab Sample ID: LCS 310-427724/2-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	100	39.43	*-	ug/L		39	43 - 110
Acenaphthylene	100	40.74		ug/L		41	40 - 110
Acetophenone	100	50.03		ug/L		50	48 - 119
Anthracene	100	53.78		ug/L		54	51 - 120
Benzo[a]anthracene	100	56.73		ug/L		57	51 - 123
Benzo[a]pyrene	100	56.52		ug/L		57	48 - 125
Benzo(b)fluoranthene	100	60.24		ug/L		60	49 - 129
Benzo[g,h,i]perylene	100	57.36		ug/L		57	43 - 139
Benzo[k]fluoranthene	100	65.75		ug/L		66	47 - 130
Benzyl alcohol	100	60.79		ug/L		61	39 - 128
Bis(2-chloroethoxy)methane	100	49.45		ug/L		49	48 - 121
Bis(2-chloroethyl)ether	100	43.28		ug/L		43	43 - 123
bis (2-chloroisopropyl) ether	100	37.90		ug/L		38	34 - 123
Bis(2-ethylhexyl) phthalate	100	59.58		ug/L		60	43 - 143
4-Bromophenyl phenyl ether	100	46.90		ug/L		47	45 - 119
Butyl benzyl phthalate	100	56.96		ug/L		57	46 - 135
4-Chloroaniline	100	72.01		ug/L		72	21 - 139
4-Chloro-3-methylphenol	100	55.56		ug/L		56	49 - 130
2-Chloronaphthalene	100	37.63		ug/L		38	37 - 110
2-Chlorophenol	100	48.99		ug/L		49	44 - 117
4-Chlorophenyl phenyl ether	100	40.19	*-	ug/L		40	44 - 116
Chrysene	100	59.91		ug/L		60	51 - 125
Dibenz(a,h)anthracene	100	64.12		ug/L		64	38 - 149

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

Lab Sample ID: LCS 310-427724/2-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	100	43.64	*-	ug/L		44	45 - 112
2,4-Dichlorophenol	100	43.56		ug/L		44	41 - 124
2,6-Dichlorophenol	100	42.70		ug/L		43	30 - 130
Diethyl phthalate	100	52.11		ug/L		52	43 - 135
2,4-Dimethylphenol	100	52.07		ug/L		52	31 - 142
Dimethyl phthalate	100	52.90		ug/L		53	43 - 129
Di-n-butyl phthalate	100	58.64		ug/L		59	50 - 133
1,3-Dinitrobenzene	100	54.66		ug/L		55	45 - 138
4,6-Dinitro-2-methylphenol	200	95.42		ug/L		48	22 - 143
2,4-Dinitrophenol	200	82.81		ug/L		41	10 - 138
2,4-Dinitrotoluene	100	52.81		ug/L		53	47 - 137
2,6-Dinitrotoluene	100	49.32	*-	ug/L		49	51 - 130
Di-n-octyl phthalate	100	56.28		ug/L		56	34 - 150
Diphenylamine	85.0	41.57		ug/L		49	48 - 122
Fluoranthene	100	65.00		ug/L		65	47 - 128
Fluorene	100	44.59		ug/L		45	45 - 119
Hexachlorobenzene	100	49.76		ug/L		50	48 - 119
Hexachlorobutadiene	100	27.25	*-	ug/L		27	32 - 110
Hexachlorocyclopentadiene	100	10.37		ug/L		10	10 - 110
Hexachloroethane	100	26.52	*-	ug/L		27	31 - 110
Indeno[1,2,3-cd]pyrene	100	65.27		ug/L		65	37 - 150
Isophorone	100	49.40	*-	ug/L		49	50 - 125
2-Methylnaphthalene	100	34.19		ug/L		34	33 - 110
2-Methylphenol	100	57.72		ug/L		58	47 - 118
4-Methylphenol (and/or 3-Methylphenol)	100	57.79		ug/L		58	46 - 117
2-Nitroaniline	100	51.07		ug/L		51	50 - 135
3-Nitroaniline	100	77.50		ug/L		78	42 - 139
4-Nitroaniline	100	77.11		ug/L		77	31 - 145
Nitrobenzene	100	47.36		ug/L		47	47 - 116
2-Nitrophenol	100	42.89		ug/L		43	41 - 129
4-Nitrophenol	200	104.0		ug/L		52	18 - 110
N-Nitrosodimethylamine	100	54.05		ug/L		54	37 - 110
N-Nitrosodi-n-propylamine	100	57.87		ug/L		58	45 - 130
N-Nitrosodiphenylamine	100	48.91		ug/L		49	49 - 121
Pentachlorophenol	200	99.84		ug/L		50	26 - 133
Phenanthrene	100	52.18		ug/L		52	51 - 117
Phenol	100	42.79		ug/L		43	29 - 110
Pyrene	100	54.12		ug/L		54	48 - 127
1,2,4,5-Tetrachlorobenzene	100	31.44	*-	ug/L		31	36 - 110
2,3,4,6-Tetrachlorophenol	100	50.73		ug/L		51	33 - 134
2,4,5-Trichlorophenol	100	46.03		ug/L		46	35 - 133
2,4,6-Trichlorophenol	100	41.21		ug/L		41	28 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*42*		*39 - 118*
2-Fluorophenol (Surr)	*46*		*25 - 110*
Nitrobenzene-d5 (Surr)	*50*		*45 - 129*

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

Lab Sample ID: LCS 310-427724/2-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427724

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5 (Surr)	*44*		*21 - 110*
Terphenyl-d14 (Surr)	*60*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*53*		*27 - 136*

Lab Sample ID: LCS 310-427724/2-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Acetylaminofluorene	51.2	20.10		ug/L		39	35 - 150
4-Aminobiphenyl	51.2	29.47		ug/L		58	24 - 138
Chlorobenzilate	51.2	25.20	*-	ug/L		49	52 - 138
Diallate	44.8	18.22	*-	ug/L		41	42 - 141
Dimethoate	44.8	21.53	*-	ug/L		48	51 - 150
7,12-Dimethylbenz(a)anthracene	51.2	22.51	*-	ug/L		44	51 - 129
3,3'-Dimethylbenzidine	51.2	20.69		ug/L		40	10 - 150
Dinoseb	51.2	25.90		ug/L		51	25 - 146
Disulfoton	44.8	16.44	*-	ug/L		37	54 - 131
Ethyl methanesulfonate	51.2	28.91		ug/L		56	48 - 120
Ethyl Parathion	44.8	19.73	*-	ug/L		44	52 - 149
Famphur	44.8	39.40		ug/L		88	44 - 150
Hexachloropropene	51.2	6.837	J	ug/L		13	10 - 110
Isodrin	51.2	24.11	*-	ug/L		47	52 - 125
Isosafrole	51.2	17.95		ug/L		35	31 - 123
Kepone	44.8	29.76		ug/L		66	10 - 150
Methapyrilene	44.8	7.861	J	ug/L		18	10 - 110
3-Methylcholanthrene	51.2	21.84		ug/L		43	43 - 150
Methyl methanesulfonate	51.2	29.70		ug/L		58	36 - 110
Methyl parathion	44.8	20.06	*-	ug/L		45	50 - 150
1,4-Naphthoquinone	51.2	29.30		ug/L		57	37 - 149
1-Naphthylamine	51.2	26.36		ug/L		51	19 - 110
2-Naphthylamine	51.2	30.58		ug/L		60	18 - 127
5-Nitro-o-toluidine	51.2	27.57		ug/L		54	47 - 145
N-Nitrosodiethylamine	51.2	26.04		ug/L		51	47 - 138
N-Nitrosodi-n-butylamine	51.2	21.99	*-	ug/L		43	52 - 142
N-Nitrosomethylethylamine	51.2	29.29		ug/L		57	54 - 123
N-Nitrosopiperidine	51.2	26.98	*-	ug/L		53	60 - 127
N-Nitrosopyrrolidine	51.2	30.95		ug/L		60	56 - 143
o,o',o''-Triethylphosphorothioate	44.8	13.31	*-	ug/L		30	45 - 113
o-Toluidine	51.2	36.35		ug/L		71	24 - 142
p-Dimethylamino azobenzene	51.2	22.99		ug/L		45	42 - 138
Pentachlorobenzene	51.2	14.50	*-	ug/L		28	33 - 110
Pentachloronitrobenzene	51.2	24.83	*-	ug/L		48	65 - 127
Phenacetin	51.2	26.76	*-	ug/L		52	56 - 146
1,4-Phenylenediamine	51.2	<10.0	*-	ug/L		-2	20 - 120
Phorate	44.8	16.84	*-	ug/L		38	57 - 135
Pronamide	51.2	22.16	*-	ug/L		43	61 - 144
Safrole	44.8	10.65	*-	ug/L		24	34 - 110

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

Lab Sample ID: LCS 310-427724/2-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thionazin	44.8	16.74	*-	ug/L		37	52 - 147
1,3,5-Trinitrobenzene	51.2	21.44		ug/L		42	39 - 144

Lab Sample ID: LCSD 310-427724/3-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	100	40.28	*-	ug/L		40	43 - 110	2	35
Acenaphthylene	100	40.86		ug/L		41	40 - 110	0	35
Acetophenone	100	46.90	*-	ug/L		47	48 - 119	6	35
Anthracene	100	54.46		ug/L		54	51 - 120	1	35
Benzo[a]anthracene	100	57.74		ug/L		58	51 - 123	2	35
Benzo[a]pyrene	100	60.43		ug/L		60	48 - 125	7	35
Benzo(b)fluoranthene	100	62.10		ug/L		62	49 - 129	3	35
Benzo[g,h,i]perylene	100	61.62		ug/L		62	43 - 139	7	35
Benzo[k]fluoranthene	100	62.52		ug/L		63	47 - 130	5	35
Benzyl alcohol	100	56.83		ug/L		57	39 - 128	7	35
Bis(2-chloroethoxy)methane	100	49.11		ug/L		49	48 - 121	1	35
Bis(2-chloroethyl)ether	100	42.90		ug/L		43	43 - 123	1	35
bis (2-chloroisopropyl) ether	100	38.82		ug/L		39	34 - 123	2	35
Bis(2-ethylhexyl) phthalate	100	69.72		ug/L		70	43 - 143	16	35
4-Bromophenyl phenyl ether	100	46.43		ug/L		46	45 - 119	1	35
Butyl benzyl phthalate	100	59.27		ug/L		59	46 - 135	4	35
4-Chloroaniline	100	65.83		ug/L		66	21 - 139	9	35
4-Chloro-3-methylphenol	100	48.42	*-	ug/L		48	49 - 130	14	35
2-Chloronaphthalene	100	39.42		ug/L		39	37 - 110	5	35
2-Chlorophenol	100	46.13		ug/L		46	44 - 117	6	35
4-Chlorophenyl phenyl ether	100	41.58	*-	ug/L		42	44 - 116	3	35
Chrysene	100	59.20		ug/L		59	51 - 125	1	35
Dibenz(a,h)anthracene	100	74.88		ug/L		75	38 - 149	15	35
Dibenzofuran	100	42.39	*-	ug/L		42	45 - 112	3	35
2,4-Dichlorophenol	100	38.83	*-	ug/L		39	41 - 124	11	35
2,6-Dichlorophenol	100	39.59		ug/L		40	30 - 130	8	35
Diethyl phthalate	100	48.85		ug/L		49	43 - 135	6	35
2,4-Dimethylphenol	100	48.08		ug/L		48	31 - 142	8	35
Dimethyl phthalate	100	49.72		ug/L		50	43 - 129	6	35
Di-n-butyl phthalate	100	59.62		ug/L		60	50 - 133	2	35
1,3-Dinitrobenzene	100	52.06		ug/L		52	45 - 138	5	35
4,6-Dinitro-2-methylphenol	200	45.43	*1	ug/L		23	22 - 143	71	35
2,4-Dinitrophenol	200	22.96	*1	ug/L		11	10 - 138	113	35
2,4-Dinitrotoluene	100	49.91		ug/L		50	47 - 137	6	35
2,6-Dinitrotoluene	100	47.95	*-	ug/L		48	51 - 130	3	35
Di-n-octyl phthalate	100	75.10		ug/L		75	34 - 150	29	35
Diphenylamine	85.0	40.55		ug/L		48	48 - 122	2	35
Fluoranthene	100	65.00		ug/L		65	47 - 128	0	35
Fluorene	100	43.87	*-	ug/L		44	45 - 119	2	35
Hexachlorobenzene	100	49.67		ug/L		50	48 - 119	0	35
Hexachlorobutadiene	100	32.53		ug/L		33	32 - 110	18	35

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

Lab Sample ID: LCSD 310-427724/3-A
Matrix: Water
Analysis Batch: 428132

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorocyclopentadiene			100	10.73		ug/L		11	10 - 110	3	35
Hexachloroethane			100	30.77		ug/L		31	31 - 110	15	35
Indeno[1,2,3-cd]pyrene			100	80.84		ug/L		81	37 - 150	21	35
Isophorone			100	49.26	*-	ug/L		49	50 - 125	0	35
2-Methylnaphthalene			100	36.14		ug/L		36	33 - 110	6	35
2-Methylphenol			100	54.37		ug/L		54	47 - 118	6	35
4-Methylphenol (and/or 3-Methylphenol)			100	53.18		ug/L		53	46 - 117	8	35
2-Nitroaniline			100	50.44		ug/L		50	50 - 135	1	35
3-Nitroaniline			100	69.27		ug/L		69	42 - 139	11	35
4-Nitroaniline			100	69.89		ug/L		70	31 - 145	10	35
Nitrobenzene			100	45.70	*-	ug/L		46	47 - 116	4	35
2-Nitrophenol			100	40.65		ug/L		41	41 - 129	5	35
4-Nitrophenol			200	86.67		ug/L		43	18 - 110	18	35
N-Nitrosodimethylamine			100	54.46		ug/L		54	37 - 110	1	35
N-Nitrosodi-n-propylamine			100	56.58		ug/L		57	45 - 130	2	35
N-Nitrosodiphenylamine			100	47.71	*-	ug/L		48	49 - 121	2	35
Pentachlorophenol			200	80.12		ug/L		40	26 - 133	22	35
Phenanthrene			100	50.51		ug/L		51	51 - 117	3	35
Phenol			100	42.02		ug/L		42	29 - 110	2	35
Pyrene			100	53.24		ug/L		53	48 - 127	2	35
1,2,4,5-Tetrachlorobenzene			100	34.01	*-	ug/L		34	36 - 110	8	35
2,3,4,6-Tetrachlorophenol			100	41.51		ug/L		42	33 - 134	20	35
2,4,5-Trichlorophenol			100	37.78		ug/L		38	35 - 133	20	35
2,4,6-Trichlorophenol			100	36.68		ug/L		37	28 - 139	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*40*		*39 - 118*
2-Fluorophenol (Surr)	*44*		*25 - 110*
Nitrobenzene-d5 (Surr)	*50*		*45 - 129*
Phenol-d5 (Surr)	*44*		*21 - 110*
Terphenyl-d14 (Surr)	*57*		*12 - 144*
2,4,6-Tribromophenol (Surr)	*46*		*27 - 136*

Lab Sample ID: LCSD 310-427724/3-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427724

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Acetylaminofluorene			51.2	18.54		ug/L		36	35 - 150	8	28
4-Aminobiphenyl			51.2	28.67		ug/L		56	24 - 138	3	35
Chlorobenzilate			51.2	23.89	*-	ug/L		47	52 - 138	5	28
Diallate			44.8	17.92	*-	ug/L		40	42 - 141	2	35
Dimethoate			44.8	21.72	*-	ug/L		48	51 - 150	1	26
7,12-Dimethylbenz(a)anthracene			51.2	20.89	*-	ug/L		41	51 - 129	7	28
3,3'-Dimethylbenzidine			51.2	27.69		ug/L		54	10 - 150	29	35
Dinoseb			51.2	26.30		ug/L		51	25 - 146	2	35
Disulfoton			44.8	15.15	*-	ug/L		34	54 - 131	8	24
Ethyl methanesulfonate			51.2	26.93		ug/L		53	48 - 120	7	27

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

Lab Sample ID: LCSD 310-427724/3-A
Matrix: Water
Analysis Batch: 428242

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 427724

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethyl Parathion	44.8	18.91	*-	ug/L		42	52 - 149	4	26
Famphur	44.8	37.76		ug/L		84	44 - 150	4	35
Hexachloropropene	51.2	12.97	*1	ug/L		25	10 - 110	62	35
Isodrin	51.2	21.80	*-	ug/L		43	52 - 125	10	26
Isosafrole	51.2	17.88		ug/L		35	31 - 123	0	35
Kepone	44.8	25.59		ug/L		57	10 - 150	15	35
Methapyrilene	44.8	<10.0	*- *1	ug/L		0.2	10 - 110	195	35
3-Methylcholanthrene	51.2	19.26	*-	ug/L		38	43 - 150	13	32
Methyl methanesulfonate	51.2	27.27		ug/L		53	36 - 110	9	26
Methyl parathion	44.8	19.82	*-	ug/L		44	50 - 150	1	25
1,4-Naphthoquinone	51.2	27.99		ug/L		55	37 - 149	5	29
1-Naphthylamine	51.2	28.53		ug/L		56	19 - 110	8	35
2-Naphthylamine	51.2	30.30		ug/L		59	18 - 127	1	35
5-Nitro-o-toluidine	51.2	26.29		ug/L		51	47 - 145	5	31
N-Nitrosodiethylamine	51.2	24.57		ug/L		48	47 - 138	6	26
N-Nitrosodi-n-butylamine	51.2	20.61	*-	ug/L		40	52 - 142	6	27
N-Nitrosomethylethylamine	51.2	28.06		ug/L		55	54 - 123	4	26
N-Nitrosopiperidine	51.2	25.42	*-	ug/L		50	60 - 127	6	26
N-Nitrosopyrrolidine	51.2	27.61	*-	ug/L		54	56 - 143	11	25
o,o',o''-Triethylphosphorothioate	44.8	13.17	*-	ug/L		29	45 - 113	1	33
o-Toluidine	51.2	33.97		ug/L		66	24 - 142	7	35
p-Dimethylamino azobenzene	51.2	22.46		ug/L		44	42 - 138	2	29
Pentachlorobenzene	51.2	19.98		ug/L		39	33 - 110	32	35
Pentachloronitrobenzene	51.2	23.31	*-	ug/L		46	65 - 127	6	29
Phenacetin	51.2	26.71	*-	ug/L		52	56 - 146	0	25
1,4-Phenylenediamine	51.2	<10.0	*-	ug/L		-2	20 - 120	20	35
Phorate	44.8	16.47	*-	ug/L		37	57 - 135	2	26
Pronamide	51.2	22.26	*-	ug/L		43	61 - 144	0	27
Safrole	44.8	11.52	*-	ug/L		26	34 - 110	8	35
Thionazin	44.8	16.47	*-	ug/L		37	52 - 147	2	28
1,3,5-Trinitrobenzene	51.2	21.00		ug/L		41	39 - 144	2	35

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

Lab Sample ID: MB 310-427483/4
Matrix: Water
Analysis Batch: 427483

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	2.60	mg/L			07/17/24 08:41	1
Isobutanol	<10.0		10.0	2.40	mg/L			07/17/24 08:41	1

Lab Sample ID: LCS 310-427483/5
Matrix: Water
Analysis Batch: 427483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	113	120.0		mg/L		106	67 - 132
Isobutanol	104	98.51		mg/L		94	80 - 121

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

Lab Sample ID: 310-285765-4 MS
Matrix: Water
Analysis Batch: 427483

Client Sample ID: DG-905
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetonitrile	<10.0		113	102.9		mg/L		91	60 - 138
Isobutanol	<10.0		104	91.40		mg/L		88	72 - 131

Lab Sample ID: 310-285765-4 MSD
Matrix: Water
Analysis Batch: 427483

Client Sample ID: DG-905
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		113	107.4		mg/L		95	60 - 138	4	30
Isobutanol	<10.0		104	94.42		mg/L		91	72 - 131	3	30

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 310-427419/1-A
Matrix: Water
Analysis Batch: 427367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.0879		0.0879	0.0220	ug/L		07/16/24 12:34	07/16/24 16:25	1
4,4'-DDE	<0.0879		0.0879	0.0264	ug/L		07/16/24 12:34	07/16/24 16:25	1
4,4'-DDT	<0.0879		0.0879	0.0176	ug/L		07/16/24 12:34	07/16/24 16:25	1
Aldrin	<0.0879		0.0879	0.0193	ug/L		07/16/24 12:34	07/16/24 16:25	1
alpha-BHC	<0.0879		0.0879	0.00879	ug/L		07/16/24 12:34	07/16/24 16:25	1
beta-BHC	<0.0879		0.0879	0.0369	ug/L		07/16/24 12:34	07/16/24 16:25	1
Chlordane (technical)	<1.76		1.76	0.343	ug/L		07/16/24 12:34	07/16/24 16:25	1
delta-BHC	<0.0879		0.0879	0.0281	ug/L		07/16/24 12:34	07/16/24 16:25	1
Dieldrin	<0.0879		0.0879	0.0185	ug/L		07/16/24 12:34	07/16/24 16:25	1
Endosulfan I	<0.0879		0.0879	0.0246	ug/L		07/16/24 12:34	07/16/24 16:25	1
Endosulfan II	<0.0879		0.0879	0.0229	ug/L		07/16/24 12:34	07/16/24 16:25	1
Endosulfan sulfate	<0.0879		0.0879	0.0158	ug/L		07/16/24 12:34	07/16/24 16:25	1
Endrin	<0.0879		0.0879	0.0246	ug/L		07/16/24 12:34	07/16/24 16:25	1
Endrin aldehyde	<0.0879		0.0879	0.0237	ug/L		07/16/24 12:34	07/16/24 16:25	1
gamma-BHC (Lindane)	<0.0879		0.0879	0.00879	ug/L		07/16/24 12:34	07/16/24 16:25	1
Heptachlor	<0.0879		0.0879	0.0202	ug/L		07/16/24 12:34	07/16/24 16:25	1
Heptachlor epoxide	<0.0879		0.0879	0.0281	ug/L		07/16/24 12:34	07/16/24 16:25	1
Methoxychlor	<0.0879		0.0879	0.0281	ug/L		07/16/24 12:34	07/16/24 16:25	1
Toxaphene	<1.76		1.76	0.879	ug/L		07/16/24 12:34	07/16/24 16:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*10 - 136*	*07/16/24 12:34*	*07/16/24 16:25*	*1*
Tetrachloro-m-xylene	*68*		*10 - 130*	*07/16/24 12:34*	*07/16/24 16:25*	*1*

Lab Sample ID: LCS 310-427419/22-A
Matrix: Water
Analysis Batch: 427367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	2.60	2.224		ug/L		86	36 - 149
4,4'-DDE	2.60	2.217		ug/L		85	34 - 130

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

Lab Sample ID: LCS 310-427419/22-A
Matrix: Water
Analysis Batch: 427367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDT	2.60	2.141		ug/L		82	23 - 150
Aldrin	2.60	2.167		ug/L		83	13 - 120
alpha-BHC	2.60	2.787		ug/L		107	36 - 127
beta-BHC	2.60	2.574		ug/L		99	37 - 136
delta-BHC	2.60	2.604		ug/L		100	33 - 134
Dieldrin	2.60	2.491		ug/L		96	39 - 130
Endosulfan I	2.60	2.149		ug/L		83	10 - 120
Endosulfan II	2.60	2.561		ug/L		99	14 - 120
Endosulfan sulfate	2.60	2.847		ug/L		110	36 - 147
Endrin	2.60	2.450		ug/L		94	39 - 140
Endrin aldehyde	2.60	2.099		ug/L		81	32 - 137
gamma-BHC (Lindane)	2.60	2.779		ug/L		107	36 - 132
Heptachlor	2.60	2.105		ug/L		81	27 - 120
Heptachlor epoxide	2.60	2.556		ug/L		98	38 - 133
Methoxychlor	2.60	2.355		ug/L		91	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*77*		*10 - 136*
Tetrachloro-m-xylene	*65*		*10 - 130*

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

Lab Sample ID: MB 310-427419/1-A
Matrix: Water
Analysis Batch: 427368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.76		1.76	0.721	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1221	<1.76		1.76	0.721	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1232	<1.76		1.76	0.721	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1242	<1.76		1.76	0.721	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1248	<1.76		1.76	0.607	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1254	<1.76		1.76	0.607	ug/L		07/16/24 12:34	07/16/24 16:25	1
PCB-1260	<1.76		1.76	0.607	ug/L		07/16/24 12:34	07/16/24 16:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*10 - 136*	*07/16/24 12:34*	*07/16/24 16:25*	*1*
Tetrachloro-m-xylene	*68*		*10 - 130*	*07/16/24 12:34*	*07/16/24 16:25*	*1*

Lab Sample ID: LCS 310-427419/23-A
Matrix: Water
Analysis Batch: 427368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	25.2	20.42		ug/L		81	30 - 133
PCB-1260	25.2	23.65		ug/L		94	31 - 133

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

Lab Sample ID: LCS 310-427419/23-A
Matrix: Water
Analysis Batch: 427368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427419

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*20*		*10 - 136*
Tetrachloro-m-xylene	*50*		*10 - 130*

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 410-529394/1-A
Matrix: Water
Analysis Batch: 529590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 529394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	<0.600		0.600	0.250	ug/L		07/17/24 14:47	07/18/24 05:07	1
Silvex (2,4,5-TP)	<0.0500		0.0500	0.0220	ug/L		07/17/24 14:47	07/18/24 05:07	1
2,4,5-T	<0.150		0.150	0.0650	ug/L		07/17/24 14:47	07/18/24 05:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*43*		*34 - 142*	*07/17/24 14:47*	*07/18/24 05:07*	*1*
DCAA	*41*		*34 - 142*	*07/17/24 14:47*	*07/18/24 05:07*	*1*

Lab Sample ID: LCS 410-529394/2-A
Matrix: Water
Analysis Batch: 529590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 529394

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			2.50	1.947		ug/L		78	53 - 159		
Silvex (2,4,5-TP)			0.250	0.1929		ug/L		77	62 - 170		
2,4,5-T			0.250	0.2257		ug/L		90	57 - 171		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*44*		*34 - 142*
DCAA	*49*		*34 - 142*

Lab Sample ID: LCSD 410-529394/3-A
Matrix: Water
Analysis Batch: 529590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 529394

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			2.50	1.837		ug/L		73	53 - 159	6	30
Silvex (2,4,5-TP)			0.250	0.1857		ug/L		74	62 - 170	4	30
2,4,5-T			0.250	0.2039		ug/L		82	57 - 171	10	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*51*		*34 - 142*
DCAA	*55*		*34 - 142*

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-427323/1-A
Matrix: Water
Analysis Batch: 428071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		07/16/24 09:00	07/22/24 20:16	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		07/16/24 09:00	07/22/24 20:16	1
Barium	<0.00200		0.00200	0.000660	mg/L		07/16/24 09:00	07/22/24 20:16	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		07/16/24 09:00	07/22/24 20:16	1
Chromium	<0.00500		0.00500	0.00120	mg/L		07/16/24 09:00	07/22/24 20:16	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		07/16/24 09:00	07/22/24 20:16	1
Copper	<0.00500		0.00500	0.00180	mg/L		07/16/24 09:00	07/22/24 20:16	1
Lead	<0.000500		0.000500	0.000260	mg/L		07/16/24 09:00	07/22/24 20:16	1
Selenium	<0.00500		0.00500	0.00140	mg/L		07/16/24 09:00	07/22/24 20:16	1
Silver	<0.00100		0.00100	0.000500	mg/L		07/16/24 09:00	07/22/24 20:16	1
Thallium	<0.00100		0.00100	0.000570	mg/L		07/16/24 09:00	07/22/24 20:16	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		07/16/24 09:00	07/22/24 20:16	1
Zinc	<0.0200		0.0200	0.00970	mg/L		07/16/24 09:00	07/22/24 20:16	1
Tin	0.002335	J	0.00500	0.00230	mg/L		07/16/24 09:00	07/22/24 20:16	1

Lab Sample ID: MB 310-427323/1-A
Matrix: Water
Analysis Batch: 428355

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00100		0.00100	0.000330	mg/L		07/16/24 09:00	07/24/24 16:52	1
Nickel	<0.00500		0.00500	0.00210	mg/L		07/16/24 09:00	07/24/24 16:52	1

Lab Sample ID: LCS 310-427323/2-A
Matrix: Water
Analysis Batch: 428071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2111		mg/L		106	80 - 120
Arsenic	0.200	0.2057		mg/L		103	80 - 120
Barium	0.100	0.1081		mg/L		108	80 - 120
Cadmium	0.100	0.1010		mg/L		101	80 - 120
Chromium	0.100	0.09824		mg/L		98	80 - 120
Cobalt	0.100	0.1018		mg/L		102	80 - 120
Copper	0.200	0.2012		mg/L		101	80 - 120
Lead	0.200	0.2070		mg/L		103	80 - 120
Selenium	0.400	0.4032		mg/L		101	80 - 120
Silver	0.100	0.1050		mg/L		105	80 - 120
Thallium	0.100	0.1071		mg/L		107	80 - 120
Vanadium	0.100	0.09753		mg/L		98	80 - 120
Zinc	0.200	0.1826		mg/L		91	80 - 120
Tin	0.200	0.1985		mg/L		99	80 - 120

Lab Sample ID: LCS 310-427323/2-A
Matrix: Water
Analysis Batch: 428355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.100	0.1031		mg/L		103	80 - 120

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

Lab Sample ID: LCS 310-427323/2-A
Matrix: Water
Analysis Batch: 428355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427323

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nickel			0.200	0.2100		mg/L		105	80 - 120		

Lab Sample ID: 310-285765-2 MS
Matrix: Water
Analysis Batch: 428071

Client Sample ID: TG-305
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	<0.00200		0.200	0.2182		mg/L		109	75 - 125		
Arsenic	0.000907	J	0.200	0.2220		mg/L		111	75 - 125		
Barium	0.0479		0.100	0.1585		mg/L		111	75 - 125		
Cadmium	0.000103	J	0.100	0.1019		mg/L		102	75 - 125		
Chromium	<0.00500		0.100	0.1028		mg/L		103	75 - 125		
Cobalt	0.000649		0.100	0.1029		mg/L		102	75 - 125		
Copper	<0.00500		0.200	0.2028		mg/L		101	75 - 125		
Lead	0.00117		0.200	0.2120		mg/L		105	75 - 125		
Selenium	<0.00500		0.400	0.3800		mg/L		95	75 - 125		
Silver	<0.00100	F1 F2	0.100	0.2184	F1	mg/L		218	75 - 125		
Thallium	<0.00100		0.100	0.1143		mg/L		114	75 - 125		
Vanadium	0.00222	J	0.100	0.1042		mg/L		102	75 - 125		
Zinc	<0.0200		0.200	0.1997		mg/L		100	75 - 125		
Tin	<0.00500		0.200	0.1993		mg/L		100	75 - 125		

Lab Sample ID: 310-285765-2 MS
Matrix: Water
Analysis Batch: 428355

Client Sample ID: TG-305
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Beryllium	<0.00100		0.100	0.1040		mg/L		104	75 - 125		
Nickel	0.0158		0.200	0.2134		mg/L		99	75 - 125		
Tin	<0.00500		0.200	0.2324		mg/L		116	75 - 125		

Lab Sample ID: 310-285765-2 MSD
Matrix: Water
Analysis Batch: 428071

Client Sample ID: TG-305
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200		0.200	0.2124		mg/L		106	75 - 125	3	20
Arsenic	0.000907	J	0.200	0.2153		mg/L		107	75 - 125	3	20
Barium	0.0479		0.100	0.1565		mg/L		109	75 - 125	1	20
Cadmium	0.000103	J	0.100	0.09921		mg/L		99	75 - 125	3	20
Chromium	<0.00500		0.100	0.09905		mg/L		99	75 - 125	4	20
Cobalt	0.000649		0.100	0.1015		mg/L		101	75 - 125	1	20
Copper	<0.00500		0.200	0.1964		mg/L		98	75 - 125	3	20
Lead	0.00117		0.200	0.2063		mg/L		103	75 - 125	3	20
Selenium	<0.00500		0.400	0.3679		mg/L		92	75 - 125	3	20
Silver	<0.00100	F1 F2	0.100	0.1043	F2	mg/L		104	75 - 125	71	20
Thallium	<0.00100		0.100	0.1128		mg/L		113	75 - 125	1	20
Vanadium	0.00222	J	0.100	0.1021		mg/L		100	75 - 125	2	20
Zinc	<0.0200		0.200	0.1972		mg/L		99	75 - 125	1	20

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

Lab Sample ID: 310-285765-2 MSD
Matrix: Water
Analysis Batch: 428071

Client Sample ID: TG-305
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tin	<0.00500		0.200	0.1949		mg/L		97	75 - 125	2	20

Lab Sample ID: 310-285765-2 MSD
Matrix: Water
Analysis Batch: 428355

Client Sample ID: TG-305
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium	<0.00100		0.100	0.1017		mg/L		102	75 - 125	2	20
Nickel	0.0158		0.200	0.2109		mg/L		98	75 - 125	1	20
Tin	<0.00500		0.200	0.2263		mg/L		113	75 - 125	3	20

Lab Sample ID: 310-285765-11 DU
Matrix: Water
Analysis Batch: 428071

Client Sample ID: DG-1301
Prep Type: Total/NA
Prep Batch: 427323

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	0.0403			0.03957		mg/L				2	20
Cadmium	<0.000200			<0.000200		mg/L				NC	20
Chromium	<0.00500			<0.00500		mg/L				NC	20
Cobalt	0.000543			0.0005050		mg/L				7	20
Copper	0.00892			0.009116		mg/L				2	20
Lead	0.0109			0.01096		mg/L				0.5	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	0.00416	J		0.003784	J	mg/L				10	20
Zinc	0.0160	J		0.01596	J	mg/L				0.3	20
Tin	<0.00500			<0.00500		mg/L				NC	20

Lab Sample ID: 310-285765-11 DU
Matrix: Water
Analysis Batch: 428355

Client Sample ID: DG-1301
Prep Type: Total/NA
Prep Batch: 427323

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Beryllium	<0.00100			<0.00100		mg/L				NC	20
Nickel	0.00679			0.007000		mg/L				3	20
Tin	<0.00500			<0.00500		mg/L				NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-428610/1-A
Matrix: Water
Analysis Batch: 428751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 428610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000110	mg/L		07/28/24 17:30	07/29/24 14:27	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 310-428610/2-A
Matrix: Water
Analysis Batch: 428751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 428610

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00167	0.001543		mg/L		93	80 - 120

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 310-427533/1-A
Matrix: Water
Analysis Batch: 427913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 427533

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.0100		0.0100	0.00350	mg/L		07/17/24 10:31	07/19/24 17:56	1

Lab Sample ID: LCS 310-427533/2-A
Matrix: Water
Analysis Batch: 427913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 427533

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.200	0.2041		mg/L		102	90 - 110

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-777239/1-A
Matrix: Water
Analysis Batch: 777242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<1.00		1.00	0.231	mg/L		07/17/24 18:00	07/17/24 21:54	1

Lab Sample ID: LCS 500-777239/2-A
Matrix: Water
Analysis Batch: 777242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	3.64	3.379		mg/L		93	80 - 120

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

Lab Sample ID: MB 310-427297/1
Matrix: Water
Analysis Batch: 427297

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			07/15/24 13:01	1

Lab Sample ID: LCS 310-427297/2
Matrix: Water
Analysis Batch: 427297

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	102.0		mg/L		102	81 - 116

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

Lab Sample ID: MB 310-427381/1
Matrix: Water
Analysis Batch: 427381

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			07/16/24 09:40	1

Lab Sample ID: LCS 310-427381/2
Matrix: Water
Analysis Batch: 427381

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	98.00		mg/L		98	81 - 116

Lab Sample ID: MB 310-427430/1
Matrix: Water
Analysis Batch: 427430

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			07/16/24 13:15	1

Lab Sample ID: LCS 310-427430/2
Matrix: Water
Analysis Batch: 427430

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	106.0		mg/L		106	81 - 116

Lab Sample ID: MB 310-427433/1
Matrix: Water
Analysis Batch: 427433

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			07/16/24 13:44	1

Lab Sample ID: LCS 310-427433/2
Matrix: Water
Analysis Batch: 427433

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	97.00		mg/L		97	81 - 116

Lab Sample ID: MB 310-427547/1
Matrix: Water
Analysis Batch: 427547

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			07/17/24 11:57	1

Lab Sample ID: LCS 310-427547/2
Matrix: Water
Analysis Batch: 427547

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	103.0		mg/L		103	81 - 116

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Analysis Batch: 427440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-18	MWP-7	Total/NA	Water	8260D	
310-285765-19	MW-15	Total/NA	Water	8260D	
310-285765-20	MW-16	Total/NA	Water	8260D	
310-285765-21	MW-17	Total/NA	Water	8260D	
310-285765-22	MW-18	Total/NA	Water	8260D	
310-285765-23	ORG-MW	Total/NA	Water	8260D	
MB 310-427440/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427440/6	Lab Control Sample	Total/NA	Water	8260D	
310-285765-18 MS	MWP-7	Total/NA	Water	8260D	
310-285765-18 MSD	MWP-7	Total/NA	Water	8260D	

Analysis Batch: 427529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	8260D	
310-285765-2	TG-305	Total/NA	Water	8260D	
310-285765-5	DG-1001	Total/NA	Water	8260D	
310-285765-6	DG-1005	Total/NA	Water	8260D	
310-285765-7	DG-1101	Total/NA	Water	8260D	
310-285765-8	DG-1105R	Total/NA	Water	8260D	
310-285765-9	DG-1201	Total/NA	Water	8260D	
310-285765-10	DG-1205	Total/NA	Water	8260D	
310-285765-11	DG-1301	Total/NA	Water	8260D	
310-285765-12	DG-1305	Total/NA	Water	8260D	
310-285765-13	DG-1401	Total/NA	Water	8260D	
MB 310-427529/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427529/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-427529/7	Lab Control Sample	Total/NA	Water	8260D	
310-285765-1 MS	TG-301	Total/NA	Water	8260D	
310-285765-1 MSD	TG-301	Total/NA	Water	8260D	

Analysis Batch: 427531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-14	DGP-1500	Total/NA	Water	8260D	
310-285765-15	MW-D	Total/NA	Water	8260D	
310-285765-16	GU-13	Total/NA	Water	8260D	
310-285765-17	SW-101	Total/NA	Water	8260D	
MB 310-427531/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427531/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-427531/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 427650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-24	Trip Blank 1	Total/NA	Water	8260D	
310-285765-25	Trip Blank 2	Total/NA	Water	8260D	
310-285765-26	Trip Blank 3	Total/NA	Water	8260D	
310-285765-27	Trip Blank 4	Total/NA	Water	8260D	
MB 310-427650/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427650/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-427650/7	Lab Control Sample	Total/NA	Water	8260D	

QC Association Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

GC/MS VOA

Analysis Batch: 427716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	8260D	
310-285765-2	TG-305	Total/NA	Water	8260D	
310-285765-3	DG-901	Total/NA	Water	8260D	
310-285765-4	DG-905	Total/NA	Water	8260D	
310-285765-5	DG-1001	Total/NA	Water	8260D	
310-285765-6	DG-1005	Total/NA	Water	8260D	
310-285765-7	DG-1101	Total/NA	Water	8260D	
310-285765-8	DG-1105R	Total/NA	Water	8260D	
310-285765-9	DG-1201	Total/NA	Water	8260D	
310-285765-10	DG-1205	Total/NA	Water	8260D	
310-285765-11	DG-1301	Total/NA	Water	8260D	
310-285765-12	DG-1305	Total/NA	Water	8260D	
310-285765-13	DG-1401	Total/NA	Water	8260D	
310-285765-17	SW-101	Total/NA	Water	8260D	
MB 310-427716/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427716/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-427716/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 427851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-14	DGP-1500	Total/NA	Water	8260D	
310-285765-15	MW-D	Total/NA	Water	8260D	
310-285765-16	GU-13	Total/NA	Water	8260D	
MB 310-427851/5	Method Blank	Total/NA	Water	8260D	
LCS 310-427851/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-427851/7	Lab Control Sample	Total/NA	Water	8260D	

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Prep Batch: 427592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	3510C	
310-285765-11	DG-1301	Total/NA	Water	3510C	
MB 310-427592/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-427592/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-427592/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 427635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8270E	427592
310-285765-11	DG-1301	Total/NA	Water	8270E	427592
MB 310-427592/1-A	Method Blank	Total/NA	Water	8270E	427592
LCS 310-427592/2-A	Lab Control Sample	Total/NA	Water	8270E	427592
LCSD 310-427592/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	427592

Prep Batch: 427724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	3510C	
MB 310-427724/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-427724/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-427724/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

GC/MS Semi VOA

Analysis Batch: 427942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8270E	427592
MB 310-427592/1-A	Method Blank	Total/NA	Water	8270E	427592
LCS 310-427592/2-A	Lab Control Sample	Total/NA	Water	8270E	427592
LCSD 310-427592/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	427592

Analysis Batch: 428132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	8270E	427724
MB 310-427724/1-A	Method Blank	Total/NA	Water	8270E	427724
LCS 310-427724/2-A	Lab Control Sample	Total/NA	Water	8270E	427724
LCSD 310-427724/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	427724

Analysis Batch: 428242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	8270E	427724
MB 310-427724/1-A	Method Blank	Total/NA	Water	8270E	427724
LCS 310-427724/2-A	Lab Control Sample	Total/NA	Water	8270E	427724
LCSD 310-427724/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	427724

GC Semi VOA

Analysis Batch: 427367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	8081B	427419
MB 310-427419/1-A	Method Blank	Total/NA	Water	8081B	427419
LCS 310-427419/22-A	Lab Control Sample	Total/NA	Water	8081B	427419

Analysis Batch: 427368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	8082A	427419
MB 310-427419/1-A	Method Blank	Total/NA	Water	8082A	427419
LCS 310-427419/23-A	Lab Control Sample	Total/NA	Water	8082A	427419

Prep Batch: 427419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	3511	
310-285765-7	DG-1101	Total/NA	Water	3511	
MB 310-427419/1-A	Method Blank	Total/NA	Water	3511	
LCS 310-427419/22-A	Lab Control Sample	Total/NA	Water	3511	
LCS 310-427419/23-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 427483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8015C	
310-285765-7	DG-1101	Total/NA	Water	8015C	
MB 310-427483/4	Method Blank	Total/NA	Water	8015C	
LCS 310-427483/5	Lab Control Sample	Total/NA	Water	8015C	
310-285765-4 MS	DG-905	Total/NA	Water	8015C	
310-285765-4 MSD	DG-905	Total/NA	Water	8015C	

QC Association Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

GC Semi VOA

Analysis Batch: 427958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8081B	427419

Analysis Batch: 427959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8082A	427419

Prep Batch: 529394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8151A	
310-285765-7	DG-1101	Total/NA	Water	8151A	
MB 410-529394/1-A	Method Blank	Total/NA	Water	8151A	
LCS 410-529394/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 410-529394/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 529590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	8151A	529394
310-285765-7	DG-1101	Total/NA	Water	8151A	529394
MB 410-529394/1-A	Method Blank	Total/NA	Water	8151A	529394
LCS 410-529394/2-A	Lab Control Sample	Total/NA	Water	8151A	529394
LCSD 410-529394/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	529394

Metals

Prep Batch: 427323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	3005A	
310-285765-2	TG-305	Total/NA	Water	3005A	
310-285765-3	DG-901	Total/NA	Water	3005A	
310-285765-4	DG-905	Total/NA	Water	3005A	
310-285765-5	DG-1001	Total/NA	Water	3005A	
310-285765-6	DG-1005	Total/NA	Water	3005A	
310-285765-7	DG-1101	Total/NA	Water	3005A	
310-285765-8	DG-1105R	Total/NA	Water	3005A	
310-285765-9	DG-1201	Total/NA	Water	3005A	
310-285765-10	DG-1205	Total/NA	Water	3005A	
310-285765-11	DG-1301	Total/NA	Water	3005A	
310-285765-12	DG-1305	Total/NA	Water	3005A	
310-285765-13	DG-1401	Total/NA	Water	3005A	
310-285765-14	DGP-1500	Total/NA	Water	3005A	
310-285765-15	MW-D	Total/NA	Water	3005A	
310-285765-16	GU-13	Total/NA	Water	3005A	
310-285765-17	SW-101	Total/NA	Water	3005A	
MB 310-427323/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-427323/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-285765-2 MS	TG-305	Total/NA	Water	3005A	
310-285765-2 MSD	TG-305	Total/NA	Water	3005A	
310-285765-11 DU	DG-1301	Total/NA	Water	3005A	

Metals

Analysis Batch: 428071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	6020B	427323
310-285765-2	TG-305	Total/NA	Water	6020B	427323
310-285765-3	DG-901	Total/NA	Water	6020B	427323
310-285765-4	DG-905	Total/NA	Water	6020B	427323
310-285765-5	DG-1001	Total/NA	Water	6020B	427323
310-285765-6	DG-1005	Total/NA	Water	6020B	427323
310-285765-7	DG-1101	Total/NA	Water	6020B	427323
310-285765-8	DG-1105R	Total/NA	Water	6020B	427323
310-285765-9	DG-1201	Total/NA	Water	6020B	427323
310-285765-10	DG-1205	Total/NA	Water	6020B	427323
310-285765-11	DG-1301	Total/NA	Water	6020B	427323
310-285765-12	DG-1305	Total/NA	Water	6020B	427323
310-285765-13	DG-1401	Total/NA	Water	6020B	427323
310-285765-14	DGP-1500	Total/NA	Water	6020B	427323
310-285765-15	MW-D	Total/NA	Water	6020B	427323
310-285765-16	GU-13	Total/NA	Water	6020B	427323
310-285765-17	SW-101	Total/NA	Water	6020B	427323
MB 310-427323/1-A	Method Blank	Total/NA	Water	6020B	427323
LCS 310-427323/2-A	Lab Control Sample	Total/NA	Water	6020B	427323
310-285765-2 MS	TG-305	Total/NA	Water	6020B	427323
310-285765-2 MSD	TG-305	Total/NA	Water	6020B	427323
310-285765-11 DU	DG-1301	Total/NA	Water	6020B	427323

Analysis Batch: 428355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	6020B	427323
310-285765-2	TG-305	Total/NA	Water	6020B	427323
310-285765-3	DG-901	Total/NA	Water	6020B	427323
310-285765-4	DG-905	Total/NA	Water	6020B	427323
310-285765-5	DG-1001	Total/NA	Water	6020B	427323
310-285765-6	DG-1005	Total/NA	Water	6020B	427323
310-285765-7	DG-1101	Total/NA	Water	6020B	427323
310-285765-8	DG-1105R	Total/NA	Water	6020B	427323
310-285765-9	DG-1201	Total/NA	Water	6020B	427323
310-285765-10	DG-1205	Total/NA	Water	6020B	427323
310-285765-11	DG-1301	Total/NA	Water	6020B	427323
310-285765-12	DG-1305	Total/NA	Water	6020B	427323
310-285765-13	DG-1401	Total/NA	Water	6020B	427323
310-285765-14	DGP-1500	Total/NA	Water	6020B	427323
310-285765-15	MW-D	Total/NA	Water	6020B	427323
310-285765-16	GU-13	Total/NA	Water	6020B	427323
310-285765-17	SW-101	Total/NA	Water	6020B	427323
MB 310-427323/1-A	Method Blank	Total/NA	Water	6020B	427323
LCS 310-427323/2-A	Lab Control Sample	Total/NA	Water	6020B	427323
310-285765-2 MS	TG-305	Total/NA	Water	6020B	427323
310-285765-2 MSD	TG-305	Total/NA	Water	6020B	427323
310-285765-11 DU	DG-1301	Total/NA	Water	6020B	427323

Prep Batch: 428610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 428610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-7	DG-1101	Total/NA	Water	7470A	
MB 310-428610/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-428610/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 428751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	7470A	428610
310-285765-7	DG-1101	Total/NA	Water	7470A	428610
MB 310-428610/1-A	Method Blank	Total/NA	Water	7470A	428610
LCS 310-428610/2-A	Lab Control Sample	Total/NA	Water	7470A	428610

General Chemistry

Analysis Batch: 427297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-5	DG-1001	Total/NA	Water	I-3765-85	
310-285765-15	MW-D	Total/NA	Water	I-3765-85	
310-285765-16	GU-13	Total/NA	Water	I-3765-85	
310-285765-17	SW-101	Total/NA	Water	I-3765-85	
MB 310-427297/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-427297/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 427381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-1	TG-301	Total/NA	Water	I-3765-85	
310-285765-2	TG-305	Total/NA	Water	I-3765-85	
310-285765-3	DG-901	Total/NA	Water	I-3765-85	
310-285765-4	DG-905	Total/NA	Water	I-3765-85	
MB 310-427381/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-427381/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 427430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-11	DG-1301	Total/NA	Water	I-3765-85	
MB 310-427430/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-427430/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 427433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-12	DG-1305	Total/NA	Water	I-3765-85	
310-285765-13	DG-1401	Total/NA	Water	I-3765-85	
310-285765-14	DGP-1500	Total/NA	Water	I-3765-85	
MB 310-427433/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-427433/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Prep Batch: 427533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	9012B	
310-285765-7	DG-1101	Total/NA	Water	9012B	
MB 310-427533/1-A	Method Blank	Total/NA	Water	9012B	
LCS 310-427533/2-A	Lab Control Sample	Total/NA	Water	9012B	

QC Association Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

General Chemistry

Analysis Batch: 427547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-6	DG-1005	Total/NA	Water	I-3765-85	
310-285765-7	DG-1101	Total/NA	Water	I-3765-85	
310-285765-8	DG-1105R	Total/NA	Water	I-3765-85	
310-285765-9	DG-1201	Total/NA	Water	I-3765-85	
310-285765-10	DG-1205	Total/NA	Water	I-3765-85	
MB 310-427547/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-427547/2	Lab Control Sample	Total/NA	Water	I-3765-85	

Analysis Batch: 427913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	9012B	427533
310-285765-7	DG-1101	Total/NA	Water	9012B	427533
MB 310-427533/1-A	Method Blank	Total/NA	Water	9012B	427533
LCS 310-427533/2-A	Lab Control Sample	Total/NA	Water	9012B	427533

Prep Batch: 777239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	9030B	
310-285765-7	DG-1101	Total/NA	Water	9030B	
MB 500-777239/1-A	Method Blank	Total/NA	Water	9030B	
LCS 500-777239/2-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 777242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-285765-4	DG-905	Total/NA	Water	9034	777239
310-285765-7	DG-1101	Total/NA	Water	9034	777239
MB 500-777239/1-A	Method Blank	Total/NA	Water	9034	777239
LCS 500-777239/2-A	Lab Control Sample	Total/NA	Water	9034	777239

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: TG-301
Date Collected: 07/10/24 15:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 13:22
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 13:59
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 16:59
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:20
Total/NA	Analysis	I-3765-85		1	427381	HE7K	EET CF	07/16/24 09:40

Client Sample ID: TG-305
Date Collected: 07/10/24 13:17
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 14:53
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 14:22
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:03
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:23
Total/NA	Analysis	I-3765-85		1	427381	HE7K	EET CF	07/16/24 09:40

Client Sample ID: DG-901
Date Collected: 07/10/24 09:48
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 14:44
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:28
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:34
Total/NA	Analysis	I-3765-85		1	427381	HE7K	EET CF	07/16/24 09:40

Client Sample ID: DG-905
Date Collected: 07/10/24 16:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 15:07
Total/NA	Prep	3510C			427592	L5FG	EET CF	07/17/24 15:18
Total/NA	Analysis	8270E		1	427942	L0FS	EET CF	07/22/24 11:29
Total/NA	Prep	3510C			427592	L5FG	EET CF	07/17/24 15:18
Total/NA	Analysis	8270E		1	427635	L0FS	EET CF	07/18/24 17:36
Total/NA	Analysis	8015C		1	427483	V7YZ	EET CF	07/17/24 09:57

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-905

Lab Sample ID: 310-285765-4

Date Collected: 07/10/24 16:19

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3511			427419	D2YP	EET CF	07/16/24 12:34
Total/NA	Analysis	8081B		1	427958	BW2O	EET CF	07/22/24 12:50
Total/NA	Prep	3511			427419	D2YP	EET CF	07/16/24 12:34
Total/NA	Analysis	8082A		1	427959	BW2O	EET CF	07/22/24 12:50
Total/NA	Prep	8151A			529394	QJZ6	ELLE	07/17/24 14:47
Total/NA	Analysis	8151A		1	529590	UAMZ	ELLE	07/18/24 06:32
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:32
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:36
Total/NA	Prep	7470A			428610	DHM5	EET CF	07/28/24 17:30
Total/NA	Analysis	7470A		1	428751	DHM5	EET CF	07/29/24 15:03
Total/NA	Prep	9012B			427533	WZC8	EET CF	07/17/24 10:31
Total/NA	Analysis	9012B		1	427913	ZJX4	EET CF	07/19/24 18:06
Total/NA	Prep	9030B			777239	CLB	EET CHI	07/17/24 18:10 - 07/17/24 18:15 [1]
Total/NA	Analysis	9034		1	777242	CLB	EET CHI	07/17/24 22:25 - 07/17/24 22:40 [1]
Total/NA	Analysis	I-3765-85		1	427381	HE7K	EET CF	07/16/24 09:40

Client Sample ID: DG-1001

Lab Sample ID: 310-285765-5

Date Collected: 07/09/24 18:18

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 16:01
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 15:29
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:35
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:47
Total/NA	Analysis	I-3765-85		1	427297	DGU1	EET CF	07/15/24 13:01

Client Sample ID: DG-1005

Lab Sample ID: 310-285765-6

Date Collected: 07/11/24 08:53

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 16:24
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 15:52
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:39
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:49
Total/NA	Analysis	I-3765-85		1	427547	HE7K	EET CF	07/17/24 11:57

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1101
Date Collected: 07/11/24 12:05
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 16:47
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 16:14
Total/NA	Prep	3510C			427724	C3AA	EET CF	07/18/24 13:11
Total/NA	Analysis	8270E		1	428242	L0FS	EET CF	07/24/24 14:48
Total/NA	Prep	3510C			427724	C3AA	EET CF	07/18/24 13:11
Total/NA	Analysis	8270E		1	428132	L0FS	EET CF	07/23/24 17:45
Total/NA	Analysis	8015C		1	427483	V7YZ	EET CF	07/17/24 10:17
Total/NA	Prep	3511			427419	D2YP	EET CF	07/16/24 12:34
Total/NA	Analysis	8081B		1	427367	BW2O	EET CF	07/16/24 21:34
Total/NA	Prep	3511			427419	D2YP	EET CF	07/16/24 12:34
Total/NA	Analysis	8082A		1	427368	BW2O	EET CF	07/16/24 21:34
Total/NA	Prep	8151A			529394	QJZ6	ELLE	07/17/24 14:47
Total/NA	Analysis	8151A		1	529590	UAMZ	ELLE	07/18/24 07:00
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:43
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:51
Total/NA	Prep	7470A			428610	DHM5	EET CF	07/28/24 17:30
Total/NA	Analysis	7470A		1	428751	DHM5	EET CF	07/29/24 15:05
Total/NA	Prep	9012B			427533	WZC8	EET CF	07/17/24 10:31
Total/NA	Analysis	9012B		1	427913	ZJX4	EET CF	07/19/24 18:13
Total/NA	Prep	9030B			777239	CLB	EET CHI	07/17/24 18:15 - 07/17/24 18:20 [1]
Total/NA	Analysis	9034		1	777242	CLB	EET CHI	07/17/24 22:40 - 07/17/24 22:56 [1]
Total/NA	Analysis	I-3765-85		1	427547	HE7K	EET CF	07/17/24 11:57

Client Sample ID: DG-1105R
Date Collected: 07/11/24 09:29
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 17:09
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 16:37
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:46
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:54
Total/NA	Analysis	I-3765-85		1	427547	HE7K	EET CF	07/17/24 11:57

Client Sample ID: DG-1201
Date Collected: 07/11/24 10:06
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 17:32

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1201

Lab Sample ID: 310-285765-9

Date Collected: 07/11/24 10:06

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 17:00
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:50
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:56
Total/NA	Analysis	I-3765-85		1	427547	HE7K	EET CF	07/17/24 11:57

Client Sample ID: DG-1205

Lab Sample ID: 310-285765-10

Date Collected: 07/11/24 10:39

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 17:55
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 17:23
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 17:54
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 20:58
Total/NA	Analysis	I-3765-85		1	427547	HE7K	EET CF	07/17/24 11:57

Client Sample ID: DG-1301

Lab Sample ID: 310-285765-11

Date Collected: 07/10/24 19:35

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 18:18
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 17:46
Total/NA	Prep	3510C			427592	L5FG	EET CF	07/17/24 15:18
Total/NA	Analysis	8270E		1	427635	L0FS	EET CF	07/18/24 18:02
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:12
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:00
Total/NA	Analysis	I-3765-85		1	427430	HE7K	EET CF	07/16/24 13:15

Client Sample ID: DG-1305

Lab Sample ID: 310-285765-12

Date Collected: 07/10/24 18:35

Matrix: Water

Date Received: 07/12/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 18:41
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 18:08
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:19

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: DG-1305
Date Collected: 07/10/24 18:35
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:05
Total/NA	Analysis	I-3765-85		1	427433	HE7K	EET CF	07/16/24 13:44

Client Sample ID: DG-1401
Date Collected: 07/10/24 17:57
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427529	FE5V	EET CF	07/17/24 19:03
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 18:31
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:23
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:07
Total/NA	Analysis	I-3765-85		1	427433	HE7K	EET CF	07/16/24 13:44

Client Sample ID: DGP-1500
Date Collected: 07/10/24 17:04
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427531	FE5V	EET CF	07/18/24 03:01
Total/NA	Analysis	8260D		1	427851	FE5V	EET CF	07/19/24 14:07
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:26
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:18
Total/NA	Analysis	I-3765-85		1	427433	HE7K	EET CF	07/16/24 13:44

Client Sample ID: MW-D
Date Collected: 07/09/24 18:18
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427531	FE5V	EET CF	07/18/24 03:23
Total/NA	Analysis	8260D		1	427851	FE5V	EET CF	07/19/24 14:29
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:30
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:21
Total/NA	Analysis	I-3765-85		1	427297	DGU1	EET CF	07/15/24 13:01

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: GU-13
Date Collected: 07/09/24 15:43
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427531	FE5V	EET CF	07/18/24 03:46
Total/NA	Analysis	8260D		1	427851	FE5V	EET CF	07/19/24 14:51
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:34
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:23
Total/NA	Analysis	I-3765-85		1	427297	DGU1	EET CF	07/15/24 13:01

Client Sample ID: SW-101
Date Collected: 07/09/24 16:32
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427531	FE5V	EET CF	07/18/24 04:09
Total/NA	Analysis	8260D		1	427716	FE5V	EET CF	07/18/24 18:53
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428355	NFT2	EET CF	07/24/24 18:37
Total/NA	Prep	3005A			427323	QTZ5	EET CF	07/16/24 09:00
Total/NA	Analysis	6020B		1	428071	NFT2	EET CF	07/22/24 21:25
Total/NA	Analysis	I-3765-85		1	427297	DGU1	EET CF	07/15/24 13:01

Client Sample ID: MWP-7
Date Collected: 07/10/24 11:58
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 05:13

Client Sample ID: MW-15
Date Collected: 07/10/24 10:19
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 05:36

Client Sample ID: MW-16
Date Collected: 07/10/24 12:33
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 05:59

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Client Sample ID: MW-17
Date Collected: 07/10/24 11:26
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 06:21

Client Sample ID: MW-18
Date Collected: 07/09/24 17:30
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 06:44

Client Sample ID: ORG-MW
Date Collected: 07/10/24 11:01
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427440	FE5V	EET CF	07/17/24 07:07

Client Sample ID: Trip Blank 1
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427650	WSE8	EET CF	07/18/24 11:19

Client Sample ID: Trip Blank 2
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427650	WSE8	EET CF	07/18/24 11:41

Client Sample ID: Trip Blank 3
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427650	WSE8	EET CF	07/18/24 12:03

Client Sample ID: Trip Blank 4
Date Collected: 07/09/24 00:00
Date Received: 07/12/24 16:30

Lab Sample ID: 310-285765-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	427650	WSE8	EET CF	07/18/24 12:25

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Laboratory References:

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

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	07-29-24

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
6020B	3005A	Water	Antimony
6020B	3005A	Water	Arsenic
6020B	3005A	Water	Barium
6020B	3005A	Water	Beryllium
6020B	3005A	Water	Cadmium
6020B	3005A	Water	Chromium
6020B	3005A	Water	Cobalt
6020B	3005A	Water	Copper
6020B	3005A	Water	Lead
6020B	3005A	Water	Nickel
6020B	3005A	Water	Selenium
6020B	3005A	Water	Silver
6020B	3005A	Water	Thallium
6020B	3005A	Water	Vanadium
6020B	3005A	Water	Zinc
8260D		Water	1,1,1,2-Tetrachloroethane
8260D		Water	1,1,1-Trichloroethane
8260D		Water	1,1,2,2-Tetrachloroethane
8260D		Water	1,1,2-Trichloroethane
8260D		Water	1,1-Dichloroethane
8260D		Water	1,1-Dichloroethene
8260D		Water	1,2,3-Trichloropropane
8260D		Water	1,2,4-Trichlorobenzene
8260D		Water	1,2-Dibromo-3-chloropropane
8260D		Water	1,2-Dibromoethane (EDB)
8260D		Water	1,2-Dichlorobenzene
8260D		Water	1,2-Dichloroethane
8260D		Water	1,2-Dichloropropane
8260D		Water	1,4-Dichlorobenzene
8260D		Water	2-Butanone (MEK)
8260D		Water	2-Hexanone
8260D		Water	4-Methyl-2-pentanone (MIBK)
8260D		Water	Acetone
8260D		Water	Acrylonitrile
8260D		Water	Allyl chloride
8260D		Water	Benzene
8260D		Water	Bromochloromethane
8260D		Water	Bromodichloromethane
8260D		Water	Bromoform
8260D		Water	Bromomethane
8260D		Water	Carbon disulfide
8260D		Water	Carbon tetrachloride
8260D		Water	Chlorobenzene
8260D		Water	Chlorodibromomethane
8260D		Water	Chloroethane

Client: SCS Engineers
Job ID: 310-285765-1
Project/Site: NWIASL 1st 2024 HMSP

Laboratory: Eurofins Cedar Falls (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

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	Chloroform
8260D		Water	Chloromethane
8260D		Water	cis-1,2-Dichloroethene
8260D		Water	cis-1,3-Dichloropropene
8260D		Water	Dibromomethane
8260D		Water	Dichlorodifluoromethane
8260D		Water	Dichlorofluoromethane
8260D		Water	Ethyl methacrylate
8260D		Water	Ethylbenzene
8260D		Water	Iodomethane
8260D		Water	Methylene chloride
8260D		Water	Styrene
8260D		Water	Tetrachloroethene
8260D		Water	Toluene
8260D		Water	trans-1,2-Dichloroethene
8260D		Water	trans-1,3-Dichloropropene
8260D		Water	trans-1,4-Dichloro-2-butene
8260D		Water	Trichloroethene
8260D		Water	Trichlorofluoromethane
8260D		Water	Vinyl acetate
8260D		Water	Vinyl chloride
8260D		Water	Xylenes, Total
8270E	3510C	Water	Bis(2-ethylhexyl) phthalate
8270E	3510C	Water	Di-n-butyl phthalate
I-3765-85		Water	Total Suspended Solids

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
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	08-01-24
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	08-01-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-24
Wyoming	State	8TMS-Q	05-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	07-31-24
A2LA	ISO/IEC 17025	0001.01	07-31-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	07-30-24
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	07-31-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	08-06-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	08-12-24
New Jersey	NELAP	PA011	08-04-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	08-04-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	07-29-24
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-25
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	07-31-24
Washington	State	C457	04-11-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: SCS Engineers
Job ID: 310-285765-1
Project/Site: NWIASL 1st 2024 HMSP

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-25-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	07-31-24

Method Summary

Client: SCS Engineers
Project/Site: NWIASL 1st 2024 HMSP

Job ID: 310-285765-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	EET CF
8081B	Organochlorine Pesticides (GC)	SW846	EET CF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET CF
8151A	Herbicides (GC)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
9012B	Cyanide, Total 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
3511	Microextraction of Organic Compounds	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF
8151A	Extraction (Herbicides)	SW846	ELLE
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	EET CF
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CHI

Protocol References:

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401
EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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310-285765 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 7-12-24 | TIME 1630 | Received By: MY

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? ↓

DG-1301 ; MW-D ; DG 1401 ,DGP 1500 ; DG1305

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): 0.8 | Corrected Temp (°C): 0.8

• **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 7-12-24 | TIME 1630 | Received By: MY

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? ↓

TG 305; TG 301; DG-901; DG-905;

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): 0.6 | 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

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Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 7-12-24 | TIME 1630 | Received By: MY

Delivery Type: ☐ UPS ☐ FedEx MY ☐ 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? ↓

MW ORG ; MW-17 ; MW-16 , MWP-7 ; MW 15 ; MW 18
DG 1001 ; GW-13 ; SW-101

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): 1.0 | Corrected Temp (°C): 1.0

• 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

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 7-12-24 | TIME 1630 | Received By: MY

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? ↓

DG1105R, DG 1005; DG-1205; DG-1201; DG 1101

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): 2.8 | Corrected Temp (°C): 2.8

• **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 Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: KonnerRoth	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-94027-25820 1
Client Contact: Nathan Ohrt	Phone:	E-Mail: Mary Yang@ET EurofinsUS com	State of Origin:	Page: Page 1 of 3
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 27223095.24			
Email: nohrt@scsengineers.com	WO #:			
Project Name: NWIASL 1st 2024 HMSP	Project #: 31002030			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.
D - HNO3
A - HCL
N - None
B - NaOH
CB - ZnAcetate/NaOH
Other:

Sample Identification	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)	6020B - Appendix I Metals	8260D - (MOD) Volatile Appendix I Sublist	I_3765_85 - Residue, Non-filterable (TSS)	8081B, 8082A, 8270E	6020B, 7470A - Appendix II metals	8260D - Volatile Appendix II Sublist	9012B - Total Cyanide	8016C_DAI - Acetonitrile and Isobutyl alcohol	9034_Calc - Sulfide* CHICAGO	8151A - (MOD) Herbicides**LANCASTER	8260D - (MOD) Volatile Appendix I Sublist + Dichlorofluoromethane	8270E - (MOD) Base/Neutrals Bis(2-ethylhexyl)pht	8260D - Trichloroethene	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N	D	A	B	N	CB	N	A	N	A		
UG-90				Water			X	X	X												
UG-201				Water			X	X	X												
TG-301	7-10-24	1505	G	Water			X	X	X												
TG-305	7-10-24	1317	G	Water			X	X	X												
DG-901	7-10-24	0948	G	Water			X	X	X												
DG-905	7-10-24	1619	G	Water					X	X	X	X	X	X	X	X					Sub Sulfide to Chicago and Herbicides to Lancaster
DG-1001	7-9-24	1818	G	Water			X	X	X												
DG-1005	7-11-24	0853	G	Water			X	X	X												
DG-1101	7-11-24	1205	G	Water					X	X	X	X	X	X	X	X					Sub Sulfide to Chicago and Herbicides to Lancaster
DG-1105R	7-11-24	0929	G	Water			X	X	X												
DG-1201	7-11-24	1006	G	Water			X	X	X												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

	Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	KonnerRoth	7-12-24 / 1000	SCS			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7-12-24 1630	Company Eurofins

Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

Ver 04/02/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Konner Roth	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-94027-25820 3
Client Contact: Nathan Ohrt	Phone:	E-Mail: Mary Yang@ET EurofinsUS com	State of Origin:	Page: Page 2 of 3
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 27223095.24			
Email: nohrt@scsengineers.com	WO #:			
Project Name: NWIASL 1st 2024 HMSP	Project #: 31002030			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: D - HNO3; A - HCL; N - None; B - NaOH; CB - ZnAcetate/NaOH

Other:

Sample Identification	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)	6020B - Appendix I Metals	8260D - (MOD) Volatile Appendix I Sublist	I_3765_85 - Residue, Non-filterable (TSS)	8081B, 8082A, 8270E	6020B, 7470A - Appendix II metals	8260D - Volatile Appendix II Sublist	9012B - Total Cyanide	8015C_DAI - Acetonitrile and Isobutyl alcohol	9034_Calc - Local Method	8151A - (MOD) Herbicides	8260D - (MOD) Volatile Appendix I Sublist + Dichlorofluoromethane	8270E - (MOD) Base/Neutrals Bis(2-ethylhexyl)pht	8260D - Trichloroethene	Total Number of containers	Special Instructions/Note:
Preservation Code:							D	A	N	N	D	A	B	N	CB	N	A	N	A		
DG-1205	7-11-24	1039	G	Water			X		X								X				
DG-1301	7-10-24	1935	G	Water			X	X	X									X			
DG-1305	7-10-24	1835	G	Water			X	X	X												
DG-1401	7-10-24	1757	G	Water			X	X	X												
DGP-1500	7-10-24	1704	G	Water			X	X	X												
MW-D	7-9-24	1818	G	Water			X	X	X												
GU-9				Water			X	X	X												
GU-10				Water			X	X	X												
GU-11				Water			X	X	X												
GU-12				Water			X	X	X												
GU-13	7-9-24	15'43	G	Water			X	X	X												

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Konner Roth	7-12-24 / 10'00	SCS			
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Thomas Roth	Lab PM: Yang, Mary E	Carrier Tracking No(s):	COC No: 310-94027-25820 5
Client Contact: Nathan Ohrt	Phone:	E-Mail: Mary Yang@ET EurofinsUS com	State of Origin:	Page: Page 3 of 3
Company: SCS Engineers	PWSID:	Analysis Requested		Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			Preservation Codes: D - HNO3, A - HCL, N - None, B - NaOH, CB - ZnAcetate/NaOH
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 27223095 24			
Email: nohrt@scsengineers.com	WO #:			
Project Name: NWIASL 1st 2024 HMSP	Project #: 31002030			
Site:	SSOW#:			Other:

Sample Identification	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)	6020B - Appendix I Metals	8260D - (MOD) Volatile Appendix I Sublist	L_3765_85 - Residue, Non-filterable (TSS)	8081B, 8082A, 8270E	6020B, 7470A - Appendix II metals	8260D - Volatile Appendix II Sublist	9012B - Total Cyanide	8015C_DAI - Acetonitrile and Isobutyl alcohol	9034_Calc - Local Method	8161A - (MOD) Herbicides	8260D - (MOD) Volatile Appendix I Sublist + Dichlorofluoromethane	8270E - (MOD) Base/Neutrals Bis(2-ethylhexyl)pht	8260D - Trichloroethene	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N	D	A	B	N	CB	N	A	N	A		
GU-14				Water			X	X	X												
GU-15				Water			X	X	X												
SW-101	7-9-24	1632	G	Water			X	X	X												
MWP-7	7-10-24	1158	G	Water															X		
MW-15	7-10-24	1019	G	Water															X		
MW-16	7-10-24	1233	G	Water															X		
MW-17	7-10-24	1126	G	Water															X		
MW-18	7-9-24	17:30	G	Water															X		
ORG-MW	7-10-24	1101	G	Water															X		
Trip Blank				Water								X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Thomas Roth	7-12-24 / 10:00	SCS			
				7.12 24 1630	Eurofins

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

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: Yang, Mary E	Carrier Tracking No(s)	COC No: 310-74415 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Mary Yang@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 #: 310-285765-1
Address: 2417 Bond Street, ,	Due Date Requested: 7/25/2024			
City: University Park	TAT Requested (days):			
State Zip: IL, 60484				
Phone: 708-534-5200(Tel) 708-534-5211(Fax)	PO #:			
Email:	WO #:			
Project Name: NWIASL 1st 2024 HMSP	Project #: 31002030			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other:

310-285765 COC

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	8151A/8151A_AP (MOD) Herbicides	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
DG-905 (310-285765-4)	7/10/24	16 19 Central		Water			X	X	1	
DG-1101 (310-285765-7)	7/11/24	12 05 Central		Water			X	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: 7/12/24 1550	Company	Received by:	Date/Time: 8/16/24 1010	Company EETA
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. 3.2->3.1

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-285765-1

Login Number: 285765
List Number: 1
Creator: Yang, Mary 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: 310-285765-1

Login Number: 285765
List Number: 3
Creator: Schmidt, Kara

List Source: Eurofins Chicago
List Creation: 07/16/24 01:59 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	3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-285765-1

Login Number: 285765
List Number: 2
Creator: Arroyo, Haley

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/16/24 11:10 AM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/9/2024 3:42:20 PM

JOB DESCRIPTION

NWIA Fall 2024 GW
NWIA Landfill

JOB NUMBER

310-295916-1

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



Generated
12/9/2024 3:42:20 PM

Authorized for release by
Samuel Miller, Project Management Assistant I
Samuel.Miller@et.eurofinsus.com
(319)277-2401

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Job Narrative
310-295916-1

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

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

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

Receipt
The samples were received on 11/22/2024 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 4.2°C, 5.3°C and 6.0°C.

GC/MS VOA
Method 8260D: The method requirement for no headspace was not met. The following volatile samples were analyzed with headspace in the sample container(s): Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28).

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid : DG-901 (310-295916-5), DG-905 (310-295916-6), DG-1105R (310-295916-10), DG-1205 (310-295916-11), DG-1301 (310-295916-12), DG-1305 (310-295916-13), DG-1401R (310-295916-14), DGP-1500 (310-295916-15), GU-15 (310-295916-16), SW101 (310-295916-17), Trip Blank 1 (310-295916-26), Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28). The requested target analyte list includes acrylonitrile, acid-labile compounds that degrades in an acidic medium.

Method 8260D: The following samples were analyzed outside of analytical holding time for Acrylonitrile: GU-15 (310-295916-16), SW101 (310-295916-17), Trip Blank 1 (310-295916-26), Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28).

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid : UG-90 (310-295916-1), UG-201 (310-295916-2), TDG-301 (310-295916-3), TDG-305 (310-295916-4), DG-1001 (310-295916-7), DG-1005 (310-295916-8), DG-1101 (310-295916-9) and (310-295853-B-6). The requested target analyte list includes acrylonitrile, acid-labile compounds that degrades in an acidic medium.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample(s) was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-D1 (310-295916-24) and MW-D2 (310-295916-25). The requested target analyte list includes Acrylonitrile, an acid-labile compound that degrades in an acidic medium.

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

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

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

Metals
Method 6020B: The laboratory control sample (LCS) for preparation batch 310-441160 and analytical batch 310-441932 recovered outside control limits for the following analytes: silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

General Chemistry

Job ID: 310-295916-1 (Continued) Eurofins Cedar Falls

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: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-295916-1	UG-90	Water	11/20/24 12:59	11/22/24 16:30
310-295916-2	UG-201	Water	11/20/24 12:23	11/22/24 16:30
310-295916-3	TDG-301	Water	11/20/24 09:55	11/22/24 16:30
310-295916-4	TDG-305	Water	11/20/24 09:20	11/22/24 16:30
310-295916-5	DG-901	Water	11/19/24 15:42	11/22/24 16:30
310-295916-6	DG-905	Water	11/19/24 14:13	11/22/24 16:30
310-295916-7	DG-1001	Water	11/20/24 10:38	11/22/24 16:30
310-295916-8	DG-1005	Water	11/20/24 11:06	11/22/24 16:30
310-295916-9	DG-1101	Water	11/20/24 11:37	11/22/24 16:30
310-295916-10	DG-1105R	Water	11/19/24 13:58	11/22/24 16:30
310-295916-11	DG-1205	Water	11/19/24 13:27	11/22/24 16:30
310-295916-12	DG-1301	Water	11/19/24 10:28	11/22/24 16:30
310-295916-13	DG-1305	Water	11/19/24 09:53	11/22/24 16:30
310-295916-14	DG-1401R	Water	11/19/24 09:15	11/22/24 16:30
310-295916-15	DGP-1500	Water	11/19/24 14:35	11/22/24 16:30
310-295916-16	GU-15	Water	11/18/24 15:45	11/22/24 16:30
310-295916-17	SW101	Water	11/18/24 16:15	11/22/24 16:30
310-295916-18	MWP-7	Water	11/19/24 12:47	11/22/24 16:30
310-295916-19	MW-15	Water	11/19/24 11:34	11/22/24 16:30
310-295916-20	MW-16	Water	11/19/24 12:21	11/22/24 16:30
310-295916-21	MW-17	Water	11/19/24 10:46	11/22/24 16:30
310-295916-22	MW-18	Water	11/19/24 11:15	11/22/24 16:30
310-295916-23	ORG-MW	Water	11/19/24 11:11	11/22/24 16:30
310-295916-24	MW-D1	Water	11/20/24 10:38	11/22/24 16:30
310-295916-25	MW-D2	Water	11/20/24 15:42	11/22/24 16:30
310-295916-26	Trip Blank 1	Water	11/18/24 00:00	11/22/24 16:30
310-295916-27	Trip Blank 2	Water	11/18/24 00:00	11/22/24 16:30
310-295916-28	Trip Blank 3	Water	11/18/24 00:00	11/22/24 16:30

Detection Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-90 — Lab Sample ID: 310-295916-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0180		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000530	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.00134		0.000500	0.000260	mg/L	1		6020B	Total/NA
Total Suspended Solids	10.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: UG-201 — Lab Sample ID: 310-295916-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.98	J	10.0	3.10	ug/L	1		8260D	Total/NA
Barium	0.136		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cadmium	0.000101	J	0.000200	0.000100	mg/L	1		6020B	Total/NA
Cobalt	0.000765	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00261	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00262		0.000500	0.000260	mg/L	1		6020B	Total/NA
Zinc	1.28		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	36.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: TDG-301 — Lab Sample ID: 310-295916-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0203		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000413	J B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Lead	0.000356	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00291	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Zinc	0.0122	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.00		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: TDG-305 — Lab Sample ID: 310-295916-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00157	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0361		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000971	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00272	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000289	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0124		0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	21.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-901 — Lab Sample ID: 310-295916-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0145		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0303		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00362	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00323	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000830		0.000500	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00134	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	17.0		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-905 — Lab Sample ID: 310-295916-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.000848	J	0.00200	0.000530	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-905 (Continued) — Lab Sample ID: 310-295916-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0466		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00139	J	0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00158	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00264	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000639		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00242	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00197	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	27.3		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1001 — Lab Sample ID: 310-295916-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00130	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0563		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00492	J	0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00356	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00445	J	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00342		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00298	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00305	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.0101		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0142	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	53.5		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1005 — Lab Sample ID: 310-295916-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00506		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0838		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.000521	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000223		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.0130		0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00480	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0115		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00494		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0102		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00183	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.0370		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0385		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	317		15.0	11.1	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1101 — Lab Sample ID: 310-295916-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00308		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0723		0.00200	0.000660	mg/L	1		6020B	Total/NA
Chromium	0.00528		0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.00259	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00789		0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00223		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00640		0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.0108		0.00500	0.00110	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-1101 (Continued) — Lab Sample ID: 310-295916-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	0.0179	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	97.5		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1105R — Lab Sample ID: 310-295916-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.556	J	1.00	0.450	ug/L	1		8260D	Total/NA
Arsenic	0.00368		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0330		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000866	B	0.000500	0.000170	mg/L	1		6020B	Total/NA
Nickel	0.00283	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Total Suspended Solids	5.33		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1205 — Lab Sample ID: 310-295916-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.679	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.70		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	1.05		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	0.473	J	1.00	0.430	ug/L	1		8260D	Total/NA
Arsenic	0.00350		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0154		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000486	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00346	J B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00111		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00256	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00453	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	44.5		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1301 — Lab Sample ID: 310-295916-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.306	J	0.500	0.220	ug/L	1		8260D	Total/NA
Chloroethane	1.79	J	4.00	0.790	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	37.1		1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	11.5		1.00	0.220	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	1.16		1.00	0.270	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.63		1.00	0.480	ug/L	1		8260D	Total/NA
trans-1,2-Dichloroethene	1.25		1.00	0.270	ug/L	1		8260D	Total/NA
Trichloroethene	6.34		1.00	0.430	ug/L	1		8260D	Total/NA
Barium	0.0413		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000354	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00327	J B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000605		0.000500	0.000260	mg/L	1		6020B	Total/NA
Thallium	0.000605	J	0.00100	0.000570	mg/L	1		6020B	Total/NA
Vanadium	0.00168	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	16.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1305 — Lab Sample ID: 310-295916-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	2.67		1.00	0.400	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.722	J	1.00	0.210	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DG-1305 (Continued) — Lab Sample ID: 310-295916-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.368	J	1.00	0.230	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.76		1.00	0.220	ug/L	1		8260D	Total/NA
Vinyl chloride	0.206	J	1.00	0.180	ug/L	1		8260D	Total/NA
Arsenic	0.00129	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.114		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000495	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00321	J B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00237		0.000500	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00223	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.0128	J	0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	9.67		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DG-1401R — Lab Sample ID: 310-295916-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.370	J	1.00	0.210	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.30		1.00	0.220	ug/L	1		8260D	Total/NA
Barium	0.0435		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000356	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00510	B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000583		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00216	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00177	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	40.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: DGP-1500 — Lab Sample ID: 310-295916-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.37		0.500	0.220	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	2.52	J	10.0	2.10	ug/L	1		8260D	Total/NA
Chloride	4.94	J	5.00	2.25	mg/L	5		300.0	Total/NA
Sulfate	29.1		5.00	2.10	mg/L	5		300.0	Total/NA
Arsenic	0.0167		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0448		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.000175	J	0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00409	J B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000348	J	0.000500	0.000260	mg/L	1		6020B	Total/NA
Sodium	13.1		1.00	0.480	mg/L	1		6020B	Total/NA
Potassium	2.19		0.500	0.150	mg/L	1		6020B	Total/NA
Calcium	107		0.500	0.190	mg/L	1		6020B	Total/NA
Magnesium	27.8		0.500	0.150	mg/L	1		6020B	Total/NA
Total Suspended Solids	7.67		5.00	3.70	mg/L	1		I-3765-85	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	351		5.00	2.50	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	351		5.00	2.50	mg/L	1		SM 2320B	Total/NA

Client Sample ID: GU-15 — Lab Sample ID: 310-295916-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16.8		10.0	3.10	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	3.33	J	10.0	2.10	ug/L	1		8260D	Total/NA
Arsenic	0.0143		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.340		0.00200	0.000660	mg/L	1		6020B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GU-15 (Continued) — Lab Sample ID: 310-295916-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.00167		0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.00137		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.0307		0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.0229		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0752	B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.0385		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0632		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00239	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.0594		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.347		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	2650		150	111	mg/L	1		I-3765-85	Total/NA

Client Sample ID: SW101 — Lab Sample ID: 310-295916-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13.1		10.0	3.10	ug/L	1		8260D	Total/NA
Arsenic	0.0128		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.287		0.00200	0.000660	mg/L	1		6020B	Total/NA
Beryllium	0.000902	J	0.00100	0.000330	mg/L	1		6020B	Total/NA
Cadmium	0.000583		0.000200	0.000100	mg/L	1		6020B	Total/NA
Chromium	0.0272		0.00500	0.00120	mg/L	1		6020B	Total/NA
Cobalt	0.0134		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.0482	B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.0237		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.0465		0.00500	0.00210	mg/L	1		6020B	Total/NA
Selenium	0.00184	J	0.00500	0.00140	mg/L	1		6020B	Total/NA
Vanadium	0.0524		0.00500	0.00110	mg/L	1		6020B	Total/NA
Zinc	0.186		0.0200	0.00970	mg/L	1		6020B	Total/NA
Total Suspended Solids	1000		100	74.0	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MWP-7 — Lab Sample ID: 310-295916-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	5.78		1.00	0.430	ug/L	1		8260D	Total/NA

Client Sample ID: MW-15 — Lab Sample ID: 310-295916-19

No Detections.

Client Sample ID: MW-16 — Lab Sample ID: 310-295916-20

No Detections.

Client Sample ID: MW-17 — Lab Sample ID: 310-295916-21

No Detections.

Client Sample ID: MW-18 — Lab Sample ID: 310-295916-22

No Detections.

Client Sample ID: ORG-MW — Lab Sample ID: 310-295916-23

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D1 — Lab Sample ID: 310-295916-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00135	J	0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0667		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00122		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00748	B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.00171		0.000500	0.000260	mg/L	1		6020B	Total/NA
Nickel	0.00489	J	0.00500	0.00210	mg/L	1		6020B	Total/NA
Vanadium	0.00264	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	61.0		5.00	3.70	mg/L	1		I-3765-85	Total/NA

Client Sample ID: MW-D2 — Lab Sample ID: 310-295916-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0149		0.00200	0.000530	mg/L	1		6020B	Total/NA
Barium	0.0317		0.00200	0.000660	mg/L	1		6020B	Total/NA
Cobalt	0.00347		0.000500	0.000170	mg/L	1		6020B	Total/NA
Copper	0.00331	J B	0.00500	0.00180	mg/L	1		6020B	Total/NA
Lead	0.000807		0.000500	0.000260	mg/L	1		6020B	Total/NA
Vanadium	0.00141	J	0.00500	0.00110	mg/L	1		6020B	Total/NA
Total Suspended Solids	23.0		7.50	5.55	mg/L	1		I-3765-85	Total/NA

Client Sample ID: Trip Blank 1 — Lab Sample ID: 310-295916-26

No Detections.

Client Sample ID: Trip Blank 2 — Lab Sample ID: 310-295916-27

No Detections.

Client Sample ID: Trip Blank 3 — Lab Sample ID: 310-295916-28

No Detections.

This Detection Summary does not include radiochemical test results.

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-90
Date Collected: 11/20/24 12:59
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-1
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			11/27/24 00:36	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 00:36	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 00:36	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 00:36	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 00:36	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 00:36	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 00:36	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 00:36	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 00:36	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 00:36	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 00:36	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 00:36	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 00:36	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 00:36	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 00:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 00:36	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 00:36	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 00:36	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 00:36	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 00:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 00:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 00:36	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 00:36	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 00:36	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 00:36	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 00:36	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 00:36	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 00:36	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 00:36	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 00:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 00:36	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 00:36	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 00:36	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 00:36	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 00:36	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 00:36	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 00:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 00:36	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 00:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 00:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 00:36	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 00:36	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 00:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 00:36	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 00:36	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 00:36	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/27/24 00:36*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-90

Date Collected: 11/20/24 12:59
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-1

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*73 - 130*		*11/27/24 00:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/27/24 00:36*	*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		11/27/24 09:00	11/27/24 21:17	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:17	1
Barium	**0.0180**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:17	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:17	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:17	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:17	1
Cobalt	**0.000530**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:17	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:17	1
Lead	**0.00134**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:17	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:17	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:17	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:17	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:17	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:17	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**10.3**		5.00	3.70	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-201
Date Collected: 11/20/24 12:23
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.98**	**J**	10.0	3.10	ug/L			11/27/24 00:58	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 00:58	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 00:58	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 00:58	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 00:58	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 00:58	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 00:58	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 00:58	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 00:58	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 00:58	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 00:58	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 00:58	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 00:58	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 00:58	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 00:58	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 00:58	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 00:58	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 00:58	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 00:58	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 00:58	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 00:58	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 00:58	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 00:58	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 00:58	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 00:58	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 00:58	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 00:58	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 00:58	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 00:58	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 00:58	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 00:58	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 00:58	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 00:58	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 00:58	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 00:58	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 00:58	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 00:58	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 00:58	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 00:58	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 00:58	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 00:58	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 00:58	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 00:58	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 00:58	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 00:58	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 00:58	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/27/24 00:58*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-201

Date Collected: 11/20/24 12:23
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-2

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/27/24 00:58*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/27/24 00:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/27/24 09:00	11/27/24 21:20	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:20	1
Barium	**0.136**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:20	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:20	1
Cadmium	**0.000101**	**J**	0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:20	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:20	1
Cobalt	**0.000765**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:20	1
Copper	**0.00261**	**J**	0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:20	1
Lead	**0.00262**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:20	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:20	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:20	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:20	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:20	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:20	1
Zinc	**1.28**		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**36.3**		5.00	3.70	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: TDG-301
Date Collected: 11/20/24 09:55
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-3
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			11/27/24 01:20	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 01:20	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 01:20	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 01:20	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 01:20	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 01:20	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 01:20	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 01:20	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 01:20	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 01:20	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 01:20	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 01:20	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 01:20	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 01:20	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 01:20	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 01:20	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 01:20	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 01:20	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 01:20	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 01:20	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 01:20	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 01:20	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 01:20	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 01:20	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 01:20	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 01:20	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 01:20	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 01:20	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 01:20	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 01:20	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 01:20	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 01:20	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 01:20	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 01:20	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 01:20	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 01:20	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 01:20	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 01:20	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 01:20	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 01:20	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 01:20	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 01:20	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 01:20	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 01:20	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 01:20	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 01:20	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/27/24 01:20*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: TDG-301

Date Collected: 11/20/24 09:55
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*73 - 130*		*11/27/24 01:20*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/27/24 01:20*	*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		11/27/24 09:00	11/27/24 21:25	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:25	1
Barium	**0.0203**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:25	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:25	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:25	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:25	1
Cobalt	**0.000413**	**J B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:25	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:25	1
Lead	**0.000356**	**J**	0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:25	1
Nickel	**0.00291**	**J**	0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:25	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:25	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:25	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:25	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:25	1
Zinc	**0.0122**	**J**	0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.00**		5.00	3.70	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: TDG-305
Date Collected: 11/20/24 09:20
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-4
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			11/27/24 01:42	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 01:42	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 01:42	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 01:42	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 01:42	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 01:42	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 01:42	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 01:42	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 01:42	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 01:42	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 01:42	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 01:42	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 01:42	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 01:42	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 01:42	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 01:42	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 01:42	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 01:42	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 01:42	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 01:42	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 01:42	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 01:42	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 01:42	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 01:42	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 01:42	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 01:42	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 01:42	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 01:42	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 01:42	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 01:42	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 01:42	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 01:42	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 01:42	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 01:42	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 01:42	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 01:42	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 01:42	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 01:42	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 01:42	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 01:42	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 01:42	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 01:42	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 01:42	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 01:42	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 01:42	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 01:42	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/27/24 01:42*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: TDG-305

Date Collected: 11/20/24 09:20
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-4

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*11/27/24 01:42*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/27/24 01:42*	*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		11/27/24 09:00	11/27/24 21:28	1
Arsenic	**0.00157**	**J**	0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:28	1
Barium	**0.0361**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:28	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:28	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:28	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:28	1
Cobalt	**0.000971**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:28	1
Copper	**0.00272**	**J**	0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:28	1
Lead	**0.000289**	**J**	0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:28	1
Nickel	**0.0124**		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:28	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:28	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:28	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:28	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:28	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**21.3**		5.00	3.70	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-901
Date Collected: 11/19/24 15:42
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-5
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			11/26/24 13:44	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 13:44	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 13:44	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 13:44	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 13:44	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 13:44	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 13:44	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 13:44	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 13:44	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 13:44	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 13:44	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 13:44	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 13:44	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 13:44	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 13:44	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 13:44	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 13:44	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 13:44	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 13:44	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 13:44	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 13:44	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 13:44	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 13:44	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 13:44	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 13:44	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 13:44	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 13:44	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 13:44	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 13:44	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 13:44	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 13:44	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 13:44	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 13:44	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 13:44	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 13:44	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 13:44	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 13:44	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 13:44	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 13:44	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 13:44	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 13:44	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 13:44	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 13:44	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 13:44	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 13:44	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 13:44	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/26/24 13:44*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-901
Date Collected: 11/19/24 15:42
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*11/26/24 13:44*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/26/24 13:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/27/24 09:00	11/27/24 21:43	1
Arsenic	**0.0145**		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:43	1
Barium	**0.0303**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:43	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:43	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:43	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:43	1
Cobalt	**0.00362**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:43	1
Copper	**0.00323**	**J**	0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:43	1
Lead	**0.000830**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:43	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:43	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:43	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:43	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:43	1
Vanadium	**0.00134**	**J**	0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:43	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**17.0**		7.50	5.55	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-905
Date Collected: 11/19/24 14:13
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-6
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			11/26/24 14:05	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 14:05	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 14:05	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 14:05	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 14:05	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 14:05	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 14:05	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 14:05	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 14:05	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 14:05	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 14:05	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 14:05	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 14:05	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 14:05	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 14:05	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 14:05	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 14:05	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 14:05	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 14:05	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 14:05	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 14:05	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 14:05	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 14:05	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 14:05	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 14:05	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 14:05	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 14:05	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 14:05	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 14:05	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 14:05	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 14:05	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 14:05	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 14:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 14:05	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 14:05	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 14:05	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 14:05	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 14:05	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 14:05	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 14:05	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 14:05	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 14:05	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 14:05	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 14:05	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 14:05	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 14:05	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/26/24 14:05*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-905

Date Collected: 11/19/24 14:13
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-6

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*11/26/24 14:05*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 14:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/27/24 09:00	11/27/24 21:45	1
Arsenic	**0.000848**	**J**	0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:45	1
Barium	**0.0466**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:45	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:45	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:45	1
Chromium	**0.00139**	**J**	0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:45	1
Cobalt	**0.00158**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:45	1
Copper	**0.00264**	**J**	0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:45	1
Lead	**0.000639**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:45	1
Nickel	**0.00242**	**J**	0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:45	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:45	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:45	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:45	1
Vanadium	**0.00197**	**J**	0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:45	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**27.3**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1001
Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-7
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			11/27/24 02:03	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 02:03	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 02:03	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 02:03	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 02:03	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 02:03	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 02:03	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 02:03	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 02:03	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 02:03	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 02:03	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 02:03	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 02:03	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 02:03	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 02:03	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 02:03	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 02:03	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 02:03	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 02:03	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 02:03	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 02:03	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 02:03	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 02:03	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 02:03	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 02:03	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 02:03	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 02:03	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 02:03	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 02:03	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 02:03	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 02:03	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 02:03	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 02:03	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 02:03	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 02:03	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 02:03	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 02:03	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 02:03	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 02:03	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 02:03	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 02:03	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 02:03	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 02:03	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 02:03	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 02:03	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 02:03	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/27/24 02:03*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1001

Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-7

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/27/24 02:03*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/27/24 02:03*	*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		11/27/24 09:00	11/27/24 21:48	1
Arsenic	**0.00130**	**J**	0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:48	1
Barium	**0.0563**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:48	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:48	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:48	1
Chromium	**0.00492**	**J**	0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:48	1
Cobalt	**0.00356**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:48	1
Copper	**0.00445**	**J**	0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:48	1
Lead	**0.00342**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:48	1
Nickel	**0.00298**	**J**	0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:48	1
Selenium	**0.00305**	**J**	0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:48	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:48	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:48	1
Vanadium	**0.0101**		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:48	1
Zinc	**0.0142**	**J**	0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**53.5**		7.50	5.55	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1005
Date Collected: 11/20/24 11:06
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-8
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			11/27/24 02:25	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 02:25	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 02:25	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 02:25	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 02:25	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 02:25	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 02:25	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 02:25	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 02:25	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 02:25	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 02:25	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 02:25	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 02:25	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 02:25	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 02:25	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 02:25	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 02:25	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 02:25	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 02:25	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 02:25	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 02:25	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 02:25	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 02:25	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 02:25	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 02:25	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 02:25	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 02:25	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 02:25	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 02:25	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 02:25	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 02:25	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 02:25	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 02:25	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 02:25	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 02:25	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 02:25	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 02:25	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 02:25	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 02:25	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 02:25	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 02:25	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 02:25	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 02:25	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 02:25	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 02:25	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 02:25	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/27/24 02:25*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1005

Date Collected: 11/20/24 11:06
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-8

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*11/27/24 02:25*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/27/24 02:25*	*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		11/27/24 09:00	11/27/24 21:51	1
Arsenic	**0.00506**		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:51	1
Barium	**0.0838**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:51	1
Beryllium	**0.000521**	**J**	0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:51	1
Cadmium	**0.000223**		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:51	1
Chromium	**0.0130**		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:51	1
Cobalt	**0.00480**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:51	1
Copper	**0.0115**		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:51	1
Lead	**0.00494**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:51	1
Nickel	**0.0102**		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:51	1
Selenium	**0.00183**	**J**	0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:51	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:51	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:51	1
Vanadium	**0.0370**		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:51	1
Zinc	**0.0385**		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**317**		15.0	11.1	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1101
Date Collected: 11/20/24 11:37
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-9
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			11/27/24 02:47	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 02:47	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 02:47	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 02:47	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 02:47	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 02:47	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 02:47	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 02:47	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 02:47	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 02:47	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 02:47	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 02:47	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 02:47	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 02:47	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 02:47	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 02:47	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 02:47	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 02:47	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 02:47	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 02:47	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 02:47	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 02:47	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 02:47	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 02:47	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 02:47	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 02:47	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 02:47	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 02:47	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 02:47	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 02:47	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 02:47	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 02:47	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 02:47	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 02:47	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 02:47	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 02:47	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 02:47	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 02:47	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 02:47	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 02:47	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 02:47	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 02:47	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 02:47	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 02:47	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 02:47	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 02:47	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/27/24 02:47*	*1*

Client Sample ID: DG-1101

Date Collected: 11/20/24 11:37
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-9

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*11/27/24 02:47*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/27/24 02:47*	*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		11/27/24 09:00	11/27/24 21:54	1
Arsenic	**0.00308**		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:54	1
Barium	**0.0723**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:54	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:54	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:54	1
Chromium	**0.00528**		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:54	1
Cobalt	**0.00259**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:54	1
Copper	**0.00789**		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:54	1
Lead	**0.00223**		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:54	1
Nickel	**0.00640**		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:54	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:54	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:54	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:54	1
Vanadium	**0.0108**		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:54	1
Zinc	**0.0179**	**J**	0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**97.5**		7.50	5.55	mg/L			11/25/24 23:51	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1105R
Date Collected: 11/19/24 13:58
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-10
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			11/26/24 14:27	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 14:27	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 14:27	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 14:27	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 14:27	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 14:27	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 14:27	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 14:27	1
Carbon disulfide	**0.556**	**J**	1.00	0.450	ug/L			11/26/24 14:27	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 14:27	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 14:27	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 14:27	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 14:27	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 14:27	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 14:27	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 14:27	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 14:27	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 14:27	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 14:27	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 14:27	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 14:27	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 14:27	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 14:27	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 14:27	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 14:27	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 14:27	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 14:27	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 14:27	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 14:27	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 14:27	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 14:27	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 14:27	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 14:27	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 14:27	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 14:27	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 14:27	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 14:27	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 14:27	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 14:27	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 14:27	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 14:27	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 14:27	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 14:27	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 14:27	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 14:27	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 14:27	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/26/24 14:27*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1105R
Date Collected: 11/19/24 13:58
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-10
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*73 - 130*		*11/26/24 14:27*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 14:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/27/24 09:00	11/27/24 21:57	1
Arsenic	**0.00368**		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 21:57	1
Barium	**0.0330**		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 21:57	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 21:57	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 21:57	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 21:57	1
Cobalt	**0.000866**	**B**	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 21:57	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 21:57	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 21:57	1
Nickel	**0.00283**	**J**	0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 21:57	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 21:57	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 21:57	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 21:57	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 21:57	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 21:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**5.33**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1205
Date Collected: 11/19/24 13:27
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-11
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			11/26/24 14:49	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 14:49	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 14:49	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 14:49	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 14:49	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 14:49	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 14:49	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 14:49	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 14:49	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 14:49	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 14:49	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 14:49	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 14:49	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 14:49	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 14:49	1
cis-1,2-Dichloroethene	**0.679**	**J**	1.00	0.210	ug/L			11/26/24 14:49	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 14:49	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 14:49	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 14:49	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 14:49	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 14:49	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 14:49	1
1,1-Dichloroethane	**2.70**		1.00	0.220	ug/L			11/26/24 14:49	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 14:49	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 14:49	1
1,2-Dichloropropane	**1.05**		1.00	0.270	ug/L			11/26/24 14:49	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 14:49	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 14:49	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 14:49	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 14:49	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 14:49	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 14:49	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 14:49	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 14:49	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 14:49	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 14:49	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 14:49	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 14:49	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 14:49	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 14:49	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 14:49	1
Trichloroethene	**0.473**	**J**	1.00	0.430	ug/L			11/26/24 14:49	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 14:49	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 14:49	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 14:49	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 14:49	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/26/24 14:49*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1205

Date Collected: 11/19/24 13:27
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-11

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/26/24 14:49*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 14:49*	*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		12/02/24 09:00	12/05/24 17:00	1
Arsenic	**0.00350**		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:00	1
Barium	**0.0154**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:00	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:00	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:00	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:00	1
Cobalt	**0.000486**	**J**	0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:00	1
Copper	**0.00346**	**J B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:00	1
Lead	**0.00111**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:00	1
Nickel	**0.00256**	**J**	0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:00	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:00	1
Silver	<0.00400	*+ F1	0.00400	0.00200	mg/L		12/02/24 09:00	12/06/24 14:11	4
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:00	1
Vanadium	**0.00453**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:00	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**44.5**		7.50	5.55	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1301
Date Collected: 11/19/24 10:28
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-12
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			11/26/24 15:11	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 15:11	1
Benzene	**0.306**	**J**	0.500	0.220	ug/L			11/26/24 15:11	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 15:11	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 15:11	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 15:11	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 15:11	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 15:11	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 15:11	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 15:11	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 15:11	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 15:11	1
Chloroethane	**1.79**	**J**	4.00	0.790	ug/L			11/26/24 15:11	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 15:11	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 15:11	1
cis-1,2-Dichloroethene	**37.1**		1.00	0.210	ug/L			11/26/24 15:11	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 15:11	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 15:11	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 15:11	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 15:11	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 15:11	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 15:11	1
1,1-Dichloroethane	**11.5**		1.00	0.220	ug/L			11/26/24 15:11	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 15:11	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 15:11	1
1,2-Dichloropropane	**1.16**		1.00	0.270	ug/L			11/26/24 15:11	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 15:11	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 15:11	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 15:11	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 15:11	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 15:11	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 15:11	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 15:11	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 15:11	1
Tetrachloroethene	**1.63**		1.00	0.480	ug/L			11/26/24 15:11	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 15:11	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 15:11	1
trans-1,2-Dichloroethene	**1.25**		1.00	0.270	ug/L			11/26/24 15:11	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 15:11	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 15:11	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 15:11	1
Trichloroethene	**6.34**		1.00	0.430	ug/L			11/26/24 15:11	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 15:11	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 15:11	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 15:11	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 15:11	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/26/24 15:11*	*1*

Client Sample ID: DG-1301

Date Collected: 11/19/24 10:28
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-12

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/26/24 15:11*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*11/26/24 15:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.9		10.9	5.98	ug/L		11/26/24 06:42	11/27/24 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*51*		*45 - 129*	*11/26/24 06:42*	*11/27/24 11:24*	*1*
2-Fluorobiphenyl (Surr)	*51*		*39 - 118*	*11/26/24 06:42*	*11/27/24 11:24*	*1*
Terphenyl-d14 (Surr)	*24*		*12 - 144*	*11/26/24 06:42*	*11/27/24 11:24*	*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		12/02/24 09:00	12/05/24 17:19	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:19	1
Barium	**0.0413**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:19	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:19	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:19	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:19	1
Cobalt	**0.000354**	**J**	0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:19	1
Copper	**0.00327**	**J B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:19	1
Lead	**0.000605**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:19	1
Nickel	<0.00500		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:19	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:19	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:31	1
Thallium	**0.000605**	**J**	0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:19	1
Vanadium	**0.00168**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:19	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**16.0**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1305
Date Collected: 11/19/24 09:53
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-13
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			11/26/24 15:33	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 15:33	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 15:33	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 15:33	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 15:33	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 15:33	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 15:33	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 15:33	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 15:33	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 15:33	1
Chlorobenzene	**2.67**		1.00	0.400	ug/L			11/26/24 15:33	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 15:33	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 15:33	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 15:33	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 15:33	1
cis-1,2-Dichloroethene	**0.722**	**J**	1.00	0.210	ug/L			11/26/24 15:33	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 15:33	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 15:33	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 15:33	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 15:33	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 15:33	1
1,4-Dichlorobenzene	**0.368**	**J**	1.00	0.230	ug/L			11/26/24 15:33	1
1,1-Dichloroethane	**1.76**		1.00	0.220	ug/L			11/26/24 15:33	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 15:33	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 15:33	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 15:33	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 15:33	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 15:33	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 15:33	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 15:33	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 15:33	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 15:33	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 15:33	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 15:33	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 15:33	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 15:33	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 15:33	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 15:33	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 15:33	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 15:33	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 15:33	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 15:33	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 15:33	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 15:33	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 15:33	1
Vinyl chloride	**0.206**	**J**	1.00	0.180	ug/L			11/26/24 15:33	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/26/24 15:33*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1305

Date Collected: 11/19/24 09:53
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-13

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*11/26/24 15:33*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 15:33*	*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		12/02/24 09:00	12/05/24 17:22	1
Arsenic	**0.00129**	**J**	0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:22	1
Barium	**0.114**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:22	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:22	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:22	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:22	1
Cobalt	**0.000495**	**J**	0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:22	1
Copper	**0.00321**	**J B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:22	1
Lead	**0.00237**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:22	1
Nickel	<0.00500		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:22	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:34	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:22	1
Vanadium	**0.00223**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:22	1
Zinc	**0.0128**	**J**	0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**9.67**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1401R
Date Collected: 11/19/24 09:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-14
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			11/26/24 15:54	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 15:54	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 15:54	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 15:54	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 15:54	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 15:54	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 15:54	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 15:54	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 15:54	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 15:54	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 15:54	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 15:54	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 15:54	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 15:54	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 15:54	1
cis-1,2-Dichloroethene	**0.370**	**J**	1.00	0.210	ug/L			11/26/24 15:54	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 15:54	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 15:54	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 15:54	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 15:54	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 15:54	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 15:54	1
1,1-Dichloroethane	**2.30**		1.00	0.220	ug/L			11/26/24 15:54	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 15:54	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 15:54	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 15:54	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 15:54	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 15:54	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 15:54	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 15:54	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 15:54	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 15:54	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 15:54	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 15:54	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 15:54	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 15:54	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 15:54	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 15:54	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 15:54	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 15:54	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 15:54	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 15:54	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 15:54	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 15:54	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 15:54	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 15:54	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/26/24 15:54*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1401R
Date Collected: 11/19/24 09:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-14
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/26/24 15:54*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/26/24 15:54*	*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		12/02/24 09:00	12/05/24 17:24	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:24	1
Barium	**0.0435**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:24	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:24	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:24	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:24	1
Cobalt	**0.000356**	**J**	0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:24	1
Copper	**0.00510**	**B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:24	1
Lead	**0.000583**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:24	1
Nickel	**0.00216**	**J**	0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:24	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:24	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:37	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:24	1
Vanadium	**0.00177**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:24	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**40.0**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DGP-1500
Date Collected: 11/19/24 14:35
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-15
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			11/26/24 16:16	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 16:16	1
Benzene	**1.37**		0.500	0.220	ug/L			11/26/24 16:16	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 16:16	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 16:16	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 16:16	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 16:16	1
2-Butanone (MEK)	**2.52**	**J**	10.0	2.10	ug/L			11/26/24 16:16	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 16:16	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 16:16	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 16:16	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 16:16	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 16:16	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 16:16	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 16:16	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 16:16	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 16:16	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 16:16	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 16:16	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 16:16	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 16:16	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 16:16	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 16:16	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 16:16	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 16:16	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 16:16	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 16:16	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 16:16	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 16:16	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 16:16	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 16:16	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 16:16	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 16:16	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 16:16	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 16:16	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 16:16	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 16:16	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 16:16	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 16:16	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 16:16	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 16:16	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 16:16	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 16:16	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 16:16	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 16:16	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 16:16	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/26/24 16:16*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DGP-1500
Date Collected: 11/19/24 14:35
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-15
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*11/26/24 16:16*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 16:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.94**	**J**	5.00	2.25	mg/L			11/27/24 19:15	5
Sulfate	**29.1**		5.00	2.10	mg/L			11/27/24 19:15	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		12/02/24 09:00	12/05/24 17:26	1
Arsenic	**0.0167**		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:26	1
Barium	**0.0448**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:26	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:26	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:26	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:26	1
Cobalt	**0.000175**	**J**	0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:26	1
Copper	**0.00409**	**J B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:26	1
Lead	**0.000348**	**J**	0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:26	1
Nickel	<0.00500		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:26	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:26	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:40	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:26	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:26	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:26	1
Sodium	**13.1**		1.00	0.480	mg/L		12/02/24 09:00	12/05/24 17:26	1
Potassium	**2.19**		0.500	0.150	mg/L		12/02/24 09:00	12/05/24 17:26	1
Calcium	**107**		0.500	0.190	mg/L		12/02/24 09:00	12/06/24 14:40	1
Magnesium	**27.8**		0.500	0.150	mg/L		12/02/24 09:00	12/05/24 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**7.67**		5.00	3.70	mg/L			11/25/24 19:01	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	**351**		5.00	2.50	mg/L			11/26/24 13:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<5.00		5.00	2.50	mg/L			11/26/24 13:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**351**		5.00	2.50	mg/L			11/26/24 13:26	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: GU-15
Date Collected: 11/18/24 15:45
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**16.8**		10.0	3.10	ug/L			11/26/24 16:38	1
Acrylonitrile	<5.00	H	5.00	2.20	ug/L			11/26/24 16:38	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 16:38	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 16:38	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 16:38	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 16:38	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 16:38	1
2-Butanone (MEK)	**3.33**	**J**	10.0	2.10	ug/L			11/26/24 16:38	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 16:38	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 16:38	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 16:38	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 16:38	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 16:38	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 16:38	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 16:38	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 16:38	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 16:38	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 16:38	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 16:38	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 16:38	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 16:38	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 16:38	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 16:38	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 16:38	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 16:38	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 16:38	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 16:38	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 16:38	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 16:38	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 16:38	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 16:38	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 16:38	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 16:38	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 16:38	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 16:38	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 16:38	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 16:38	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 16:38	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 16:38	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 16:38	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 16:38	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 16:38	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 16:38	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 16:38	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 16:38	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 16:38	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*11/26/24 16:38*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: GU-15

Date Collected: 11/18/24 15:45
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-16

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*73 - 130*		*11/26/24 16:38*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/26/24 16:38*	*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		12/02/24 09:00	12/05/24 17:29	1
Arsenic	**0.0143**		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:29	1
Barium	**0.340**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:29	1
Beryllium	**0.00167**		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:29	1
Cadmium	**0.00137**		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:29	1
Chromium	**0.0307**		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:29	1
Cobalt	**0.0229**		0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:29	1
Copper	**0.0752**	**B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:29	1
Lead	**0.0385**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:29	1
Nickel	**0.0632**		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:29	1
Selenium	**0.00239**	**J**	0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:29	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:43	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:29	1
Vanadium	**0.0594**		0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:29	1
Zinc	**0.347**		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**2650**		150	111	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: SW101
Date Collected: 11/18/24 16:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-17
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13.1		10.0	3.10	ug/L			11/26/24 17:00	1
Acrylonitrile	<5.00	H	5.00	2.20	ug/L			11/26/24 17:00	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 17:00	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 17:00	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 17:00	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 17:00	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 17:00	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 17:00	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 17:00	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 17:00	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 17:00	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 17:00	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 17:00	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 17:00	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 17:00	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 17:00	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 17:00	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 17:00	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 17:00	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 17:00	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 17:00	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 17:00	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 17:00	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 17:00	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 17:00	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 17:00	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 17:00	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 17:00	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 17:00	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 17:00	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 17:00	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 17:00	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 17:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 17:00	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 17:00	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 17:00	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 17:00	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 17:00	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 17:00	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 17:00	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 17:00	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 17:00	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 17:00	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 17:00	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 17:00	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 17:00	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/26/24 17:00*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: SW101
Date Collected: 11/18/24 16:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-17
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*115*		*73 - 130*		*11/26/24 17:00*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/26/24 17:00*	*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		12/02/24 09:00	12/05/24 17:31	1
Arsenic	**0.0128**		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:31	1
Barium	**0.287**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:31	1
Beryllium	**0.000902**	**J**	0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:31	1
Cadmium	**0.000583**		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:31	1
Chromium	**0.0272**		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:31	1
Cobalt	**0.0134**		0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:31	1
Copper	**0.0482**	**B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:31	1
Lead	**0.0237**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:31	1
Nickel	**0.0465**		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:31	1
Selenium	**0.00184**	**J**	0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:31	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:46	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:31	1
Vanadium	**0.0524**		0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:31	1
Zinc	**0.186**		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**1000**		100	74.0	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MWP-7
Date Collected: 11/19/24 12:47
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	5.78		1.00	0.430	ug/L			11/27/24 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*11/27/24 20:57*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/27/24 20:57*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/27/24 20:57*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-15
Date Collected: 11/19/24 11:34
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-19
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*11/27/24 21:19*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/27/24 21:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/27/24 21:19*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-16
Date Collected: 11/19/24 12:21
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-20
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*120*		*73 - 130*		*11/27/24 21:41*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/27/24 21:41*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/27/24 21:41*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-17
Date Collected: 11/19/24 10:46
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-21
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*117*		*73 - 130*		*11/27/24 22:02*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/27/24 22:02*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/27/24 22:02*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-18
Date Collected: 11/19/24 11:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-22
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*116*		*73 - 130*		*11/27/24 22:24*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/27/24 22:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*11/27/24 22:24*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: ORG-MW
Date Collected: 11/19/24 11:11
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-23
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*11/27/24 22:46*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/27/24 22:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*11/27/24 22:46*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D1
Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-24
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			11/27/24 14:05	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 14:05	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 14:05	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 14:05	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 14:05	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 14:05	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 14:05	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 14:05	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 14:05	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 14:05	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 14:05	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 14:05	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 14:05	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 14:05	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 14:05	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 14:05	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 14:05	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 14:05	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 14:05	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 14:05	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 14:05	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 14:05	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 14:05	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 14:05	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 14:05	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 14:05	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 14:05	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 14:05	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 14:05	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 14:05	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 14:05	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 14:05	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 14:05	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 14:05	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 14:05	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 14:05	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 14:05	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 14:05	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 14:05	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 14:05	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 14:05	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 14:05	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 14:05	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 14:05	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 14:05	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 14:05	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/27/24 14:05*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D1

Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-24

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*112*		*73 - 130*		*11/27/24 14:05*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/27/24 14:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		12/02/24 09:00	12/05/24 17:34	1
Arsenic	**0.00135**	**J**	0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:34	1
Barium	**0.0667**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:34	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:34	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:34	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:34	1
Cobalt	**0.00122**		0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:34	1
Copper	**0.00748**	**B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:34	1
Lead	**0.00171**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:34	1
Nickel	**0.00489**	**J**	0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:34	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:34	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:48	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:34	1
Vanadium	**0.00264**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:34	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**61.0**		5.00	3.70	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D2
Date Collected: 11/20/24 15:42
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-25
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			11/27/24 14:26	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 14:26	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 14:26	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 14:26	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 14:26	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 14:26	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 14:26	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 14:26	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 14:26	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 14:26	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 14:26	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 14:26	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 14:26	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 14:26	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 14:26	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 14:26	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 14:26	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 14:26	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 14:26	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 14:26	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 14:26	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 14:26	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 14:26	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 14:26	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 14:26	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 14:26	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 14:26	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 14:26	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 14:26	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 14:26	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 14:26	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 14:26	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 14:26	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 14:26	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 14:26	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 14:26	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 14:26	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 14:26	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 14:26	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 14:26	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 14:26	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 14:26	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 14:26	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 14:26	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 14:26	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 14:26	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/27/24 14:26*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D2
Date Collected: 11/20/24 15:42
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-25
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*113*		*73 - 130*		*11/27/24 14:26*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/27/24 14:26*	*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		12/02/24 09:00	12/05/24 17:36	1
Arsenic	**0.0149**		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 17:36	1
Barium	**0.0317**		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 17:36	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 17:36	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 17:36	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 17:36	1
Cobalt	**0.00347**		0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 17:36	1
Copper	**0.00331**	**J B**	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 17:36	1
Lead	**0.000807**		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 17:36	1
Nickel	<0.00500		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 17:36	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 17:36	1
Silver	<0.00100	*+	0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:51	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 17:36	1
Vanadium	**0.00141**	**J**	0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 17:36	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (USGS I-3765-85)	**23.0**		7.50	5.55	mg/L			11/25/24 19:01	1

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: Trip Blank 1
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-26
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			11/26/24 12:22	1
Acrylonitrile	<5.00	H	5.00	2.20	ug/L			11/26/24 12:22	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 12:22	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 12:22	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 12:22	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 12:22	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 12:22	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 12:22	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 12:22	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 12:22	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 12:22	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 12:22	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 12:22	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 12:22	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 12:22	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 12:22	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 12:22	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 12:22	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 12:22	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 12:22	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 12:22	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 12:22	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 12:22	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 12:22	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 12:22	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 12:22	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 12:22	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 12:22	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 12:22	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 12:22	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 12:22	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 12:22	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 12:22	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 12:22	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 12:22	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 12:22	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 12:22	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 12:22	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 12:22	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 12:22	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 12:22	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 12:22	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 12:22	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 12:22	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 12:22	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 12:22	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*11/26/24 12:22*	*1*

Client Sample ID: Trip Blank 1
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-26
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*108*		*73 - 130*		*11/26/24 12:22*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/26/24 12:22*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: Trip Blank 2
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-27
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			11/26/24 13:00	1
Acrylonitrile	<5.00	H	5.00	2.20	ug/L			11/26/24 13:00	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 13:00	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 13:00	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 13:00	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 13:00	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 13:00	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 13:00	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 13:00	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 13:00	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 13:00	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 13:00	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 13:00	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 13:00	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 13:00	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 13:00	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 13:00	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 13:00	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 13:00	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 13:00	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 13:00	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 13:00	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 13:00	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 13:00	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 13:00	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 13:00	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 13:00	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 13:00	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 13:00	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 13:00	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 13:00	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 13:00	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 13:00	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 13:00	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 13:00	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 13:00	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 13:00	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 13:00	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 13:00	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 13:00	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 13:00	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 13:00	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 13:00	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 13:00	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 13:00	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 13:00	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/26/24 13:00*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: Trip Blank 2
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-27
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*109*		*73 - 130*		*11/26/24 13:00*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/26/24 13:00*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: Trip Blank 3
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-28
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			11/26/24 13:22	1
Acrylonitrile	<5.00	H	5.00	2.20	ug/L			11/26/24 13:22	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 13:22	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 13:22	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 13:22	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 13:22	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 13:22	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 13:22	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 13:22	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 13:22	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 13:22	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 13:22	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 13:22	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 13:22	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 13:22	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 13:22	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 13:22	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 13:22	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 13:22	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 13:22	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 13:22	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 13:22	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 13:22	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 13:22	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 13:22	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 13:22	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 13:22	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 13:22	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 13:22	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 13:22	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 13:22	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 13:22	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 13:22	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 13:22	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 13:22	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 13:22	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 13:22	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 13:22	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 13:22	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 13:22	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 13:22	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 13:22	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 13:22	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 13:22	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 13:22	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 13:22	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*11/26/24 13:22*	*1*

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: Trip Blank 3
Date Collected: 11/18/24 00:00
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-28
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	111		73 - 130		11/26/24 13:22	1
Toluene-d8 (Surr)	97		80 - 120		11/26/24 13:22	1

Qualifiers

GC/MS VOA

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.

HPLC/IC

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

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery 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.

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: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

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)	(73-130)	(80-120)
310-295916-1	UG-90	102	115	97
310-295916-2	UG-201	99	114	95
310-295916-3	TDG-301	97	117	98
310-295916-4	TDG-305	101	113	98
310-295916-5	DG-901	101	110	95
310-295916-5 MS	DG-901	100	101	101
310-295916-5 MSD	DG-901	103	100	101
310-295916-6	DG-905	102	113	96
310-295916-7	DG-1001	101	114	97
310-295916-8	DG-1005	100	116	97
310-295916-9	DG-1101	100	113	96
310-295916-10	DG-1105R	99	112	96
310-295916-11	DG-1205	99	114	96
310-295916-12	DG-1301	102	114	98
310-295916-13	DG-1305	97	116	96
310-295916-14	DG-1401R	99	114	97
310-295916-15	DGP-1500	99	110	96
310-295916-16	GU-15	96	112	94
310-295916-17	SW101	103	115	95
310-295916-18	MWP-7	101	116	97
310-295916-19	MW-15	99	116	95
310-295916-20	MW-16	101	120	93
310-295916-21	MW-17	100	117	96
310-295916-22	MW-18	99	116	95
310-295916-23	ORG-MW	97	113	95
310-295916-24	MW-D1	102	112	94
310-295916-25	MW-D2	102	113	95
310-295916-26	Trip Blank 1	102	108	96
310-295916-27	Trip Blank 2	103	109	97
310-295916-28	Trip Blank 3	101	111	97
LCS 310-440948/6	Lab Control Sample	100	101	101
LCS 310-440948/7	Lab Control Sample	100	113	94
LCS 310-441008/6	Lab Control Sample	101	98	101
LCS 310-441008/7	Lab Control Sample	100	116	96
LCS 310-441010/6	Lab Control Sample	101	101	101
LCS 310-441010/7	Lab Control Sample	101	111	96
LCS 310-441015/6	Lab Control Sample	98	98	101
MB 310-440948/5	Method Blank	103	114	94
MB 310-441008/5	Method Blank	103	110	97
MB 310-441010/5	Method Blank	100	114	97
MB 310-441015/5	Method Blank	102	113	96

Surrogate Legend

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

Surrogate Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		NBZ	FBP	TPHL						
Lab Sample ID	Client Sample ID	(45-129)	(39-118)	(12-144)						
310-295916-12	DG-1301	51	51	24						
MB 310-440916/1-A	Method Blank	115	104	136						

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TPHL = Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 310-440948/5
Matrix: Water
Analysis Batch: 440948

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			11/26/24 10:55	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 10:55	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 10:55	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 10:55	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 10:55	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 10:55	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 10:55	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 10:55	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/26/24 10:55	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 10:55	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 10:55	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 10:55	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 10:55	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 10:55	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 10:55	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 10:55	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 10:55	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 10:55	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 10:55	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 10:55	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 10:55	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 10:55	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 10:55	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 10:55	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 10:55	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 10:55	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 10:55	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 10:55	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 10:55	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 10:55	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 10:55	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 10:55	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 10:55	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 10:55	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 10:55	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 10:55	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 10:55	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 10:55	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 10:55	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 10:55	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 10:55	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 10:55	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 10:55	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 10:55	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 10:55	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 10:55	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 10:55	1

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

Lab Sample ID: MB 310-440948/5
Matrix: Water
Analysis Batch: 440948

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		11/26/24 10:55	1
Dibromofluoromethane (Surr)	114		73 - 130		11/26/24 10:55	1
Toluene-d8 (Surr)	94		80 - 120		11/26/24 10:55	1

Lab Sample ID: LCS 310-440948/6
Matrix: Water
Analysis Batch: 440948

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	40.0	34.09		ug/L		85	50 - 150
Acrylonitrile	200	182.4		ug/L		91	50 - 150
Benzene	20.0	18.23		ug/L		91	72 - 124
Bromochloromethane	20.0	18.55		ug/L		93	73 - 130
Bromodichloromethane	20.0	18.77		ug/L		94	74 - 122
Bromoform	20.0	17.90		ug/L		89	61 - 122
2-Butanone (MEK)	40.0	34.83		ug/L		87	50 - 150
Carbon disulfide	20.0	17.35		ug/L		87	59 - 135
Carbon tetrachloride	20.0	19.02		ug/L		95	67 - 132
Chlorobenzene	20.0	18.43		ug/L		92	76 - 120
Chlorodibromomethane	20.0	18.68		ug/L		93	71 - 121
Chloroform	20.0	19.48		ug/L		97	72 - 125
cis-1,2-Dichloroethene	20.0	18.72		ug/L		94	74 - 123
cis-1,3-Dichloropropene	20.0	18.93		ug/L		95	71 - 125
1,2-Dibromo-3-chloropropane	20.0	20.10		ug/L		100	50 - 150
1,2-Dibromoethane (EDB)	20.0	18.85		ug/L		94	75 - 125
Dibromomethane	20.0	18.84		ug/L		94	74 - 125
1,2-Dichlorobenzene	20.0	19.27		ug/L		96	74 - 120
1,4-Dichlorobenzene	20.0	18.45		ug/L		92	72 - 120
1,1-Dichloroethane	20.0	17.92		ug/L		90	70 - 127
1,2-Dichloroethane	20.0	18.64		ug/L		93	71 - 125
1,1-Dichloroethene	20.0	18.00		ug/L		90	63 - 132
1,2-Dichloropropane	20.0	19.12		ug/L		96	73 - 124
Ethylbenzene	20.0	18.54		ug/L		93	74 - 122
2-Hexanone	40.0	37.99		ug/L		95	60 - 140
Iodomethane	20.0	12.16		ug/L		61	10 - 150
Methylene chloride	20.0	18.73		ug/L		94	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	34.83		ug/L		87	60 - 139
Styrene	20.0	19.06		ug/L		95	74 - 121
1,1,1,2-Tetrachloroethane	20.0	18.28		ug/L		91	71 - 120
1,1,2,2-Tetrachloroethane	20.0	18.08		ug/L		90	68 - 124
Tetrachloroethene	20.0	18.52		ug/L		93	71 - 130
Toluene	20.0	18.87		ug/L		94	74 - 123
trans-1,4-Dichloro-2-butene	20.0	18.80		ug/L		94	50 - 150
trans-1,2-Dichloroethene	20.0	18.19		ug/L		91	70 - 126
trans-1,3-Dichloropropene	20.0	18.20		ug/L		91	69 - 123
1,1,1-Trichloroethane	20.0	19.37		ug/L		97	73 - 129
1,1,2-Trichloroethane	20.0	18.95		ug/L		95	73 - 123
Trichloroethene	20.0	18.06		ug/L		90	72 - 126

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

Lab Sample ID: LCS 310-440948/6
Matrix: Water
Analysis Batch: 440948

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	18.25		ug/L		91	65 - 127
Vinyl acetate	40.0	32.09		ug/L		80	50 - 150
Xylenes, Total	40.0	36.04		ug/L		90	73 - 123

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

Lab Sample ID: LCS 310-440948/7
Matrix: Water
Analysis Batch: 440948

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	18.90		ug/L		94	23 - 150
Chloroethane	20.0	20.63		ug/L		103	54 - 136
Chloromethane	20.0	21.08		ug/L		105	38 - 150
Trichlorofluoromethane	20.0	20.97		ug/L		105	54 - 149
Vinyl chloride	20.0	21.26		ug/L		106	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*73 - 130*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: 310-295916-5 MS
Matrix: Water
Analysis Batch: 440948

Client Sample ID: DG-901
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	<10.0		50.0	40.24		ug/L		80	31 - 150
Acrylonitrile	<5.00		250	226.6		ug/L		91	40 - 150
Benzene	<0.500		25.0	21.56		ug/L		86	46 - 130
Bromochloromethane	<5.00		25.0	22.13		ug/L		89	57 - 130
Bromodichloromethane	<1.00		25.0	22.20		ug/L		89	57 - 130
Bromoform	<5.00		25.0	21.33		ug/L		85	44 - 130
2-Butanone (MEK)	<10.0		50.0	38.61		ug/L		77	38 - 150
Carbon disulfide	<1.00		25.0	21.97		ug/L		88	38 - 135
Carbon tetrachloride	<2.00		25.0	21.55		ug/L		86	45 - 132
Chlorobenzene	<1.00		25.0	21.67		ug/L		87	59 - 130
Chlorodibromomethane	<5.00		25.0	22.12		ug/L		88	54 - 130
Chloroform	<3.00		25.0	22.20		ug/L		89	51 - 130
cis-1,2-Dichloroethene	<1.00		25.0	21.88		ug/L		88	45 - 130
cis-1,3-Dichloropropene	<5.00		25.0	21.35		ug/L		85	53 - 130
1,2-Dibromo-3-chloropropane	<5.00		25.0	24.31		ug/L		97	38 - 150
1,2-Dibromoethane (EDB)	<1.00		25.0	22.34		ug/L		89	60 - 130
Dibromomethane	<1.00		25.0	22.23		ug/L		89	59 - 130
1,2-Dichlorobenzene	<1.00		25.0	22.69		ug/L		91	59 - 130

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

Lab Sample ID: 310-295916-5 MS
Matrix: Water
Analysis Batch: 440948

Client Sample ID: DG-901
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		25.0	22.53		ug/L		90	57 - 130
1,1-Dichloroethane	<1.00		25.0	20.88		ug/L		84	49 - 130
1,2-Dichloroethane	<1.00		25.0	19.71		ug/L		79	51 - 130
1,1-Dichloroethene	<2.00		25.0	20.76		ug/L		83	37 - 132
1,2-Dichloropropane	<1.00		25.0	22.39		ug/L		90	57 - 130
Ethylbenzene	<1.00		25.0	21.33		ug/L		85	45 - 130
2-Hexanone	<10.0		50.0	44.40		ug/L		89	46 - 140
Iodomethane	<10.0		25.0	20.03		ug/L		80	10 - 150
Methylene chloride	<5.00		25.0	23.16		ug/L		93	37 - 150
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	43.35		ug/L		87	47 - 139
Styrene	<1.00		25.0	22.31		ug/L		89	47 - 130
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.25		ug/L		85	55 - 130
1,1,2,2-Tetrachloroethane	<1.00		25.0	22.30		ug/L		89	54 - 130
Tetrachloroethene	<1.00		25.0	21.88		ug/L		88	47 - 130
Toluene	<1.00		25.0	22.51		ug/L		90	51 - 130
trans-1,4-Dichloro-2-butene	<10.0		25.0	21.25		ug/L		85	26 - 150
trans-1,2-Dichloroethene	<1.00		25.0	21.62		ug/L		86	48 - 130
trans-1,3-Dichloropropene	<5.00		25.0	21.42		ug/L		86	50 - 130
1,1,1-Trichloroethane	<1.00		25.0	21.69		ug/L		87	52 - 130
1,1,2-Trichloroethane	<1.00		25.0	22.65		ug/L		91	58 - 130
Trichloroethene	<1.00		25.0	21.87		ug/L		87	51 - 130
1,2,3-Trichloropropane	<1.00		25.0	22.14		ug/L		89	49 - 130
Vinyl acetate	<10.0		50.0	37.37		ug/L		75	29 - 150
Xylenes, Total	<3.00		50.0	42.60		ug/L		85	43 - 130

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

Lab Sample ID: 310-295916-5 MSD
Matrix: Water
Analysis Batch: 440948

Client Sample ID: DG-901
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		50.0	38.46		ug/L		77	31 - 150	5	29
Acrylonitrile	<5.00		250	221.8		ug/L		89	40 - 150	2	20
Benzene	<0.500		25.0	20.30		ug/L		81	46 - 130	6	20
Bromochloromethane	<5.00		25.0	21.08		ug/L		84	57 - 130	5	20
Bromodichloromethane	<1.00		25.0	21.47		ug/L		86	57 - 130	3	20
Bromoform	<5.00		25.0	21.36		ug/L		85	44 - 130	0	20
2-Butanone (MEK)	<10.0		50.0	39.50		ug/L		79	38 - 150	2	20
Carbon disulfide	<1.00		25.0	20.05		ug/L		80	38 - 135	9	30
Carbon tetrachloride	<2.00		25.0	21.31		ug/L		85	45 - 132	1	20
Chlorobenzene	<1.00		25.0	21.31		ug/L		85	59 - 130	2	20
Chlorodibromomethane	<5.00		25.0	21.82		ug/L		87	54 - 130	1	20
Chloroform	<3.00		25.0	21.34		ug/L		85	51 - 130	4	20
cis-1,2-Dichloroethene	<1.00		25.0	20.13		ug/L		81	45 - 130	8	20

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

Lab Sample ID: 310-295916-5 MSD
Matrix: Water
Analysis Batch: 440948

Client Sample ID: DG-901
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		25.0	20.59		ug/L		82	53 - 130	4	20
1,2-Dibromo-3-chloropropane	<5.00		25.0	23.98		ug/L		96	38 - 150	1	20
1,2-Dibromoethane (EDB)	<1.00		25.0	21.72		ug/L		87	60 - 130	3	20
Dibromomethane	<1.00		25.0	21.53		ug/L		86	59 - 130	3	20
1,2-Dichlorobenzene	<1.00		25.0	23.34		ug/L		93	59 - 130	3	20
1,4-Dichlorobenzene	<1.00		25.0	22.59		ug/L		90	57 - 130	0	20
1,1-Dichloroethane	<1.00		25.0	19.71		ug/L		79	49 - 130	6	20
1,2-Dichloroethane	<1.00		25.0	21.48		ug/L		86	51 - 130	9	20
1,1-Dichloroethene	<2.00		25.0	20.34		ug/L		81	37 - 132	2	26
1,2-Dichloropropane	<1.00		25.0	21.85		ug/L		87	57 - 130	2	20
Ethylbenzene	<1.00		25.0	21.26		ug/L		85	45 - 130	0	20
2-Hexanone	<10.0		50.0	43.79		ug/L		88	46 - 140	1	20
Iodomethane	<10.0		25.0	20.88		ug/L		84	10 - 150	4	35
Methylene chloride	<5.00		25.0	22.24		ug/L		89	37 - 150	4	24
4-Methyl-2-pentanone (MIBK)	<10.0		50.0	40.51		ug/L		81	47 - 139	7	20
Styrene	<1.00		25.0	21.96		ug/L		88	47 - 130	2	20
1,1,1,2-Tetrachloroethane	<1.00		25.0	21.18		ug/L		85	55 - 130	0	20
1,1,2,2-Tetrachloroethane	<1.00		25.0	22.25		ug/L		89	54 - 130	0	20
Tetrachloroethene	<1.00		25.0	21.55		ug/L		86	47 - 130	2	20
Toluene	<1.00		25.0	21.55		ug/L		86	51 - 130	4	20
trans-1,4-Dichloro-2-butene	<10.0		25.0	21.79		ug/L		87	26 - 150	2	23
trans-1,2-Dichloroethene	<1.00		25.0	20.56		ug/L		82	48 - 130	5	22
trans-1,3-Dichloropropene	<5.00		25.0	20.60		ug/L		82	50 - 130	4	20
1,1,1-Trichloroethane	<1.00		25.0	20.49		ug/L		82	52 - 130	6	20
1,1,2-Trichloroethane	<1.00		25.0	22.60		ug/L		90	58 - 130	0	20
Trichloroethene	<1.00		25.0	20.24		ug/L		81	51 - 130	8	20
1,2,3-Trichloropropane	<1.00		25.0	21.97		ug/L		88	49 - 130	1	26
Vinyl acetate	<10.0		50.0	37.05		ug/L		74	29 - 150	1	23
Xylenes, Total	<3.00		50.0	42.02		ug/L		84	43 - 130	1	20

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

Lab Sample ID: MB 310-441008/5
Matrix: Water
Analysis Batch: 441008

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			11/26/24 22:04	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/26/24 22:04	1
Benzene	<0.500		0.500	0.220	ug/L			11/26/24 22:04	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/26/24 22:04	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/26/24 22:04	1
Bromoform	<5.00		5.00	0.780	ug/L			11/26/24 22:04	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/26/24 22:04	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/26/24 22:04	1

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

Lab Sample ID: MB 310-441008/5
Matrix: Water
Analysis Batch: 441008

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			11/26/24 22:04	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/26/24 22:04	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/26/24 22:04	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/26/24 22:04	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/26/24 22:04	1
Chloroform	<3.00		3.00	1.30	ug/L			11/26/24 22:04	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/26/24 22:04	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/26/24 22:04	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/26/24 22:04	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/26/24 22:04	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/26/24 22:04	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/26/24 22:04	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/26/24 22:04	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/26/24 22:04	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/26/24 22:04	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/26/24 22:04	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/26/24 22:04	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/26/24 22:04	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/26/24 22:04	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/26/24 22:04	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/26/24 22:04	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/26/24 22:04	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/26/24 22:04	1
Styrene	<1.00		1.00	0.370	ug/L			11/26/24 22:04	1
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/26/24 22:04	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/26/24 22:04	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/26/24 22:04	1
Toluene	<1.00		1.00	0.430	ug/L			11/26/24 22:04	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/26/24 22:04	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/26/24 22:04	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/26/24 22:04	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/26/24 22:04	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/26/24 22:04	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/26/24 22:04	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/26/24 22:04	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/26/24 22:04	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/26/24 22:04	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/26/24 22:04	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/26/24 22:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*11/26/24 22:04*	*1*
Dibromofluoromethane (Surr)	*110*		*73 - 130*		*11/26/24 22:04*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/26/24 22:04*	*1*

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

Lab Sample ID: LCS 310-441008/6
Matrix: Water
Analysis Batch: 441008

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	37.11		ug/L		93	50 - 150		
Acrylonitrile			200	192.0		ug/L		96	50 - 150		
Benzene			20.0	18.51		ug/L		93	72 - 124		
Bromochloromethane			20.0	19.28		ug/L		96	73 - 130		
Bromodichloromethane			20.0	19.35		ug/L		97	74 - 122		
Bromoform			20.0	18.37		ug/L		92	61 - 122		
2-Butanone (MEK)			40.0	34.33		ug/L		86	50 - 150		
Carbon disulfide			20.0	18.39		ug/L		92	59 - 135		
Carbon tetrachloride			20.0	19.63		ug/L		98	67 - 132		
Chlorobenzene			20.0	19.43		ug/L		97	76 - 120		
Chlorodibromomethane			20.0	19.07		ug/L		95	71 - 121		
Chloroform			20.0	19.77		ug/L		99	72 - 125		
cis-1,2-Dichloroethene			20.0	18.99		ug/L		95	74 - 123		
cis-1,3-Dichloropropene			20.0	18.61		ug/L		93	71 - 125		
1,2-Dibromo-3-chloropropane			20.0	20.99		ug/L		105	50 - 150		
1,2-Dibromoethane (EDB)			20.0	19.39		ug/L		97	75 - 125		
Dibromomethane			20.0	19.24		ug/L		96	74 - 125		
1,2-Dichlorobenzene			20.0	19.64		ug/L		98	74 - 120		
1,4-Dichlorobenzene			20.0	19.42		ug/L		97	72 - 120		
1,1-Dichloroethane			20.0	18.90		ug/L		95	70 - 127		
1,2-Dichloroethane			20.0	18.74		ug/L		94	71 - 125		
1,1-Dichloroethene			20.0	18.98		ug/L		95	63 - 132		
1,2-Dichloropropane			20.0	19.73		ug/L		99	73 - 124		
Ethylbenzene			20.0	19.37		ug/L		97	74 - 122		
2-Hexanone			40.0	38.14		ug/L		95	60 - 140		
Iodomethane			20.0	16.44		ug/L		82	10 - 150		
Methylene chloride			20.0	19.47		ug/L		97	50 - 150		
4-Methyl-2-pentanone (MIBK)			40.0	35.50		ug/L		89	60 - 139		
Styrene			20.0	19.89		ug/L		99	74 - 121		
1,1,1,2-Tetrachloroethane			20.0	19.57		ug/L		98	71 - 120		
1,1,2,2-Tetrachloroethane			20.0	19.07		ug/L		95	68 - 124		
Tetrachloroethene			20.0	18.53		ug/L		93	71 - 130		
Toluene			20.0	19.48		ug/L		97	74 - 123		
trans-1,4-Dichloro-2-butene			20.0	16.73		ug/L		84	50 - 150		
trans-1,2-Dichloroethene			20.0	19.26		ug/L		96	70 - 126		
trans-1,3-Dichloropropene			20.0	18.28		ug/L		91	69 - 123		
1,1,1-Trichloroethane			20.0	19.04		ug/L		95	73 - 129		
1,1,2-Trichloroethane			20.0	19.92		ug/L		100	73 - 123		
Trichloroethene			20.0	18.83		ug/L		94	72 - 126		
1,2,3-Trichloropropane			20.0	19.24		ug/L		96	65 - 127		
Vinyl acetate			40.0	33.96		ug/L		85	50 - 150		
Xylenes, Total			40.0	37.98		ug/L		95	73 - 123		

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

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

Lab Sample ID: LCS 310-441008/7
Matrix: Water
Analysis Batch: 441008

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	17.51		ug/L		88	23 - 150
Chloroethane	20.0	19.48		ug/L		97	54 - 136
Chloromethane	20.0	19.51		ug/L		98	38 - 150
Trichlorofluoromethane	20.0	18.93		ug/L		95	54 - 149
Vinyl chloride	20.0	19.78		ug/L		99	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*116*		*73 - 130*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 310-441010/5
Matrix: Water
Analysis Batch: 441010

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			11/27/24 08:35	1
Acrylonitrile	<5.00		5.00	2.20	ug/L			11/27/24 08:35	1
Benzene	<0.500		0.500	0.220	ug/L			11/27/24 08:35	1
Bromochloromethane	<5.00		5.00	0.540	ug/L			11/27/24 08:35	1
Bromodichloromethane	<1.00		1.00	0.390	ug/L			11/27/24 08:35	1
Bromoform	<5.00		5.00	0.780	ug/L			11/27/24 08:35	1
Bromomethane	<4.00		4.00	1.10	ug/L			11/27/24 08:35	1
2-Butanone (MEK)	<10.0		10.0	2.10	ug/L			11/27/24 08:35	1
Carbon disulfide	<1.00		1.00	0.450	ug/L			11/27/24 08:35	1
Carbon tetrachloride	<2.00		2.00	0.650	ug/L			11/27/24 08:35	1
Chlorobenzene	<1.00		1.00	0.400	ug/L			11/27/24 08:35	1
Chlorodibromomethane	<5.00		5.00	0.750	ug/L			11/27/24 08:35	1
Chloroethane	<4.00		4.00	0.790	ug/L			11/27/24 08:35	1
Chloroform	<3.00		3.00	1.30	ug/L			11/27/24 08:35	1
Chloromethane	<3.00		3.00	0.610	ug/L			11/27/24 08:35	1
cis-1,2-Dichloroethene	<1.00		1.00	0.210	ug/L			11/27/24 08:35	1
cis-1,3-Dichloropropene	<5.00		5.00	0.250	ug/L			11/27/24 08:35	1
1,2-Dibromo-3-chloropropane	<5.00		5.00	1.20	ug/L			11/27/24 08:35	1
1,2-Dibromoethane (EDB)	<1.00		1.00	0.340	ug/L			11/27/24 08:35	1
Dibromomethane	<1.00		1.00	0.330	ug/L			11/27/24 08:35	1
1,2-Dichlorobenzene	<1.00		1.00	0.370	ug/L			11/27/24 08:35	1
1,4-Dichlorobenzene	<1.00		1.00	0.230	ug/L			11/27/24 08:35	1
1,1-Dichloroethane	<1.00		1.00	0.220	ug/L			11/27/24 08:35	1
1,2-Dichloroethane	<1.00		1.00	0.390	ug/L			11/27/24 08:35	1
1,1-Dichloroethene	<2.00		2.00	0.560	ug/L			11/27/24 08:35	1
1,2-Dichloropropane	<1.00		1.00	0.270	ug/L			11/27/24 08:35	1
Ethylbenzene	<1.00		1.00	0.310	ug/L			11/27/24 08:35	1
2-Hexanone	<10.0		10.0	2.00	ug/L			11/27/24 08:35	1
Iodomethane	<10.0		10.0	7.00	ug/L			11/27/24 08:35	1
Methylene chloride	<5.00		5.00	1.70	ug/L			11/27/24 08:35	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			11/27/24 08:35	1
Styrene	<1.00		1.00	0.370	ug/L			11/27/24 08:35	1

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

Lab Sample ID: MB 310-441010/5
Matrix: Water
Analysis Batch: 441010

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.380	ug/L			11/27/24 08:35	1
1,1,2,2-Tetrachloroethane	<1.00		1.00	0.470	ug/L			11/27/24 08:35	1
Tetrachloroethene	<1.00		1.00	0.480	ug/L			11/27/24 08:35	1
Toluene	<1.00		1.00	0.430	ug/L			11/27/24 08:35	1
trans-1,4-Dichloro-2-butene	<10.0		10.0	1.10	ug/L			11/27/24 08:35	1
trans-1,2-Dichloroethene	<1.00		1.00	0.270	ug/L			11/27/24 08:35	1
trans-1,3-Dichloropropene	<5.00		5.00	0.560	ug/L			11/27/24 08:35	1
1,1,1-Trichloroethane	<1.00		1.00	0.190	ug/L			11/27/24 08:35	1
1,1,2-Trichloroethane	<1.00		1.00	0.450	ug/L			11/27/24 08:35	1
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 08:35	1
Trichlorofluoromethane	<4.00		4.00	0.380	ug/L			11/27/24 08:35	1
1,2,3-Trichloropropane	<1.00		1.00	0.590	ug/L			11/27/24 08:35	1
Vinyl acetate	<10.0		10.0	2.50	ug/L			11/27/24 08:35	1
Vinyl chloride	<1.00		1.00	0.180	ug/L			11/27/24 08:35	1
Xylenes, Total	<3.00		3.00	0.400	ug/L			11/27/24 08:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*11/27/24 08:35*	*1*
Dibromofluoromethane (Surr)	*114*		*73 - 130*		*11/27/24 08:35*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/27/24 08:35*	*1*

Lab Sample ID: LCS 310-441010/6
Matrix: Water
Analysis Batch: 441010

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	37.94		ug/L		95	50 - 150
Acrylonitrile	200	202.3		ug/L		101	50 - 150
Benzene	20.0	18.63		ug/L		93	72 - 124
Bromochloromethane	20.0	19.30		ug/L		97	73 - 130
Bromodichloromethane	20.0	19.43		ug/L		97	74 - 122
Bromoform	20.0	19.00		ug/L		95	61 - 122
2-Butanone (MEK)	40.0	37.10		ug/L		93	50 - 150
Carbon disulfide	20.0	18.51		ug/L		93	59 - 135
Carbon tetrachloride	20.0	19.47		ug/L		97	67 - 132
Chlorobenzene	20.0	18.92		ug/L		95	76 - 120
Chlorodibromomethane	20.0	19.66		ug/L		98	71 - 121
Chloroform	20.0	19.83		ug/L		99	72 - 125
cis-1,2-Dichloroethene	20.0	19.17		ug/L		96	74 - 123
cis-1,3-Dichloropropene	20.0	18.38		ug/L		92	71 - 125
1,2-Dibromo-3-chloropropane	20.0	20.84		ug/L		104	50 - 150
1,2-Dibromoethane (EDB)	20.0	19.95		ug/L		100	75 - 125
Dibromomethane	20.0	19.82		ug/L		99	74 - 125
1,2-Dichlorobenzene	20.0	19.44		ug/L		97	74 - 120
1,4-Dichlorobenzene	20.0	18.81		ug/L		94	72 - 120
1,1-Dichloroethane	20.0	19.33		ug/L		97	70 - 127
1,2-Dichloroethane	20.0	19.80		ug/L		99	71 - 125
1,1-Dichloroethene	20.0	18.79		ug/L		94	63 - 132

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

Lab Sample ID: LCS 310-441010/6
Matrix: Water
Analysis Batch: 441010

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	20.0	20.29		ug/L		101	73 - 124
Ethylbenzene	20.0	18.87		ug/L		94	74 - 122
2-Hexanone	40.0	39.65		ug/L		99	60 - 140
Iodomethane	20.0	14.80		ug/L		74	10 - 150
Methylene chloride	20.0	19.78		ug/L		99	50 - 150
4-Methyl-2-pentanone (MIBK)	40.0	38.03		ug/L		95	60 - 139
Styrene	20.0	19.06		ug/L		95	74 - 121
1,1,1,2-Tetrachloroethane	20.0	19.25		ug/L		96	71 - 120
1,1,2,2-Tetrachloroethane	20.0	19.56		ug/L		98	68 - 124
Tetrachloroethene	20.0	19.17		ug/L		96	71 - 130
Toluene	20.0	19.46		ug/L		97	74 - 123
trans-1,4-Dichloro-2-butene	20.0	16.53		ug/L		83	50 - 150
trans-1,2-Dichloroethene	20.0	18.98		ug/L		95	70 - 126
trans-1,3-Dichloropropene	20.0	18.39		ug/L		92	69 - 123
1,1,1-Trichloroethane	20.0	19.37		ug/L		97	73 - 129
1,1,2-Trichloroethane	20.0	20.39		ug/L		102	73 - 123
Trichloroethene	20.0	19.46		ug/L		97	72 - 126
1,2,3-Trichloropropane	20.0	19.94		ug/L		100	65 - 127
Vinyl acetate	40.0	32.45		ug/L		81	50 - 150
Xylenes, Total	40.0	37.05		ug/L		93	73 - 123

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

Lab Sample ID: LCS 310-441010/7
Matrix: Water
Analysis Batch: 441010

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	15.93		ug/L		80	23 - 150
Chloroethane	20.0	19.08		ug/L		95	54 - 136
Chloromethane	20.0	18.48		ug/L		92	38 - 150
Trichlorofluoromethane	20.0	19.40		ug/L		97	54 - 149
Vinyl chloride	20.0	19.05		ug/L		95	56 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*73 - 130*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 310-441015/5
Matrix: Water
Analysis Batch: 441015

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.00		1.00	0.430	ug/L			11/27/24 19:08	1

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

Lab Sample ID: MB 310-441015/5
Matrix: Water
Analysis Batch: 441015

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		11/27/24 19:08	1
Dibromofluoromethane (Surr)	113		73 - 130		11/27/24 19:08	1
Toluene-d8 (Surr)	96		80 - 120		11/27/24 19:08	1

Lab Sample ID: LCS 310-441015/6
Matrix: Water
Analysis Batch: 441015

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichloroethene	20.0	19.61		ug/L		98	72 - 126

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

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

Lab Sample ID: MB 310-440916/1-A
Matrix: Water
Analysis Batch: 441093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 440916

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<10.0		10.0	5.50	ug/L		11/26/24 06:42	11/27/24 10:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	115		45 - 129	11/26/24 06:42	11/27/24 10:07	1
2-Fluorobiphenyl (Surr)	104		39 - 118	11/26/24 06:42	11/27/24 10:07	1
Terphenyl-d14 (Surr)	136		12 - 144	11/26/24 06:42	11/27/24 10:07	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 310-441386/3
Matrix: Water
Analysis Batch: 441386

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.00		1.00	0.450	mg/L			11/27/24 11:43	1
Sulfate	<1.00		1.00	0.420	mg/L			11/27/24 11:43	1

Lab Sample ID: LCS 310-441386/4
Matrix: Water
Analysis Batch: 441386

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	9.508		mg/L		95	90 - 110
Sulfate	10.0	9.836		mg/L		98	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 310-441026/1-A
Matrix: Water
Analysis Batch: 441235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441026

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		11/27/24 09:00	11/27/24 20:22	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		11/27/24 09:00	11/27/24 20:22	1
Barium	<0.00200		0.00200	0.000660	mg/L		11/27/24 09:00	11/27/24 20:22	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		11/27/24 09:00	11/27/24 20:22	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		11/27/24 09:00	11/27/24 20:22	1
Chromium	<0.00500		0.00500	0.00120	mg/L		11/27/24 09:00	11/27/24 20:22	1
Cobalt	0.0004430	J	0.000500	0.000170	mg/L		11/27/24 09:00	11/27/24 20:22	1
Copper	<0.00500		0.00500	0.00180	mg/L		11/27/24 09:00	11/27/24 20:22	1
Lead	<0.000500		0.000500	0.000260	mg/L		11/27/24 09:00	11/27/24 20:22	1
Nickel	<0.00500		0.00500	0.00210	mg/L		11/27/24 09:00	11/27/24 20:22	1
Selenium	<0.00500		0.00500	0.00140	mg/L		11/27/24 09:00	11/27/24 20:22	1
Silver	<0.00100		0.00100	0.000500	mg/L		11/27/24 09:00	11/27/24 20:22	1
Thallium	<0.00100		0.00100	0.000570	mg/L		11/27/24 09:00	11/27/24 20:22	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		11/27/24 09:00	11/27/24 20:22	1
Zinc	<0.0200		0.0200	0.00970	mg/L		11/27/24 09:00	11/27/24 20:22	1

Lab Sample ID: LCS 310-441026/2-A
Matrix: Water
Analysis Batch: 441235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441026

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			0.200	0.1992		mg/L		100	80 - 120		
Arsenic			0.200	0.2048		mg/L		102	80 - 120		
Barium			0.100	0.1031		mg/L		103	80 - 120		
Beryllium			0.100	0.09930		mg/L		99	80 - 120		
Cadmium			0.100	0.09365		mg/L		94	80 - 120		
Chromium			0.100	0.1058		mg/L		106	80 - 120		
Cobalt			0.100	0.1080		mg/L		108	80 - 120		
Copper			0.200	0.2142		mg/L		107	80 - 120		
Lead			0.200	0.2116		mg/L		106	80 - 120		
Nickel			0.200	0.2128		mg/L		106	80 - 120		
Selenium			0.400	0.3926		mg/L		98	80 - 120		
Silver			0.100	0.1082		mg/L		108	80 - 120		
Thallium			0.100	0.1084		mg/L		108	80 - 120		
Vanadium			0.100	0.1041		mg/L		104	80 - 120		
Zinc			0.200	0.1759		mg/L		88	80 - 120		

Lab Sample ID: 310-295916-2 DU
Matrix: Water
Analysis Batch: 441235

Client Sample ID: UG-201
Prep Type: Total/NA
Prep Batch: 441026

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	0.136			0.1440		mg/L				5	20
Beryllium	<0.00100			<0.00100		mg/L				NC	20
Cadmium	0.000101	J		<0.000200		mg/L				NC	20
Chromium	<0.00500			<0.00500		mg/L				NC	20
Cobalt	0.000765	B		0.0003780	J F5	mg/L				68	20

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

Lab Sample ID: 310-295916-2 DU
Matrix: Water
Analysis Batch: 441235

Client Sample ID: UG-201
Prep Type: Total/NA
Prep Batch: 441026

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	0.00261	J	0.002613	J	mg/L		0	20
Lead	0.00262		0.002543		mg/L		3	20
Nickel	<0.00500		<0.00500		mg/L		NC	20
Selenium	<0.00500		<0.00500		mg/L		NC	20
Silver	<0.00100		<0.00100		mg/L		NC	20
Thallium	<0.00100		<0.00100		mg/L		NC	20
Vanadium	<0.00500		<0.00500		mg/L		NC	20
Zinc	1.28		1.380		mg/L		7	20

Lab Sample ID: MB 310-441160/1-A
Matrix: Water
Analysis Batch: 441732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00200		0.00200	0.00100	mg/L		12/02/24 09:00	12/05/24 16:55	1
Arsenic	<0.00200		0.00200	0.000530	mg/L		12/02/24 09:00	12/05/24 16:55	1
Barium	<0.00200		0.00200	0.000660	mg/L		12/02/24 09:00	12/05/24 16:55	1
Beryllium	<0.00100		0.00100	0.000330	mg/L		12/02/24 09:00	12/05/24 16:55	1
Cadmium	<0.000200		0.000200	0.000100	mg/L		12/02/24 09:00	12/05/24 16:55	1
Chromium	<0.00500		0.00500	0.00120	mg/L		12/02/24 09:00	12/05/24 16:55	1
Cobalt	<0.000500		0.000500	0.000170	mg/L		12/02/24 09:00	12/05/24 16:55	1
Copper	0.002212	J	0.00500	0.00180	mg/L		12/02/24 09:00	12/05/24 16:55	1
Lead	<0.000500		0.000500	0.000260	mg/L		12/02/24 09:00	12/05/24 16:55	1
Nickel	<0.00500		0.00500	0.00210	mg/L		12/02/24 09:00	12/05/24 16:55	1
Selenium	<0.00500		0.00500	0.00140	mg/L		12/02/24 09:00	12/05/24 16:55	1
Thallium	<0.00100		0.00100	0.000570	mg/L		12/02/24 09:00	12/05/24 16:55	1
Vanadium	<0.00500		0.00500	0.00110	mg/L		12/02/24 09:00	12/05/24 16:55	1
Zinc	<0.0200		0.0200	0.00970	mg/L		12/02/24 09:00	12/05/24 16:55	1
Sodium	<1.00		1.00	0.480	mg/L		12/02/24 09:00	12/05/24 16:55	1
Potassium	<0.500		0.500	0.150	mg/L		12/02/24 09:00	12/05/24 16:55	1
Magnesium	<0.500		0.500	0.150	mg/L		12/02/24 09:00	12/05/24 16:55	1

Lab Sample ID: MB 310-441160/1-A
Matrix: Water
Analysis Batch: 441932

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 441160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00100		0.00100	0.000500	mg/L		12/02/24 09:00	12/06/24 14:05	1
Calcium	<0.500		0.500	0.190	mg/L		12/02/24 09:00	12/06/24 14:05	1

Lab Sample ID: LCS 310-441160/2-A
Matrix: Water
Analysis Batch: 441732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.200	0.2273		mg/L		114	80 - 120
Arsenic	0.200	0.2093		mg/L		105	80 - 120
Barium	0.100	0.1061		mg/L		106	80 - 120
Beryllium	0.100	0.09163		mg/L		92	80 - 120

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

Lab Sample ID: LCS 310-441160/2-A
Matrix: Water
Analysis Batch: 441732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.100	0.1006		mg/L		101	80 - 120
Chromium	0.100	0.1021		mg/L		102	80 - 120
Cobalt	0.100	0.1098		mg/L		110	80 - 120
Copper	0.200	0.2123		mg/L		106	80 - 120
Lead	0.200	0.2183		mg/L		109	80 - 120
Nickel	0.200	0.2081		mg/L		104	80 - 120
Selenium	0.400	0.4001		mg/L		100	80 - 120
Thallium	0.100	0.08618		mg/L		86	80 - 120
Vanadium	0.100	0.1006		mg/L		101	80 - 120
Zinc	0.200	0.1765		mg/L		88	80 - 120
Sodium	2.00	2.125		mg/L		106	80 - 120
Potassium	2.00	1.944		mg/L		97	80 - 120
Magnesium	2.00	1.994		mg/L		100	80 - 120

Lab Sample ID: LCS 310-441160/2-A
Matrix: Water
Analysis Batch: 441932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 441160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	2.00	1.847		mg/L		92	80 - 120

Lab Sample ID: 310-295916-11 MS
Matrix: Water
Analysis Batch: 441732

Client Sample ID: DG-1205
Prep Type: Total/NA
Prep Batch: 441160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<0.00200		0.200	0.2278		mg/L		114	75 - 125
Arsenic	0.00350		0.200	0.2177		mg/L		107	75 - 125
Barium	0.0154		0.100	0.1195		mg/L		104	75 - 125
Beryllium	<0.00100		0.100	0.09399		mg/L		94	75 - 125
Cadmium	<0.000200		0.100	0.09617		mg/L		96	75 - 125
Chromium	<0.00500		0.100	0.1016		mg/L		102	75 - 125
Cobalt	0.000486	J	0.100	0.1075		mg/L		107	75 - 125
Copper	0.00346	J B	0.200	0.2067		mg/L		102	75 - 125
Lead	0.00111		0.200	0.2105		mg/L		105	75 - 125
Nickel	0.00256	J	0.200	0.2007		mg/L		99	75 - 125
Selenium	<0.00500		0.400	0.3046		mg/L		76	75 - 125
Thallium	<0.00100		0.100	0.08431		mg/L		84	75 - 125
Vanadium	0.00453	J	0.100	0.1050		mg/L		100	75 - 125
Zinc	<0.0200		0.200	0.1825		mg/L		91	75 - 125
Sodium	17.4		2.00	19.02	4	mg/L		82	75 - 125
Potassium	5.53		2.00	7.356		mg/L		91	75 - 125

Lab Sample ID: 310-295916-11 MS
Matrix: Water
Analysis Batch: 441932

Client Sample ID: DG-1205
Prep Type: Total/NA
Prep Batch: 441160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	<0.00400	*+ F1	0.100	0.1288	F1	mg/L		129	75 - 125

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

Lab Sample ID: 310-295916-11 MSD — **Client Sample ID: DG-1205**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 441732 — **Prep Batch: 441160**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<0.00200		0.200	0.2388		mg/L		119	75 - 125	5	20
Arsenic	0.00350		0.200	0.2227		mg/L		110	75 - 125	2	20
Barium	0.0154		0.100	0.1216		mg/L		106	75 - 125	2	20
Beryllium	<0.00100		0.100	0.09523		mg/L		95	75 - 125	1	20
Cadmium	<0.000200		0.100	0.09701		mg/L		97	75 - 125	1	20
Chromium	<0.00500		0.100	0.1031		mg/L		103	75 - 125	1	20
Cobalt	0.000486	J	0.100	0.1101		mg/L		110	75 - 125	2	20
Copper	0.00346	J B	0.200	0.2072		mg/L		102	75 - 125	0	20
Lead	0.00111		0.200	0.2142		mg/L		107	75 - 125	2	20
Nickel	0.00256	J	0.200	0.2041		mg/L		101	75 - 125	2	20
Selenium	<0.00500		0.400	0.3081		mg/L		77	75 - 125	1	20
Thallium	<0.00100		0.100	0.08398		mg/L		84	75 - 125	0	20
Vanadium	0.00453	J	0.100	0.1071		mg/L		103	75 - 125	2	20
Zinc	<0.0200		0.200	0.1883		mg/L		94	75 - 125	3	20
Sodium	17.4		2.00	19.18	4	mg/L		90	75 - 125	1	20
Potassium	5.53		2.00	7.473		mg/L		97	75 - 125	2	20

Lab Sample ID: 310-295916-11 MSD — **Client Sample ID: DG-1205**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 441932 — **Prep Batch: 441160**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Silver	<0.00400	*+ F1	0.100	0.1292	F1	mg/L		129	75 - 125	0	20

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

Lab Sample ID: MB 310-440897/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			11/25/24 19:01	1

Lab Sample ID: LCS 310-440897/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440897

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	116.0		mg/L		116	81 - 116

Lab Sample ID: 310-295916-11 DU — **Client Sample ID: DG-1205**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440897

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	44.5		47.00		mg/L		5	35

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

Lab Sample ID: MB 310-440903/1
Matrix: Water
Analysis Batch: 440903

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	<5.00		5.00	3.70	mg/L			11/25/24 23:51	1

Lab Sample ID: LCS 310-440903/2
Matrix: Water
Analysis Batch: 440903

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	97.00		mg/L		97	81 - 116

Lab Sample ID: 310-295916-8 DU
Matrix: Water
Analysis Batch: 440903

Client Sample ID: DG-1005
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	317		332.0		mg/L		5	35

Method: SM 2320B - Alkalinity

Lab Sample ID: LCS 310-441036/2
Matrix: Water
Analysis Batch: 441036

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	1000	968.2		mg/L		97	86 - 111

GC/MS VOA

Analysis Batch: 440948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-5	DG-901	Total/NA	Water	8260D	
310-295916-6	DG-905	Total/NA	Water	8260D	
310-295916-10	DG-1105R	Total/NA	Water	8260D	
310-295916-11	DG-1205	Total/NA	Water	8260D	
310-295916-12	DG-1301	Total/NA	Water	8260D	
310-295916-13	DG-1305	Total/NA	Water	8260D	
310-295916-14	DG-1401R	Total/NA	Water	8260D	
310-295916-15	DGP-1500	Total/NA	Water	8260D	
310-295916-16	GU-15	Total/NA	Water	8260D	
310-295916-17	SW101	Total/NA	Water	8260D	
310-295916-26	Trip Blank 1	Total/NA	Water	8260D	
310-295916-27	Trip Blank 2	Total/NA	Water	8260D	
310-295916-28	Trip Blank 3	Total/NA	Water	8260D	
MB 310-440948/5	Method Blank	Total/NA	Water	8260D	
LCS 310-440948/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-440948/7	Lab Control Sample	Total/NA	Water	8260D	
310-295916-5 MS	DG-901	Total/NA	Water	8260D	
310-295916-5 MSD	DG-901	Total/NA	Water	8260D	

Analysis Batch: 441008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-1	UG-90	Total/NA	Water	8260D	
310-295916-2	UG-201	Total/NA	Water	8260D	
310-295916-3	TDG-301	Total/NA	Water	8260D	
310-295916-4	TDG-305	Total/NA	Water	8260D	
310-295916-7	DG-1001	Total/NA	Water	8260D	
310-295916-8	DG-1005	Total/NA	Water	8260D	
310-295916-9	DG-1101	Total/NA	Water	8260D	
MB 310-441008/5	Method Blank	Total/NA	Water	8260D	
LCS 310-441008/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-441008/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 441010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-24	MW-D1	Total/NA	Water	8260D	
310-295916-25	MW-D2	Total/NA	Water	8260D	
MB 310-441010/5	Method Blank	Total/NA	Water	8260D	
LCS 310-441010/6	Lab Control Sample	Total/NA	Water	8260D	
LCS 310-441010/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 441015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-18	MWP-7	Total/NA	Water	8260D	
310-295916-19	MW-15	Total/NA	Water	8260D	
310-295916-20	MW-16	Total/NA	Water	8260D	
310-295916-21	MW-17	Total/NA	Water	8260D	
310-295916-22	MW-18	Total/NA	Water	8260D	
310-295916-23	ORG-MW	Total/NA	Water	8260D	
MB 310-441015/5	Method Blank	Total/NA	Water	8260D	
LCS 310-441015/6	Lab Control Sample	Total/NA	Water	8260D	

QC Association Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

GC/MS Semi VOA

Prep Batch: 440916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-12	DG-1301	Total/NA	Water	3510C	
MB 310-440916/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 441093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-12	DG-1301	Total/NA	Water	8270E	440916
MB 310-440916/1-A	Method Blank	Total/NA	Water	8270E	440916

HPLC/IC

Analysis Batch: 441386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-15	DGP-1500	Total/NA	Water	300.0	
MB 310-441386/3	Method Blank	Total/NA	Water	300.0	
LCS 310-441386/4	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 441026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-1	UG-90	Total/NA	Water	3005A	
310-295916-2	UG-201	Total/NA	Water	3005A	
310-295916-3	TDG-301	Total/NA	Water	3005A	
310-295916-4	TDG-305	Total/NA	Water	3005A	
310-295916-5	DG-901	Total/NA	Water	3005A	
310-295916-6	DG-905	Total/NA	Water	3005A	
310-295916-7	DG-1001	Total/NA	Water	3005A	
310-295916-8	DG-1005	Total/NA	Water	3005A	
310-295916-9	DG-1101	Total/NA	Water	3005A	
310-295916-10	DG-1105R	Total/NA	Water	3005A	
MB 310-441026/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-441026/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-295916-2 DU	UG-201	Total/NA	Water	3005A	

Prep Batch: 441160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-11	DG-1205	Total/NA	Water	3005A	
310-295916-12	DG-1301	Total/NA	Water	3005A	
310-295916-13	DG-1305	Total/NA	Water	3005A	
310-295916-14	DG-1401R	Total/NA	Water	3005A	
310-295916-15	DGP-1500	Total/NA	Water	3005A	
310-295916-16	GU-15	Total/NA	Water	3005A	
310-295916-17	SW101	Total/NA	Water	3005A	
310-295916-24	MW-D1	Total/NA	Water	3005A	
310-295916-25	MW-D2	Total/NA	Water	3005A	
MB 310-441160/1-A	Method Blank	Total/NA	Water	3005A	
LCS 310-441160/2-A	Lab Control Sample	Total/NA	Water	3005A	
310-295916-11 MS	DG-1205	Total/NA	Water	3005A	
310-295916-11 MSD	DG-1205	Total/NA	Water	3005A	

Metals

Analysis Batch: 441235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-1	UG-90	Total/NA	Water	6020B	441026
310-295916-2	UG-201	Total/NA	Water	6020B	441026
310-295916-3	TDG-301	Total/NA	Water	6020B	441026
310-295916-4	TDG-305	Total/NA	Water	6020B	441026
310-295916-5	DG-901	Total/NA	Water	6020B	441026
310-295916-6	DG-905	Total/NA	Water	6020B	441026
310-295916-7	DG-1001	Total/NA	Water	6020B	441026
310-295916-8	DG-1005	Total/NA	Water	6020B	441026
310-295916-9	DG-1101	Total/NA	Water	6020B	441026
310-295916-10	DG-1105R	Total/NA	Water	6020B	441026
MB 310-441026/1-A	Method Blank	Total/NA	Water	6020B	441026
LCS 310-441026/2-A	Lab Control Sample	Total/NA	Water	6020B	441026
310-295916-2 DU	UG-201	Total/NA	Water	6020B	441026

Analysis Batch: 441732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-11	DG-1205	Total/NA	Water	6020B	441160
310-295916-12	DG-1301	Total/NA	Water	6020B	441160
310-295916-13	DG-1305	Total/NA	Water	6020B	441160
310-295916-14	DG-1401R	Total/NA	Water	6020B	441160
310-295916-15	DGP-1500	Total/NA	Water	6020B	441160
310-295916-16	GU-15	Total/NA	Water	6020B	441160
310-295916-17	SW101	Total/NA	Water	6020B	441160
310-295916-24	MW-D1	Total/NA	Water	6020B	441160
310-295916-25	MW-D2	Total/NA	Water	6020B	441160
MB 310-441160/1-A	Method Blank	Total/NA	Water	6020B	441160
LCS 310-441160/2-A	Lab Control Sample	Total/NA	Water	6020B	441160
310-295916-11 MS	DG-1205	Total/NA	Water	6020B	441160
310-295916-11 MSD	DG-1205	Total/NA	Water	6020B	441160

Analysis Batch: 441932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-11	DG-1205	Total/NA	Water	6020B	441160
310-295916-12	DG-1301	Total/NA	Water	6020B	441160
310-295916-13	DG-1305	Total/NA	Water	6020B	441160
310-295916-14	DG-1401R	Total/NA	Water	6020B	441160
310-295916-15	DGP-1500	Total/NA	Water	6020B	441160
310-295916-16	GU-15	Total/NA	Water	6020B	441160
310-295916-17	SW101	Total/NA	Water	6020B	441160
310-295916-24	MW-D1	Total/NA	Water	6020B	441160
310-295916-25	MW-D2	Total/NA	Water	6020B	441160
MB 310-441160/1-A	Method Blank	Total/NA	Water	6020B	441160
LCS 310-441160/2-A	Lab Control Sample	Total/NA	Water	6020B	441160
310-295916-11 MS	DG-1205	Total/NA	Water	6020B	441160
310-295916-11 MSD	DG-1205	Total/NA	Water	6020B	441160

General Chemistry

Analysis Batch: 440897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-5	DG-901	Total/NA	Water	I-3765-85	

General Chemistry (Continued)

Analysis Batch: 440897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-6	DG-905	Total/NA	Water	I-3765-85	
310-295916-10	DG-1105R	Total/NA	Water	I-3765-85	
310-295916-11	DG-1205	Total/NA	Water	I-3765-85	
310-295916-12	DG-1301	Total/NA	Water	I-3765-85	
310-295916-13	DG-1305	Total/NA	Water	I-3765-85	
310-295916-14	DG-1401R	Total/NA	Water	I-3765-85	
310-295916-15	DGP-1500	Total/NA	Water	I-3765-85	
310-295916-16	GU-15	Total/NA	Water	I-3765-85	
310-295916-17	SW101	Total/NA	Water	I-3765-85	
310-295916-24	MW-D1	Total/NA	Water	I-3765-85	
310-295916-25	MW-D2	Total/NA	Water	I-3765-85	
MB 310-440897/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-440897/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-295916-11 DU	DG-1205	Total/NA	Water	I-3765-85	

Analysis Batch: 440903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-1	UG-90	Total/NA	Water	I-3765-85	
310-295916-2	UG-201	Total/NA	Water	I-3765-85	
310-295916-3	TDG-301	Total/NA	Water	I-3765-85	
310-295916-4	TDG-305	Total/NA	Water	I-3765-85	
310-295916-7	DG-1001	Total/NA	Water	I-3765-85	
310-295916-8	DG-1005	Total/NA	Water	I-3765-85	
310-295916-9	DG-1101	Total/NA	Water	I-3765-85	
MB 310-440903/1	Method Blank	Total/NA	Water	I-3765-85	
LCS 310-440903/2	Lab Control Sample	Total/NA	Water	I-3765-85	
310-295916-8 DU	DG-1005	Total/NA	Water	I-3765-85	

Analysis Batch: 441036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-295916-15	DGP-1500	Total/NA	Water	SM 2320B	
LCS 310-441036/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: UG-90
Date Collected: 11/20/24 12:59
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 00:36
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:17
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: UG-201
Date Collected: 11/20/24 12:23
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 00:58
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:20
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: TDG-301
Date Collected: 11/20/24 09:55
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 01:20
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:25
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: TDG-305
Date Collected: 11/20/24 09:20
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 01:42
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:28
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: DG-901
Date Collected: 11/19/24 15:42
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 13:44
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:43
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-905
Date Collected: 11/19/24 14:13
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 14:05
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:45
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: DG-1001
Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 02:03
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:48
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: DG-1005
Date Collected: 11/20/24 11:06
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 02:25
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:51
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: DG-1101
Date Collected: 11/20/24 11:37
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441008	MZR8	EET CF	11/27/24 02:47
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:54
Total/NA	Analysis	I-3765-85		1	440903	MDU9	EET CF	11/25/24 23:51

Client Sample ID: DG-1105R
Date Collected: 11/19/24 13:58
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 14:27
Total/NA	Prep	3005A			441026	F5MW	EET CF	11/27/24 09:00
Total/NA	Analysis	6020B		1	441235	NFT2	EET CF	11/27/24 21:57
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DG-1205
Date Collected: 11/19/24 13:27
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 14:49
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:00
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		4	441932	NFT2	EET CF	12/06/24 14:11
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: DG-1301
Date Collected: 11/19/24 10:28
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 15:11
Total/NA	Prep	3510C			440916	AYK7	EET CF	11/26/24 06:42
Total/NA	Analysis	8270E		1	441093	L0FS	EET CF	11/27/24 11:24
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:19
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:31
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: DG-1305
Date Collected: 11/19/24 09:53
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 15:33
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:22
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:34
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: DG-1401R
Date Collected: 11/19/24 09:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 15:54
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:24
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:37
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: DGP-1500

Lab Sample ID: 310-295916-15

Date Collected: 11/19/24 14:35
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 16:16
Total/NA	Analysis	300.0		5	441386	WZC8	EET CF	11/27/24 19:15
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:26
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:40
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01
Total/NA	Analysis	SM 2320B		1	441036	HE7K	EET CF	11/26/24 13:26

Client Sample ID: GU-15

Lab Sample ID: 310-295916-16

Date Collected: 11/18/24 15:45
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 16:38
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:29
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:43
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: SW101

Lab Sample ID: 310-295916-17

Date Collected: 11/18/24 16:15
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 17:00
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:31
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:46
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: MWP-7

Lab Sample ID: 310-295916-18

Date Collected: 11/19/24 12:47
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 20:57

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-15
Date Collected: 11/19/24 11:34
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 21:19

Client Sample ID: MW-16
Date Collected: 11/19/24 12:21
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 21:41

Client Sample ID: MW-17
Date Collected: 11/19/24 10:46
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 22:02

Client Sample ID: MW-18
Date Collected: 11/19/24 11:15
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 22:24

Client Sample ID: ORG-MW
Date Collected: 11/19/24 11:11
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441015	WSE8	EET CF	11/27/24 22:46

Client Sample ID: MW-D1
Date Collected: 11/20/24 10:38
Date Received: 11/22/24 16:30

Lab Sample ID: 310-295916-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441010	WSE8	EET CF	11/27/24 14:05
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:34
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:48
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Lab Chronicle

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Client Sample ID: MW-D2

Lab Sample ID: 310-295916-25

Date Collected: 11/20/24 15:42
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	441010	WSE8	EET CF	11/27/24 14:26
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441732	NFT2	EET CF	12/05/24 17:36
Total/NA	Prep	3005A			441160	F5MW	EET CF	12/02/24 09:00
Total/NA	Analysis	6020B		1	441932	NFT2	EET CF	12/06/24 14:51
Total/NA	Analysis	I-3765-85		1	440897	MDU9	EET CF	11/25/24 19:01

Client Sample ID: Trip Blank 1

Lab Sample ID: 310-295916-26

Date Collected: 11/18/24 00:00
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 12:22

Client Sample ID: Trip Blank 2

Lab Sample ID: 310-295916-27

Date Collected: 11/18/24 00:00
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 13:00

Client Sample ID: Trip Blank 3

Lab Sample ID: 310-295916-28

Date Collected: 11/18/24 00:00
Matrix: Water
Date Received: 11/22/24 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	440948	MZR8	EET CF	11/26/24 13:22

Laboratory References:

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

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA 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	12-01-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Chloride
300.0		Water	Sulfate
6020B	3005A	Water	Antimony
6020B	3005A	Water	Arsenic
6020B	3005A	Water	Barium
6020B	3005A	Water	Beryllium
6020B	3005A	Water	Cadmium
6020B	3005A	Water	Calcium
6020B	3005A	Water	Chromium
6020B	3005A	Water	Cobalt
6020B	3005A	Water	Copper
6020B	3005A	Water	Lead
6020B	3005A	Water	Magnesium
6020B	3005A	Water	Nickel
6020B	3005A	Water	Potassium
6020B	3005A	Water	Selenium
6020B	3005A	Water	Silver
6020B	3005A	Water	Sodium
6020B	3005A	Water	Thallium
6020B	3005A	Water	Vanadium
6020B	3005A	Water	Zinc
8260D		Water	1,1,1,2-Tetrachloroethane
8260D		Water	1,1,1-Trichloroethane
8260D		Water	1,1,2,2-Tetrachloroethane
8260D		Water	1,1,2-Trichloroethane
8260D		Water	1,1-Dichloroethane
8260D		Water	1,1-Dichloroethene
8260D		Water	1,2,3-Trichloropropane
8260D		Water	1,2-Dibromo-3-chloropropane
8260D		Water	1,2-Dibromoethane (EDB)
8260D		Water	1,2-Dichlorobenzene
8260D		Water	1,2-Dichloroethane
8260D		Water	1,2-Dichloropropane
8260D		Water	1,4-Dichlorobenzene
8260D		Water	2-Butanone (MEK)
8260D		Water	2-Hexanone
8260D		Water	4-Methyl-2-pentanone (MIBK)
8260D		Water	Acetone
8260D		Water	Acrylonitrile
8260D		Water	Benzene
8260D		Water	Bromochloromethane
8260D		Water	Bromodichloromethane
8260D		Water	Bromoform
8260D		Water	Bromomethane
8260D		Water	Carbon disulfide

Laboratory: Eurofins Cedar Falls (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

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	Carbon tetrachloride
8260D		Water	Chlorobenzene
8260D		Water	Chlorodibromomethane
8260D		Water	Chloroethane
8260D		Water	Chloroform
8260D		Water	Chloromethane
8260D		Water	cis-1,2-Dichloroethene
8260D		Water	cis-1,3-Dichloropropene
8260D		Water	Dibromomethane
8260D		Water	Ethylbenzene
8260D		Water	Iodomethane
8260D		Water	Methylene chloride
8260D		Water	Styrene
8260D		Water	Tetrachloroethene
8260D		Water	Toluene
8260D		Water	trans-1,2-Dichloroethene
8260D		Water	trans-1,3-Dichloropropene
8260D		Water	trans-1,4-Dichloro-2-butene
8260D		Water	Trichloroethene
8260D		Water	Trichlorofluoromethane
8260D		Water	Vinyl acetate
8260D		Water	Vinyl chloride
8260D		Water	Xylenes, Total
8270E	3510C	Water	Bis(2-ethylhexyl) phthalate
I-3765-85		Water	Total Suspended Solids
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Total Alkalinity as CaCO3 to pH 4.5

Method Summary

Client: SCS Engineers
Project/Site: NWIA Fall 2024 GW

Job ID: 310-295916-1
SDG: NWIA Landfill

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET CF
300.0	Anions, Ion Chromatography	EPA	EET CF
6020B	Metals (ICP/MS)	SW846	EET CF
I-3765-85	Residue, Non-filterable (TSS)	USGS	EET CF
SM 2320B	Alkalinity	SM	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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

eurofins | Environment Testing America



Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS

City/State: CITY | STATE | Project:

Receipt Information

Date/Time Received: DATE 11/22/24 | TIME 1630 | Received By: XB

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-02, TDG-301, DG-1001, VG-90, PG-905, DG-1005, DG-1101, DG-901

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | 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): 5.3 | Corrected Temp (°C): 5.3

• **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: J | STATE: | Project.

Receipt Information

Date/Time Received: DATE: 11/22/24 | TIME: 1630 | Received By: XB

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? ↓

DG-1105R, VG-201, DG-1205, DG-1305, DG-1401R, MW-D1, TDG-305, TB-2

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | 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): 4.2 | Corrected Temp (°C): 4.2

• **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

eurofins | Environment Testing America

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client: SCS engineers

City/State: CITY U STATE | Project:

Receipt Information

Date/Time Received: DATE 11/22/24 TIME 1630 | Received By: KB

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? ↓

MW-18, MWP-7, DG-1301, DGP-1500, MW-15, MW-17
ORG-MW, SW101, GW-15, MW-16

Temperature Record

Coolant: ☒ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 2 | 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): 6.0 | Corrected Temp (°C): 6.0

• **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 Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Konner Roth	Lab PM: Miller, Samuel	Carrier Tracking No(s):	COC No: 310-99668-27022.1
Client Contact: Sean Marczewski	Phone:	E-Mail: Samuel.Miller@et.eurofinsus.com	State of Origin:	Page: Page 1 of 3
Company: SCS Engineers	PWSID:			Job #:

Address: 1690 All State Court Suite 100	Due Date Requested:
City: West Des Moines	TAT Requested (days):
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No
Phone: 712-661-9682	PO #: 27223095 25
Email: SMarczewski@scsengineers com	WO #:
Project Name: NWIA Fall 2024 GW	Project #: 31002030
Site: NWIA Landfill	SSOW#:

Analysis Requested

Preservation Codes:
N - None
A - HCL
D - HNO3
Other:

Sample Identification	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)	Appendix I	Total Suspended Solids	Bis [2-ethylhexyl] phthalate	Trichloroethene	Geochemistry*	App I VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
UG-90	11-20-24	1259	G	Water			X	X						*Geochemistry: bicarbonate, carbonate, calcium, magnesium, potassium, chloride, sodium and sulfate.
UG-201	11-20-24	1223	G	Water			X	X						
TDG-301	11-20-24	0955	G	Water			X	X						
TDG-305	11-20-24	0920	G	Water			X	X						
DG-901	11-19-24	15:42	G	Water			X	X						
DG-905	11-19-24	14:13	G	Water			X	X						
DG-1001	11-20-24	1038	G	Water			X	X						
DG-1005	11-20-24	1106	G	Water			X	X						
DG-1101	11-20-24	1137	G	Water			X	X						
DG-1105R	11-19-24	1358	G	Water			X	X						
DG-1205	11-19-24	1327	G	Water			X	X						

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Konner Roth	11-22-24/12:00	SCS			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/22/24 1630	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

TestAmerica Des Moines SC
214

eurofins

Chain of Custody Record

Client Information	Sampler: Homer Roth	Lab PM: Miller, Samuel	Carrier Tracking No(s):	COC No: 310-99668-27022.2
Client Contact: Sean Marczewski	Phone:	E-Mail: Samuel Miller@et.eurofinsus.com	State of Origin:	Page: Page 2 of 3
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone: 712-661-9682	PO #: 27223095 25			
Email: SMarczewski@scsengineers.com	WO #:			
Project Name: NWIA Fall 2024 GW	Project #: 31002030			
Site: NWIA Landfill	SSOW#:			

Analysis Requested

Preservation Codes
N - None
A - HCL
D - HNO3
Other:

Sample Identification	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)	Appendix I	Total Suspended Solids	Bis [2-ethylhexyl] phthalate	Trichloroethene	Geochemistry*	App I VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
DG-1301	11-19-24	1028	G	Water			X	X	X					*Geochemistry: bicarbonate, carbonate, calcium, magnesium, potassium, chloride, sodium and sulfate.
DG-1305	11-19-24	0953	G	Water			X	X						
DG-1401R	11-19-24	0915	G	Water			X	X						
DGP-1500	11-19-24	1435	G	Water			X	X			X			
GU-9				Water			X	X						
GU-10				Water			X	X						
GU-11				Water			X	X						
GU-12				Water			X	X						
GU-13				Water			X	X						
GU-14				Water			X	X						
GU-15	11-18-24	15'45	G	Water			X	X						

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III, IV, Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Homer Roth	11-22-24/1200	SCS			
2						
3				XB	11/22/24 1630	ET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Phone (319) 277-2425

Chain of Custody Record

TestAmerica Des Moines SC
214

eurofins

Client Information	Sampler: Konner Roth	Lab PM: Miller, Samuel	Carrier Tracking No(s):	COC No: 310-99668-27022 3
Client Contact: Sean Marczewski	Phone:	E-Mail: Samuel.Miller@et.eurofinsus.com	State of Origin:	Page: Page 3 of 3
Company: SCS Engineers	PWSID:			Job #:
Address: 1690 All State Court Suite 100	Due Date Requested:			
City: West Des Moines	TAT Requested (days):			
State, Zip: IA, 50265	Compliance Project: Δ Yes Δ No			
Phone: 712-661-9682	PO #: 27223095 25			
Email: SMarczewski@scsengineers.com	WO #:			
Project Name: NWIA Fall 2024 GW	Project #: 31002030			
Site: NWIA Landfill	SSOW#:			

Analysis Requested

Preservation Codes: N - None; A - HCL; D - HNO3

Other:

Sample Identification	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)	Appendix I	Total Suspended Solids	Bis [2-ethylhexyl] phthalate	Trichloroethene	Geochemistry*	App I VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
SW-101	11-18-24	1615	G	Water			X	X						*Geochemistry: bicarbonate, carbonate, calcium, magnesium, potassium, chloride, sodium and sulfate.
MWP-7	11-19-24	1247	G	Water						X				
MW-15	11-19-24	1134	G	Water						X				
MW-16	11-19-24	1221	G	Water						X				
MW-17	11-19-24	1046	G	Water						X				
MW-18	11-19-24	1115	G	Water						X				
ORG-MW	11-19-24	1111	G	Water						X				
MW-D1	11-20-24	1038	G	Water			X	X						
MW-D2	11-20-24	1542	G	Water			X	X						
Trip Blank				Water								X		
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Konner Roth	11-22-24 / 1200	SCS			
			XB	11/22/24 1630	ET

Custody Seals Intact: Δ Yes Δ No | Custody Seal No | Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

Page 100 of 101

12/9/2024

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-295916-1
SDG Number: NWIA Landfill

Login Number: 295916
List Number: 1
Creator: Bunker, Xavier M

List Source: Eurofins Cedar Falls

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

Appendix B-2
Data Validation Documentation

Completed by: Konner Roth
Sampling Date: 7/10/2024
Lab Report Date: 10/11/2024
Site Name: Northwest Iowa Sanitary Landfill
Project Type: HMSP - 1st 2024 Semi-Annual Sampling Event
Lab Report Number: 310-285765-1

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature	X			
Preservation		X		Method 6020B: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: TG-301 (310-285765-1). The sample(s) was preserved to the appropriate pH in the laboratory. Method 8260D: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: DG-1205 (310-285765-10).
Condition		X		Method 8260D: The method requirement for no headspace was not met. The following volatile samples were analyzed with headspace in the sample container: Trip Blank 1 (310-285765-24), Trip Blank 2 (310-285765-25), Trip Blank 3 (310-285765-26) and Trip Blank 4 (310-285765-27).
Case Narrative	X			
Holding Times	X			
Analytical Sensitivity and Blanks				
Method Blank Detections		X		Tin was detected at a J flag concentration.
Trip Blank Detections	X			No detections.
Accuracy				
ICV/CCV		X		Method 8260D: The continuing calibration verification (CCV) associated with batch 310-427529 recovered above the upper control limit for Trichlorofluoromethane (24.3%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 310-427529/4). Method 8260D: The continuing calibration verification (CCV) associated with batch 310-427531 recovered above the upper control limit for Trichlorofluoromethane (23.8%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 310-427531/4).
LCS/LCSD		X		Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 310-427592 and analytical batch 310-427942 recovered outside control limits for the following analyte(s): p-Phenylene diamine. Phenylene diamine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 310-427592 and analytical batch 310-427942 recovered outside control limits for the following analytes: Famphur. 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 310-427592 and analytical batch 310-427942 recovered outside control limits for multiple analytes. Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 310-427724 and analytical batch 310-428132 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and 4,6-Dinitro-2 methylphenol. Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427724 and analytical batch 310-428132 recovered outside acceptance limits for multiple analytes. There was insufficient holding time to perform a re-extraction or re-analysis; 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 310-427724 and analytical batch 310-428242 recovered outside control limits for the following analytes: Hexachloropropene and Methapyrilene. Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427724 and analytical batch 310-428242 recovered outside acceptance limits for multiple analytes, There was insufficient holding time to perform a re-extraction or re-analysis; 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 310-427592 and analytical batch 310-427635 recovered outside control limits for multiple analytes. Method 8270E: The laboratory control sample (LCS) for preparation batch 310-427592 and analytical batch 310-427635 recovered outside acceptance limits for multiple analytes. There was insufficient holding time to perform a re-extraction or re-analysis; therefore, the data have been reported.
MS/MSD		X		Method 8270E: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 310-427724. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			A field duplicate sample was collected at DG-1001. RPD for analyzed parameters was <50% with the exception of acetone (89.8%).

Completed by: Konner Roth
Sampling Date: 11/20/2024
Lab Report Date: 12/9/2024
Site Name: Northwest Iowa Sanitary Landfill
Project Type: HMSP - 2nd 2024 Semi-Annual Sampling Event
Lab Report Number: 310-295916-1

	OK	NO	N/A	NOTES
Sample Collection and Sample Handling				
Chain of Custody	X			
Temperature	X			
Preservation		X		Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid : DG-901 (310-295916-5), DG-905 (310-295916-6), DG-1105R (310-295916-10), DG-1205 (310-295916-11), DG-1301 (310-295916-12), DG-1305 (310-295916-13), DG-1401R (310-295916-14), DGP-1500 (310-295916-15), GU-15 (310-295916-16), SW101 (310-295916-17), Trip Blank 1 (310-295916-26), Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28). The requested target analyte list includes acrylonitrile, acid-labile compounds that degrades in an acidic medium. Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid : UG-90 (310-295916-1), UG-201 (310-295916-2), TDG-301 (310-295916-3), TDG-305 (310-295916-4), DG-1001 (310-295916-7), DG-1005 (310-295916-8), DG-1101 (310-295916-9) and (310-295853-B-6). The requested target analyte list includes acrylonitrile, acid-labile compounds that degrades in an acidic medium. Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample(s) was received preserved with hydrochloric acid. Vial preservation was pH <2 rather than pH 4-5. : MW-D1 (310-295916-24) and MW-D2 (310-295916-25). The requested target analyte list includes Acrylonitrile, an acid-labile compound that degrades in an acidic medium.
Condition		X		Method 8260D: The method requirement for no headspace was not met. The following volatile samples were analyzed with headspace in the sample container(s): Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28).
Case Narrative	X			
Holding Times		X		Method 8260D: The following samples were analyzed outside of analytical holding time for Acrylonitrile: GU-15 (310-295916-16),SW-101 (310-295916-17), Trip Blank 1 (310-295916-26), Trip Blank 2 (310-295916-27) and Trip Blank 3 (310-295916-28).
Analytical Sensitivity and Blanks				
Method Blank Detections		X		Cobalt and Copper were detected at J flag concentrations.
Trip Blank Detections	X			No detections.
Accuracy				
ICV/CCV	X			
LCS/LCSD		X		Method 6020B: The laboratory control sample (LCS) for preparation batch 310-441160 and analytical batch 310-441932 recovered outside control limits for the following analytes: silver. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.
MS/MSD	X			
Surrogates (organics only)	X			
Precision				
QA/QC Sample RPDs	X			
Field Duplicates	X			A field duplicate sample was collected at DG-1001 and DG-901. RPD for analyzed parameters was <50% with the exception of Cobalt (97%), Copper (51%), and Lead (67%) at DG-1001.

Appendix C
Summary of Groundwater Chemistry

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Antimony, mg/L (CAS NO - 7440-36-0)	4/8/2008	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	7/1/2008	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	8/26/2008	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	10/21/2008	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	12/9/2008	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A
	4/3/2009	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	6/3/2009	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	< 0.006	N/A	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	9/29/2009	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.006	< 0.006	< 0.006	< 0.006	< 0.012	< 0.006	N/A	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0118	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	0.00625	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00925	0.0105	N/A
	12/6/2010	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.00636	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	< 0.006	< 0.006
	5/17/2011	0.00999	0.00972	0.00836	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.0117	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	0.00989	0.0102	< 0.006
	9/27/2011	< 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	N/A	0.00667	< 0.006	< 0.006
	5/2/2012	0.0133	0.0139	0.0104	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	0.0116	0.0171	< 0.006	< 0.006	0.00979	N/A	N/A	N/A	N/A	0.0139	0.0143	< 0.006
	9/25/2012	< 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	N/A	< 0.006	< 0.006	< 0.006
	3/26/2013	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	< 0.006	N/A	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	N/A	N/A	N/A	N/A	< 0.006	< 0.006	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.006	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.003*	0.00481*	0.00358*	0.00126*	0.00189*	0.00192*	0.00177*	0.00216*	0.00276*	0.00278*	0.00271*	< 0.006	0.00135*	< 0.006	N/A	N/A	N/A	0.00349*	0.00373*	< 0.006
	9/17/2013	N/A	0.00387*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	< 0.012	< 0.012	< 0.012	< 0.006	< 0.012	< 0.006	N/A	N/A	< 0.012	< 0.012	< 0.012	< 0.012	< 0.006	< 0.006	N/A	N/A	N/A	< 0.012	< 0.012	< 0.006
	3/26/2014	N/A	N/A	< 0.012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A	N/A
	7/9/2014	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	< 0.006	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.006	N/A	N/A	N/A
	9/29/2014	< 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	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
	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	N/A	N/A	< 0.006	N/A	N/A
	3/31/2015	< 0.001	0.00037*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000449*	< 0.001	0.000314*	0.00036*	< 0.001	< 0.001	< 0.001	0.000189*	< 0.001	< 0.001	0.000331*	0.000173*
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.000226*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.001	0.00093*	0.000262*	< 0.001	0.000224*	0.000186*	0.000236*	0.000188*	0.000201*	< 0.001	0.000173*	0.000252*	< 0.001	0.000387*	N/A	N/A	< 0.001	< 0.001	< 0.001	0.000289*
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.001	0.000395*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000279*	< 0.001	0.000289*	< 0.001	< 0.001	0.000402*	0.000625*	0.000689*	0.00033*
	4/12/2016	N/A	N/A	0.000256*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 0.001	0.000318*	< 0.001	< 0.001	< 0.001	0.000275*	< 0.001	0.000252*	< 0.001	< 0.001	< 0.001	0.000431*	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	0.000658*	0.000269*
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/11/2017	< 0.001	0.000227*	0.000223*	< 0.001	< 0.001	0.000192*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000332*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000509*	< 0.001
	4/11/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000612*	< 0.001	< 0.001	< 0.001	0.000441*	< 0.001	< 0.001	0.000317*	0.00023*	< 0.001	< 0.001	0.000523*	0.000438*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000489*	< 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
	5/9/2018	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	N/A
	10/2/2018	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
	10/2/2018	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	N/A	N/A	N/A	N/A	N/A
	5/7/2019	< 0.001	0.0009*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00122	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000572*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 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	< 0.001	< 0.001
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 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
	5/20/2020	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	N/A	N/A	N/A
	10/28/2020	< 0.001	< 0.001	< 0.001	0.000782*	< 0.001	< 0.001	0.00234	< 0.001	< 0.001	0.00154	0.000786*	< 0.001	N/A	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 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	< 0.002	< 0.002
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	11/1/2021	< 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	< 0.002	< 0.002
	11/1/2021	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	N/A
	3/29/2022	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	< 0.002	N/A	N/A	N/A	N/A
	7/6/2022	< 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	< 0.002	< 0.002	< 0.002
	7/6/2022	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	< 0.002	N/A
	10/17/2022	< 0.002	0.000773*	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	N/A	< 0.002	< 0.002	0.000757*	N/A	N/A	N/A	< 0.002	< 0.002	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 0.008	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00139*	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	< 0.002	< 0.002	< 0.002
	10/31/2023	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	N/A
	7/9/2024	N/A	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	N/A	N/A	< 0.002	< 0.002	< 0.002
	7/9/2024	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	N/A
	11/18/2024	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002
	11/18/2024	N/A	N/A	< 0.002	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	4/8/2008	< 0.001	0.00109	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	7/1/2008	0.00128	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/26/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	10/21/2008	0.00145	0.00105	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	12/9/2008	0.00269	0.00224	N/A	N/A	N/A	N/A	< 0.001	N/A	0.00107	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	0.00177	N/A	N/A
	4/3/2009	N/A	N/A	< 0.001	< 0.001	0.00124	< 0.001	N/A	< 0.001	N/A	0.00139	N/A	0.00868	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	6/3/2009	N/A	N/A	< 0.001	< 0.001	< 0.001	0.00166	N/A	< 0.001	N/A	< 0.001	N/A	0.00144	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00238	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	0.00555	0.00282	< 0.001	< 0.001	< 0.001	0.00128	N/A	0.0013	N/A	0.00769	0.00332	0.00329	0.00364	N/A	N/A	N/A	N/A	N/A	0.00348	N/A
	9/29/2009	< 0.001	< 0.001	0.00176	< 0.001	< 0.001	0.00138	N/A	0.00151	N/A	0.00188	< 0.001	0.00208	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	< 0.003	< 0.001	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	0.00164	0.00174	0.00188	< 0.001	< 0.001	< 0.001	N/A	0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00137	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.002	< 0.001	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.003	< 0.001	< 0.001	< 0.001	< 0.001	0.00134	< 0.001	< 0.001	< 0.003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.003	N/A
	12/6/2010	< 0.002	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001	0.00234	< 0.002	0.00284	< 0.001	N/A	N/A	N/A	N/A	< 0.002	< 0.002	0.00135
	5/17/2011	< 0.006	< 0.004	< 0.002	< 0.002	< 0.002	< 0.001	< 0.001	< 0.002	< 0.004	< 0.003	< 0.002	0.00241	< 0.002	N/A	N/A	N/A	N/A	< 0.006	< 0.006	0.00179
	9/27/2011	< 0.003	< 0.003	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001	0.00155	< 0.001	N/A	N/A	N/A	N/A	< 0.003	< 0.004	0.00208
	5/2/2012	< 0.006	< 0.006	< 0.001	< 0.003	< 0.002	< 0.001	< 0.001	< 0.003	< 0.006	< 0.003	< 0.002	0.00175	< 0.001	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.001
	9/25/2012	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00295	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.002	N/A	N/A	N/A	N/A	< 0.001	< 0.001	0.00162
	3/26/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	0.00482	< 0.001	0.00121	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00107	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	0.00628	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.002	< 0.001	< 0.001	0.000436*	< 0.001	0.00203	< 0.001	0.000219*	< 0.001	0.00339	< 0.001	0.000737*	< 0.001	0.00279	N/A	N/A	N/A	< 0.001	< 0.001	0.00257
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0135	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 0.002	< 0.004	< 0.001	< 0.002	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001	0.00981	N/A	N/A	N/A	< 0.004	0.000655*	0.0014
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 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
	7/9/2014	N/A	N/A	N/A	N/A	N/A	0.000412*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0011	N/A	N/A	0.00291	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	9/29/2014	< 0.001	< 0.001	< 0.001	< 0.001	0.00558	< 0.001	< 0.001	< 0.001	< 0.001	0.000445*	< 0.001	< 0.001	< 0.001	0.00756	0.00322	0.0077	< 0.001	< 0.001	< 0.001	0.00187
	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	N/A	N/A	< 0.001	N/A	N/A
	1/27/2015	N/A	N/A	N/A	N/A	0.00209	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	< 0.002	< 0.002	< 0.002	< 0.002	0.000987*	0.00133*	< 0.002	0.00118*	< 0.002	0.00142*	< 0.002	0.00202	< 0.002	0.0042	< 0.002	0.0019*	< 0.002	< 0.002	0.00112*	0.00139*
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00117*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.002	< 0.002	< 0.002	< 0.002	0.00181*	0.00121*	< 0.002	< 0.01	< 0.002	< 0.01	< 0.01	< 0.01	< 0.01	0.0238	N/A	N/A	< 0.01	< 0.01	< 0.01	0.00248
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00119*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	0.000801*	< 0.002	< 0.002	0.000678*	0.00143*	0.000971*	0.00133*	0.00403	< 0.002	0.00114*	< 0.002	0.000853*	< 0.002	0.0139	< 0.002	0.000918*	0.00338	0.000882*	0.00216	0.00269
	4/12/2016	N/A	N/A	0.000733*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00231	< 0.002	0.0021	< 0.002	0.00101*	< 0.002	< 0.002	< 0.002	0.0056	0.000684*	0.00081*	N/A	< 0.002	0.00508	0.00188*
	9/20/2016	N/A	N/A	N/A	N/A	0.00109*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A
	4/11/2017	0.000532*	< 0.002	< 0.002	0.000509*	0.000705*	0.00103*	< 0.002	0.00287	< 0.002	0.000643*	< 0.002	< 0.002	< 0.002	0.00584	0.000697*	0.000694*	0.000624*	< 0.002	0.00164*	0.00162*
	4/11/2017	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	N/A
	10/11/2017	< 0.006	< 0.002	< 0.004	< 0.002	< 0.004	0.00142*	< 0.004	0.00363	< 0.002	0.00388	< 0.004	0.000959*	0.00139*	0.00968	0.000932*	0.00146*	0.000597*	< 0.004	0.00208	0.00324
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	0.000809*	0.000614*	0.000636*	0.00082*	0.00078*	0.00169*	< 0.002	0.00316	< 0.002	0.00132*	< 0.002	0.000763*	< 0.002	0.014	0.000692*	0.000628*	0.00104*	< 0.002	0.00174*	0.00381
	5/9/2018	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	N/A
	10/2/2018	0.00109	0.000575*	0.00408	0.00113	0.000731*	0.0022	0.000764*	0.00447	0.000582*	0.00254	0.000442*	0.00105	0.000452*	0.0104	0.00098*	0.00159	0.00114	0.000978*	0.00202	0.00213
	10/2/2018	N/A	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	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.0009*	< 0.002	< 0.002	< 0.002	< 0.002	0.00127*	0.0014*	0.00441	< 0.002	0.00124*	< 0.002	0.00133*	< 0.002	0.0144	< 0.002	0.00178*	0.00162*	< 0.002	0.00216	0.000931*
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	0.00122*	< 0.002	0.0193	0.000812*	< 0.002	0.00268	< 0.002	0.00308	< 0.002	0.00196*	< 0.002	0.00109*	< 0.002	0.0171	< 0.002	0.000888*	0.00116*	< 0.002	0.00218	0.00113*
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0016*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/10/2020	N/A	N/A	0.0102	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/1/2020	N/A	N/A	0.0011*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 0.002	< 0.002	0.00168*	< 0.002	0.00526	< 0.008	0.00309	0.00562	< 0.002	0.00276	< 0.002	< 0.002	< 0.002	0.0072	< 0.002	0.00102*	< 0.002	< 0.002	0.00313	0.00422
	5/20/2020	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	N/A	N/A
	8/17/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/23/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.002	< 0.002	0.00246	0.00704	< 0.002	0.00268	0.00187*	0.0026	< 0.002	0.00319	< 0.002	0.00356	N/A	0.0202	N/A	N/A	N/A	< 0.002	0.00132*	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.002	< 0.002	0.0021	< 0.002	0.00201	0.00112*	0.000989*	0.00272	< 0.002	0.00317	< 0.002	0.00238	< 0.002	0.0196	< 0.002	0.0144	0.000802*	< 0.002	0.00129*	0.00282
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A	N/A
	11/1/2021	0.00081*	< 0.002	0.00196*	< 0.002	0.00221	0.00205	0.0011*	0.00233	< 0.002	0.00233	< 0.002	0.00331	< 0.002	0.0134	< 0.002	0.00339	0.00136*	< 0.002	0.00199*	0.00277
	11/1/2021	N/A	N/A	0.00201	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	< 0.002	N/A	N/A	N/A	N/A
	7/6/2022	< 0.002	< 0.002	0.00145*	< 0.002	< 0.002	0.00203	0.00161*	0.00187*	< 0.002	0.00248	< 0.002	0.00413	0.00103*	0.0145	N/A	N/A	N/A	< 0.002	< 0.002	0.00247
	7/6/2022	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	0.000753*	N/A
	10/17/2022	< 0.002	< 0.002	0.00181*	< 0.002	< 0.002	N/A	0.00101*	N/A	< 0.002	0.00251	N/A	0.00263	< 0.002	0.00949	N/A	N/A	N/A	< 0.002	0.00199*	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	0.000543*	0.000602*	0.00134*	< 0.002	0.000614*	0.00235	0.000664*	N/A	< 0.002	0.00149*	< 0.002	0.000799*	< 0.002	0.0301	0.002	0.000717*	N/A	0.00117*	< 0.002	0.00228
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.00126*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.00128*	0.00117*	0.00183*	0.000595*	< 0.002	0.00123*	< 0.002	0.000783*	< 0.002	0.00263	0.000539*	0.00166*	< 0.002	0.0201	N/A	N/A	N/A	0.000604*	0.00131*	0.00211
	10/31/2023	N/A	N/A	0.00187*	N/A	N/A	N/A	N/A	N/A	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Arsenic, mg/L (CAS NO - 7440-38-2)	7/9/2024	N/A	N/A	0.0143	< 0.002	< 0.002	0.00104*	0.00441	0.0021	< 0.002	0.00244	< 0.002	0.000672*	< 0.002	0.016	0.0147	N/A	N/A	< 0.002	0.000907*	0.00721
	7/9/2024	N/A	N/A	N/A	N/A	0.000974*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 0.002	< 0.002	0.0149	0.000848*	0.0013*	0.00506	0.00308	0.00368	N/A	0.0035	< 0.002	0.00129*	< 0.002	0.0167	N/A	N/A	0.0143	< 0.002	0.00157*	0.0128
	11/18/2024	N/A	N/A	0.0145	N/A	0.00135*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barium, mg/L (CAS NO - 7440-39-3)	4/8/2008	0.0214	0.0284	N/A	N/A	N/A	N/A	0.028	N/A	0.0182	N/A	0.034	N/A	N/A	N/A	N/A	N/A	N/A	0.0238	N/A	N/A
	7/1/2008	0.0186	0.0268	N/A	N/A	N/A	N/A	0.0316	N/A	0.0177	N/A	0.0321	N/A	N/A	N/A	N/A	N/A	N/A	0.0296	N/A	N/A
	8/26/2008	0.0178	0.0255	N/A	N/A	N/A	N/A	0.0291	N/A	0.0184	N/A	0.0299	N/A	N/A	N/A	N/A	N/A	N/A	0.0249	N/A	N/A
	10/21/2008	0.019	0.0248	N/A	N/A	N/A	N/A	0.0305	N/A	0.0303	N/A	0.0331	N/A	N/A	N/A	N/A	N/A	N/A	0.0254	N/A	N/A
	12/9/2008	0.0164	0.0213	N/A	N/A	N/A	N/A	0.0289	N/A	0.0282	N/A	0.036	N/A	N/A	N/A	N/A	N/A	N/A	0.023	N/A	N/A
	4/3/2009	N/A	N/A	0.0118	0.0262	0.0178	0.0245	N/A	0.016	N/A	< 0.01	N/A	0.0649	0.0271	N/A	N/A	N/A	N/A	N/A	0.0102	N/A
	6/3/2009	N/A	N/A	0.0124	0.0247	0.0181	0.0235	N/A	0.0225	N/A	0.0102	N/A	0.049	0.0324	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	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
	8/11/2009	0.0161	0.0264	< 0.01	0.0255	0.0184	0.0233	N/A	0.0178	N/A	0.0219	0.032	0.0526	0.0346	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A
	9/29/2009	0.018	0.0221	0.0134	0.0262	0.0219	0.0283	N/A	0.0204	N/A	0.0103	0.0295	0.0429	0.0451	N/A	N/A	N/A	N/A	N/A	0.0189	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.011	0.0307	0.04	0.0287	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	0.017	0.0272	0.0123	0.0238	0.0173	0.0236	N/A	0.0151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0223	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0118	0.0334	0.0743	0.0331	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	0.0169	0.026	0.0128	0.0205	0.0197	0.0244	0.0303	0.0158	0.0181	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0194	0.0411	N/A
	12/6/2010	0.017	0.0217	0.0173	0.0295	0.021	0.031	0.0316	0.0178	0.0168	0.0135	0.0315	0.0873	0.0322	N/A	N/A	N/A	N/A	0.0193	0.0294	0.152
	5/17/2011	0.0153	0.0186	< 0.01	0.0216	0.0168	0.0225	0.0377	0.0137	0.0142	0.0101	0.0312	0.095	0.026	N/A	N/A	N/A	N/A	0.0161	0.0126	0.124
	9/27/2011	0.0165	0.0236	< 0.01	0.0275	0.0246	0.0266	0.0319	0.0218	0.0184	0.0183	0.0332	0.104	0.0459	N/A	N/A	N/A	N/A	0.0219	0.012	0.0977
	5/2/2012	0.0172	0.0264	0.0113	0.028	0.0202	0.0266	0.039	0.0154	0.0173	0.0203	0.0395	0.0755	0.0408	N/A	N/A	N/A	N/A	0.018	0.0212	0.161
	9/25/2012	0.021	0.0222	0.0304	0.0339	0.0323	0.0402	0.0339	0.0269	0.0241	0.0129	0.042	0.0865	0.0525	N/A	N/A	N/A	N/A	0.0263	0.017	0.227
	1/30/2013	N/A	N/A	N/A	0.0324	0.0176	0.0272	0.0523	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	0.017	0.0248	0.0107	0.0279	0.0257	N/A	0.0458	N/A	0.0205	< 0.01	0.0382	0.0743	0.0362	N/A	N/A	N/A	N/A	0.0242	0.0234	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.138	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	0.0308	N/A	N/A	0.03	N/A	N/A	N/A	N/A	N/A	N/A	0.0601	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.0151	0.0272	0.00963*	0.0378	0.0248	0.0397	0.0342	0.0267	0.0241	0.0102	0.0309	0.0748	0.029	0.068	N/A	N/A	N/A	0.0231	0.0154	0.132
	9/17/2013	N/A	0.0269	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	0.0683	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0644	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.0135	0.019	0.0062*	0.0292	0.0155	0.0251	N/A	N/A	0.0276	0.00299*	0.0312	0.0605	0.0656	0.0668	N/A	N/A	N/A	0.00893*	0.0132	0.157
	3/26/2014	N/A	N/A	0.00629*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.0339	0.00971*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	0.0334	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0559	N/A	N/A	0.114	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0411	N/A	N/A	N/A
	9/29/2014	0.0182	0.0445	0.00774*	0.042	0.0391	0.0441	0.0326	0.0214	0.0242	0.00785*	0.0296	0.101	0.0327	0.0829	0.068	0.0617	0.0398	0.0158	0.0265	0.121
	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	N/A	N/A	0.0161	N/A	N/A
	1/27/2015	N/A	N/A	N/A	N/A	0.0295	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	0.016	0.0266	0.00991	0.0292	0.0221	0.0323	0.0256	0.0188	0.0233	0.01	0.0421	0.0629	0.0317	0.0808	0.0475	0.0652	0.0427	0.0245	0.0241	0.15
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.0345	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	0.0169	0.0452	0.011	0.0316	0.0313	0.0311	0.0374	0.0415	0.0253	0.0133	0.0352	0.0619	0.0329	0.187	N/A	N/A	0.0523	0.023	0.0152	0.108
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.0318	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0491	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	N/A	0.116	N/A	N/A	N/A
	4/12/2016	0.0206	0.0733	0.00982	0.0315	0.0195	0.0317	0.0345	0.0324	0.0145	0.00878	0.0273	0.0451	0.0273	0.145	0.0398	0.0754	0.0929	0.034	0.0676	0.123
	4/12/2016	N/A	N/A	0.0115	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/5/2016	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	0.0296	N/A	N/A	N/A
	9/20/2016	0.0169	0.0572	0.0102	0.0514	0.0223	0.0663	0.0922	0.0405	0.0192	0.00966	0.0303	0.0751	0.0313	0.0624	0.0543	0.0801	N/A	0.0194	0.147	0.0862
	9/20/2016	N/A	N/A	N/A	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	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0359	N/A	N/A	N/A
	11/15/2016	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	N/A	N/A	N/A	0.0862	N/A
	12/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0524	N/A
	4/11/2017	0.0194	0.047	0.0108	0.0384	0.0215	0.0406	0.0355	0.0267	0.0181	0.00872	0.0297	0.0658	0.0328	0.0433	0.0378	0.0564	0.0432	0.0186	0.0696	0.11
	4/11/2017	N/A	N/A	N/A	N/A	0.021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	0.0165	0.0557	0.0109	0.0483	0.025	0.0109	0.0812	0.0409	0.0178	0.0424	0.0323	0.0886	0.0681	0.0586	0.0542	0.0776	0.0452	0.0184	0.0689	0.136
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0368	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/2/2018	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	0.051	N/A	N/A	N/A	N/A
	5/9/2018	0.0205	0.0535	0.0483	0.0365	0.0238	0.0546	0.0365	0.0287	0.0138	0.00904	0.0303	0.0733	0.0346	0.0755	0.0519	0.0474	0.0394	0.0197	0.0545	0.11
	5/9/2018	N/A	N/A	0.0761	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	0.0169	0.072	0.0847	0.0766	0.0258	0.0681	0.0362	0.0304	0.0182	0.0192	0.0311	0.101	0.0352	0.0548	0.0537	0.141	0.0565	0.0178	0.0558	0.0782
	10/2/2018	N/A	N/A	0.0859	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2019	N/A	N/A	0.0216	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0548	N/A	N/A	N/A	N/A
	5/7/2019	0.023	0.0971	0.0285	0.0376	0.0223	0.0361	0.0405	0.0233	0.0181	0.00921	0.0332	0.0823	0.0285	0.0637	0.0549	0.0855	0.0494	0.0175	0.0494	0.0531
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0274	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	0.0248	0.121	0.0448	0.0553	0.0197	0.05	0.0307	0.0397	0.0166	0.00892	0.052	0.101	0.0322	0.0689	0.0508	0.0863	0.0631	0.0214	0.0495	0.0791
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0632	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	0.0212	0.0946	0.027	0.0409	0.029	0.0544	0.0551	0.0446	0.0225	0.00933	0.039	0.117	0.0365	0.109	0.0221	0.0366	0.0676	0.0271	0.0706	0.129
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0219	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	0.0171	0.0993	0.0252	0.0395	0.0261	0.037	0.0413	0.0175	0.0264	0.0112	0.0294	0.094	N/A	0.0525	N/A	N/A	N/A	0.0217	0.0272	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0793	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	0.0165	0.0452	0.0202	0.0312	0.0227	0.0267	0.0304	0.029	0.0229	0.0103	0.0409	0.0971	0.0333	0.0537	0.0362	0.182	0.0309	0.023	0.0339	0.137
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0163	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0289	N/A	N/A	N/A	N/A
	11/1/2021	0.0254	0.0377	0.0183	0.0358	0.0307	0.0366	0.036	0.0328	0.0223	0.0151	0.0433	0.11	0.0437	0.0683	0.0454	0.103	0.0485	0.0226	0.0343	0.203
	11/1/2021	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	N/A	N/A	N/A	N/A
	3/29/2022	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	0.0388	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Barium, mg/L (CAS NO - 7440-39-3)	7/6/2022	0.0189	0.026	0.0135	0.0322	0.0233	0.0736	0.0432	0.0364	0.0179	0.0183	0.0332	0.0937	0.0351	0.0462	N/A	N/A	N/A	0.0167	0.0326	0.133
	7/6/2022	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	0.0329	N/A
	10/17/2022	0.029	0.0297	0.0195	0.0392	0.0282	N/A	0.0423	N/A	0.0219	0.0121	N/A	0.104	0.0495	0.0486	N/A	N/A	N/A	0.0243	0.0333	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0218	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	0.0186	0.0527	0.0216	0.0346	0.0268	0.0574	0.0345	N/A	0.0197	0.0117	0.0338	0.0603	0.0465	0.0406	0.061	0.0432	N/A	0.0335	0.0181	0.145
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.0659	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.019	0.0579	0.0217	0.0405	0.0381	0.0639	0.0392	0.0317	0.0228	0.0143	0.0433	0.107	0.0402	0.0414	N/A	N/A	N/A	0.0214	0.0445	0.166
	10/31/2023	N/A	N/A	0.0223	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	0.0713	0.0343	0.0471	0.0445	0.0848	0.0254	0.0174	0.0136	0.0403	0.07	0.0408	0.0405	0.0944	N/A	N/A	0.0501	0.0479	0.243
	7/9/2024	N/A	N/A	N/A	N/A	0.0759	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	0.018	0.136	0.0317	0.0466	0.0563	0.0838	0.0723	0.033	N/A	0.0154	0.0413	0.114	0.0435	0.0448	N/A	N/A	0.34	0.0203	0.0361	0.287
	11/18/2024	N/A	N/A	0.0303	N/A	0.0667	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beryllium, mg/L (CAS NO - 7440-41-7)	4/8/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	7/1/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/26/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	10/21/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	12/9/2008	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	4/3/2009	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	6/3/2009	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	9/29/2009	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	12/6/2010	< 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	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	5/17/2011	< 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	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	9/27/2011	< 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	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	5/2/2012	< 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	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	9/25/2012	< 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	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	3/26/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	N/A	N/A	N/A	< 0.001	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 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	N/A	N/A	< 0.001	0.00042*	< 0.001
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000449*	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	0.00156	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	< 0.001
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.000229*	< 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
	7/9/2014	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	0.000762*	N/A	N/A	N/A
	8/5/2014	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	< 0.001	N/A	N/A	N/A	N/A
	9/29/2014	< 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	< 0.001	< 0.001
	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	N/A	N/A	< 0.001	N/A	N/A
	3/31/2015	< 0.001	< 0.001	0.000068*	0.000072*	0.000076*	0.000136*	< 0.001	0.000145*	0.000235*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000088*	0.000064*	< 0.001	< 0.001	0.000117*	< 0.001
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.000058*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.001	0.000067*	0.000098*	0.000116*	0.000113*	0.000083*	0.000064*	0.000244*	0.000083*	0.000132*	< 0.001	0.000125*	0.00011*	0.000508*	N/A	N/A	0.000075*	< 0.001	0.000146*	< 0.001
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.000118*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000103*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000497*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000291*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	4/12/2016	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	N/A
	9/20/2016	< 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	< 0.001	< 0.001	< 0.001
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/11/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000144*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	4/11/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.001	< 0.001	< 0.002	< 0.001	< 0.002	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	0.000225*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.002	0.000152*	< 0.001
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 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	< 0.001	< 0.001
	5/9/2018	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	N/A
	10/2/2018	< 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	< 0.001	< 0.001
	10/2/2018	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	N/A
	5/7/2019	< 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	< 0.001	< 0.001
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 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	< 0.001	< 0.001
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 0.001	0.000442*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000314*	< 0.001
	5/20/2020	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	N/A	N/A
	10/28/2020	< 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	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 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	< 0.001	< 0.001
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	11/1/2021	< 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	< 0.001	< 0.001
	11/1/2021	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	N/A
	3/29/2022	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	< 0.001	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Beryllium, mg/L (CAS NO - 7440-41-7)	7/6/2022	< 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	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/6/2022	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	< 0.001	N/A
	10/17/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000549*	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 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	N/A	N/A	< 0.001	< 0.001	< 0.001
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001	0.000332*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/9/2024	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	N/A
	11/18/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000521*	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	0.00167	< 0.001	< 0.001	0.000902*
	11/18/2024	N/A	N/A	< 0.001	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
Cadmium, mg/L (CAS NO - 7440-43-9)	4/8/2008	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	7/1/2008	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	8/26/2008	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	10/21/2008	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	12/9/2008	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A
	4/3/2009	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	6/3/2009	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	9/29/2009	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	N/A
	12/6/2010	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005
	5/17/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005
	9/27/2011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005
	5/2/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005
	9/25/2012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000685	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	< 0.0005
	1/30/2013	N/A	N/A	N/A	N/A	N/A	N/A	0.00163	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	< 0.0005	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	N/A	N/A	N/A	N/A	< 0.0005	< 0.0005	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	N/A	N/A	N/A	0.00367	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	0.00268	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000837	N/A	N/A	N/A	< 0.0005	0.000458*	< 0.0005
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000163*	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.000181*	< 0.0005	< 0.0005	0.000499*	< 0.0005	< 0.0005	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	0.0000824*	0.00181	0.000464*	N/A	N/A	N/A	0.0000882*	0.000291*	< 0.0005
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.000678	< 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
	7/9/2014	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	< 0.02	N/A	N/A	0.000865	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	9/29/2014	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000232*	0.000113*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000111*	< 0.0005	0.000097*	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	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	N/A	N/A	< 0.0005	N/A	N/A
	3/31/2015	< 0.0005	< 0.0005	< 0.0005	0.00228	< 0.0005	0.000152*	< 0.0005	< 0.0005	0.000244*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00012*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	3/31/2015	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	N/A
	8/25/2015	< 0.0005	0.00021*	< 0.0005	0.00205	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00033*	N/A	N/A	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.0005	< 0.0005	< 0.0005	0.000389*	< 0.0005	< 0.0005	0.00006*	0.000051*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000138*	0.000069*	0.000098*	0.000089*	0.000657	0.00068	< 0.0005
	4/12/2016	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	N/A
	6/7/2016	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	< 0.0005	0.000179*	N/A
	9/20/2016	< 0.0005	< 0.0005	< 0.0005	0.00103	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00011*	0.000085*	N/A	< 0.0005	0.00018*	< 0.0005
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A
	4/11/2017	< 0.0005	< 0.0005	< 0.0005	0.00123	< 0.0005	0.000198*	< 0.0005	0.000051*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000076*	0.000121*	< 0.0005	< 0.0015	0.000292*	< 0.0005
	4/11/2017	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.0015	< 0.0005	< 0.001	0.000539	< 0.001	< 0.0005	< 0.001	0.000081*	< 0.0005	< 0.0005	< 0.001	< 0.0005	0.000367*	< 0.0005	0.000168*	0.000273*	< 0.0005	< 0.001	0.000413*	0.000046*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.0005	< 0.0005	< 0.0005	0.000246*	< 0.0005	0.000111*	< 0.0005	0.000087*	< 0.0005	< 0.0005	0.000073*	< 0.0005	< 0.0005	< 0.0005	0.000072*	< 0.0005	< 0.0005	0.000096*	0.000241*	< 0.0005
	5/9/2018	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	N/A
	10/2/2018	< 0.0005	< 0.0005	0.000177*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000189*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10/2/2018	N/A	N/A	0.000214*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.000418*	0.000174*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00008*	0.000101*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000186*	0.00028*	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 0.0001	0.000039*	0.0001	0.000119	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000048*	< 0.0001	< 0.0001	< 0.0001	0.000116	0.000231	< 0.0001	0.000049*	0.000219	< 0.0001
	9/24/2019	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	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 0.0001	0.000066*	0.000045*	0.000039*	< 0.0001	< 0.0004	0.000159	0.000077*	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000115	< 0.0001	0.000041*	< 0.0001	0.000273	0.000349	< 0.0001
	5/20/2020	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	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.0001	< 0.0001	0.000065*	< 0.0001	< 0.0001	< 0.0001	0.000104	0.000075*	< 0.0001	< 0.0001	0.000068*	< 0.0001	N/A	0.00015	N/A	N/A	N/A	0.000088*	0.00018	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.0001	0.000106	0.000058*	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000072*	0.000103	< 0.0001	0.000104	< 0.0001	< 0.0001	0.000105	0.000075*	0.000271	< 0.0001	0.000323	0.000124	< 0.0001
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0001	N/A	N/A	N/A	N/A
	11/1/2021	0.000067*	0.000069*	0.000072*	< 0.0001	0.000061*	< 0.0001	< 0.0001	0.00006*	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000088*	0.00008*	0.000211	0.000081*	< 0.0001	0.000178	< 0.0001
	11/1/2021	N/A	N/A	0.000056*	N/A	N/A	N/A	N/A	N/A	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Cadmium, mg/L (CAS NO - 7440-43-9)	3/29/2022	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	0.000092*	N/A	N/A	N/A	N/A
	7/6/2022	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000075*	0.000065*	0.000091*	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000085*	0.000081*	N/A	N/A	N/A	< 0.0001	< 0.0001	< 0.0001
	7/6/2022	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	0.000056*	N/A
	10/17/2022	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	N/A	**0.000125**	N/A	< 0.0001	< 0.0001	N/A	< 0.0001	**0.000125**	< 0.0001	N/A	N/A	N/A	< 0.0001	**0.000113**	N/A
	10/17/2022	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	N/A	N/A	N/A	N/A
	5/30/2023	< 0.0002	0.000137*	0.000193*	< 0.0002	< 0.0002	**0.000278**	0.0001*	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	< 0.0002	< 0.0002	< 0.0002
	5/30/2023	N/A	N/A	N/A	N/A	N/A	**0.000376**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	**0.00026**	**0.000283**	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	**0.000301**	< 0.0002	< 0.0002	< 0.0002	0.000211	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	< 0.0002	0.000103*	< 0.0002
	7/9/2024	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	N/A	N/A	N/A
	11/18/2024	< 0.0002	0.000101*	< 0.0002	< 0.0002	< 0.0002	**0.000223**	< 0.0002	< 0.0002	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	0.00137	< 0.0002	< 0.0002	0.000583
	11/18/2024	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	N/A	N/A	N/A
Chromium, mg/L (CAS NO - 7440-47-3)	4/8/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/1/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	8/26/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	10/21/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	12/9/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	4/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/29/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	12/6/2010	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/17/2011	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	**0.044**	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02
	9/27/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/2/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/25/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	3/26/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.00409*	0.00265*	0.00722*	0.00453*	0.00255*	0.00299*	0.00347*	0.00393*	0.00181*	0.00358*	0.00312*	0.00178*	0.00169*	0.00296*	N/A	N/A	N/A	0.00481*	0.00599*	< 0.02
	9/17/2013	N/A	0.00233*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00179*	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.00449*	< 0.02	0.00522*	< 0.02	< 0.02	< 0.02	N/A	N/A	0.00363*	< 0.02	< 0.02	< 0.02	0.00488*	0.00497*	N/A	N/A	N/A	0.00513*	< 0.02	< 0.02
	3/26/2014	N/A	N/A	0.00664*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 0.02	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	9/29/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0114*	0.00868*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	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	N/A	N/A	< 0.02	N/A	N/A
	3/31/2015	< 0.005	< 0.005	0.00185*	0.00128*	< 0.005	0.00276*	0.00137*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00236*	< 0.005	0.00245*	< 0.005	< 0.005	< 0.005	< 0.005
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00292*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.005	< 0.005	0.00209*	0.00135*	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	0.0131*	N/A	N/A	< 0.025	< 0.025	< 0.025	< 0.005
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00298*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.005	0.000443*	0.00263*	0.00147*	0.000441*	0.000482*	0.00276*	**0.00532**	0.00146*	< 0.005	0.000419*	< 0.005	< 0.005	**0.00789**	< 0.005	0.000512*	0.00169*	0.00102*	0.00111*	0.000762*
	4/12/2016	N/A	N/A	0.00187*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 0.005	< 0.005	0.00102*	0.000935*	< 0.005	< 0.005	0.000736*	0.000893*	0.000841*	< 0.005	< 0.005	< 0.005	< 0.005	0.00148*	0.000491*	0.00094*	N/A	< 0.005	0.00479*	0.000666*
	9/20/2016	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	4/11/2017	< 0.005	< 0.005	0.00128*	0.000957*	< 0.005	0.00108*	0.00106*	0.000992*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.015	< 0.005	< 0.005
	4/11/2017	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.005	< 0.005	< 0.01	0.000826*	< 0.01	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00237*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00102*	0.00086*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.005	< 0.005	< 0.005	0.00292*	< 0.005	0.00242*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00206*	0.000932*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	5/9/2018	N/A	N/A	0.000819*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	< 0.005	0.00132*	0.00162*	0.00199*	0.00121*	0.00272*	0.00249*	0.00278*	0.00184*	0.00137*	0.00161*	0.00154*	0.00147*	0.00147*	0.00127*	0.00134*	0.00173*	0.00117*	0.00377*	**0.00504**
	10/2/2018	N/A	N/A	0.00131*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.00101*	0.0011*	< 0.005	0.00137*	< 0.005	< 0.005	0.00395*	0.00205*	0.00134*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00175*	0.00328*	0.00111*	< 0.005	< 0.005	0.00106*
	5/7/2019	N/A	N/A	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	N/A	N/A	N/A
	9/24/2019	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00123*	< 0.005	< 0.005	< 0.005	< 0.005	0.000998*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00726**	< 0.005
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02	**0.0082**	**0.00647**	0.00291*	< 0.005	< 0.005	< 0.005	< 0.005	0.002*	< 0.005	< 0.005	< 0.005	< 0.005	**0.00718**	0.00122*
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00211*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.005	< 0.005	< 0.005	0.00183*	< 0.005	< 0.005	0.00409*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	0.00127*	N/A	N/A	N/A	< 0.005	0.00311*	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.005	< 0.005	< 0.005	0.00123*	< 0.005	< 0.005	0.00198*	0.0017*	0.00139*	< 0.005	< 0.005	< 0.005	< 0.005	0.00135*	< 0.005	0.00147*	< 0.005	< 0.005	0.0013*	< 0.005
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	11/1/2021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00113*	0.00198*	< 0.005	< 0.005	< 0.005	< 0.005	0.00182*	< 0.005	**0.00622**	< 0.005	< 0.005	0.00433*	0.00207*
	11/1/2021	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	N/A
	3/29/2022	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	< 0.005	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chromium, mg/L (CAS NO - 7440-47-3)	7/6/2022	< 0.005	< 0.005	< 0.005	0.00143*	< 0.005	0.00499*	0.00487*	0.00267*	< 0.005	< 0.005	< 0.005	< 0.005	0.00302*	0.0015*	N/A	N/A	N/A	< 0.005	< 0.005	0.00162*
	7/6/2022	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	< 0.005	N/A
	10/17/2022	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	0.00153*	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	0.00342*	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00114*	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00339*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.0123	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005
	7/9/2024	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	N/A
	11/18/2024	< 0.005	< 0.005	< 0.005	0.00139*	0.00492*	0.013	0.00528	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	0.0307	< 0.005	< 0.005	0.0272
	11/18/2024	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	N/A	N/A	N/A
Cobalt, mg/L (CAS NO - 7440-48-4)	4/8/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/1/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	8/26/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	10/21/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	12/9/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	4/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/29/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	12/6/2010	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/17/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/27/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/2/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/25/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	3/26/2013	0.0021	< 0.00132	0.00164	< 0.00132	0.00207	N/A	0.00346	N/A	0.00262	< 0.00132	0.00268	< 0.00132	0.00174	N/A	N/A	N/A	N/A	0.0016	< 0.00132	N/A
	3/26/2013	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	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00313	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 0.00132	N/A	N/A	< 0.00132	N/A	N/A	N/A	N/A	N/A	N/A	< 0.00132	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	< 0.00132	N/A	N/A	N/A	< 0.00132	< 0.00132	< 0.00132
	9/17/2013	N/A	< 0.00132	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00175	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.00566	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	N/A	N/A	< 0.00241	< 0.00241	< 0.00241	< 0.00241	0.00384	< 0.00241	N/A	N/A	N/A	< 0.00241	< 0.00241	< 0.00241
	3/26/2014	N/A	N/A	< 0.00241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.00241	< 0.00241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 0.00241	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00828	N/A	N/A	N/A
	8/5/2014	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	< 0.00241	N/A	N/A	N/A	N/A
	9/29/2014	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	< 0.00241	0.00712	< 0.00241	< 0.00241	< 0.00241	0.00313*	< 0.00241
	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	N/A	N/A	< 0.00241	N/A	N/A
	3/31/2015	0.00092	0.000118*	0.000107*	0.000428*	0.000671	0.000585	0.000472*	0.000541	0.00112	0.000307*	0.000729	0.00051	0.000255*	0.000636	0.000491*	0.000919	0.000192*	0.000209*	0.000482*	0.000452*
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00105	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	0.000613	0.000155*	0.000142*	0.000308*	0.000384*	0.000204*	0.00038*	0.00108	0.000785*	< 0.0025	0.000525*	0.000465*	0.00046*	0.00174*	N/A	N/A	0.000495*	< 0.0025	0.000425*	0.000263*
	8/25/2015	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	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000474*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	0.000431*	0.000044*	0.000135*	0.00026*	0.000243*	0.000137*	0.000973	0.002	0.000833	0.000106*	0.000309*	0.000293*	0.00008*	0.00137	0.00031*	0.00057	0.00834	0.000672	0.00282	0.00115
	4/12/2016	N/A	N/A	0.000133*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/5/2016	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	0.00271	N/A	N/A	N/A
	9/20/2016	0.000345*	0.00004*	0.000034*	0.000269*	0.00007*	0.000166*	0.000447*	0.000739	0.000663	0.000102*	0.000358*	0.000075*	0.000085*	0.000484*	0.000401*	0.000348*	N/A	0.000141*	0.00227	0.000483*
	9/20/2016	N/A	N/A	N/A	N/A	0.000167*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00042*	N/A	N/A	N/A
	4/11/2017	0.000402*	< 0.0005	0.000055*	0.000267*	0.00007*	0.000111*	0.000425*	0.001	0.000762	0.000249*	0.000383*	0.000204*	0.00013*	0.000069*	0.000213*	0.00018*	0.000263*	0.00021*	0.0012	0.000948
	4/11/2017	N/A	N/A	N/A	N/A	0.00016*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	0.000392*	< 0.0005	< 0.001	0.000249*	< 0.001	0.000108*	0.000194*	0.00248	0.00044*	0.000478*	0.000444*	0.00014*	0.00149	0.000641	0.000471*	0.00142	0.000312*	0.000218*	0.00141	0.00184
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000096*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	0.000397*	< 0.0005	< 0.0005	0.000309*	0.000095*	0.000348*	0.00013*	0.00131	0.00046*	0.000093*	0.000152*	0.000102*	0.000128*	0.000906	0.000373*	0.000145*	0.000235*	0.000205*	0.00106	0.00162
	5/9/2018	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	N/A
	10/2/2018	< 0.001	< 0.001	0.00472	0.000581*	< 0.001	0.000565*	< 0.001	0.000773*	0.000572*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00155	< 0.001	0.000504*	0.00106	0.00104
	10/2/2018	N/A	N/A	0.00472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2019	N/A	N/A	0.000318*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.00094	0.000264*	0.00046*	0.000425*	< 0.0005	0.000146*	0.00119	0.000957	0.000576	0.000225*	0.00022*	0.000154*	0.000156*	0.00207	0.000584	0.00187	0.00133	0.000288*	0.00397	0.000369*
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000783	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/23/2019	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	N/A	0.000469*	N/A
	9/24/2019	0.000847	0.000095*	0.00303	0.000806	< 0.0005	0.000575	0.000094*	0.000328*	0.000233*	0.000113*	0.000364*	< 0.0005	< 0.0005	0.000332*	0.000195*	0.00213	0.000208*	0.000728	0.00163	0.000247*
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000242*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/10/2020	N/A	N/A	0.00234	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/1/2020	N/A	N/A	0.00351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	0.000107*	< 0.0005	0.00116	0.000665	0.000751	0.00128*	0.00281	0.00195	0.00068	0.00022*	0.000213*	0.000275*	0.000194*	0.00122	0.000108*	0.000805	< 0.0005	0.00165	0.00561	0.0018
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000821	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00074	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00393	N/A
	9/23/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00105	N/A
	10/28/2020	0.000132*	< 0.0005	0.000696	0.000473*	0.000094*	0.000458*	0.00101	0.000669	0.000591	0.000261*	0.0011	0.00136	N/A	0.000738	N/A	N/A	N/A	0.000414*	0.000974	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000279*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Cobalt, mg/L (CAS NO - 7440-48-4)	5/25/2021	0.000349*	0.000127*	**0.000534**	0.000341*	**0.000877**	0.000368*	**0.000796**	**0.000776**	**0.000609**	0.000442*	0.00046*	0.000248*	0.000261*	**0.00101**	< 0.0005	**0.00382**	**0.00167**	**0.00191**	**0.000728**	**0.0014**
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000633**	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000135*	N/A	N/A	N/A	N/A
	11/1/2021	**0.00109**	0.000275*	0.000424*	0.000364*	0.000436*	0.000304*	**0.000525**	**0.000695**	**0.000532**	0.000387*	**0.000577**	< 0.0005	0.000211*	**0.00114**	0.000419*	**0.00197**	**0.00121**	**0.00158**	**0.00189**	**0.00206**
	11/1/2021	N/A	N/A	0.000435*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	**0.000605**	N/A	N/A	N/A	N/A
	7/6/2022	0.000279*	0.000227*	0.000265*	0.000332*	< 0.0005	**0.0014**	**0.00158**	**0.00161**	0.000311*	0.000445*	**0.000582**	0.000439*	**0.00106**	**0.000735**	N/A	N/A	N/A	**0.000887**	0.000469*	**0.000747**
	7/6/2022	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	**0.000501**	N/A
	10/17/2022	**0.000584**	**0.000511**	0.000369*	0.000325*	0.000356*	N/A	**0.000928**	N/A	0.000416*	**0.000531**	N/A	0.000328*	0.000489*	**0.000882**	N/A	N/A	N/A	**0.000967**	**0.00268**	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000427*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/20/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000516**	N/A
	5/30/2023	0.000216*	0.000236*	0.000331*	0.000231*	0.000237*	**0.00199**	**0.000905**	N/A	0.00038*	0.000245*	0.000316*	< 0.0005	0.000263*	**0.000556**	**0.00178**	< 0.0005	N/A	0.000464*	**0.00287**	**0.00136**
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.00038*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	**0.000648**	0.000301*	0.000487*	0.000225*	< 0.0005	0.000376*	0.000289*	**0.000658**	**0.000503**	0.000192*	0.000341*	0.000192*	0.000209*	< 0.0005	N/A	N/A	N/A	0.000359*	0.000347*	**0.000849**
	10/31/2023	N/A	N/A	0.000292*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	**0.00772**	0.00048*	**0.000575**	0.000294*	0.00679	0.000171*	0.000288*	**0.000506**	**0.000543**	< 0.0005	**0.000548**	< 0.0005	**0.00113**	N/A	N/A	**0.00208**	**0.000649**	**0.00338**
	7/9/2024	N/A	N/A	N/A	N/A	0.000401*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	**0.00053**	**0.000765**	**0.00347**	**0.00158**	**0.00356**	**0.0048**	**0.00259**	**0.000866**	N/A	0.000486*	0.000354*	0.000495*	0.000356*	0.000175*	N/A	N/A	0.0229	0.000413*	**0.000971**	0.0134
	11/18/2024	N/A	N/A	**0.00362**	N/A	**0.00122**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copper, mg/L (CAS NO - 7440-50-8)	4/8/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	**0.0267**	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/1/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	**0.0219**	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	8/26/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	10/21/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	12/9/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	4/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/29/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	12/6/2010	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/17/2011	**0.0423**	**0.0302**	**0.028**	< 0.02	< 0.02	< 0.02	**0.0229**	**0.0278**	**0.0271**	**0.0348**	**0.0251**	< 0.02	**0.0202**	N/A	N/A	N/A	N/A	**0.0432**	**0.0431**	< 0.02
	9/27/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/2/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/25/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	3/26/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	3/26/2013	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	N/A
	4/22/2013	N/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	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 0.02	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
	9/17/2013	< 0.02	< 0.02	< 0.02	< 0.02	0.0022*	0.00181*	0.0023*	0.00219*	< 0.02	< 0.02	0.0015*	< 0.02	< 0.02	0.00329*	N/A	N/A	N/A	0.00217*	0.0112*	< 0.02
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00245*	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.0188*	< 0.02	0.00638*	< 0.02	0.0191*	< 0.02	N/A	N/A	0.00535*	< 0.02	0.00441*	0.0114*	0.0113*	0.00806*	N/A	N/A	N/A	0.0108*	**0.027**	< 0.02
	3/26/2014	N/A	N/A	**0.0203**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.00964*	< 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
	7/9/2014	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	**0.02**	N/A	N/A	N/A
	8/5/2014	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	< 0.02	N/A	N/A	N/A	N/A
	9/29/2014	< 0.02	< 0.02	< 0.02	0.00538*	< 0.02	0.0115*	< 0.02	0.0119*	< 0.02	< 0.02	< 0.02	< 0.02	0.00614*	0.00476*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	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	N/A	N/A	< 0.02	N/A	N/A
	3/31/2015	< 0.002	**0.00217**	**0.0121**	**0.00368**	**0.00663**	**0.0205**	**0.0107**	**0.00364**	**0.00858**	**0.00203**	**0.0101**	**0.00746**	**0.00679**	**0.00541**	**0.00616**	**0.0168**	**0.00283**	**0.0266**	**0.0101**	**0.00407**
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.0035**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.002	**0.00425**	0.000496*	**0.00208**	0.000748*	0.00128*	0.00121*	**0.00741**	0.00156*	**0.00281**	**0.00271**	**0.00374**	**0.00276**	**0.0179**	N/A	N/A	0.0019*	0.00168*	**0.00442**	0.00143*
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.00675**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00403**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 0.005	< 0.005	**0.0118**	**0.0112**	**0.00695**	0.00492*	0.0028*	**0.0292**	0.00359*	0.00282*	0.00436*	**0.00683**	0.00286*	**0.0081**	0.00253*	0.00401*	0.00191*	**0.0154**	**0.0191**	0.00245*
	4/12/2016	N/A	N/A	0.00258*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 0.005	< 0.005	0.00148*	0.00363*	0.00219*	0.00241*	**0.00791**	0.00184*	0.00267*	< 0.005	0.00173*	0.00339*	0.00229*	0.00194*	0.00381*	0.00486*	N/A	0.00191*	**0.00936**	0.00214*
	9/20/2016	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	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00127*	N/A	N/A	N/A
	4/11/2017	< 0.005	< 0.005	**0.00615**	**0.011**	< 0.005	**0.00637**	< 0.005	**0.0103**	0.00496*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.015	**0.00609**	< 0.005
	4/11/2017	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.005	< 0.005	< 0.01	0.0029*	< 0.01	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.01	0.00276*	0.0102	< 0.005	0.00257*	0.00315*	< 0.005	< 0.01	**0.0075**	< 0.005
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.005	< 0.005	< 0.005	0.00315*	< 0.005	0.00358*	< 0.005	0.00303*	< 0.005	< 0.005	< 0.005	< 0.005	0.00344*	0.00171*	< 0.005	< 0.005	< 0.005	< 0.005	0.0047*	< 0.005
	5/9/2018	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	N/A
	10/2/2018	0.000894*	0.00135*	**0.0116**	**0.00268**	0.000806*	**0.00415**	0.00145*	**0.00407**	0.00152*	**0.00295**	0.00175*	**0.00953**	**0.00306**	0.00158*	**0.00303**	**0.00471**	**0.00305**	0.00169*	**0.0059**	**0.00441**
	10/2/2018	N/A	N/A	**0.0119**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	**0.0135**	0.00471*	< 0.005	**0.0338**	0.00311*	< 0.005	**0.00527**	**0.00702**	**0.00663**	**0.00595**	< 0.005	< 0.005	< 0.005	0.00266*	< 0.005	0.00216*	< 0.005	< 0.005	< 0.005	< 0.005
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0113**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 0.005	< 0.005	0.00249*	< 0.005	< 0.005	**0.00831**	< 0.005	0.00201*	< 0.005	0.00345*	0.00267*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00871**	**0.00711**	< 0.005
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.005	< 0.005	< 0.005	**0.00962**	< 0.005	< 0.02	**0.00654**	**0.00667**	0.00398*	< 0.005	< 0.005	< 0.005	< 0.005	**0.00559**	< 0.005	< 0.005	< 0.005	**0.00531**	**0.0166**	< 0.005
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00394*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.005	< 0.005	0.00355*	0.00286*	< 0.005	< 0.005	**0.00593**	**0.00536**	< 0.005	< 0.005	**0.00909**	< 0.005	N/A	**0.0108**	N/A	N/A	N/A	0.00258*	**0.00638**	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00593**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Copper, mg/L (CAS NO - 7440-50-8)	5/25/2021	< 0.005	< 0.005	0.00421*	0.00193*	0.00261*	< 0.005	0.0034*	0.00395*	0.00407*	< 0.005	**0.00706**	0.00209*	**0.00517**	**0.00531**	0.00279*	**0.0102**	0.00174*	**0.00656**	**0.00882**	< 0.005
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00244*	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00231*	N/A	N/A	N/A	N/A
	11/1/2021	0.00213*	0.00293*	0.0033*	0.00164*	**0.00598**	0.00176*	0.00205*	0.00186*	0.00257*	< 0.005	0.00224*	< 0.005	**0.00645**	**0.00531**	0.00276*	**0.00906**	0.00401*	< 0.005	**0.00964**	0.00201*
	11/1/2021	N/A	N/A	0.00321*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	**0.0073**	N/A	N/A	N/A	N/A
	7/6/2022	< 0.005	0.00299*	0.00293*	0.00294*	< 0.005	**0.00707**	0.00353*	**0.0287**	< 0.005	0.00184*	**0.00931**	< 0.005	**0.0398**	**0.00569**	N/A	N/A	N/A	< 0.005	0.00401*	0.00198*
	7/6/2022	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	0.00427*	N/A
	10/17/2022	0.0042*	< 0.005	0.00419*	< 0.005	**0.00993**	N/A	0.00257*	N/A	< 0.005	< 0.005	N/A	< 0.005	**0.00651**	0.00419*	N/A	N/A	N/A	< 0.005	**0.00633**	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.005	0.00196*	**0.0052**	< 0.005	0.00206*	**0.00678**	0.00289*	N/A	0.00297*	< 0.005	0.00183*	< 0.005	0.00499*	0.00183*	< 0.005	**0.338**	N/A	0.00282*	< 0.005	0.00224*
	5/30/2023	N/A	N/A	N/A	N/A	N/A	**0.00771**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 0.005	0.00191*	0.00408*	< 0.005	< 0.005	0.00306*	< 0.005	0.00218*	< 0.005	< 0.005	0.00261*	< 0.005	0.00332*	< 0.005	N/A	N/A	N/A	< 0.005	0.00291*	0.00197*
	10/31/2023	N/A	N/A	0.00462*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	**0.0146**	< 0.005	0.002*	< 0.005	0.0158	< 0.005	0.00371*	**0.00565**	**0.00892**	< 0.005	0.00315*	< 0.005	0.00351*	N/A	N/A	0.00238*	< 0.005	0.00205*
	7/9/2024	N/A	N/A	N/A	N/A	0.00239*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 0.005	0.00261*	0.00331*	0.00264*	0.00445*	**0.0115**	**0.00789**	< 0.005	N/A	0.00346*	0.00327*	0.00321*	**0.0051**	0.00409*	N/A	N/A	0.0752	< 0.005	0.00272*	0.0482
	11/18/2024	N/A	N/A	0.00323*	N/A	**0.00748**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lead, mg/L (CAS NO - 7439-92-1)	4/8/2008	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	7/1/2008	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	8/26/2008	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	10/21/2008	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	12/9/2008	< 0.004	< 0.004	N/A	N/A	N/A	N/A	**0.0083**	N/A	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A	N/A
	4/3/2009	N/A	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	6/3/2009	N/A	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	< 0.004	N/A	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	9/29/2009	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	**0.00585**	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.004	< 0.004	N/A
	12/6/2010	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004
	5/17/2011	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004
	9/27/2011	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004
	5/2/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004
	9/25/2012	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	**0.00666**	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	N/A	N/A	**0.00484**	< 0.004	< 0.004
	1/30/2013	N/A	N/A	N/A	N/A	N/A	N/A	**0.00644**	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
	3/26/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	< 0.004	N/A	< 0.004	< 0.004	**0.00421**	< 0.004	< 0.004	N/A	N/A	N/A	N/A	< 0.004	< 0.004	N/A
	3/26/2013	N/A	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	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00613**	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 0.004	N/A	N/A	< 0.004	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
	9/17/2013	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.0017*	N/A	N/A	N/A	0.00322*	**0.00464**	< 0.004
	9/17/2013	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	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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	< 0.004	< 0.004	N/A
	3/26/2014	0.00208*	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	N/A	N/A	< 0.004	< 0.004	< 0.004	< 0.004	**0.00926**	0.002*	N/A	N/A	N/A	< 0.004	< 0.004	< 0.004
	3/26/2014	N/A	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	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.00144*	< 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
	7/9/2014	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	N/A	**0.0096**	N/A	N/A	N/A
	8/5/2014	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	< 0.004	N/A	N/A	N/A	N/A
	9/29/2014	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	0.00292*	< 0.004	0.00129*
	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	N/A	N/A	< 0.004	N/A	N/A
	3/31/2015	0.000426*	**0.00136**	**0.000555**	**0.000715**	0.000442*	**0.00179**	**0.00121**	**0.000816**	**0.00154**	0.000254*	**0.00118**	0.000458*	**0.000533**	**0.00134**	**0.000669**	**0.00188**	0.000136*	**0.00115**	**0.00147**	**0.000589**
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.00225**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	**0.000604**	**0.002**	0.000221*	**0.000573**	0.000235*	0.000306*	**0.00159**	0.00139*	**0.000788**	< 0.0025	0.000495*	0.000443*	**0.000876**	**0.00696**	N/A	N/A	0.000555*	< 0.0025	< 0.0025	0.000444*
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.00122**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000653**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	**0.00128**	0.000279*	**0.000549**	**0.000592**	**0.000513**	0.000489*	**0.00285**	**0.00314**	**0.00133**	0.000259*	**0.000664**	**0.000628**	< 0.0005	**0.00408**	< 0.0005	**0.000987**	**0.00054**	**0.00853**	**0.00338**	**0.000798**
	4/12/2016	N/A	N/A	0.000298*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/7/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00131**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000764**	**0.00337**	N/A
	7/5/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000986**	N/A
	9/20/2016	< 0.0005	< 0.0005	< 0.0005	0.000232*	< 0.0005	< 0.0005	**0.00282**	**0.00169**	**0.000921**	< 0.0005	0.000346*	**0.00119**	< 0.0005	**0.00144**	**0.000514**	**0.000704**	N/A	< 0.0005	**0.00282**	**0.000541**
	9/20/2016	N/A	N/A	N/A	N/A	**0.000544**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000343*	N/A	N/A	N/A
	11/15/2016	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	N/A	N/A	N/A	**0.00068**	N/A
	4/11/2017	**0.000872**	< 0.0005	0.000494*	**0.000719**	< 0.0005	< 0.0005	**0.00199**	**0.00236**	0.000487*	< 0.0005	0.000352*	0.000449*	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0015	**0.00227**	**0.000546**
	4/11/2017	N/A	N/A	N/A	N/A	0.000336*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/8/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000974**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00167**	N/A
	10/11/2017	< 0.0005	< 0.0005	0.000325*	< 0.0005	< 0.0005	< 0.0005	**0.00069**	**0.00124**	< 0.0005	< 0.0005	**0.0012**	**0.000562**	0.00221	< 0.0005	**0.000665**	**0.000763**	< 0.0005	< 0.0005	**0.00205**	**0.000608**
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	0.000318*	< 0.0005	< 0.0005	**0.000872**	0.00034*	**0.00119**	0.000332*	**0.00126**	< 0.0005	< 0.0005	0.000354*	0.000498*	0.000379*	**0.00105**	0.000364*	< 0.0005	< 0.0005	< 0.0005	**0.00232**	< 0.0005
	5/9/2018	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	N/A
	7/31/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.0037**	N/A
	9/4/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.000722**	N/A
	10/2/2018	< 0.0005	< 0.0005	**0.000954**	**0.000522**	< 0.0005	**0.00109**	**0.000513**	**0.001**	< 0.0005	0.000266*	0.000336*	**0.00085**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00148**	**0.00137**
	10/2/2018	N/A	N/A	**0.000992**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	**0.00535**	0.00258	< 0.0005	**0.00146**	< 0.0005	< 0.0005	**0.00198**	**0.00133**	**0.000562**	0.000354*	**0.000545**	**0.000976**	< 0.0005	**0.0011**	**0.000579**	**0.00125**	**0.000735**	< 0.0005	< 0.0005	0.000444*
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00186**	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Lead, mg/L (CAS NO - 7439-92-1)	9/24/2019	0.000823	0.000557	0.000552	< 0.0005	< 0.0005	0.000923	< 0.0005	0.000438*	< 0.0005	0.000283*	0.000483*	0.000458*	< 0.0005	0.00101	< 0.0005	< 0.0005	0.000614	0.000544	0.00324	0.000293*
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000535	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	0.000374*	0.000788	0.000579	0.0005	0.000529	0.00249	0.00656	0.00318	0.00176	< 0.0005	0.000373*	0.00212	0.00042*	0.00359	< 0.0005	0.000455*	< 0.0005	0.00251	0.0067	< 0.0005
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000991	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00061	N/A
	10/28/2020	< 0.0005	0.000294*	0.000648	0.000326*	0.00021*	0.000539	0.00547	0.000724	0.000953	0.000223*	0.00112	0.000202*	N/A	0.00166	N/A	N/A	N/A	0.000395*	0.00236	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000779	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	0.000298*	0.00132	0.000954	< 0.0005	0.000325*	0.000323*	0.00326	0.00117	0.000853	< 0.0005	0.00144	0.00316	0.000509	0.00164	< 0.0005	0.00382	< 0.0005	0.00373	0.00146	0.00065
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000231*	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0005	N/A	N/A	N/A	N/A
	11/1/2021	0.00203	0.000756	0.000832	0.000532	0.000846	0.000804	0.00231	0.000824	0.00135	0.000598	0.00109	0.00113	0.000684	0.00196	0.000807	0.00395	0.000465*	< 0.0005	0.00348	0.000943
	11/1/2021	N/A	N/A	0.000999	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	0.000461*	N/A	N/A	N/A	N/A
	7/6/2022	0.00026*	0.000997	0.000453*	< 0.0005	< 0.0005	0.00182	0.00202	0.00257	0.000523	0.00042*	0.000496*	0.000505	0.00291	0.00136	N/A	N/A	N/A	< 0.0005	0.000289*	0.000878
	7/6/2022	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	0.000357*	N/A
	10/17/2022	0.000463*	0.00027*	0.000688	0.00066	0.000392*	N/A	0.00812	N/A	0.000897	0.00053	N/A	0.000415*	0.00175	0.000935	N/A	N/A	N/A	< 0.0005	0.00188	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000591	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 0.0005	0.000422*	0.000647	< 0.0005	< 0.0005	0.00376	0.00144	N/A	0.000767	0.000241*	0.000399*	0.000612	0.000505	0.000279*	0.00187	0.00449	N/A	< 0.0005	< 0.0005	< 0.0005
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.000566	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.000706	0.000656	0.000732	< 0.0005	< 0.0005	0.00133	0.000941	< 0.0005	0.00141	< 0.0005	0.00103	0.00052	0.000475*	< 0.0005	N/A	N/A	N/A	< 0.0005	0.000326*	0.000938
	10/31/2023	N/A	N/A	0.000668	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	0.00397	0.000551	0.000355*	0.000308*	0.0195	< 0.0005	0.00221	0.00139	0.0109	0.00154	0.000966	< 0.0005	0.000824	N/A	N/A	0.00284	0.00117	0.00047*
	7/9/2024	N/A	N/A	N/A	N/A	0.000595	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	0.00134	0.00262	0.000807	0.000639	0.00342	0.00494	0.00223	< 0.0005	N/A	0.00111	0.000605	0.00237	0.000583	0.000348*	N/A	N/A	0.0385	0.000356*	0.000289*	0.0237
	11/18/2024	N/A	N/A	0.00083	N/A	0.00171	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mercury, mg/L (CAS NO - 7439-97-6)	8/11/2009	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.0002	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
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	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	0.0000931*	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0002	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
	5/20/2020	N/A	N/A	< 0.0002	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0002	< 0.0002	< 0.0002	< 0.0002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0002	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
Nickel, mg/L (CAS NO - 7440-02-0)	4/8/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/1/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	8/26/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	10/21/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	12/9/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	4/3/2009	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/3/2009	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	9/29/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A
	12/6/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	5/17/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	0.0714	< 0.05
	9/27/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	5/2/2012	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	9/25/2012	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	3/26/2013	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.0101*	< 0.05	0.00355*	0.00626*	0.00479*	0.00389*	0.00321*	0.00898*	0.00257*	0.0158*	0.00349*	0.00494*	0.00327*	0.00637*	N/A	N/A	N/A	0.0117*	0.0914	0.00813*
	9/17/2013	N/A	0.0038*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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	0.00524*	N/A
	3/26/2014	0.0599	< 0.05	< 0.05	< 0.05	0.0109*	< 0.05	N/A	N/A	0.00711*	0.0121*	< 0.05	0.0118*	0.0099*	< 0.05	N/A	N/A	N/A	0.0259*	0.106	< 0.05
	3/26/2014	N/A	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	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	0.014*	< 0.05	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0103*	N/A	0.0363*	N/A
	9/29/2014	0.0106*	0.0112*	0.0109*	0.00981*	0.0123*	0.0125*	0.00891*	0.0149*	0.0115*	0.00864*	0.0108*	0.0127*	0.0135*	0.0104*	0.0283*	0.0202*	0.0161*	< 0.05	0.0241*	0.0116*
	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	N/A	N/A	0.021*	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Nickel, mg/L (CAS NO - 7440-02-0)	3/31/2015	0.00554	0.00209*	0.00693	0.00478*	0.00365*	0.027	0.00353*	0.00222*	0.00415*	0.0047*	0.00547	0.00844	0.00294*	0.00125*	0.0141	0.00771	0.00699	0.0156	0.0185	0.00634
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00316*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	0.00609*	< 0.025	< 0.025	0.00306*	< 0.025	< 0.025	< 0.025	0.00405*	< 0.025	0.004*	< 0.025	0.00748*	< 0.025	< 0.025	N/A	N/A	0.00832*	0.00442*	0.0107*	0.00448*
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00378*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00279*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	0.00323*	< 0.005	0.0076	0.00538	0.00374*	0.00262*	0.00279*	0.0111	0.00266*	0.00351*	0.00621	0.00396*	0.00197*	0.00351*	0.00877	0.0075	0.0485	0.0134	0.0676	0.00871
	4/12/2016	N/A	N/A	0.00252*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/7/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0483	N/A
	9/20/2016	0.00335*	< 0.005	< 0.005	0.00238*	< 0.005	0.00189*	0.00329*	0.00583	0.00206*	0.00333*	0.0056	< 0.005	0.00184*	< 0.005	0.00872	0.00895	N/A	0.00351*	0.0392	0.00572
	9/20/2016	N/A	N/A	N/A	N/A	0.00776	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	N/A	N/A	N/A
	4/11/2017	0.00222*	< 0.005	0.0093	0.00443*	0.00238*	0.00273*	0.000953*	0.00502	0.00431*	0.00332*	0.00309*	0.00263*	0.00149*	< 0.005	0.00833	0.011	0.00899	0.00983*	0.0517	0.00716
	4/11/2017	N/A	N/A	N/A	N/A	0.00174*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.015	< 0.005	0.00282*	0.00251*	< 0.01	0.00283*	< 0.01	0.00459*	0.00193*	0.00122*	0.0142	0.00543	0.00783	0.00125*	0.013	0.0346	0.012	0.00381*	0.0423	0.0104
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00178*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.005	< 0.005	0.00112*	0.00245*	< 0.005	0.00414*	< 0.005	0.00619	0.00143*	0.0018*	0.00284*	< 0.005	0.00196*	0.00334*	0.00734	0.00649	0.00884	0.00377*	0.0281	0.0104
	5/9/2018	N/A	N/A	0.00145*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	0.00208	< 0.002	0.00448	0.00225	< 0.002	0.00443	0.0011*	0.00628	0.00133*	0.00345	0.00245	0.00296	0.00176*	0.0013*	0.00996	0.0328	0.00523	0.00452	0.0266	0.00758
	10/2/2018	N/A	N/A	0.00449	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.00449*	< 0.005	0.00325*	0.00506	0.00249*	< 0.005	0.00431*	0.00752	0.00379*	0.012	0.00294*	< 0.005	< 0.005	0.00331*	0.0128	0.03	0.00552	0.00668	0.0297	0.00199*
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00685	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	0.00427*	< 0.005	0.00313*	0.00319*	0.00206*	0.00211*	< 0.005	0.0018*	< 0.005	0.01	0.00861	< 0.005	< 0.005	0.00246*	0.0113	0.0431	0.00183*	0.00805	0.0265	0.00178*
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00272*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 0.005	< 0.005	0.00778	0.00526	< 0.005	< 0.02	0.00723	0.00647	0.00267*	0.00254*	0.00343*	< 0.005	0.00216*	0.00252*	0.006	0.0133	< 0.005	0.00781	0.0527	0.0163
	5/20/2020	N/A	N/A	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
	10/28/2020	< 0.005	< 0.005	0.00656	0.00428*	< 0.005	< 0.005	0.00302*	0.00333*	< 0.005	0.00604	0.00861	0.00341*	N/A	< 0.005	N/A	N/A	N/A	0.00832	0.0216	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.005	< 0.005	0.0033*	0.00257*	0.00475*	< 0.005	0.00228*	0.00256*	0.00234*	0.00218*	0.0137	0.00292*	0.00218*	0.00278*	0.0051	0.0238	0.0462	0.0102	0.0378	0.0207
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0058	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00468*	0.0409	N/A	N/A	N/A
	10/3/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0478	N/A	N/A	N/A
	11/1/2021	0.00318*	< 0.005	0.00266*	0.00235*	0.00303*	< 0.005	0.00232*	0.00384*	0.00239*	0.00297*	0.00514	0.0034*	0.00266*	< 0.005	0.00714	0.0102	0.0437	0.00324*	0.019	0.024
	11/1/2021	N/A	N/A	0.00255*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	0.00446*	N/A	N/A	N/A	N/A
	7/6/2022	< 0.005	0.00278*	< 0.005	0.0024*	< 0.005	0.00571	0.00388*	0.0099	< 0.005	0.00417*	0.0113	0.00304*	0.0163	0.00205*	N/A	N/A	N/A	0.00809	0.0127	0.0137
	7/6/2022	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	0.0128	N/A
	10/17/2022	0.00273*	< 0.005	0.00249*	0.00251*	0.00232*	N/A	0.0107	N/A	0.00448*	0.00501	N/A	0.00422*	0.00309*	< 0.005	N/A	N/A	N/A	0.00594	0.0255	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00329*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00339*	0.00228*	N/A	< 0.005	< 0.005	0.00884	< 0.005	< 0.005	< 0.005	0.00926	< 0.005	N/A	0.0161	0.00375*	0.0149
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.00524	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.00255*	< 0.005	0.00198*	0.00296*	0.00251*	0.0031*	< 0.005	0.00883	0.00294*	0.00299*	0.0059	0.00223*	< 0.005	< 0.005	N/A	N/A	N/A	0.00387*	0.0155	0.0142
	10/31/2023	N/A	N/A	0.0021*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	0.00814	0.00256*	0.00527	< 0.005	0.014	< 0.005	< 0.005	0.00398*	0.00679	< 0.005	0.00236*	< 0.005	0.00756	N/A	N/A	0.00508	0.0158	0.0169
	7/9/2024	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	N/A	N/A	N/A
	11/18/2024	< 0.005	< 0.005	< 0.005	0.00242*	0.00298*	0.0102	0.0064	0.00283*	N/A	0.00256*	< 0.005	< 0.005	0.00216*	< 0.005	N/A	N/A	0.0632	0.00291*	0.0124	0.0465
	11/18/2024	N/A	N/A	< 0.005	N/A	0.00489*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Selenium, mg/L (CAS NO - 7782-49-2)	4/8/2008	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	7/1/2008	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	8/26/2008	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	10/21/2008	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	12/9/2008	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	4/3/2009	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	6/3/2009	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	< 0.005	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	9/29/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 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	< 0.005	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00561	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0053	< 0.005	N/A
	12/6/2010	< 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	N/A	< 0.005	< 0.005	< 0.005
	5/17/2011	< 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	N/A	< 0.005	< 0.005	< 0.005
	9/27/2011	< 0.005	0.00515	< 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	N/A	< 0.005	0.00567	< 0.005
	5/2/2012	< 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	N/A	< 0.005	< 0.005	< 0.005
	9/25/2012	< 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	N/A	< 0.005	< 0.005	< 0.005
	3/26/2013	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.005	< 0.005	< 0.005	0.00223*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.015	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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
	3/26/2014	< 0.005	0.00073*	0.000677*	< 0.005	< 0.005	0.00181*	N/A	N/A	< 0.005	< 0.005	0.00108*	< 0.005	0.00128*	0.0173	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005
	3/26/2014	N/A	N/A	0.000746*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	0.014	N/A	N/A	< 0.005	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Selenium, mg/L (CAS NO - 7782-49-2)	9/29/2014	< 0.005	0.0014*	0.000758*	0.00209*	< 0.005	0.00119*	0.00149*	< 0.005	< 0.005	0.00117*	0.00139*	0.000595*	< 0.005	**0.0118**	< 0.005	0.000586*	0.00111*	< 0.005	< 0.005	< 0.005
	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	N/A	N/A	< 0.005	N/A	N/A
	3/31/2015	0.00392*	**0.00878**	0.00369*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0202**	< 0.005	< 0.005	< 0.005	0.00334*	< 0.005	< 0.005
	3/31/2015	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	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.005	**0.0075**	0.00492*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.025	< 0.005	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	N/A	N/A	< 0.025	< 0.025	< 0.025	< 0.005
	8/25/2015	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	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	0.000752*	0.00487*	0.00433*	< 0.005	< 0.005	0.00252*	0.00166*	0.00314*	< 0.005	0.000652*	< 0.005	0.000755*	0.000654*	**0.0269**	0.0027*	0.000691*	0.000646*	0.00489*	0.00114*	0.000811*
	4/12/2016	N/A	N/A	0.00456*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 0.005	0.00225*	0.0038*	< 0.005	< 0.005	0.00161*	0.00212*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0158**	< 0.005	< 0.005	N/A	**0.00719**	< 0.005	< 0.005
	9/20/2016	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A
	4/11/2017	< 0.005	0.00339*	0.0045*	< 0.005	< 0.005	0.00142*	0.00364*	0.00145*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.00831**	< 0.005	< 0.005	< 0.005	0.00578*	0.00115*	< 0.005
	4/11/2017	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.005	**0.00538**	0.00394*	< 0.005	< 0.005	< 0.005	0.00234*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0133**	< 0.005	< 0.005	< 0.005	**0.00588**	< 0.005	< 0.005
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.005	0.0044*	0.00308*	< 0.005	< 0.005	0.00127*	0.00448*	0.000944*	0.00114*	0.000909*	< 0.005	< 0.005	< 0.005	**0.0169**	0.00107*	< 0.005	< 0.005	0.00497*	< 0.005	< 0.005
	5/9/2018	N/A	N/A	0.00344*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	< 0.0025	**0.00302**	< 0.0025	< 0.0025	< 0.0025	0.00151*	**0.00451**	< 0.0025	0.00127*	0.00105*	< 0.0025	< 0.0025	< 0.0025	**0.0294**	< 0.0025	< 0.0025	< 0.0025	**0.00794**	0.00119*	< 0.0025
	10/2/2018	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	N/A	N/A	N/A	N/A
	5/7/2019	0.00283*	0.0026*	0.0011*	< 0.005	< 0.005	< 0.005	**0.005**	< 0.005	0.00101*	< 0.005	< 0.005	< 0.005	< 0.005	**0.00534**	< 0.005	< 0.005	< 0.005	0.00151*	< 0.005	< 0.005
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 0.005	0.00261*	< 0.005	< 0.005	< 0.005	0.00156*	**0.00507**	< 0.005	0.00105*	< 0.005	< 0.005	< 0.005	< 0.005	0.00389*	< 0.005	< 0.005	< 0.005	**0.00754**	< 0.005	< 0.005
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.005	0.00173*	< 0.005	< 0.005	< 0.005	< 0.02	**0.00571**	0.00177*	0.00101*	< 0.005	< 0.005	< 0.005	< 0.005	0.00433*	< 0.005	< 0.005	< 0.005	**0.00773**	< 0.005	< 0.005
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00103*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.005	0.00434*	< 0.005	< 0.005	< 0.005	0.00134*	0.00251*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	**0.0169**	N/A	N/A	N/A	0.00129*	< 0.005	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	0.0024*	**0.00512**	0.00257*	0.00212*	0.0013*	0.00187*	0.00399*	0.0031*	0.00188*	0.00182*	0.00213*	0.00196*	0.00143*	**0.034**	0.00406*	< 0.005	< 0.005	**0.00549**	0.00263*	0.0018*
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00325*	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00485*	N/A	N/A	N/A	N/A
	11/1/2021	< 0.005	**0.0117**	0.00308*	< 0.005	< 0.005	< 0.005	0.00227*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0231**	< 0.005	< 0.005	< 0.005	< 0.005	0.00179*	< 0.005
	11/1/2021	N/A	N/A	0.00303*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	< 0.005	N/A	N/A	N/A	N/A
	7/6/2022	< 0.005	**0.00694**	0.00293*	< 0.005	< 0.005	< 0.005	0.00364*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	**0.0215**	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005
	7/6/2022	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	< 0.005	N/A
	10/17/2022	< 0.005	0.00339*	0.00301*	< 0.005	< 0.005	N/A	0.00232*	N/A	< 0.005	< 0.005	N/A	< 0.005	< 0.005	**0.0193**	N/A	N/A	N/A	< 0.005	< 0.005	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.005	**0.00674**	0.00398*	< 0.005	< 0.005	0.0021*	0.00331*	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00248*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005
	5/30/2023	N/A	N/A	N/A	N/A	N/A	**0.00644**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.00216*	0.00411*	0.00272*	< 0.005	< 0.005	0.00194*	0.00255*	0.00233*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005
	10/31/2023	N/A	N/A	0.00268*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	0.00172*	< 0.005	< 0.005	< 0.005	0.00388*	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00205*	< 0.005	N/A	N/A	0.00236*	< 0.005	< 0.005
	7/9/2024	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	N/A
	11/18/2024	< 0.005	< 0.005	< 0.005	< 0.005	0.00305*	0.00183*	< 0.005	< 0.005	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	0.00239*	< 0.005	< 0.005	0.00184*
	11/18/2024	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	N/A	N/A	N/A
Silver, mg/L (CAS NO - 7440-22-4)	4/8/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	7/1/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	8/26/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	10/21/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	12/9/2008	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A
	4/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/3/2009	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	9/29/2009	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	12/6/2010	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/17/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/27/2011	< 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	N/A	< 0.02	< 0.02	< 0.02
	5/2/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/25/2012	< 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	N/A	< 0.02	< 0.02	< 0.02
	3/26/2013	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	< 0.02	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 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	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	0.00413*	0.00266*	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	0.00301*	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	N/A	0.00354*	< 0.02	< 0.02
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	0.00322*	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Silver, mg/L (CAS NO - 7440-22-4)	9/29/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	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	N/A	N/A	< 0.02	N/A	N/A
	3/31/2015	0.000052*	< 0.001	< 0.001	< 0.001	< 0.001	0.000149*	< 0.001	< 0.001	0.000051*	< 0.001	0.000066*	0.000044*	< 0.001	< 0.001	0.000252*	0.000073*	< 0.001	< 0.001	< 0.001	< 0.001
	3/31/2015	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	N/A
	8/25/2015	0.000139*	0.000118*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000139*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 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	< 0.001	< 0.001
	4/12/2016	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	N/A
	9/20/2016	< 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	< 0.001	< 0.001	< 0.001
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A
	4/11/2017	< 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	< 0.003	< 0.001	< 0.001
	4/11/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000184*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000146*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00035*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/9/2018	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	N/A
	10/2/2018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
	10/2/2018	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	N/A
	5/7/2019	< 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	< 0.001	< 0.001
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 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	< 0.001	< 0.001
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 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
	5/20/2020	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	N/A	N/A
	10/28/2020	< 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	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 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	< 0.001	< 0.001
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	11/1/2021	< 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	< 0.001	< 0.001
	11/1/2021	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	N/A
	3/29/2022	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	< 0.001	N/A	N/A	N/A	N/A
	7/6/2022	< 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	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/6/2022	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	< 0.001	N/A
	10/17/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.001	**0.00134**	**0.00153**	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 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	N/A	N/A	< 0.001	< 0.001	< 0.001
	10/31/2023	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	N/A
	7/9/2024	N/A	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	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/9/2024	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	N/A
	11/18/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.004	< 0.001	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2024	N/A	N/A	< 0.001	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
Thallium, mg/L (CAS NO - 7440-28-0)	4/8/2008	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	7/1/2008	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	8/26/2008	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	10/21/2008	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	12/9/2008	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A
	4/3/2009	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	6/3/2009	N/A	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	9/29/2009	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	**0.00224**	N/A
	4/6/2010	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A
	6/17/2010	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	< 0.002	N/A
	12/6/2010	< 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	N/A	< 0.002	< 0.002	< 0.002
	5/17/2011	< 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	N/A	< 0.002	< 0.002	< 0.002
	9/27/2011	< 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	N/A	< 0.002	< 0.002	< 0.002
	5/2/2012	< 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	N/A	< 0.002	< 0.002	< 0.002
	9/25/2012	< 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	N/A	< 0.002	< 0.002	< 0.002
	3/26/2013	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	< 0.002	N/A	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	N/A	N/A	N/A	N/A	< 0.002	< 0.002	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.002	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 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	N/A	N/A	N/A	0.0006*	0.00117*	< 0.002
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	< 0.002	N/A
	3/26/2014	< 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	< 0.002	< 0.002	< 0.002
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A
	7/9/2014	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	< 0.002	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.002	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Thallium, mg/L (CAS NO - 7440-28-0)	9/29/2014	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	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	N/A	N/A	< 0.002	N/A	N/A
	3/31/2015	0.000037*	< 0.001	< 0.001	< 0.001	< 0.001	0.000034*	< 0.001	0.000035*	0.000387*	< 0.001	0.000038*	< 0.001	< 0.001	< 0.001	0.000041*	0.000043*	< 0.001	< 0.001	0.000082*	< 0.001
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.000041*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.001	0.000045*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.005	< 0.005	< 0.001	0.000037*	0.000075*	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.001
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00005*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.001	< 0.001	< 0.001	0.000036*	< 0.001	< 0.001	0.000061*	0.000078*	< 0.001	0.000027*	< 0.001	< 0.001	< 0.001	0.000044*	< 0.001	< 0.001	0.000067*	0.000064*	0.000166*	< 0.001
	4/12/2016	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	N/A
	9/20/2016	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.000033*	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	0.00018*	< 0.001
	9/20/2016	N/A	N/A	N/A	N/A	0.000031*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000033*	N/A	N/A	N/A
	4/11/2017	< 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	< 0.003	0.000249*	< 0.001
	4/11/2017	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 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	0.000069*	0.000214*	< 0.001
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 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	0.000181*	< 0.001
	5/9/2018	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	N/A
	10/2/2018	< 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	< 0.002	< 0.002
	10/2/2018	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	N/A
	5/7/2019	< 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	< 0.001	< 0.001
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 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	< 0.001	< 0.001
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.004	< 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
	5/20/2020	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	N/A	N/A
	10/28/2020	< 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	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.001	< 0.001	0.00122	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00166	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.001	N/A	N/A	N/A	N/A
	11/1/2021	< 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	< 0.001	< 0.001
	11/1/2021	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	N/A
	3/29/2022	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	< 0.001	N/A	N/A	N/A	N/A
	7/6/2022	< 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	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/6/2022	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	< 0.001	N/A
	10/17/2022	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	N/A	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	N/A	N/A	N/A	< 0.001	< 0.001	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.001	0.00279	0.00381	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	< 0.001	< 0.001
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.0104	< 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	N/A	N/A	0.0028	0.000832*	< 0.001
	10/31/2023	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	N/A
	7/9/2024	N/A	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	N/A	N/A	< 0.001	< 0.001	< 0.001
	7/9/2024	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	N/A
	11/18/2024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	N/A	< 0.001	0.000605*	< 0.001	< 0.001	< 0.001	N/A	N/A	< 0.001	< 0.001	< 0.001	< 0.001
	11/18/2024	N/A	N/A	< 0.001	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
Tin, mg/L (CAS NO - 7440-31-5)	8/11/2009	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.1	< 0.1	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 0.1	N/A	< 0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	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	0.125	N/A	N/A	N/A	N/A	N/A	N/A	0.126	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.1	< 0.005	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
	8/25/2015	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	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	0.000908*	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	< 0.005	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	0.00113*	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
	10/2/2018	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.005	N/A	N/A	< 0.02	< 0.005	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
	10/28/2020	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	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	< 0.005	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	< 0.005	< 0.005	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Vanadium, mg/L (CAS NO - 7440-62-2)	4/8/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	7/1/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	8/26/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	10/21/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A
	12/9/2008	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Vanadium, mg/L (CAS NO - 7440-62-2)	4/3/2009	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/3/2009	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A
	8/11/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	9/29/2009	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A
	12/6/2010	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	5/17/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	9/27/2011	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	5/2/2012	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	9/25/2012	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	3/26/2013	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	< 0.05	N/A	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	N/A	< 0.05	< 0.05	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.05	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.00682*	< 0.05	< 0.05	0.00389*	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	0.0041*	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	N/A	N/A	0.00276*	0.00262*	< 0.05	< 0.05	0.0147*	< 0.05	N/A	N/A	N/A	< 0.05	< 0.05	< 0.05
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.00495*	< 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
	7/9/2014	N/A	N/A	N/A	N/A	N/A	0.0035*	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
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.05	N/A	N/A	N/A
	9/29/2014	0.00325*	< 0.05	< 0.05	< 0.05	< 0.05	0.00739*	0.00369*	0.00375*	0.00308*	0.00375*	< 0.05	0.00279*	< 0.05	< 0.05	< 0.05	0.00366*	< 0.05	0.00267*	0.00264*	< 0.05
	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	N/A	N/A	< 0.05	N/A	N/A
	3/31/2015	0.00118*	0.00063*	0.00117*	0.00163*	0.00342*	**0.00525**	0.00326*	0.0031*	0.00325*	0.0038*	0.00379*	0.0024*	0.00143*	0.00169*	0.00235*	**0.00633**	0.00103*	0.00151*	0.00197*	0.00249*
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.00603**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	0.00072*	0.000541*	0.00108*	0.0013*	0.0038*	**0.0055**	0.00288*	0.00636*	0.00375*	0.00388*	< 0.025	< 0.025	0.00256*	0.00504*	N/A	N/A	0.00263*	0.00237*	< 0.025	0.00117*
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	**0.00619**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00207*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	0.000433*	0.000352*	0.000892*	0.00111*	0.00188*	0.00448*	**0.00529**	**0.0121**	0.00227*	**0.00584**	0.00114*	0.00201*	< 0.005	0.00392*	0.000801*	0.00195*	0.000834*	0.00309*	0.00107*	0.00171*
	4/12/2016	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	N/A
	9/20/2016	< 0.005	0.000285*	0.000544*	0.00162*	0.000886*	**0.0113**	0.00205*	**0.0056**	0.00257*	0.00232*	0.000778*	0.00144*	0.000312*	0.000745*	0.00175*	0.00235*	N/A	0.000818*	**0.0113**	0.00163*
	9/20/2016	N/A	N/A	N/A	N/A	0.00119*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000514*	N/A	N/A	N/A
	4/11/2017	< 0.005	< 0.005	< 0.005	0.00113*	< 0.005	**0.00835**	0.00231*	**0.00539**	0.00295*	0.00221*	0.00142*	0.00144*	< 0.005	< 0.005	< 0.005	0.000892*	< 0.005	< 0.015	0.00213*	0.00191*
	4/11/2017	N/A	N/A	N/A	N/A	0.000981*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.005	< 0.005	< 0.01	0.00203*	< 0.01	0.00318*	< 0.01	0.00261*	0.00435*	0.00248*	< 0.01	0.00126*	0.00627	< 0.005	0.00131*	0.0022*	< 0.005	< 0.01	0.00405*	0.00144*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.005	< 0.005	0.000769*	0.0014*	0.000615*	**0.00809**	0.00131*	0.00338*	0.00207*	0.00243*	0.00113*	0.00099*	< 0.005	0.00144*	0.000927*	0.000893*	< 0.005	0.000897*	0.00305*	0.000671*
	5/9/2018	N/A	N/A	0.000853*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	< 0.005	< 0.005	0.00237*	0.00367*	< 0.005	**0.0159**	0.00393*	**0.00637**	0.00281*	**0.0189**	< 0.005	0.00293*	< 0.005	0.00244*	0.00329*	< 0.005	< 0.005	0.00255*	**0.00642**	**0.00903**
	10/2/2018	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	N/A
	5/7/2019	0.00144*	0.00106*	0.00138*	0.00128*	< 0.005	**0.0139**	**0.00734**	**0.00664**	0.00316*	0.00212*	0.00111*	**0.00624**	< 0.005	0.000957*	0.00213*	**0.00794**	0.00228*	< 0.005	0.000983*	0.00205*
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**0.00825**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/23/2019	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	< 0.005	N/A	N/A	N/A	N/A
	9/24/2019	< 0.005	0.000925*	0.00103*	0.00143*	0.000999*	**0.0117**	0.00173*	0.00176*	0.00158*	0.000822*	0.00172*	0.00145*	< 0.005	0.00161*	0.00131*	< 0.005	0.00112*	0.00127*	**0.0114**	0.00154*
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00284*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 0.005	< 0.005	0.00285*	0.00101*	0.00286*	**0.0213**	**0.0147**	**0.0139**	0.00149*	< 0.005	< 0.005	0.0012*	< 0.005	0.00221*	0.00215*	0.0017*	< 0.005	0.00152*	**0.0135**	0.00208*
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00164*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 0.005	< 0.005	0.0036*	0.0024*	0.00138*	**0.00867**	**0.0054**	0.00145*	0.00168*	0.00126*	0.0012*	< 0.005	N/A	0.00198*	N/A	N/A	N/A	0.0012*	**0.00548**	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00136*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 0.005	< 0.005	0.0035*	< 0.005	0.00113*	0.00273*	0.00319*	**0.00528**	0.00216*	0.00181*	0.00277*	0.0021*	< 0.005	0.00212*	0.00168*	**0.00706**	0.00114*	0.00259*	0.0021*	0.00222*
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.005	N/A	N/A	N/A	N/A
	11/1/2021	0.00171*	0.00119*	0.00365*	0.00121*	0.00245*	0.00158*	0.00258*	0.00348*	0.00134*	0.0022*	0.00217*	0.00129*	< 0.005	0.004*	0.00284*	**0.0142**	0.00207*	0.00141*	**0.00719**	0.003*
	11/1/2021	N/A	N/A	0.00392*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/29/2022	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	< 0.005	N/A	N/A	N/A	N/A
	7/6/2022	< 0.005	< 0.005	0.00301*	< 0.005	< 0.005	**0.0123**	**0.0102**	**0.00751**	< 0.005	0.00258*	0.00167*	< 0.005	**0.00522**	0.00248*	N/A	N/A	N/A	0.00111*	0.00122*	0.00263*
	7/6/2022	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	0.00129*	N/A
	10/17/2022	< 0.005	< 0.005	0.00342*	< 0.005	< 0.005	N/A	0.00447*	N/A	0.00129*	0.002*	N/A	< 0.005	0.00201*	0.00173*	N/A	N/A	N/A	0.00116*	**0.00549**	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00153*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 0.005	< 0.005	0.00284*	< 0.005	0.00137*	**0.0148**	0.00222*	N/A	< 0.005	< 0.005	< 0.005	< 0.005	0.00144*	0.00199*	0.0039*	< 0.005	N/A	< 0.005	< 0.005	0.00118*
	5/30/2023	N/A	N/A	N/A	N/A	N/A	0.00238*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 0.005	< 0.005	0.00365*	0.00126*	< 0.005	**0.00681**	0.00185*	< 0.005	0.00199*	0.00173*	0.00154*	0.002*	< 0.005	< 0.005	N/A	N/A	N/A	< 0.005	< 0.005	0.00227*
	10/31/2023	N/A	N/A	0.00376*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	0.00457*	0.00225*	0.00134*	0.0048*	0.0283	0.00154*	0.00236*	**0.00771**	0.00416*	0.00273*	0.00367*	< 0.005	0.00436*	N/A	N/A	0.00238*	0.00222*	0.00357*
	7/9/2024	N/A	N/A	N/A	N/A	0.00171*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 0.005	< 0.005	0.00134*	0.00197*	**0.0101**	**0.037**	**0.0108**	< 0.005	N/A	0.00453*	0.00168*	0.00223*	0.00177*	< 0.005	N/A	N/A	0.0594	< 0.005	< 0.005	0.0524
	11/18/2024	N/A	N/A	0.00141*	N/A	0.00264*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Zinc, mg/L (CAS NO - 7440-66-6)	4/8/2008	**0.0256**	**0.0536**	N/A	N/A	N/A	N/A	**0.0586**	N/A	**0.0378**	N/A	**0.0249**	N/A	N/A	N/A	N/A	N/A	N/A	**0.0379**	N/A	N/A
	7/1/2008	**0.223**	**0.305**	N/A	N/A	N/A	N/A	**0.182**	N/A	**0.12**	N/A	**0.0842**	N/A	N/A	N/A	N/A	N/A	N/A	**0.271**	N/A	N/A
	8/26/2008	**0.282**	**0.338**	N/A	N/A	N/A	N/A	**0.0975**	N/A	**0.157**	N/A	**0.0973**	N/A	N/A	N/A	N/A	N/A	N/A	**0.306**	N/A	N/A
	10/21/2008	**0.0768**	**0.127**	N/A	N/A	N/A	N/A	**0.037**	N/A	**0.0565**	N/A	**0.0353**	N/A	N/A	N/A	N/A	N/A	N/A	**0.0978**	N/A	N/A
	12/9/2008	**0.0767**	**0.12**	N/A	N/A	N/A	N/A	**0.0389**	N/A	**0.0663**	N/A	**0.0465**	N/A	N/A	N/A	N/A	N/A	N/A	**0.0934**	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Zinc, mg/L (CAS NO - 7440-66-6)	4/3/2009	N/A	N/A	0.0803	0.0424	0.0353	0.0342	N/A	0.0565	N/A	0.13	N/A	0.035	0.0398	N/A	N/A	N/A	N/A	N/A	0.115	N/A
	6/3/2009	N/A	N/A	0.119	0.0547	0.0419	0.0377	N/A	0.0782	N/A	0.209	N/A	0.0488	0.0611	N/A	N/A	N/A	N/A	N/A	0.197	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0673	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	0.253	0.164	0.098	0.0521	0.0425	0.0392	N/A	0.072	N/A	0.212	0.0559	0.0607	0.0654	N/A	N/A	N/A	N/A	N/A	0.279	N/A
	9/29/2009	0.15	0.2	0.1	0.0526	0.0384	0.0356	N/A	0.0755	N/A	0.156	0.0494	0.0908	0.0595	N/A	N/A	N/A	N/A	N/A	0.272	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0721	0.0324	< 0.02	0.0256	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	0.0848	0.0504	0.0518	0.0341	0.0315	0.0245	N/A	0.0408	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0987	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0968	0.0413	< 0.02	0.0357	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	0.0542	0.0504	0.0444	0.0224	0.0512	0.047	0.0368	0.0545	0.0364	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.073	0.219	N/A
	12/6/2010	0.142	0.181	0.0649	0.0509	0.0469	0.0358	0.0488	0.0621	0.0685	0.115	0.0502	0.0276	0.0357	N/A	N/A	N/A	N/A	0.135	0.114	< 0.02
	5/17/2011	< 0.02	0.0201	< 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	N/A	< 0.02	< 0.02	< 0.02
	9/27/2011	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0913	< 0.02	N/A	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02
	5/2/2012	0.0214	0.0349	0.0244	< 0.02	< 0.02	< 0.02	0.0217	0.0332	0.0212	0.0305	0.0278	0.0532	0.0331	N/A	N/A	N/A	N/A	0.0334	0.023	< 0.02
	9/25/2012	< 0.02	0.0208	0.0242	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0217	< 0.02	< 0.02	N/A	N/A	N/A	N/A	0.0207	< 0.02	< 0.02
	3/26/2013	0.0454	0.0627	0.0581	0.0482	0.0339	N/A	0.0597	N/A	0.0811	0.0612	0.0792	0.0711	0.0505	N/A	N/A	N/A	N/A	0.0667	0.0619	N/A
	3/26/2013	N/A	N/A	0.0693	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0897	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	0.0315	N/A	N/A	0.0602	N/A	N/A	N/A	N/A	N/A	N/A	0.0521	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.196	0.177	0.169	0.13	0.101	0.114	0.145	0.19	0.165	0.218	0.146	0.0699	0.106	0.0985	N/A	N/A	N/A	0.193	0.21	0.026
	9/17/2013	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	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0827	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	0.0148*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0954	N/A	N/A	N/A	< 0.02	0.0334	< 0.02
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 0.02	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0567	N/A	N/A	N/A
	9/29/2014	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
	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	N/A	N/A	< 0.02	N/A	N/A
	3/31/2015	0.00723*	0.0129	0.0114	0.0134	0.00725*	0.0292	0.0089*	< 0.01	0.0109	0.00819*	0.01	0.00919*	0.00777*	0.00935*	0.0141	0.0173	< 0.01	0.0161	0.00873*	< 0.03
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	0.00801*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 0.01	0.0156	< 0.01	0.023	< 0.01	< 0.01	< 0.01	0.0155	< 0.01	0.00782*	< 0.01	0.0638	< 0.01	0.044	N/A	N/A	0.00762*	0.00798*	< 0.01	< 0.01
	8/25/2015	N/A	N/A	N/A	N/A	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
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00852*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 0.01	< 0.01	0.00951*	0.0796	0.00584*	0.0288	0.00807*	0.0316	0.00879*	0.02	< 0.01	0.00999*	< 0.01	0.0684	< 0.01	0.00715*	0.0107	0.0289	0.0234	0.01
	4/12/2016	N/A	N/A	0.0055*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	0.0103	< 0.01	< 0.01	0.0157	< 0.01	< 0.01	0.00844*	0.0148	0.00573*	0.00568*	< 0.01	< 0.01	< 0.01	0.00576*	< 0.01	0.00541*	N/A	< 0.01	0.021	0.00839*
	9/20/2016	N/A	N/A	N/A	N/A	0.0124	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A
	4/11/2017	< 0.02	< 0.02	< 0.02	0.0145*	< 0.02	< 0.02	< 0.02	0.0144*	0.0154*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.06	0.0131*	< 0.02
	4/11/2017	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	N/A
	10/11/2017	< 0.02	< 0.02	< 0.04	< 0.02	< 0.04	< 0.02	< 0.04	< 0.02	< 0.02	< 0.02	0.0138*	< 0.02	0.0125*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0117*	0.0119*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0156*	0.0199*
	5/9/2018	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	N/A
	10/2/2018	0.00786*	< 0.02	0.00857*	0.00725*	< 0.02	0.0106*	0.0076*	0.0105*	< 0.02	0.00777*	0.00821*	0.0139*	< 0.02	< 0.02	< 0.02	0.0121*	< 0.02	0.00914*	0.0157*	0.0146*
	10/2/2018	N/A	N/A	0.00883*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	0.027	0.0123*	< 0.02	0.016*	< 0.02	< 0.02	0.0129*	0.0134*	0.0112*	0.0132*	< 0.02	< 0.02	< 0.02	0.0141*	< 0.02	0.0128*	< 0.02	< 0.02	< 0.02	< 0.02
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0129*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0146*	< 0.02	< 0.02	< 0.02	0.0106*	0.0142*	< 0.02	< 0.02	0.0117*	< 0.02	0.0275	< 0.02	0.0147*	0.0251	< 0.02
	9/24/2019	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	N/A	N/A	N/A
	3/10/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	5/20/2020	< 0.02	< 0.02	< 0.02	0.011*	< 0.02	< 0.08	0.0187*	0.0165*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0127*	0.0515	< 0.02
	5/20/2020	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	N/A	N/A
	10/28/2020	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0125*	< 0.02	< 0.02	< 0.02	0.0539	< 0.02	N/A	0.0197*	N/A	N/A	N/A	0.0121*	0.0162*	N/A
	10/28/2020	N/A	N/A	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
	5/25/2021	< 0.02	0.166	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0329	0.0139*	< 0.02	0.0153*	< 0.02	0.0911	< 0.02	0.0284	0.0163*	< 0.02
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.02	N/A	N/A	N/A	N/A
	11/1/2021	0.0103*	0.366	< 0.02	< 0.02	0.0175*	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.0136*	< 0.02	0.0343	0.0107*	< 0.02	0.0151*	< 0.02
	11/1/2021	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	N/A
	3/29/2022	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	0.0253	N/A	N/A	N/A	N/A
	7/6/2022	< 0.02	0.349	< 0.02	< 0.02	< 0.02	0.0166*	< 0.02	0.0389	< 0.02	< 0.02	0.0152*	< 0.02	0.0489	0.0122*	N/A	N/A	N/A	< 0.02	< 0.02	< 0.02
	7/6/2022	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	0.0159*	N/A
	10/17/2022	0.011*	0.0622	0.0278	< 0.02	< 0.02	N/A	0.0255	N/A	< 0.02	< 0.02	N/A	< 0.02	< 0.02	0.0104*	N/A	N/A	N/A	< 0.02	0.0154*	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.02	0.0383	0.0092*	< 0.02	< 0.02	0.0106*	< 0.02	N/A	< 0.02	0.00692*	0.00667*	0.00658*	< 0.02	0.0121*	0.0131*	0.193	N/A	< 0.02	< 0.02	0.00785*
	5/30/2023	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	N/A
	10/31/2023	< 0.02	0.0308	0.012*	< 0.02	0.0166*	0.0165*	< 0.02	0.00992*	< 0.02	< 0.02	0.00813*	0.0137*	0.00696*	< 0.02	N/A	N/A	N/A	< 0.02	< 0.02	0.0276
	10/31/2023	N/A	N/A	0.00704*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 0.02	< 0.02	< 0.02	< 0.02	0.0373	< 0.02	< 0.02	0.0144*	0.016*	< 0.02	< 0.02	< 0.02	< 0.02	N/A	N/A	< 0.02	< 0.02	0.109
	7/9/2024	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	N/A
	11/18/2024	< 0.02	1.28	< 0.02	< 0.02	< 0.02	0.0385	0.0179*	< 0.02	N/A	< 0.02	< 0.02	0.0128*	< 0.02	< 0.02	N/A	N/A	0.347	0.0122*	< 0.02	0.186
	11/18/2024	N/A	N/A	< 0.02	N/A	0.0142*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Suspended Solids, mg/L (CAS NO - TSS)	12/17/2013	N/A	N/A	N/A	N/A	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	57	N/A	N/A	N/A	< 5	5.33	N/A
	3/26/2014	19	9.33	16	78	12	41	N/A	N/A	14.3	10	18.3	18.7	446	56	N/A	N/A	N/A	6	24	18.5
	3/26/2014	N/A	N/A	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	142	35.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62	N/A	N/A	1080	< 5	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Total Metals Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Total Suspended Solids, mg/L (CAS NO - TSS)	8/5/2014	N/A	N/A	N/A	N/A	N/A	21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	N/A	10.7	N/A
	9/29/2014	6.83	< 1.88	7.75	12.8	12.5	8.8	99.5	103	34.7	6	21	11.7	76.5	47	7.33	68	7.38	2.13	2.71	8.51
	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	N/A	N/A	2.43	N/A	N/A
	1/27/2015	N/A	N/A	N/A	N/A	65.7	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
	3/31/2015	1.67*	9	11.3	28	24.8	132	156	110	23.6	14.2	32.7	7.17	16	29.3	32.3	80	7.67	5.5	35.6	22.8
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	99.5	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
	8/25/2015	< 1.88	12	6.75	3.5	6	10	46.9	59.5	9.12	5	13.1	5.88	43.8	148	N/A	N/A	23.9	1.5*	9.38	6.63
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	20.4	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
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.37	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	N/A	64.7	N/A	N/A	N/A
	4/12/2016	3.75	1*	6.25	13.3	16	19.3	65.6	131	13.4	7.5	1.75*	11.3	3.25	184	2.13	59.2	26.4	85.5	4	22.9
	4/12/2016	N/A	N/A	7.13	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	N/A
	6/7/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4*	2.33*	N/A
	7/5/2016	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	< 5	N/A	7.67	N/A
	9/20/2016	250	4.33*	299	2	3.75	3.75	165	108	24.5	2.25	13.6	2.63	6.25	42.3	21	29	N/A	< 5	27	17.2
	9/20/2016	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	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.88	N/A	N/A	N/A
	11/15/2016	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	N/A	N/A	N/A	16.3	N/A
	12/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32	N/A
	4/11/2017	11.6	2.25	7	9.12	13	3	98	30.8	12.3	8.75	6.63	12.5	19.1	3.38	16.8	28	5.63	2.38	28.1	23
	4/11/2017	N/A	N/A	N/A	N/A	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	N/A	N/A
	8/8/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	67.8	N/A
	10/11/2017	2.25	1.88	3.75	2.63	4.13	1.88	40	53.3	11.6	4.13	18.4	6.12	18.6	2.75	27.6	36.2	1.5*	1*	242	17.3
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	65.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/2/2018	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	14.9	N/A	N/A	N/A	N/A
	5/9/2018	7.5	4.67*	2.75	35.3	3	19.6	35.1	12.8	8.25	1.75*	6	3.63	9.38	5.75	8.63	3.63	1.63*	1.25*	183	6
	5/9/2018	N/A	N/A	2.33*	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	N/A	N/A	N/A	N/A
	9/4/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.63	N/A
	10/2/2018	2.13	2	5	17.5	1*	33	44.8	26.3	11.3	2.5	5.63	2.38	2.38	2.88	6.87	2.88	1.63*	4.38	52.5	21.6
	10/2/2018	N/A	N/A	6.63	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	N/A	N/A	N/A
	3/26/2019	N/A	N/A	1.25*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25.4	N/A	N/A	N/A	N/A
	5/7/2019	12.8	11.6	1*	22.3	3.38	4.62	90	138	20.8	9	10.3	4.5	37.5	13	19.9	69	20	1.25*	11.9	25.5
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/23/2019	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	3.33*	N/A	N/A	3.67*	N/A
	9/24/2019	11	6.75	10	11.1	< 1.88	25	21.3	11.5	9.38	4	31.2	2.25	9.12	16.5	13.4	6.38	6.12	2	99.5	15.5
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/10/2020	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	2.63	N/A	N/A	N/A	N/A
	4/1/2020	N/A	N/A	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	N/A
	5/20/2020	4.5	12.5	9.75	11.5	95.5	134	92	155	16.5	2.5	7.38	4.75	11	34	1.5*	7.25	0.75*	13.5	95.4	10.2
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	70.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	145	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27	N/A
	9/23/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4*	N/A
	10/28/2020	1.63*	4.5	8.25	3.87	3.25	20	46.8	33.2	30.7	4.25	60.8	3.38	N/A	16.3	N/A	N/A	N/A	3.25	59.7	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	3.13	< 1.88	19.8	6.5	6.5	8.75	31.3	45	20.5	7.37	15	7.38	20	28.3	9.33	116	12.3	19.3	9.63	19.3
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1*	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	37.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.63	10.4	N/A	N/A	N/A
	10/3/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	41.2	N/A	N/A	N/A
	11/1/2021	2	2*	8.75	3.13	17.2	5	15.4	33.5	10	4.13	12	1.13*	11.5	39	22.5	152	5	2.25	92	21.5
	11/1/2021	N/A	N/A	9.6	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	N/A
	3/29/2022	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	7.33	N/A	N/A	N/A	N/A
	7/6/2022	7.33	< 5	10.7	7	2.33*	118	91	56	6.67	9.33	26.7	4.67*	130	29.7	N/A	N/A	N/A	3*	8.33	23
	7/6/2022	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	11	N/A
	10/17/2022	3	< 1.88	12.4	4.13	3.75	N/A	83	N/A	12.6	12	N/A	6.62	280	20.7	N/A	N/A	N/A	2	99	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/20/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	52.7	N/A
	5/30/2023	7.38	1*	13.5	3	15.1	390	42.8	N/A	21.6	8	12.8	2.75	21.1	4.88	35.5	93	N/A	4.88	2.13	7.88
	5/30/2023	N/A	N/A	N/A	N/A	N/A	414	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	5.37	1.5*	28	4.75	1.75*	126	24.1	2.33*	44.8	5.5	10.5	2.88	64	1.5*	N/A	N/A	N/A	1.88	9.75	39.3
	10/31/2023	N/A	N/A	26.5	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	N/A
	7/9/2024	N/A	N/A	45	4.33*	14	43.3	1800	4*	18.3	45.7	109	11.3	130	8	125	N/A	N/A	21	183	54.6
	7/9/2024	N/A	N/A	N/A	N/A	51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	10.3	36.3	17	27.3	53.5	317	97.5	5.33	N/A	44.5	16	9.67	40	7.67	N/A	N/A	2650	5	21.3	1000
	11/18/2024	N/A	N/A	23	N/A	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

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

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1,1,2-Tetrachloroethane, ug/L (CAS NO - 630-20-6)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1,1-Trichloroethane, ug/L (CAS NO - 71-55-6)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1,2,2-Tetrachloroethane, ug/L (CAS NO - 79-34-5)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1,2-Trichloroethane, ug/L (CAS NO - 79-00-5)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	< 1	N/A	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1-Dichloroethane, ug/L (CAS NO - 75-34-3)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	1.73	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	2.36	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	2.27	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	2.78	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	2.84	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	3.88	N/A	8.54	3.17	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	4.25	N/A	20.8	5.06	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	3.29	2.47	24.4	6.75	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	2.8	2.81	25.5	4.38	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.03	3.19	1.08	1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.16	3.3	2.43	2.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.32	2.67	2.33	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.02	3.09	1.94	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.83	3.95	4.65	1.99	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.99	4.86	5.81	2.69	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.8	N/A	13.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.93	5.56	23.5	3.04	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	3.17	6.79	18.4	2.06	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.36	3.76	5.01	0.891*	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.503*	3.2	8.02	18.3	2.69	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.222*	2.58	6.92	11.5	0.867*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.411*	2.46	6.66	18.9	1.31	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.461*	2.22	8.48	18.5	0.968*	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.442*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.69	6.83	5.08	0.291*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.59	10.1	1.97	1.11	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.12	6.67	4.23	0.618*	< 1	< 1	< 1	0.265*	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.85	9.48	13.5	< 1	< 1	< 1	0.832*	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.81	5.42	0.694*	0.655*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.05	1.79	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.82	4.23	< 1	< 1	< 1	< 1	0.266*	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.21	< 1	9.1	0.25*	1.15	< 1	< 1	0.472*	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.04	12.4	1.36	1.03	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.06	9.8	2.44	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.26	3.35	3.67	1.19	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.85	7.25	5.31	2.23	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.61	4.28	5.71	1.35	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	0.247*	2.54	N/A	10.5	2.97	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.224*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	2.19	12.1	1.3	0.846*	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.31	11.1	3.37	1.84	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.99	2.65	4.83	0.478*	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	2.7	11.5	1.76	2.3	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1-Dichloroethene, ug/L (CAS NO - 75-35-4)	4/8/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	7/1/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/26/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	10/21/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	12/9/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	4/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	2.12	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	9/29/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	4.01	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	12/6/2010	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/17/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	9/27/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/2/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.4	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2013	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 2	N/A	N/A	< 2	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
	9/17/2013	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.371*	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	9/17/2013	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	N/A	N/A
	12/17/2013	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	N/A
	3/26/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	1.48*	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 2	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	9/29/2014	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.471*	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	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	N/A	N/A	< 2	N/A	N/A
	3/31/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1.25*	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	3/31/2015	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	N/A
	8/25/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1.21*	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.352*	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/12/2016	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	N/A
	9/20/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2
	9/20/2016	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	4/11/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/11/2017	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.771*	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/9/2018	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	N/A
	10/2/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/2/2018	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	N/A
	5/7/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/20/2020	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	N/A	N/A
	10/28/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	N/A	N/A	< 2	< 2	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	11/1/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/1/2021	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	N/A
	7/6/2022	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	7/6/2022	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	< 2	N/A
	10/17/2022	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	N/A	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2
	7/9/2024	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	N/A
	11/18/2024	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2,3-Trichloropropane, ug/L (CAS NO - 96-18-4)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2-Dibromo-3-Chloropropane, ug/L (CAS NO - 96-12-8)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	< 0.12	N/A	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A	N/A	< 0.12	< 0.12	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	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	< 0.12	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	N/A	N/A	N/A	< 0.12	< 0.12	< 0.12
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 0.12	< 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	N/A	N/A	N/A	< 0.12	< 0.12	< 0.12
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	< 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
	7/9/2014	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	< 0.12	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	N/A	N/A	N/A
	9/29/2014	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12	< 0.12
	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	N/A	N/A	< 0.12	N/A	N/A
	3/31/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/31/2015	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	N/A
	8/25/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/12/2016	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	N/A
	9/20/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	4/11/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/11/2017	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/9/2018	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	N/A
	10/2/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/2/2018	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	N/A
	5/7/2019	< 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	< 1.2	< 1.2	< 1.2
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 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	< 1.2	< 1.2	< 1.2
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2-Dibromoethane [EDB], ug/L (CAS NO - 106-93-4)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	N/A	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A	N/A	< 0.13	< 0.13	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	N/A	< 0.13	< 0.13	< 0.13
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	< 0.13	< 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	N/A	N/A	N/A	< 0.13	< 0.13	< 0.13
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	< 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
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 1.3	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
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A
	9/29/2014	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	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	N/A	N/A	< 0.13	N/A	N/A
	3/31/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	3/31/2015	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	N/A
	8/25/2015	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	N/A	< 0.13	< 0.13	< 0.13	< 0.13
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	4/12/2016	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	N/A
	9/20/2016	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	N/A	< 0.13	< 0.13	< 0.13
	9/20/2016	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	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A
	4/11/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	4/11/2017	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	5/9/2018	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	N/A
	10/2/2018	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13	< 0.13
	10/2/2018	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	N/A
	5/7/2019	< 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	< 0.34	< 0.34	< 0.34
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 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	< 0.34	< 0.34	< 0.34
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2-Dichlorobenzene, ug/L (CAS NO - 95-50-1)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 1	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2-Dichloroethane, ug/L (CAS NO - 107-06-2)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.18*	< 1	< 1	< 1	< 1	0.23*	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	0.194*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.211*	0.196*	0.238*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,2-Dichloropropane, ug/L (CAS NO - 78-87-5)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.26	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.11	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.26	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.2	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.01	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.07	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.17	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.06	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	1.21	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.17	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	1.01	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.23	< 1	0.999*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.07	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.945*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.11	< 1	1.06	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.08	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.665*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.821*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	0.718*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.935*	0.948*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.846*	1.11	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.922*	< 1	0.29*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.843*	0.738*	0.425*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.618*	0.515*	0.492*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	0.966*	N/A	1.07	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.932*	0.766*	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.899*	0.945*	0.327*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.31	< 1	0.588*	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	1.05	1.16	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,4-Dichlorobenzene, ug/L (CAS NO - 106-46-7)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	1.13	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	1.48	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	2.71	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.88	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/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	N/A
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	2.7	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.02	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.611*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.637*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.705*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	1.65	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.394*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.975*	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	0.368*	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2-Butanone, ug/L (CAS NO - 78-93-3)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	0.629*	2.14*	< 10	< 10	2.19*	0.595*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	8.54*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	56	66.8	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	16.3	4.99*	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	4.79*
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	37.3
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	3.13*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6.44*
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	9.44*	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	2.46*	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	7.87*	< 10	< 10	< 10	< 10	4.16*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	2.52*	N/A	N/A	3.33*	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2-Hexanone, ug/L (CAS NO - 591-78-6)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
4-Methyl-2-Pentanone, ug/L (CAS NO - 108-10-1)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0.513*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Acetone, ug/L (CAS NO - 67-64-1)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	**13**
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	3.06*	2.46*	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	3.13*
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	2.19*	3.6*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	32.9*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.66*	N/A	N/A	N/A
	8/5/2014	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	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**24.4**	**32.8**	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	3.31*	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	1.82*	< 10	< 10	< 10	< 10	3.25*	< 10	< 10	< 10	< 10	< 10	< 10	3.95*	< 10	3.83*	**11.8**
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.45*	N/A	N/A	N/A
	4/11/2017	< 10	1.93*	< 10	2.56*	2.69*	3.09*	2.21*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	2.4*	3.72*
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	2.84*	< 10	< 10	2.76*	3.57*	3.11*	4.84*	3.47*	5.8*	2.45*	3.38*	2.44*	4.53*	3.24*	5*	4.18*	5.06*	2.12*	2.3*	**63.2**
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.1*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.78*
	5/9/2018	3.75*	4.43*	< 10	3.65*	1.96*	3.08*	< 10	3.29*	2.03*	< 10	< 10	3.01*	4.17*	3.26*	1.79*	3.11*	< 10	1.79*	2.35*	**23.5**
	5/9/2018	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	N/A
	7/31/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	10/2/2018	< 10	< 10	7.06*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	3.98*
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	4.83*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	4.2*	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.19*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	4.23*	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**16.8**
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/17/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	3.23*	**34**	< 10	4.06*	< 10	4.13*
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A
	11/1/2021	< 10	6.36*	< 10	3.51*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6.74*	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	3.5*
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	3.46*	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	5.69*
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5.07*	< 10	< 10	< 10	< 10	< 10	6.27*	N/A	N/A	N/A	< 10	< 10	3.72*
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	**290**	< 10	< 10	< 10	< 10	5.19*	< 10	< 10	< 10	< 10	< 10	< 10	**11.4**	N/A	N/A	< 10	< 10	**10.2**
	7/9/2024	N/A	N/A	N/A	N/A	**26.3**	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Acetone, ug/L (CAS NO - 67-64-1)	11/18/2024	< 10	4.98*	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	16.8	< 10	< 10	13.1
	11/18/2024	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	N/A	N/A	N/A
Acrylonitrile, ug/L (CAS NO - 107-13-1)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	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
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 10	< 10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 10	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Benzene, ug/L (CAS NO - 71-43-2)	4/8/2008	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	7/1/2008	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	8/26/2008	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	10/21/2008	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	12/9/2008	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	4/3/2009	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	6/3/2009	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	N/A	**0.55**	< 0.5	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	9/29/2009	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	< 0.5	**0.76**	< 0.5	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A
	12/6/2010	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	5/17/2011	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	9/27/2011	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	5/2/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**0.85**	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	3/26/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	< 0.5	< 0.5	**0.501**	< 0.5	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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	N/A
	6/19/2013	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	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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	N/A
	3/26/2014	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	**0.904**	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 0.5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	9/29/2014	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	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	N/A	N/A	< 0.5	N/A	N/A
	3/31/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.176*	**1.06**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/31/2015	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	N/A
	8/25/2015	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.05**	< 0.5	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.176*	0.249*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/12/2016	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	N/A
	9/20/2016	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.37*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5
	9/20/2016	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	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A
	4/11/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.176*	0.124*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/11/2017	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**0.524**	< 0.5	< 0.5	< 0.5	0.244*	< 0.5	< 0.5	< 0.5	< 0.5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/9/2018	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	N/A
	10/2/2018	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	10/2/2018	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	N/A
	5/7/2019	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.272*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.414*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.331*	< 0.5	N/A	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	N/A
	10/28/2020	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	N/A
	5/25/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	N/A	N/A
	11/1/2021	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	11/1/2021	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	N/A
	7/6/2022	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	7/6/2022	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	N/A
	10/17/2022	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	N/A	< 0.5	< 0.5	N/A	0.398*	< 0.5	< 0.5	N/A	N/A	N/A	< 0.5	< 0.5	N/A
	10/17/2022	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	N/A	N/A
	5/30/2023	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	0.283*	< 0.5	0.25*	< 0.5	< 0.5	**0.732**	< 0.5	< 0.5	N/A	< 0.5	< 0.5	< 0.5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.233*	< 0.5	< 0.5	**0.815**	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	**1.19**	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**1.2**	< 0.5	N/A	N/A	< 0.5	< 0.5	< 0.5
	7/9/2024	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	N/A
	11/18/2024	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	N/A	< 0.5	0.306*	< 0.5	< 0.5	**1.37**	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5
	11/18/2024	N/A	N/A	< 0.5	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Bromochloromethane, ug/L (CAS NO - 74-97-5)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	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	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Bromodichloromethane, ug/L (CAS NO - 75-27-4)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 5	< 5	< 5	< 10	< 10	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 5	< 5	< 5	< 5	< 5	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.39	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	3/10/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.482*	N/A	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Bromoform, ug/L (CAS NO - 75-25-2)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	< 50	< 50	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 50	< 50	< 50	< 50	< 50	< 50	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	0.184*	< 5	0.215*	< 5	0.215*	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	0.143*	0.209*	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Bromomethane, ug/L (CAS NO - 74-83-9)	4/8/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/1/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	8/26/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	10/21/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	12/9/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	4/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	9/29/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	12/6/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/17/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	9/27/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 20	< 20	< 20
	3/26/2013	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 4	N/A	N/A	< 4	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
	9/17/2013	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.236*	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	9/29/2014	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	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	N/A	N/A	< 4	N/A	N/A
	3/31/2015	0.541*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.35*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	3/31/2015	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	N/A
	8/25/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 4	< 4	< 4	0.645*	0.677*	0.449*	0.791*	0.871*	0.958*	0.995*	0.877*	0.999*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	4/12/2016	N/A	N/A	0.643*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4
	9/20/2016	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.56*	N/A	N/A	N/A
	4/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.436*	0.397*	0.438*	0.418*	< 4	< 4	< 4
	4/11/2017	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	0.363*	0.404*	< 4	< 4	< 4	0.237*	< 4	< 4	< 4	< 4	< 4	0.504*	0.266*	0.345*	< 4	< 4	< 4	< 4	< 4	< 4
	5/9/2018	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	N/A
	10/2/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/2/2018	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	N/A
	5/7/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	3.23*	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/20/2020	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	N/A	N/A
	10/28/2020	< 4	< 4	< 5	< 5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 5	N/A	N/A	N/A	< 4	< 4	N/A
	10/28/2020	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	N/A
	5/25/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	11/1/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2021	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	N/A
	7/6/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	7/6/2022	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	< 4	N/A
	10/17/2022	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4
	7/9/2024	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	N/A
	11/18/2024	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Carbon Disulfide, ug/L (CAS NO - 75-15-0)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 1	< 1	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	0.15*	< 1	< 1	0.441*	< 1	< 1	< 1	< 1	0.228*	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.224*	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.551*	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	0.626*	< 1	0.603*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.503*	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	1.58	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	0.538*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.715*	N/A	N/A	N/A	0.616*	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	0.569*	< 1	< 1	< 1	< 1	< 1	0.678*	< 1	N/A	N/A	0.534*	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.556*	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Carbon Tetrachloride, ug/L (CAS NO - 56-23-5)	4/8/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	7/1/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/26/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	10/21/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	12/9/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	4/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	9/29/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 5	< 5	< 5	< 4	< 4	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 4	< 4	< 4	< 4	< 4	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	12/6/2010	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/17/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	9/27/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/2/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2013	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 2	N/A	N/A	< 2	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
	9/17/2013	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 2	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	9/29/2014	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	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	N/A	N/A	< 2	N/A	N/A
	3/31/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	3/31/2015	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	N/A
	8/25/2015	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/12/2016	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	N/A
	9/20/2016	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2
	9/20/2016	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	4/11/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	4/11/2017	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/9/2018	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	N/A
	10/2/2018	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	10/2/2018	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	N/A
	5/7/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/20/2020	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	N/A	N/A
	10/28/2020	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	N/A	N/A	< 2	< 2	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	11/1/2021	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
	11/1/2021	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	N/A
	7/6/2022	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	7/6/2022	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	< 2	N/A
	10/17/2022	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	N/A	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2
	7/9/2024	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	N/A
	11/18/2024	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chlorobenzene, ug/L (CAS NO - 108-90-7)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	1.26	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	1.6	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	3.23	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.12	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	6.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10.9	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	5.39	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	17.3	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.58	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	25.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	30.1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.59	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.71	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	15.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.07	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.53	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.88	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	0.524*	< 1	N/A	14.2	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.642*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	0.722*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.74*	< 1	< 1	2.76	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	6.74	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	2.67	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chlorodibromomethane, ug/L (CAS NO - 124-48-1)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 20	< 20	< 20	< 20	< 20	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	1.38*	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chloroethane, ug/L (CAS NO - 75-00-3)	4/8/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/1/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	8/26/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	10/21/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	12/9/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	4/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	4.73	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	9/29/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	12/6/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/17/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	9/27/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	3/26/2013	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 4	N/A	N/A	< 4	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
	9/17/2013	0.497*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.1*	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	3.46*	0.945*	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 40	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
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	9/29/2014	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.27*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	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	N/A	N/A	< 4	N/A	N/A
	3/31/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	3.19*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	3/31/2015	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	N/A
	8/25/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	3.25*	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.29*	0.82*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	4/12/2016	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	N/A
	9/20/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4
	9/20/2016	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.805*	0.607*	0.317*	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	4/11/2017	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.981*	1.76*	0.882*	< 4	< 4	1.39*	< 4	< 4	< 4	< 4
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.35*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/9/2018	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	N/A
	10/2/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/2/2018	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	N/A
	5/7/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.11*	< 4	1.44*	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.4*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/20/2020	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	N/A	N/A
	10/28/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.44*	< 4	N/A	< 4	N/A	N/A	N/A	< 4	< 4	N/A
	10/28/2020	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	N/A
	5/25/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.859*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	11/1/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.17*	0.975*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2021	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	N/A
	7/6/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.835*	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	7/6/2022	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	< 4	N/A
	10/17/2022	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	N/A	1.48*	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	1.38*	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.38*	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4
	7/9/2024	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	N/A
	11/18/2024	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	1.79*	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chloroform, ug/L (CAS NO - 67-66-3)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 2.5	< 2.5	N/A	N/A	N/A	N/A	< 2.5	N/A	< 2.5	N/A	< 2.5	N/A	N/A	N/A	N/A	N/A	N/A	< 2.5	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 2	< 2	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.55	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 3	< 3	< 1	< 1	< 1	< 1	< 1	< 3	< 1	< 1	< 1	< 1	< 1	< 3	< 3	< 1	< 1	< 3
	5/9/2018	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	N/A
	10/2/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/2/2018	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	N/A
	5/7/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	15.8	10.5	< 3	< 3	< 3	< 3
	9/24/2019	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	N/A	N/A	N/A
	3/10/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.33*	2.96*	N/A	N/A	N/A	N/A
	5/20/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	2.12*	< 3	< 3	< 3	< 3
	5/20/2020	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	N/A	N/A
	10/28/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	11/1/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2021	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	N/A
	7/6/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	7/6/2022	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	< 3	N/A
	10/17/2022	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	N/A	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3
	7/9/2024	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	N/A
	11/18/2024	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chloromethane, ug/L (CAS NO - 74-87-3)	4/8/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	7/1/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	8/26/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	10/21/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	12/9/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	4/3/2009	N/A	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/3/2009	N/A	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	9/29/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A
	12/6/2010	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	5/17/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	9/27/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	5/2/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	3/26/2013	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 30	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
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	9/29/2014	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	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	N/A	N/A	< 3	N/A	N/A
	3/31/2015	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	3/31/2015	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	N/A
	8/25/2015	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0.452*	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	4/12/2016	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	N/A
	9/20/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3
	9/20/2016	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.346*	N/A	N/A	N/A
	4/11/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0.574*	0.486*	0.517*	0.544*	< 3	< 3	< 3
	4/11/2017	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/9/2018	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	N/A
	10/2/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/2/2018	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	N/A
	5/7/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/20/2020	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	N/A	N/A
	10/28/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	11/1/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2021	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	N/A
	7/6/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	3.63	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	0.915*
	7/6/2022	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	< 3	N/A
	10/17/2022	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	N/A	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	2.28*	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3
	7/9/2024	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	N/A
	11/18/2024	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
cis-1,2-Dichloroethene, ug/L (CAS NO - 156-59-2)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	2.74	1.54	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	6.07	2.32	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	1.35	7.85	3.23	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	1.53	9.33	2.17	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.33	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.84	1.01	1.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.88	1.24	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.15	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.3	1.79	1.19	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.45	2.32	1.4	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	5.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.97	10.6	1.55	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.28	< 1	3.99	7.78	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.514*	0.761*	2.38	2.18	0.321*	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	1.46	0.603*	5.67	9.68	1.22	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.44*	0.555*	4.79	5.52	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.43	0.323*	5	10.6	0.491*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.18	0.393*	6.77	11.3	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.78*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.288*	0.543*	6.22	2.77	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10.2	1.16	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.539*	6.79	2.23	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	0.274*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.759*	8.02	7.53	0.27*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.261*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.556*	4.4	< 1	0.226*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.271*	1.28	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.66*	3.82	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.567*	< 1	10.7	< 1	0.391*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.588*	16.6	0.224*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.415*	10.4	0.975*	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.672*	4.1	1.93	0.355*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.448*	10.5	2.88	0.603*	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.411*	9.35	3.16	0.345*	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	0.322*	0.778*	N/A	6.25	0.791*	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.299*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.446*	29.3	0.262*	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.211*	0.602*	25.4	1.73	0.415*	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	0.258*	< 1	< 1	< 1	< 1	0.85*	3.79	2.42	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	0.679*	37.1	0.722*	0.37*	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
cis-1,3-Dichloropropene, ug/L (CAS NO - 10061-01-5)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 20	< 20	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Ethylbenzene, ug/L (CAS NO - 100-41-4)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	0.47*	< 1	0.715*	< 1	< 1	< 1	< 1	< 1	0.487*	< 1	< 1	0.518*	< 1	< 1	< 1	0.477*	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Iodomethane, ug/L (CAS NO - 74-88-4)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	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	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 20	< 20	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 20	N/A	< 20	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 50	< 50	< 50	< 50	< 50	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	< 50	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 10	< 20	N/A	N/A	N/A	N/A	< 20	< 20	< 20
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	9.18*	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 50	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Methylene Bromide, ug/L (CAS NO - 74-95-3)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Methylene Chloride, ug/L (CAS NO - 75-09-2)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	7.16	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	0.592*	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.249*	< 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
	7/9/2014	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	1.41*	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	0.288*	< 5	0.184*	< 5	0.365*	0.484*	< 5	< 5	< 5	0.427*	0.295*	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	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
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	0.368*	0.286*	0.229*	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	0.47*
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.457*	N/A	N/A	N/A
	4/11/2017	0.237*	< 5	< 5	< 5	< 5	< 5	< 5	0.209*	< 5	< 5	0.271*	< 5	< 5	0.517*	0.484*	0.428*	0.533*	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	0.301*	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Styrene, ug/L (CAS NO - 100-42-5)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 4	< 4	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 4	< 1	< 1	< 1	< 1	< 1	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	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	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

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Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Tetrachloroethene, ug/L (CAS NO - 127-18-4)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	1.34	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	1.67	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	1.69	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	1.21	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	1.32	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	2.48	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	1.46	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	2.16	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.39	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.97	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.49	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.21	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.32	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	2.7	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.24	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	2.16	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.549*	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.57	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.72	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.48	< 1	< 1	< 1	N/A	N/A	0.374*	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.23*	1.66	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.14	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.212*	2.48	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.77	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.844*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.74	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.43	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.505*	0.946*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.09	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.753*	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	1.36	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.48*	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.63	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Toluene, ug/L (CAS NO - 108-88-3)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	**3.83**	< 1	< 1	**2.23**	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	**4.19**	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	0.165*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.345*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.22*	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.158*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.551*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	0.926*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**9.82**	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	**1.85**	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.562*	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
trans-1,2-Dichloroethene, ug/L (CAS NO - 156-60-5)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	0.308*	0.241*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.424*	0.296*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.352*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.367*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.381*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.609*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.982*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.348*	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.566*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.35*	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	1.06	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.971*	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	1.25	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
trans-1,3-Dichloropropene, ug/L (CAS NO - 10061-02-6)	4/8/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	7/1/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	8/26/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	10/21/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	12/9/2008	< 5	< 5	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	4/3/2009	N/A	N/A	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	N/A	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	6/3/2009	N/A	N/A	< 20	< 20	< 20	< 20	N/A	< 20	N/A	< 20	N/A	< 20	< 20	N/A	N/A	N/A	N/A	N/A	< 20	N/A
	6/10/2009	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	N/A
	8/11/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	9/29/2009	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 20	< 20	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	12/6/2010	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/17/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	9/27/2011	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	5/2/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2013	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 5	< 5	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 5	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	N/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
	3/26/2014	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 5	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	9/29/2014	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	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	N/A	N/A	< 5	N/A	N/A
	3/31/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	3/31/2015	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	N/A
	8/25/2015	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/12/2016	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	N/A
	9/20/2016	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	9/20/2016	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A
	4/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	4/11/2017	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/9/2018	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	N/A
	10/2/2018	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	10/2/2018	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	N/A
	5/7/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/20/2020	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	N/A	N/A
	10/28/2020	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A
	11/1/2021	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	11/1/2021	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	N/A
	7/6/2022	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A
	10/17/2022	< 5	< 5	< 5	< 5	< 5	N/A	< 5	N/A	< 5	< 5	N/A	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	N/A	< 5	< 5	< 5
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5
	7/9/2024	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	N/A
	11/18/2024	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	N/A	< 5	< 5	< 5	< 5	< 5	N/A	N/A	< 5	< 5	< 5	< 5
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
trans-1,4-Dichloro-2-Butene, ug/L (CAS NO - 110-57-6)	4/8/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	7/1/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	8/26/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	10/21/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	12/9/2008	< 10	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	4/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/3/2009	N/A	N/A	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	9/29/2009	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	12/6/2010	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/17/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	9/27/2011	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2013	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	N/A
	3/26/2013	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	9/17/2013	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	3/26/2014	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	9/29/2014	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	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	N/A	N/A	< 10	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Trichloroethene, ug/L (CAS NO - 79-01-6)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	3.37	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	4.02	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	4.4	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	5.13	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	4.35	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.1	N/A	1.15	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.38	N/A	2.78	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	4.55	3.17	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	1.1	6.53	4.95	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.07	4.89	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.11	6.36	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	6.37	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	7.52	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	8.95	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	9.35	3.28	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	12.8	2.4	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.241*	0.67*	7	0.885*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/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	N/A
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	0.228*	0.712*	13.6	2.38	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.436*	12.4	1.18	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.83*	11.9	2.34	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.469*	15.4	1.99	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/A	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
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.217*	0.763*	11.3	0.599*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	16.2	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.589*	12.3	0.489*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.701*	15.3	1.02	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.758*	8.38	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.58	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.58*	6.66	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.742*	< 1	13.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.623*	14.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.541*	12.3	< 1	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.72*	4.3	0.537*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.444*	8.71	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.53	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	0.515*	N/A	0.489*	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	0.594*	8.77	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.464*	8.81	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.499*	2.41	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	0.473*	6.34	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Trichlorofluoromethane, ug/L (CAS NO - 75-69-4)	4/8/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	7/1/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	8/26/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	10/21/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	12/9/2008	< 4	< 4	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	4/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/3/2009	N/A	N/A	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	N/A	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	9/29/2009	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	12/6/2010	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/17/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	9/27/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	5/2/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	3/26/2013	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 4	N/A	N/A	< 4	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
	9/17/2013	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.227*	N/A	N/A	N/A
	8/5/2014	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	< 4	N/A	N/A	N/A	N/A
	9/29/2014	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.798*	< 4	< 4	< 4	0.677*	< 4	< 4	< 4	< 4	< 4
	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	N/A	N/A	< 4	N/A	N/A
	3/31/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.68*	< 4	< 4	< 4	< 4	< 4
	3/31/2015	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	N/A
	8/25/2015	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.908*	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.88*	< 4	< 4	< 4	< 4	< 4
	4/12/2016	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	N/A
	9/20/2016	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.801*	< 4	N/A	< 4	< 4	< 4
	9/20/2016	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A
	4/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	1.47*	< 4	< 4	< 4	< 4	< 4
	4/11/2017	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.507*	< 4	< 4	< 4	< 4	< 4
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	3.45*	< 4	< 4	< 4	< 4	< 4
	5/9/2018	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	N/A
	10/2/2018	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	10/2/2018	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	N/A
	5/7/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	2.01*	< 4	< 4	< 4	< 4	< 4
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.687*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.388*	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/20/2020	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	N/A	N/A
	10/28/2020	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	N/A	N/A	< 4	< 4	N/A
	10/28/2020	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	N/A
	5/25/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A
	11/1/2021	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4
	11/1/2021	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	N/A
	7/6/2022	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	7/6/2022	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	< 4	N/A
	10/17/2022	< 4	< 4	< 4	< 4	< 4	N/A	< 4	N/A	< 4	< 4	N/A	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	< 4	0.961*	< 4	N/A	< 4	< 4	< 4
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	0.643*	< 4	< 4	< 4	N/A	N/A	N/A	< 4	< 4	< 4
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4
	7/9/2024	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	N/A
	11/18/2024	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	< 4	< 4	< 4	< 4	< 4	N/A	N/A	< 4	< 4	< 4	< 4
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Vinyl Acetate, ug/L (CAS NO - 108-05-4)	4/8/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	7/1/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	8/26/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	10/21/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	12/9/2008	< 2	< 2	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A
	4/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/3/2009	N/A	N/A	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	9/29/2009	< 2	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	< 2	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 4	< 4	< 4	< 2	< 2	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	12/6/2010	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/17/2011	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	< 4	< 4	< 4
	9/27/2011	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	5/2/2012	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 10	< 10	< 10
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2013	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 2	N/A	N/A	< 2	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
	9/17/2013	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	< 2	< 2	< 2
	3/26/2014	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	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	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	< 2	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	N/A	N/A
	9/29/2014	< 2	< 2	< 2	< 10	< 2	< 2	< 10	< 2	< 2	< 10	< 10	< 10	< 10	< 2	< 10	< 10	< 10	< 2	< 2	< 2
	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	N/A	N/A	< 2	N/A	N/A
	3/31/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	3/31/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/12/2016	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	N/A
	9/20/2016	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	9/20/2016	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A
	4/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	4/11/2017	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/9/2018	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	N/A
	10/2/2018	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	10/2/2018	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	N/A
	5/7/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/7/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	9/24/2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/20/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A
	11/1/2021	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	11/1/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A
	10/17/2022	< 10	< 10	< 10	< 10	< 10	N/A	< 10	N/A	< 10	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	10/31/2023	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	N/A	N/A	< 10	< 10	< 10
	7/9/2024	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	N/A	< 10	< 10	< 10	< 10	< 10	N/A	N/A	< 10	< 10	< 10	< 10
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Vinyl Chloride, ug/L (CAS NO - 75-01-4)	4/8/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	7/1/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	8/26/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	10/21/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	12/9/2008	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	4/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/3/2009	N/A	N/A	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	N/A	3.32	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/10/2009	N/A	N/A	N/A	N/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
	8/11/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	4.63	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	9/29/2009	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	6.46	< 1	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	12/6/2010	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/17/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	9/27/2011	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	5/2/2012	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	< 2
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	3.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 4	< 4	7.49	< 4	N/A	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	1.98	4.07	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.345*	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	9/17/2013	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/17/2013	N/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	N/A
	3/26/2014	< 1	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	1.83	4.78	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	3/26/2014	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	9/29/2014	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.27	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	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	N/A	N/A	< 1	N/A	N/A
	3/31/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.152*	0.102*	1.58	7.63	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	3/31/2015	N/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	N/A
	8/25/2015	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.91	6.69	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	8/25/2015	N/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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.36*	1.12	0.783*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/12/2016	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	N/A
	9/20/2016	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.88	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	9/20/2016	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A
	4/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.778*	0.583*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	4/11/2017	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.172*	1.13	2.89	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/9/2018	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	N/A
	10/2/2018	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	10/2/2018	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	N/A
	5/7/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.231*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/7/2019	N/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	N/A	N/A	N/A
	9/24/2019	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.445*	< 1	1.35	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	9/24/2019	N/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	N/A	N/A	N/A
	5/20/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.49	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/20/2020	N/A	N/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	N/A	N/A
	10/28/2020	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.57	0.266*	N/A	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/28/2020	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	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.181*	< 1	0.889*	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A
	11/1/2021	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.199*	1.03	1.71	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
	11/1/2021	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.607*	1.12	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	7/6/2022	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	N/A
	10/17/2022	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	N/A	2.13	< 1	< 1	N/A	N/A	N/A	< 1	< 1	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	1.34	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	< 1
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.15	< 1	< 1	< 1	N/A	N/A	N/A	< 1	< 1	< 1
	10/31/2023	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.375*	< 1	< 1	< 1	< 1	< 1	N/A	N/A	< 1	< 1	< 1
	7/9/2024	N/A	N/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
	11/18/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	N/A	< 1	< 1	0.206*	< 1	< 1	N/A	N/A	< 1	< 1	< 1	< 1
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Xylenes, total, ug/L (CAS NO - 1330-20-7)	4/8/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	7/1/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	8/26/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	10/21/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	12/9/2008	< 3	< 3	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	4/3/2009	N/A	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/3/2009	N/A	N/A	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	N/A	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/10/2009	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	N/A	N/A
	8/11/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	9/29/2009	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 6	< 6	< 6	< 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2010	< 3	< 3	< 3	< 6	< 6	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/12/2010	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	< 3	N/A
	12/6/2010	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	5/17/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	9/27/2011	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	5/2/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	3/26/2013	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	9/17/2013	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	N/A	N/A
	12/17/2013	N/A	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
	3/26/2014	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	3/26/2014	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	N/A
	5/6/2014	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	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	N/A	N/A	< 30	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
	8/5/2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	9/29/2014	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	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	N/A	N/A	< 3	N/A	N/A
	3/31/2015	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	3/31/2015	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	N/A
	8/25/2015	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	4/12/2016	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	N/A
	9/20/2016	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3
	9/20/2016	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A
	4/11/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	4/11/2017	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0.357*
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/9/2018	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	N/A
	10/2/2018	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	10/2/2018	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	N/A
	5/7/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/7/2019	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	N/A	N/A	N/A
	9/24/2019	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	5/20/2020	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	N/A	N/A
	10/28/2020	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	< 3	< 3	2.38*	< 3	< 3	< 3	< 3	< 3	1.14*	< 3	< 3	< 3	< 3	< 3	< 3	0.524*	0.477*	< 3	< 3	< 3
	5/25/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A
	11/1/2021	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
	11/1/2021	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	N/A
	7/6/2022	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	7/6/2022	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	< 3	N/A
	10/17/2022	< 3	< 3	< 3	< 3	< 3	N/A	< 3	N/A	< 3	< 3	N/A	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	0.543*	< 3	< 3	N/A	< 3	< 3	< 3
	5/30/2023	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	N/A	< 3	< 3	< 3
	10/31/2023	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	N/A
	7/9/2024	N/A	N/A	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3
	7/9/2024	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	N/A
	11/18/2024	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3	< 3	< 3	N/A	N/A	< 3	< 3	< 3	< 3
	11/18/2024	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Appendix I VOC Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
M&P-Xylene, ug/L (CAS NO - 179601-23-1)	3/26/2013	< 2	< 2	< 2	< 2	< 2	N/A	< 2	N/A	< 2	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	< 2	< 2	N/A
	3/26/2013	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	N/A
	4/22/2013	N/A	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
	6/19/2013	N/A	N/A	N/A	< 2	N/A	N/A	< 2	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
O-Xylene, ug/L (CAS NO - 95-47-6)	3/26/2013	< 1	< 1	< 1	< 1	< 1	N/A	< 1	N/A	< 1	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	< 1	< 1	N/A
	3/26/2013	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/22/2013	N/A	N/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
	6/19/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,1-Dichloropropene, ug/L (CAS NO - 563-58-6)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/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
	8/25/2015	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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 1	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,2,4,5-Tetrachlorobenzene, ug/L (CAS NO - 95-94-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,2,4-Trichlorobenzene, ug/L (CAS NO - 120-82-1)	8/11/2009	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 5	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,3,5-Trinitrobenzene, ug/L (CAS NO - 99-35-4)	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,3-Dichlorobenzene, ug/L (CAS NO - 541-73-1)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 1	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/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
	8/25/2015	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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 1	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,3-Dichloropropane, ug/L (CAS NO - 142-28-9)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/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
	8/25/2015	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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 1	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,3-Dinitrobenzene, ug/L (CAS NO - 99-65-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
1,4-Naphthoquinone, ug/L (CAS NO - 130-15-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1,4-Phenylenediamine, ug/L (CAS NO - 106-50-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
1-Naphthylamine, ug/L (CAS NO - 134-32-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	8/11/2009	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 4	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2,2-Dichloropropane, ug/L (CAS NO - 594-20-7)	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 4	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 4	< 4	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,3,4,6-Tetrachlorophenol, ug/L (CAS NO - 58-90-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,4,5-T [2C], ug/L (CAS NO - 93-76-5)	8/11/2009	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.43	< 0.43	< 0.43	< 0.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 1.01	N/A	< 1.02	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
	5/6/2014	N/A	N/A	N/A	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	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	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	N/A	N/A	N/A
	8/25/2015	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	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	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
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.21	< 1.15	< 1.2	< 1.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 1.02	N/A	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	N/A
	5/20/2020	N/A	N/A	< 1.01	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 1.02	N/A	N/A	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
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.155	N/A	N/A	< 0.152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-TP [Silvex] [2C], ug/L (CAS NO - 93-72-1)	8/11/2009	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	< 0.2	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.2	< 0.2	0.48	< 0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.29	< 0.29	< 0.29	< 0.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 1.01	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	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	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	< 1.02	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.21	< 1.15	< 1.2	< 1.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	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	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 1.02	N/A	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	N/A
	5/20/2020	N/A	N/A	< 1.01	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 1.02	N/A	N/A	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
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.5	< 0.5	< 0.5	< 0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0516	N/A	N/A	< 0.0506	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2,4,5-Trichlorophenol, ug/L (CAS NO - 95-95-4)	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,4,6-Trichlorophenol, ug/L (CAS NO - 88-06-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,4-D [2C], ug/L (CAS NO - 94-75-7)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.99	< 0.99	< 0.99	< 0.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.47	< 0.47	< 0.47	< 0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 1.01	N/A	< 1.02	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
	5/6/2014	N/A	N/A	N/A	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	N/A	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	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	N/A	N/A	N/A
	8/25/2015	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	**11.8**	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.21	< 1.15	< 1.2	< 1.19	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	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	**3.57**	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 1.02	N/A	N/A	< 1.03	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	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	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 1.01	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.01	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 1.02	N/A	N/A	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
	11/1/2021	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	< 1.02	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/17/2022	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	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.957	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.586	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.619	N/A	N/A	< 0.607	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2,4-Dichlorophenol, ug/L (CAS NO - 120-83-2)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,4-Dimethylphenol, ug/L (CAS NO - 105-67-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,4-Dinitrophenol, ug/L (CAS NO - 51-28-5)	8/11/2009	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 24.4	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 23.8	< 20	< 28.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 40	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 20	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
	3/26/2014	N/A	N/A	N/A	< 20.4	N/A	< 20.4	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20.4	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
	9/29/2014	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 20.2	N/A	N/A	< 20.4	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
	5/20/2020	N/A	N/A	< 20	N/A	N/A	< 20.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 18.5	< 19.2	< 18.5	< 18.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 20	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
2,4-Dinitrotoluene, ug/L (CAS NO - 121-14-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	24	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	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
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2,6-Dichlorophenol, ug/L (CAS NO - 87-65-0)	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2,6-Dinitrotoluene, ug/L (CAS NO - 606-20-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Acetylaminofluorene, ug/L (CAS NO - 53-96-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Chloronaphthalene, ug/L (CAS NO - 91-58-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2-Chlorophenol, ug/L (CAS NO - 95-57-8)	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Methylnaphthalene, ug/L (CAS NO - 91-57-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Methylphenol, ug/L (CAS NO - 95-48-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Naphthylamine, ug/L (CAS NO - 91-59-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
2-Nitroaniline, ug/L (CAS NO - 88-74-4)	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
2-Nitrophenol, ug/L (CAS NO - 88-75-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3,3-Dichlorobenzidine, ug/L (CAS NO - 91-94-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 50	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	N/A
	3/26/2014	N/A	N/A	N/A	< 51	N/A	< 51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 51	N/A	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	N/A	N/A	N/A	< 50	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
	3/31/2015	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	N/A	N/A
	8/25/2015	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	< 50	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 50	< 50	< 50	< 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3,3-Dimethylbenzidine, ug/L (CAS NO - 119-93-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
3/4-Methylphenol, ug/L (CAS NO - T-34MP)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.186*	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3-Chloropropene, ug/L (CAS NO - 107-05-1)	8/11/2009	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	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	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 2	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3-Methylcholanthrene, ug/L (CAS NO - 56-49-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
3-Nitroaniline, ug/L (CAS NO - 99-09-2)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4,4`-DDD, ug/L (CAS NO - 72-54-8)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.003*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4`-DDE, ug/L (CAS NO - 72-55-9)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.00359*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,4`-DDT, ug/L (CAS NO - 50-29-3)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	0.00943*	N/A	0.0176*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
4,6-Dinitro-2-methylphenol, ug/L (CAS NO - 534-52-1)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Aminobiphenyl, ug/L (CAS NO - 92-67-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Bromophenyl phenyl ether, ug/L (CAS NO - 101-55-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Chloro-3-methylphenol, ug/L (CAS NO - 59-50-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
4-Chloroaniline, ug/L (CAS NO - 106-47-8)	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Chlorophenyl phenyl ether, ug/L (CAS NO - 7005-72-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Nitroaniline, ug/L (CAS NO - 100-01-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
4-Nitrophenol, ug/L (CAS NO - 100-02-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
5-Nitro-o-toluidine, ug/L (CAS NO - 99-55-8)	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
7,12-Dimethylbenz [a] anthracene, ug/L (CAS NO - 57-97-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Acenaphthene, ug/L (CAS NO - 83-32-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Acenaphthylene, ug/L (CAS NO - 208-96-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Acetonitrile, mg/L (CAS NO - 75-05-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	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	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Acetonitrile, mg/L (CAS NO - 75-05-8)	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 10	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Acetophenone, ug/L (CAS NO - 98-86-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Acrolein, ug/L (CAS NO - 107-02-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	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	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 10	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Aldrin, ug/L (CAS NO - 309-00-2)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anthracene, ug/L (CAS NO - 120-12-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Anthracene, ug/L (CAS NO - 120-12-7)	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzo [a] anthracene, ug/L (CAS NO - 56-55-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzo [a] pyrene, ug/L (CAS NO - 50-32-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.36*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzo [b] fluoranthene, ug/L (CAS NO - 205-99-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.839*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Benzo [g,h,i] perylene, ug/L (CAS NO - 191-24-2)	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.32*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzo [k] fluoranthene, ug/L (CAS NO - 207-08-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.335*	< 10	< 10	0.326*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Benzyl alcohol, ug/L (CAS NO - 100-51-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Alpha-BHC, ug/L (CAS NO - 319-84-6)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	0.00199*	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	0.00269*	N/A	N/A	< 0.0323	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0242*	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beta-BHC, ug/L (CAS NO - 319-85-7)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Beta-BHC, ug/L (CAS NO - 319-85-7)	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	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)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	0.0038*	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gamma-BHC [Lindane], ug/L (CAS NO - 58-89-9)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bis[2-chloroethoxy]methane, ug/L (CAS NO - 111-91-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Bis[2-chloroethyl]ether, ug/L (CAS NO - 111-44-4)	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Bis[2-chloroisopropyl]ether, ug/L (CAS NO - 108-60-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Bis[2-ethylhexyl]phthalate, ug/L (CAS NO - 117-81-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.4	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.6	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 10	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
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.935*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	98	N/A	21.6	N/A	N/A	N/A	4.32*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.946*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2014	N/A	N/A	N/A	1.63*	N/A	3.1*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/5/2014	N/A	N/A	N/A	0.797*	N/A	< 10	N/A	N/A	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	< 10	N/A	0.539*	1.94*	N/A	N/A	0.71*	N/A	N/A	N/A	1.85*	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	7.1*	N/A	6.63*	N/A	N/A	N/A	3.87*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	N/A	N/A	N/A	7.42*	N/A	15.5	N/A	N/A	N/A	8.02*	N/A	N/A	N/A	11.6	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.31*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	4.55*	N/A	0.71*	N/A	N/A	N/A	2.74*	N/A	N/A	N/A	0.917*	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	1.45*	N/A	0.931*	N/A	N/A	1.47*	1.19*	N/A	N/A	N/A	0.912*	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	1.85*	N/A	< 10	N/A	N/A	N/A	2.35*	8.75*	2.74*	2.16*	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	1.9*	N/A	N/A	N/A	2.18*	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	< 10	N/A	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	3.48*	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	N/A	N/A	N/A	< 10	N/A	< 10.1	N/A	N/A	N/A	< 10	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	< 10.1	< 10.2	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.19*	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	N/A	N/A	N/A	N/A	N/A	< 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
	5/25/2021	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	N/A	N/A	N/A
	8/24/2021	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.99*	124	< 9.26	7.38*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	86.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	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/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	11/18/2024	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Butyl benzyl phthalate, ug/L (CAS NO - 85-68-7)	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Chlordane, ug/L (CAS NO - 57-74-9)	8/11/2009	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 2.04	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2.04	N/A	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	N/A	N/A	N/A	< 2	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	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	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 2.02	N/A	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 2	N/A	N/A	< 2.02	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.85	< 1.85	< 1.85	< 1.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Alpha-Chlordane, ug/L (CAS NO - 5103-71-9)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
Gamma-Chlordane, ug/L (CAS NO - 5566-34-7)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
Chlorobenzilate, ug/L (CAS NO - 510-15-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Chloroprene, ug/L (CAS NO - 126-99-8)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/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
	8/25/2015	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	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 1	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Chrysene, ug/L (CAS NO - 218-01-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Cyanide, mg/L (CAS NO - 57-12-5)	8/11/2009	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.01	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
	3/26/2014	N/A	N/A	N/A	0.00679*	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
	5/6/2014	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	N/A
	9/29/2014	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	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.01	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
	5/20/2020	N/A	N/A	< 0.01	N/A	N/A	< 0.01	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.01	< 0.01	< 0.01	< 0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.01	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
Diallate [cis or trans], ug/L (CAS NO - 2303-16-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.63*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Dibenz [a,h] anthracene, ug/L (CAS NO - 53-70-3)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dibenzofuran, ug/L (CAS NO - 132-64-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dichlorodifluoromethane, ug/L (CAS NO - 75-71-8)	8/11/2009	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.9	4.39	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.27	5.06	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9.81	5.04	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.4	4.62	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.7	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.44	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.86	5.16	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.86	4.52	< 4	< 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.42	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.57	6.38	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	8.19	7.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.65	3.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 3	N/A	< 3	N/A	N/A	N/A	7	4.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	4.87	5.63	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 3	N/A	N/A	N/A	6.3	4.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.8*	4.66	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.81	2.69*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 3	6.4	3.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.67	1.91*	< 3	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.16	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.77	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.17*	0.286*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	6.29	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/24/2019	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	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	N/A	7.48	2.8*	N/A	N/A	< 3	N/A	N/A	N/A	N/A	N/A	N/A
	10/28/2020	< 3	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	5.17	< 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	8/24/2021	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	N/A	N/A
	11/1/2021	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	< 3	< 3	< 3	N/A	N/A	N/A	N/A	N/A	0.41*	4.27	< 3	< 3	< 3	N/A	N/A	N/A	N/A	< 3	< 3	< 3
	7/6/2022	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	< 3	N/A
	10/17/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/30/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/31/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 3	N/A	N/A	< 3	N/A	N/A	6.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin, ug/L (CAS NO - 60-57-1)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.00218*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Diethyl phthalate, ug/L (CAS NO - 84-66-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	1.93*	N/A	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	N/A	N/A	N/A	0.491*	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dimethoate, ug/L (CAS NO - 60-51-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dimethyl phthalate, ug/L (CAS NO - 131-11-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Dimethylaminoazobenzene, ug/L (CAS NO - 60-11-7)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Di-n-butyl phthalate, ug/L (CAS NO - 84-74-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	10.4	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/19/2013	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	N/A
	9/17/2013	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/A	N/A	N/A	< 10	N/A	N/A	1.12*	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	N/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	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	0.602*	0.623*	< 10	0.64*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/9/2018	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	N/A	N/A	N/A	N/A	N/A
	10/2/2018	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	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	< 10.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Di-n-octyl phthalate, ug/L (CAS NO - 117-84-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 20	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
	3/26/2014	N/A	N/A	N/A	0.336*	N/A	< 20.4	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20.4	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
	9/29/2014	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.83*	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 20.2	N/A	N/A	2.86*	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
	5/20/2020	N/A	N/A	< 20	N/A	N/A	< 20.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20.2	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 18.5	< 19.2	< 18.5	< 18.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 20	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
Dinoseb, ug/L (CAS NO - 88-85-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Diphenylamine, ug/L (CAS NO - 122-39-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Diphenylamine, ug/L (CAS NO - 122-39-4)	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Disulfoton, ug/L (CAS NO - 298-04-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Endosulfan I, ug/L (CAS NO - 959-98-8)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	0.00293*	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	0.00213*	N/A	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	N/A	N/A	N/A	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	0.00231*	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	0.00239*	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.00956*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00592*	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan II, ug/L (CAS NO - 33213-65-9)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	0.00669*	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	0.012*	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.00532*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	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

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Endosulfan sulfate, ug/L (CAS NO - 1031-07-8)	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin, ug/L (CAS NO - 72-20-8)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endrin aldehyde, ug/L (CAS NO - 7421-93-4)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	0.0133*	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ethyl Methacrylate, ug/L (CAS NO - 97-63-2)	8/11/2009	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	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	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 2	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Ethyl Methanesulfonate, ug/L (CAS NO - 62-50-0)	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Famphur, ug/L (CAS NO - 52-85-7)	8/11/2009	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 24.4	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 23.8	< 20	< 28.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 40	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	N/A	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 20	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
	3/26/2014	N/A	N/A	N/A	< 20.4	N/A	< 20.4	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20.4	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
	9/29/2014	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 20	< 20	< 20	< 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Fluoranthene, ug/L (CAS NO - 206-44-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.471*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Fluorene, ug/L (CAS NO - 86-73-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Heptachlor, ug/L (CAS NO - 76-44-8)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Heptachlor, ug/L (CAS NO - 76-44-8)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	0.00419*	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	0.00743*	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Heptachlor Epoxide, ug/L (CAS NO - 1024-57-3)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	< 0.0327	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hexachlorobenzene, ug/L (CAS NO - 118-74-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Hexachlorobutadiene, ug/L (CAS NO - 87-68-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Hexachlorocyclopentadiene, ug/L (CAS NO - 77-47-4)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 20	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
	3/26/2014	N/A	N/A	N/A	< 20.4	N/A	< 20.4	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 20.4	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
	9/29/2014	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	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	< 20	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	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	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Hexachloroethane, ug/L (CAS NO - 67-72-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Hexachloropropene, ug/L (CAS NO - 1888-71-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.47*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Indeno [1,2,3-cd] pyrene, ug/L (CAS NO - 193-39-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.47*	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Isobutanol, mg/L (CAS NO - 78-83-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	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	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 10	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Isodrin, ug/L (CAS NO - 465-73-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Isophorone, ug/L (CAS NO - 78-59-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Isosafrole, ug/L (CAS NO - 120-58-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Isosafrole, ug/L (CAS NO - 120-58-1)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Kepone, ug/L (CAS NO - 143-50-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Methacrylonitrile, ug/L (CAS NO - 126-98-7)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/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	N/A
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 10	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Methapyrilene, ug/L (CAS NO - 91-80-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Methoxychlor, ug/L (CAS NO - 72-43-5)	8/11/2009	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.032	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
	3/26/2014	N/A	N/A	N/A	0.0147*	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	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	N/A	N/A	N/A	< 0.032	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry
Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Methoxychlor, ug/L (CAS NO - 72-43-5)	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.032	< 0.032	< 0.032	< 0.032	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.0323	N/A	N/A	< 0.0327	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.032	N/A	N/A	< 0.0323	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.0593	< 0.0593	< 0.0593	< 0.0593	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 0.0954	N/A	N/A	< 0.0895	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methyl Methacrylate, ug/L (CAS NO - 80-62-6)	8/11/2009	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	N/A	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 2	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	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	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 2	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Methyl Methanesulfonate, ug/L (CAS NO - 66-27-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Naphthalene, ug/L (CAS NO - 91-20-3)	8/11/2009	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 5	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 5	< 5	< 5	< 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Nitrobenzene, ug/L (CAS NO - 98-95-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Nitrobenzene, ug/L (CAS NO - 98-95-3)	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosodiethylamine, ug/L (CAS NO - 55-18-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosodimethylamine, ug/L (CAS NO - 62-75-9)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosodi-n-butylamine, ug/L (CAS NO - 924-16-3)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
N-Nitrosodi-n-propylamine, ug/L (CAS NO - 621-64-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosodiphenylamine, ug/L (CAS NO - 86-30-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosomethylethylamine, ug/L (CAS NO - 10595-95-6)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
N-Nitrosopiperidine, ug/L (CAS NO - 100-75-4)	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
N-Nitrosopyrrolidine, ug/L (CAS NO - 930-55-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
O,O,O-Triethyl Phosphorothioate, ug/L (CAS NO - 126-68-1)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
O-Toluidine, ug/L (CAS NO - 95-53-4)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	64.1	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 10	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	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	N/A	N/A
	8/25/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	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

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Parathion-Ethyl, ug/L (CAS NO - 56-38-2)	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Parathion-Methyl, ug/L (CAS NO - 298-00-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
PCB-1016, ug/L (CAS NO - 12674-11-2)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1221, ug/L (CAS NO - 11104-28-2)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1232, ug/L (CAS NO - 11141-16-5)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
PCB-1232, ug/L (CAS NO - 11141-16-5)	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1242, ug/L (CAS NO - 53469-21-9)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1248, ug/L (CAS NO - 12672-29-6)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1254, ug/L (CAS NO - 11097-69-1)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCB-1260, ug/L (CAS NO - 11096-82-5)	8/11/2009	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 0.8	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
	3/26/2014	N/A	N/A	N/A	< 0.816	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	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	N/A
	9/29/2014	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	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	N/A	N/A	N/A	N/A
	9/20/2016	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	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
PCB-1260, ug/L (CAS NO - 11096-82-5)	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.8	< 0.8	< 0.8	< 0.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 0.808	N/A	N/A	< 0.816	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 0.8	N/A	N/A	< 0.808	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
	5/25/2021	N/A	N/A	< 0.8	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
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.741	< 0.741	< 0.741	< 0.741	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorobenzene, ug/L (CAS NO - 608-93-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Pentachloronitrobenzene, ug/L (CAS NO - 82-68-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Pentachlorophenol [2C], ug/L (CAS NO - 87-86-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Phenacetin, ug/L (CAS NO - 62-44-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Phenacetin, ug/L (CAS NO - 62-44-2)	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Phenanthrene, ug/L (CAS NO - 85-01-8)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Phenol, ug/L (CAS NO - 108-95-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Phorate, ug/L (CAS NO - 298-02-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Pronamide, ug/L (CAS NO - 23950-58-5)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Pronamide, ug/L (CAS NO - 23950-58-5)	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Propionitrile, ug/L (CAS NO - 107-12-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/17/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/27/2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/25/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	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	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	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	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 10	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	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Pyrene, ug/L (CAS NO - 129-00-0)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Safrole, ug/L (CAS NO - 94-59-7)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Sulfide, mg/L (CAS NO - 18496-25-8)	8/11/2009	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SCS ENGINEERS

Summary of Groundwater Chemistry

Northwest Iowa Area Sanitary Landfill - 84-SDP-01-74P

Other Constituents	Sample Date	UG-90 UPG	UG-201 UPG	DG-901 DNG	DG-905 DNG	DG-1001 DNG	DG-1005 DNG	DG-1101 DNG	DG-1105R DNG	DG-1201 DNG	DG-1205 DNG	DG-1301 DNG	DG-1305 DNG	DG-1401R DNG	DGP-1500 DNG	GU-13 DNG	GU-14 DNG	GU-15 DNG	TDG-301 DNG	TDG-305 DNG	SW-101 DNG
Sulfide, mg/L (CAS NO - 18496-25-8)	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 0.12	< 0.12	0.48	0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	N/A	N/A	N/A	< 1	N/A	N/A	< 1	N/A	N/A	N/A	N/A	1.68	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/17/2013	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	0.302*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2014	< 1	< 1	N/A	< 1	N/A	< 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
	5/6/2014	N/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	N/A
	9/29/2014	< 1	< 1	N/A	N/A	N/A	N/A	< 1	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	< 1	< 1	N/A	N/A	N/A	< 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
	8/25/2015	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A
	12/1/2015	N/A	N/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	N/A	N/A
	4/12/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/11/2017	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	N/A
	5/9/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.361*	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/2/2018	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1	< 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	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	N/A
	5/20/2020	N/A	N/A	< 1	N/A	N/A	0.276*	N/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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.686*	0.298*	< 1	0.267*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Thionazin, ug/L (CAS NO - 297-97-2)	8/11/2009	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 12.2	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 11.9	< 10	< 14.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 20	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/15/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 10.2	N/A	< 10.2	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
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 10.2	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
	9/29/2014	N/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	N/A	N/A	N/A	N/A	N/A	N/A
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/20/2016	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10	< 10	< 10	< 10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 10.1	N/A	N/A	< 10.2	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
	5/20/2020	N/A	N/A	< 10	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 10.1	N/A	N/A	N/A	N/A	N/A	N/A
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 9.26	< 9.62	< 9.26	< 9.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	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	N/A
Toxaphene, ug/L (CAS NO - 8001-35-2)	8/11/2009	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	9/29/2009	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	4/6/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	6/17/2010	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/2/2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	3/26/2013	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	N/A
	3/26/2014	N/A	N/A	N/A	< 2.04	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/6/2014	N/A	N/A	N/A	N/A	N/A	N/A	< 2.04	N/A	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	N/A	N/A	N/A	< 2	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
	3/31/2015	N/A	N/A	N/A	N/A	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	8/25/2015	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	N/A
	12/1/2015	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	N/A	N/A
	9/20/2016	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	N/A	N/A
	4/11/2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 2	< 2	< 2	< 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/7/2019	N/A	N/A	N/A	< 2.02	N/A	N/A	< 2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	5/20/2020	N/A	N/A	< 2	N/A	N/A	< 2.02	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
	5/25/2021	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	N/A	N/A	N/A
	7/6/2022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	< 1.85	< 1.85	< 1.85	< 1.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	7/9/2024	N/A	N/A	N/A	< 1.91	N/A	N/A	< 1.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

Denotes Detection.

Denotes Confirmed Outlier. Statistically Excluded.

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

Appendix D
Statistical Method and Output

Statistical Method and Output

Purpose

The purpose of this document is to provide the statistical evaluation of groundwater analytical data collected from the groundwater monitoring network of the Northwest Iowa Area Sanitary Landfill (Landfill).

Diagnostic and Exploratory Evaluations and Tests of Assumptions

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

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

Management of Non-Detect Data

Non-detect values in the dataset are managed using simple substitution or the Kaplan-Meier estimator. If less than 15% of the data are non-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.

Management of Data (ND data < 75%)

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

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

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

Management of Data (ND data ≥ 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.

Laboratory methodology and instrumentation achieved a cobalt reporting limit of 0.02 mg/L prior to and including the September 2012 sampling event. Beginning in 2013, improved laboratory instrumentation provided an increased concentration sensitivity and lower cobalt reporting limits. Due to analytical improvements, cobalt data prior to 2013 is no longer considered representative of groundwater quality at the Landfill and non-detect values of <0.02 mg/L in HMSP monitoring points were removed from the statistical evaluation.

Duplicate data for monitoring point DG-1401R during the 10/4/2017 sampling event was removed due to high TSS concentrations likely affecting the inorganic concentrations. Therefore, the sample was not considered representative of the groundwater at the time of sampling.

The four sampling events (5/7/2019 through 10/28/2020) for background monitoring point UG-201 were removed from statistical consideration. Due to issues with frequent pump malfunctions, the sampling methodology was changed from sampling with a submersible pump to sampling with a bailer. This removal of data will prevent statistical comparisons from being made between monitoring points with different sampling methods. After the monitoring well was equipped with a pump, inorganic concentrations returned to more typical levels.

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

Interwell prediction limits are calculated for the monitoring wells.

- 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 should be collected prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If the retesting result is above the prediction limit, the SSI is confirmed, and the monitoring point should be placed into the assessment monitoring program. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Intrawell Prediction Limits with Retesting

Intrawell prediction limits are calculated for the groundwater underdrains. Monitoring points GU-13, GU-14, and GU-15 are the underdrains with sufficient data to perform statistical evaluations.

- If the dataset has a normal distribution (or can be transformed to a normal distribution using Ladder of Powers), parametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If the dataset does not have a normal distribution (and cannot be transformed to a normal distribution using Ladder of Powers) or has greater than 50% non-detects, nonparametric intrawell prediction limits are calculated if at least six datasets have been collected.
- If an SSI above the prediction limit is indicated, retesting samples using the 1-of-2 retesting scheme should be collected prior to the next regularly scheduled sampling event with temporal sample spacing consideration to provide samples with greater independence. If the retesting result is above the prediction limit, the SSI is confirmed, and the discharge will be treated with the leachate. If the retesting sample concentration is below the prediction limit, the SSI is not confirmed, and the monitoring point continues in the detection monitoring program.

Updating the Background Dataset for Intrawell Prediction Limits

If no SSI is confirmed for any two-year period, the intrawell background dataset will be updated using the following procedure:

- Test for normality (normal distribution) of the dataset either outright or through a transformation using Ladder of Powers:
  - Shapiro-Wilk test
- Test for statistically significant trends:
  - Mann-Kendall/Sen's Slope trend test

If an increasing trend is detected, the monitoring point discharge will be treated with the leachate.

- If the dataset has a normal distribution and no trend is present, conduct a two-sample Welch's t-test at a 0.01 significance level to compare current background to the most recent two years of detection monitoring data.

If Welch's t-test test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.

- If the dataset does not a have normal distribution and no trend is present, conduct a two-sample non-parametric Wilcoxon rank-sum test (also known as the Mann-Whitney test) at a 0.01 significance level to compare current background to the most recent two years of detection monitoring data.

If the Wilcoxon rank-sum test is significant and shows that the most recent two years of concentration data appear to be increasing, the background will not be updated.

- If the Welch's t-test and the Wilcoxon rank-sum test are not significant, the most recent two years of detection monitoring data will be added to the intrawell background dataset.
- Establish prediction limits based on the updated intrawell background dataset.

The process will repeat every two years in which an SSI is not confirmed.

Double Quantification Method

The quasi-statistical "double quantification" method 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/Corrective Action 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/corrective action monitoring statistical evaluations are performed using the most recent eight samples or all samples if less than eight samples are available. The confidence intervals or confidence bands used for the assessment/corrective action 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.

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

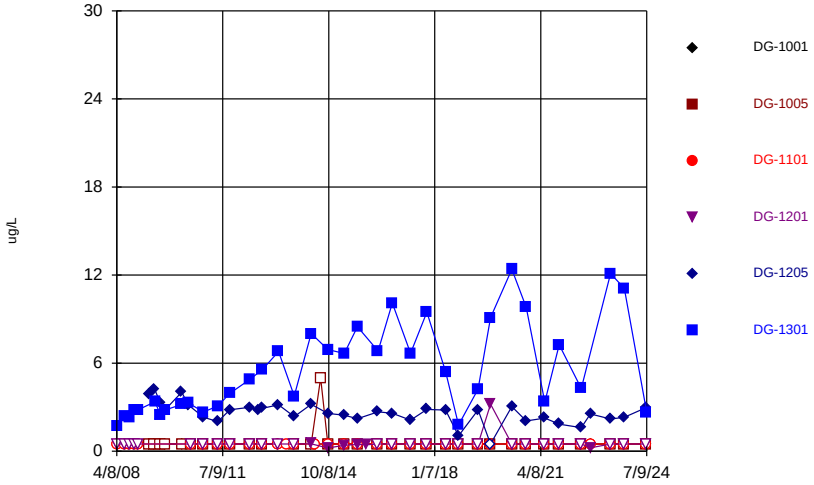
Sanitas™ statistical software was used to perform the statistical evaluations. The statistical output for the 1st and 2nd 2024 statistical evaluations are included in Attachments A and B of this appendix, respectively.

Attachment A
1st 2024 Statistical Evaluation Output

Time Series Plots

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

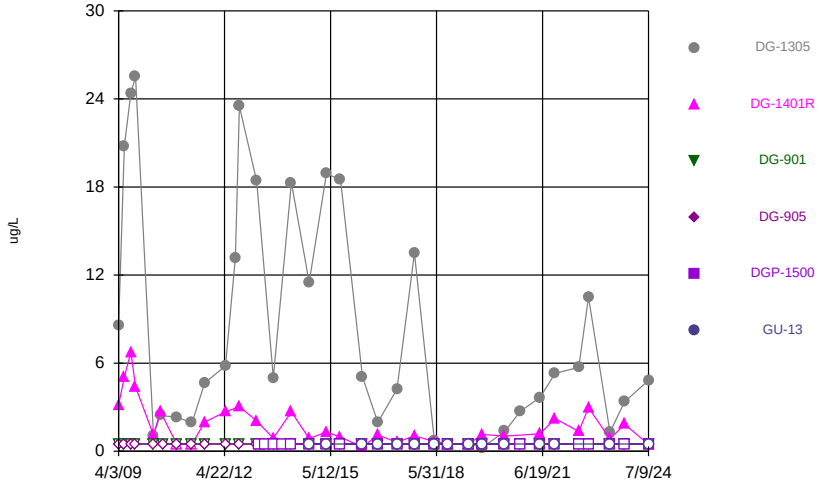
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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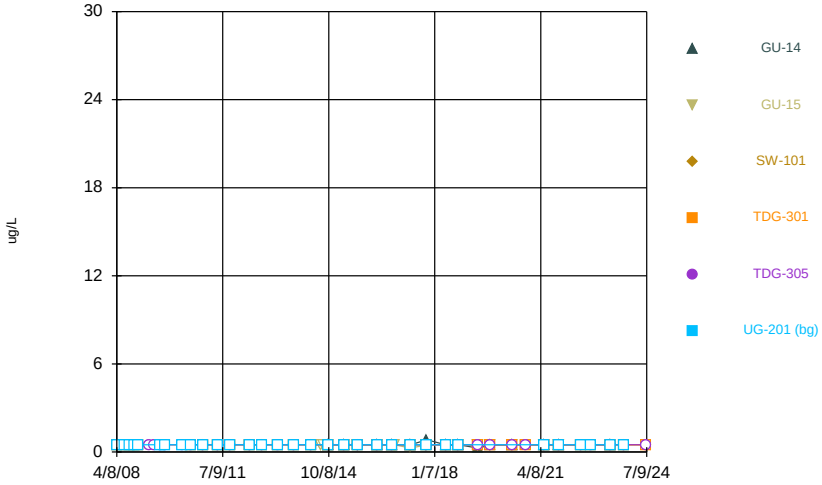
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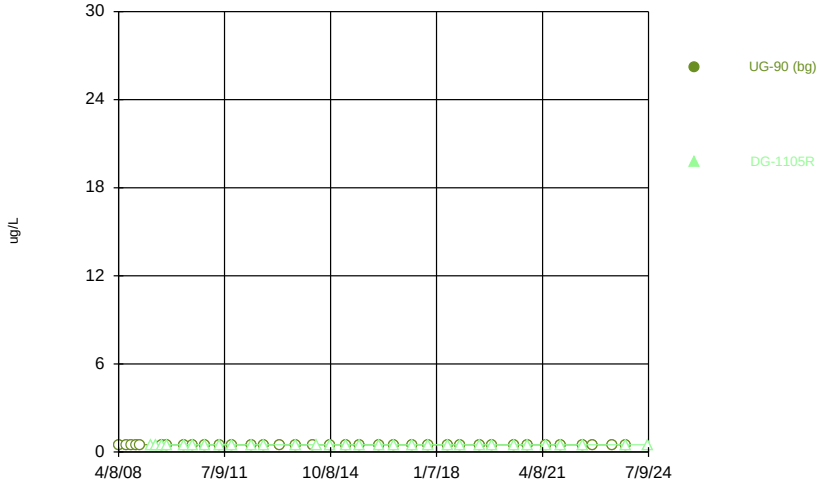
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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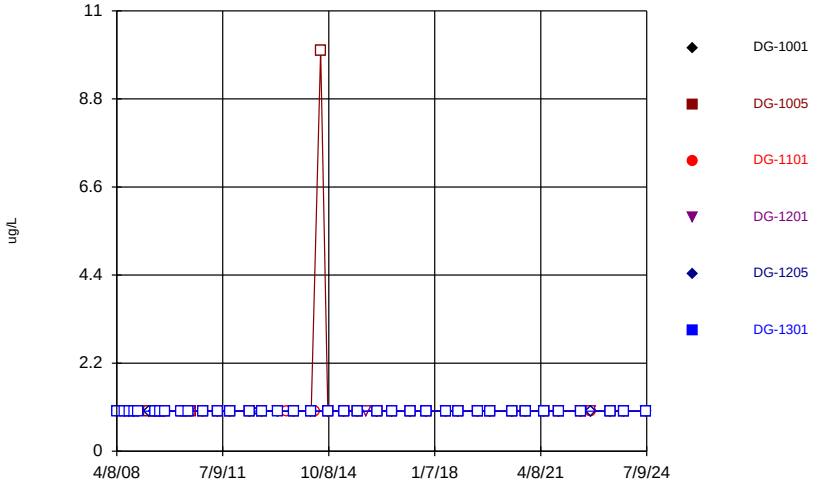
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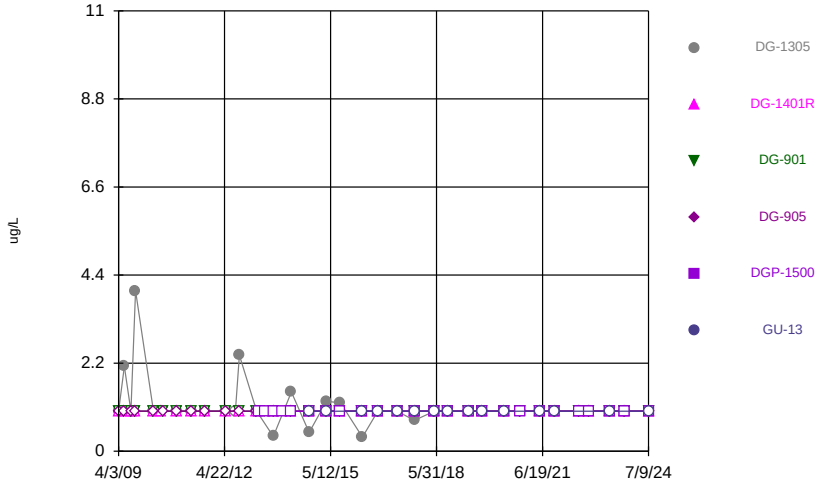
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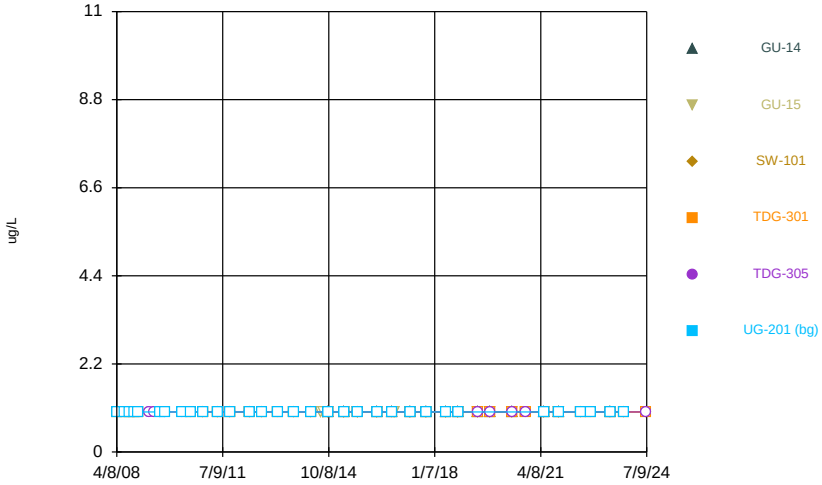
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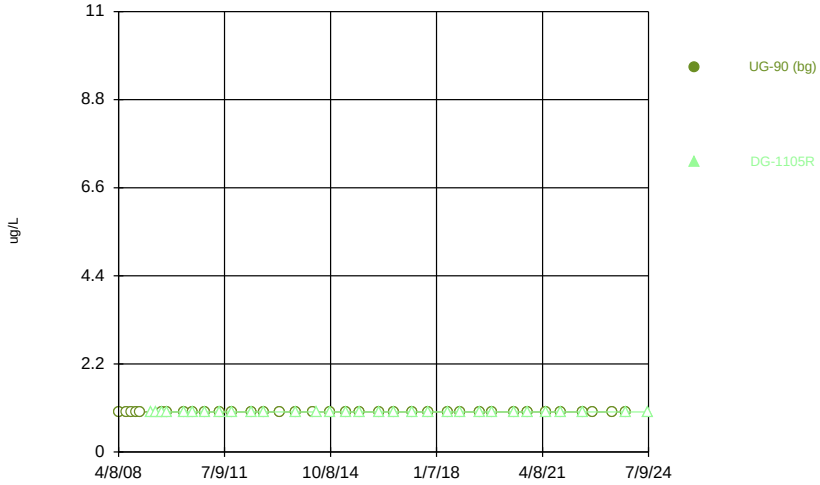
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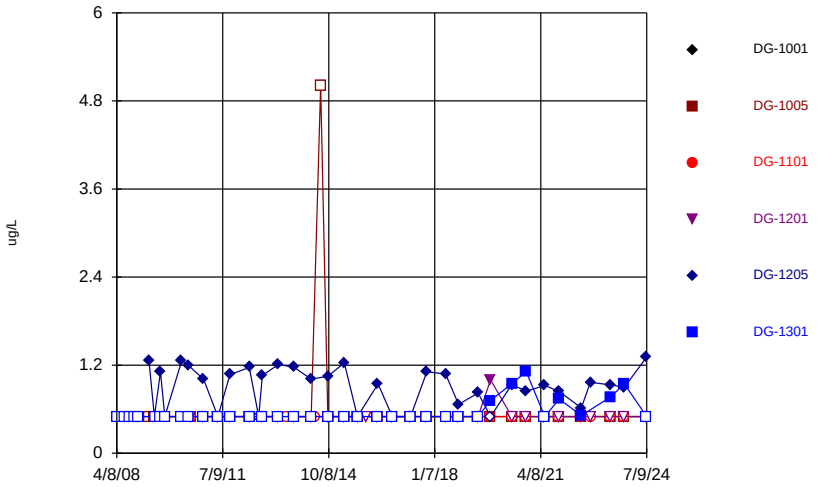
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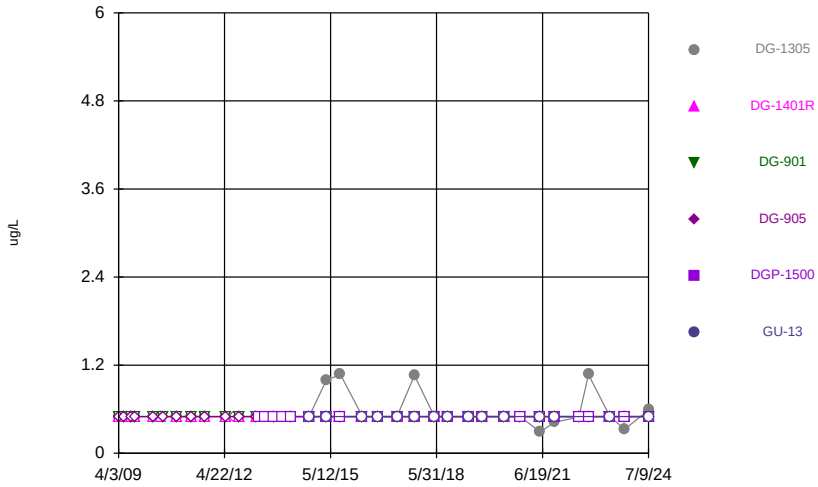
Time Series



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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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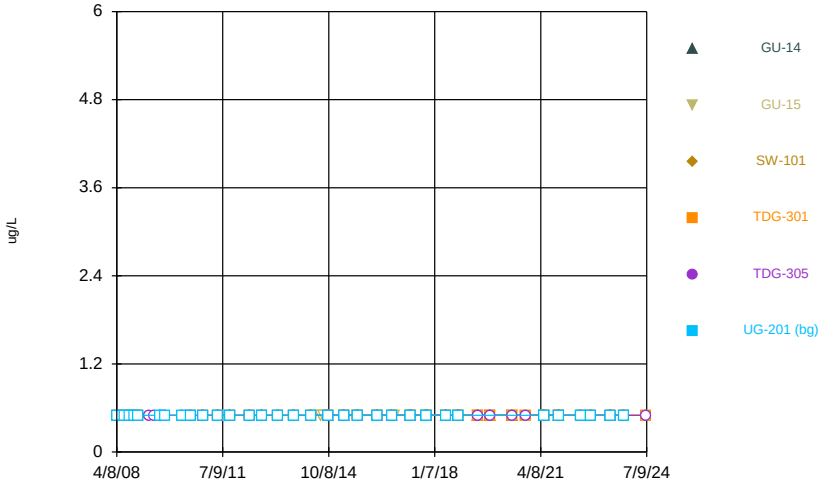
Time Series



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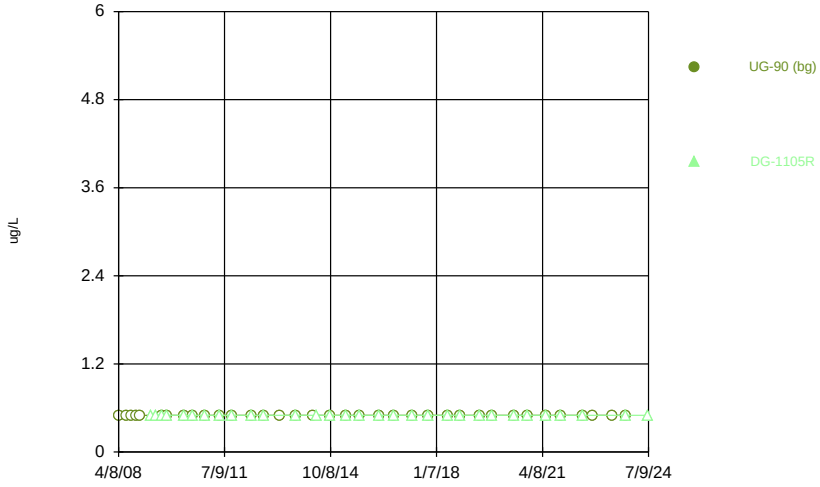
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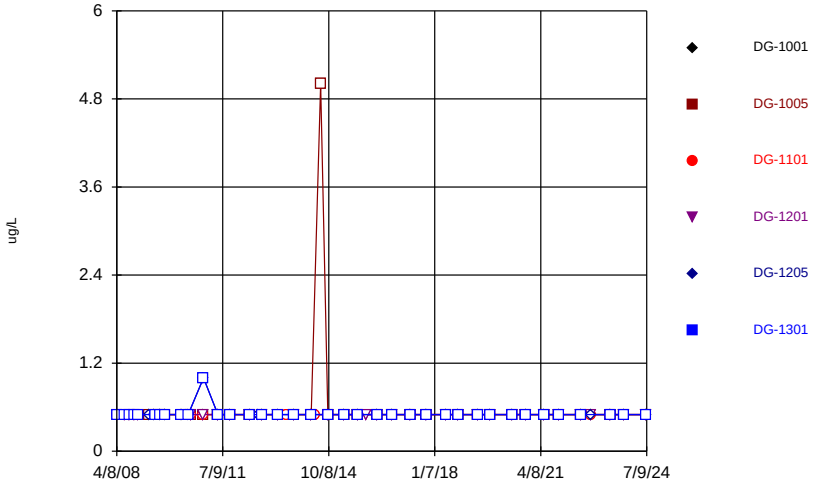
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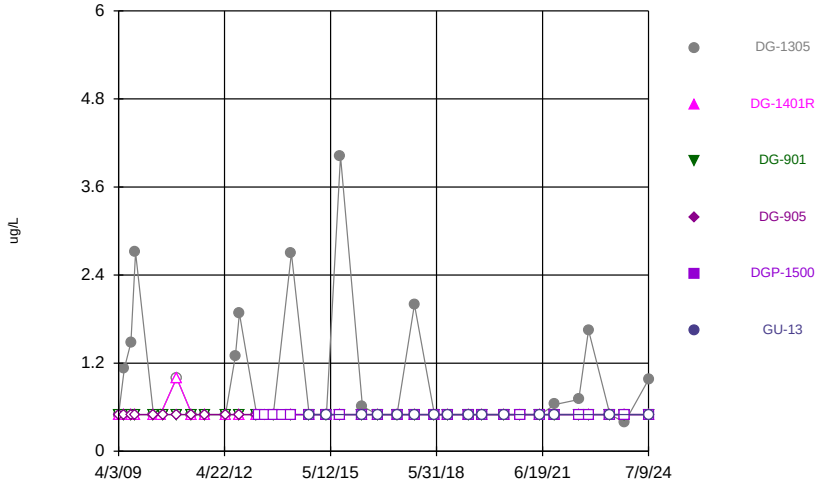
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

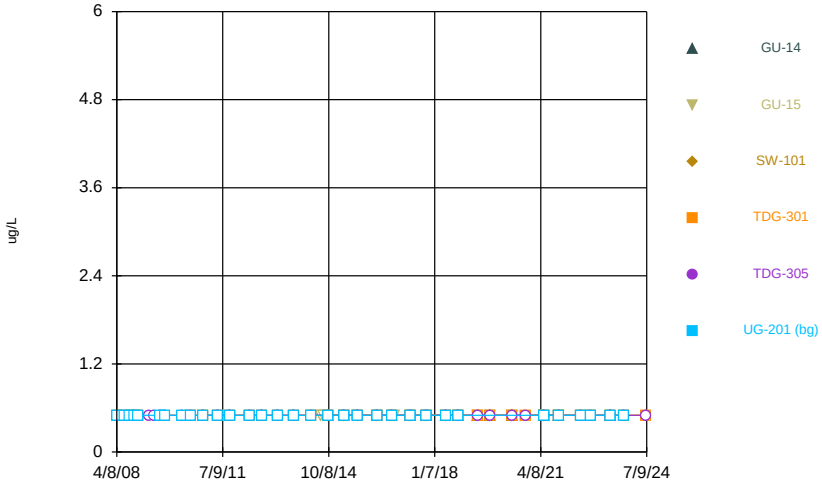
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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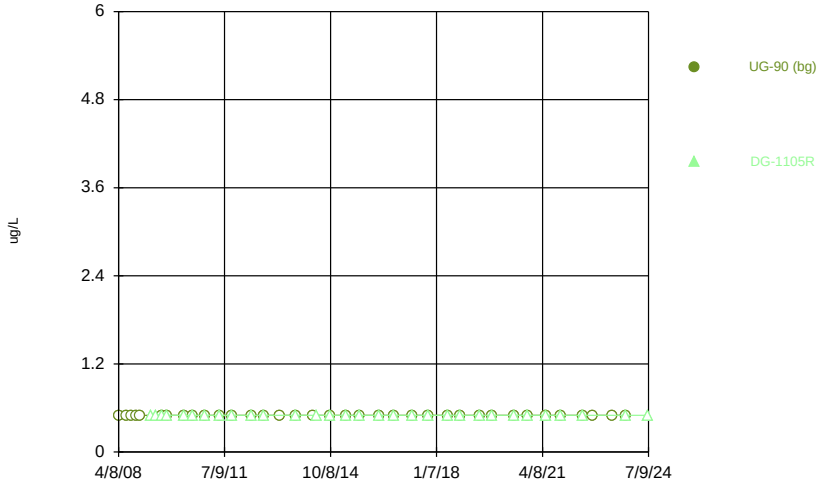
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

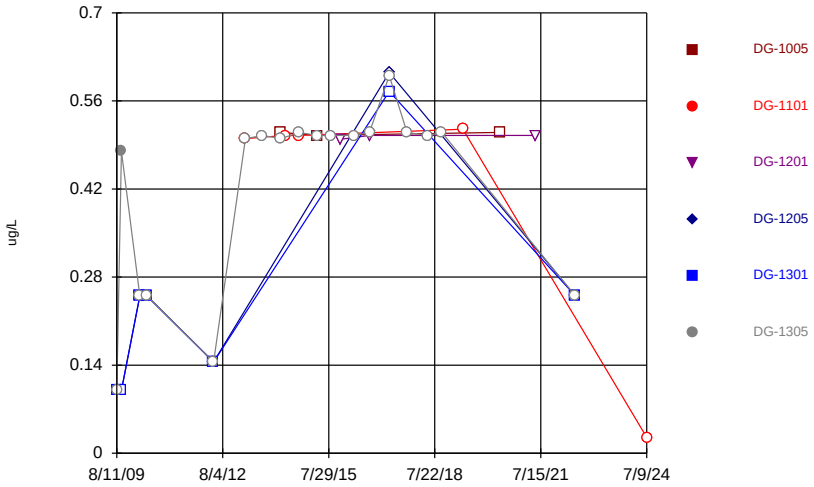
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

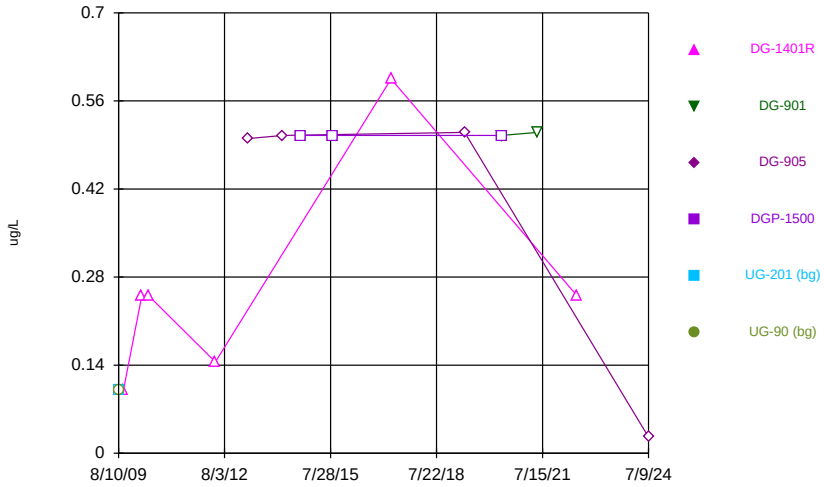
Time Series



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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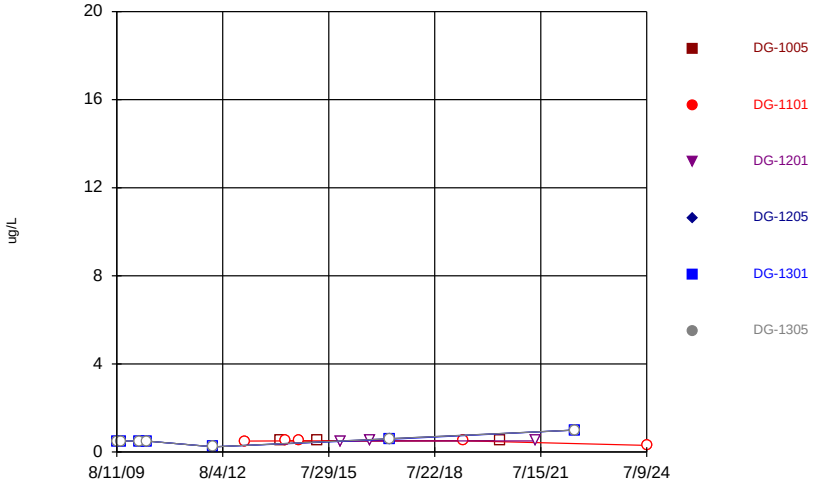
Time Series



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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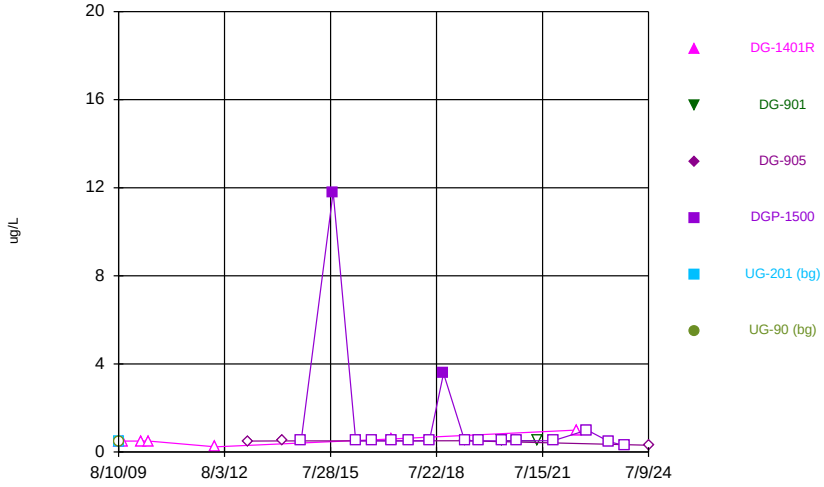
Time Series



Constituent: 2,4-D [2C] Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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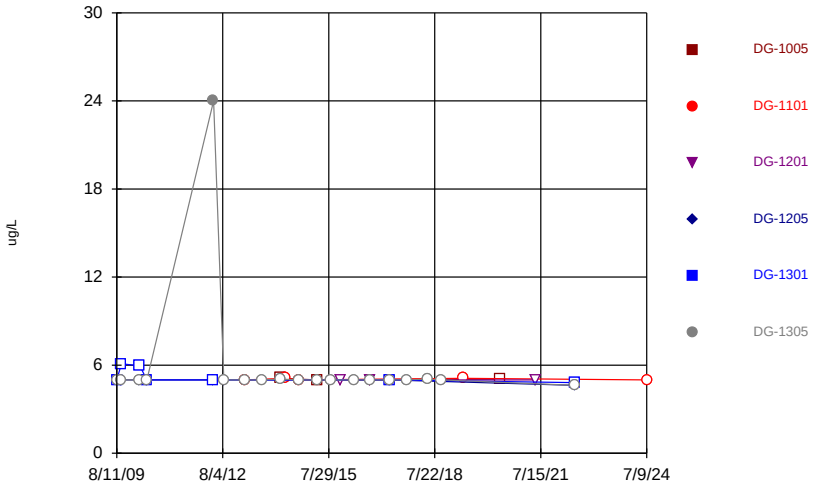
Time Series



Constituent: 2,4-D [2C] Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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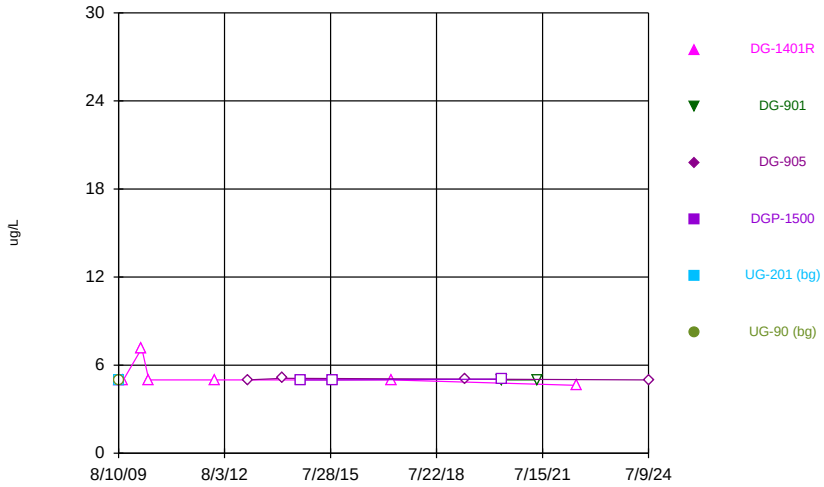
Time Series



Constituent: 2,4-Dinitrotoluene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

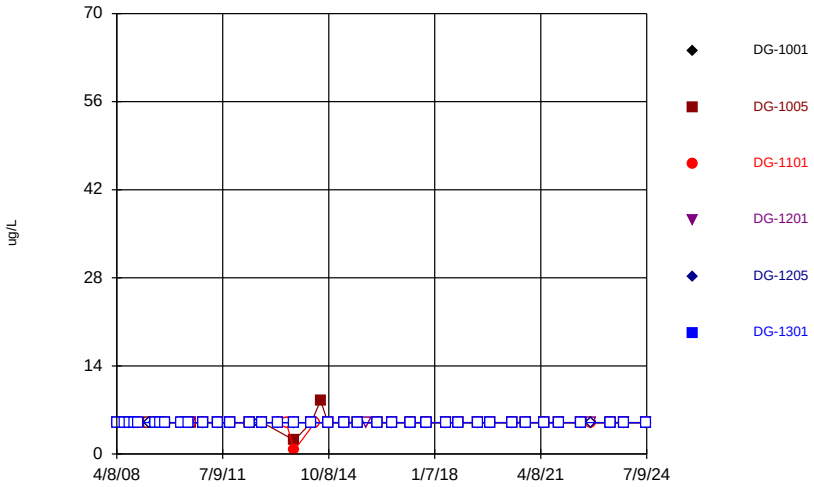
Time Series



Constituent: 2,4-Dinitrotoluene Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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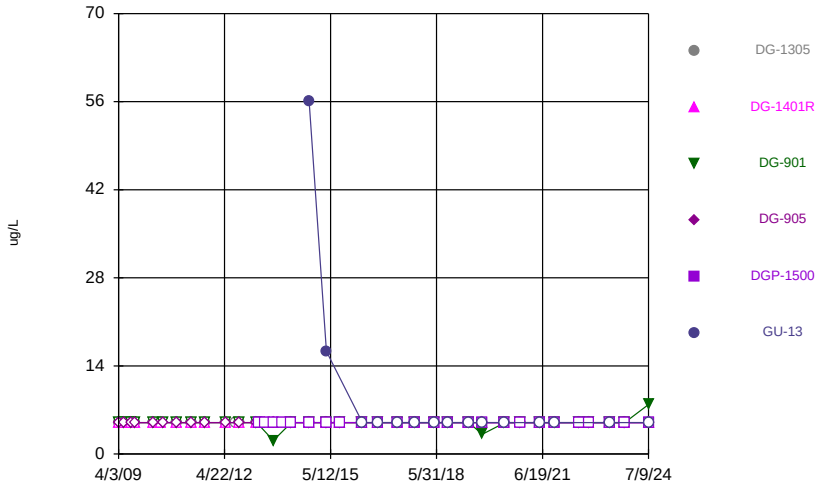
Time Series



Constituent: 2-Butanone Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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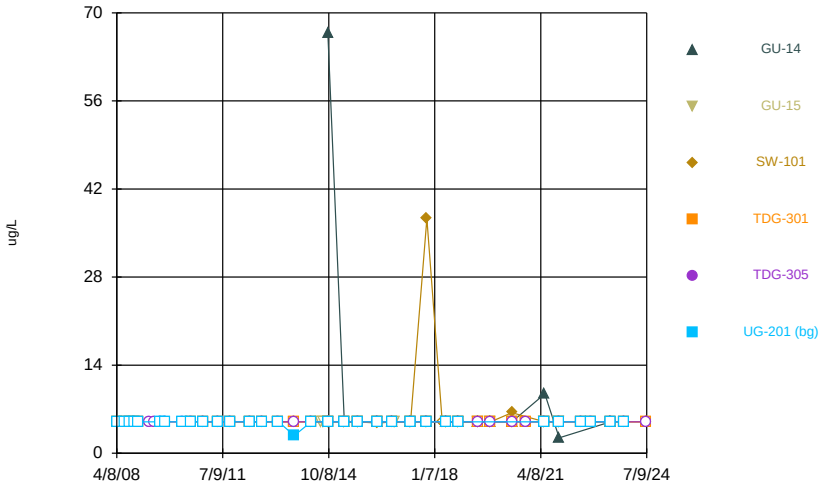
Time Series



Constituent: 2-Butanone Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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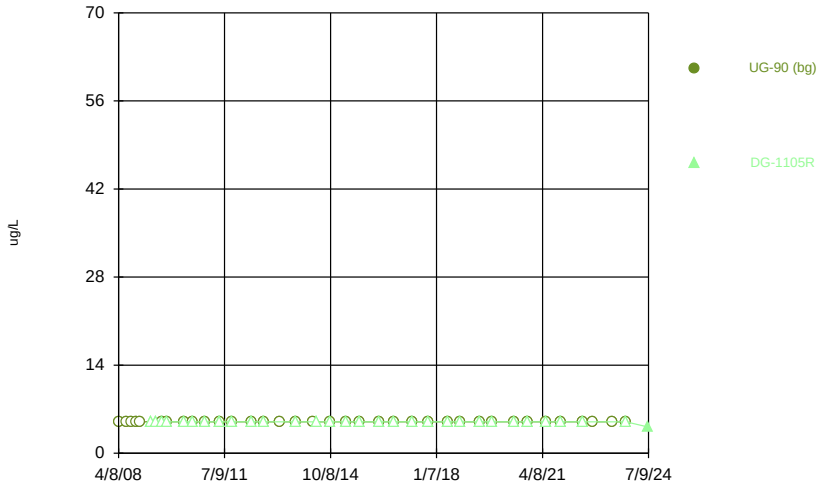
Time Series



Constituent: 2-Butanone Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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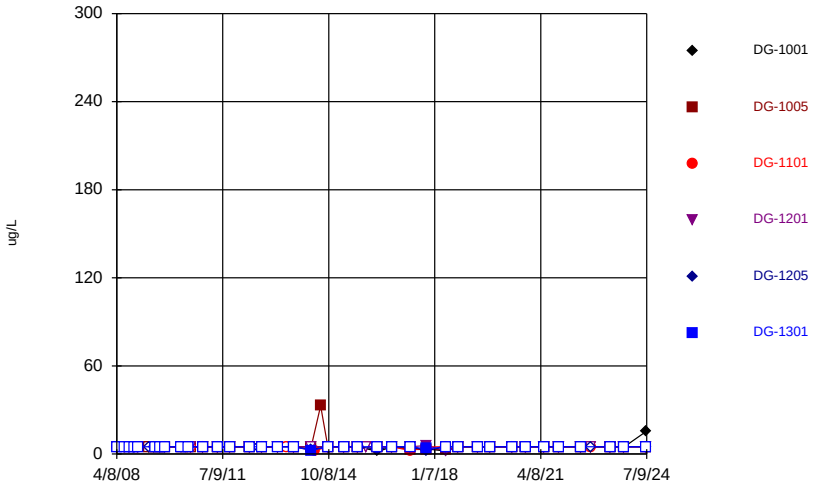
Time Series



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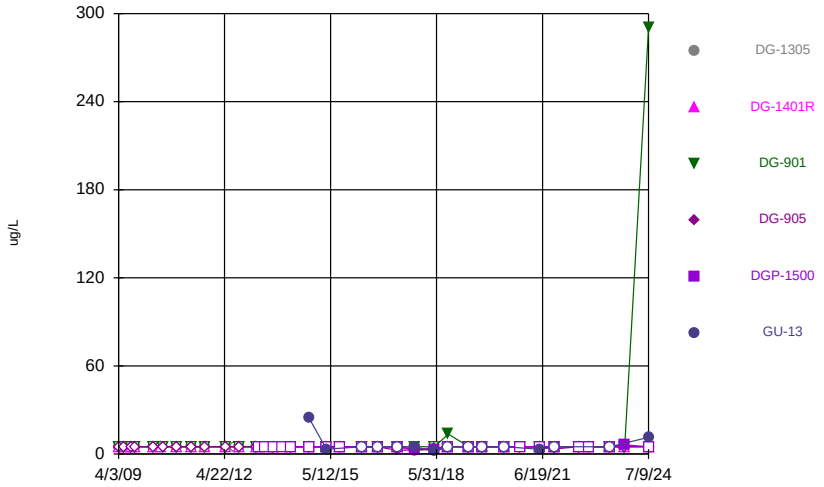
Time Series



Constituent: Acetone Analysis Run 10/16/2024 11:51 AM View: 2024SSN -Time Series
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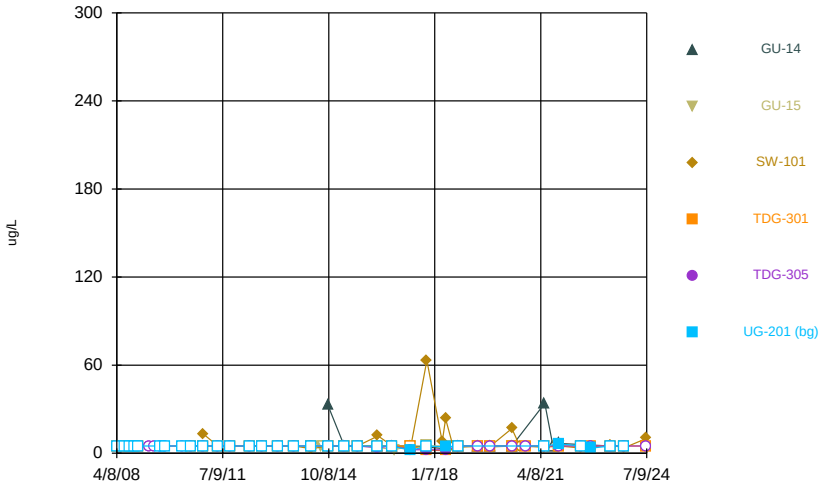
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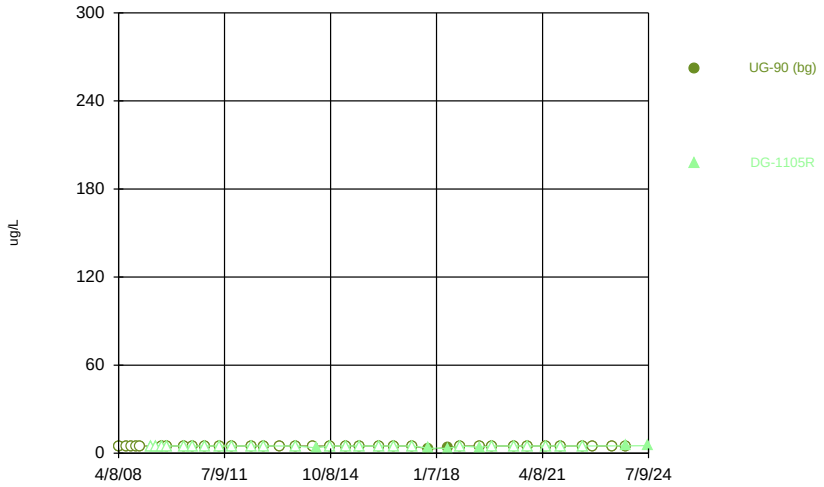
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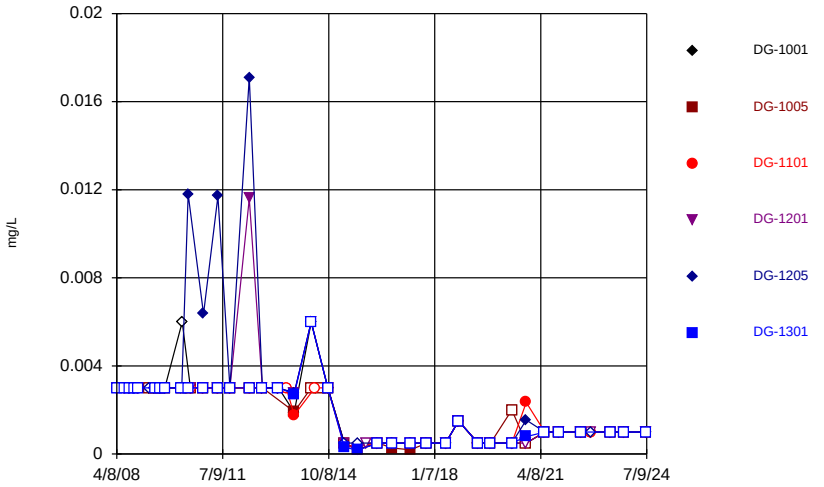
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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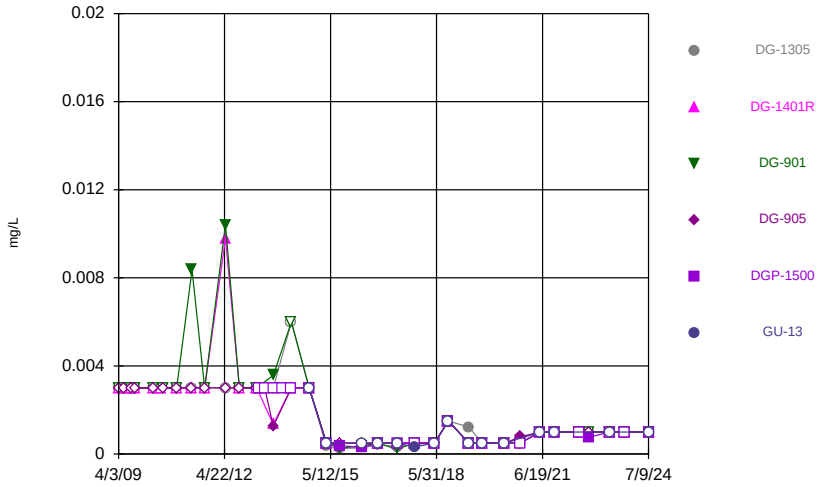
Time Series



Constituent: Antimony Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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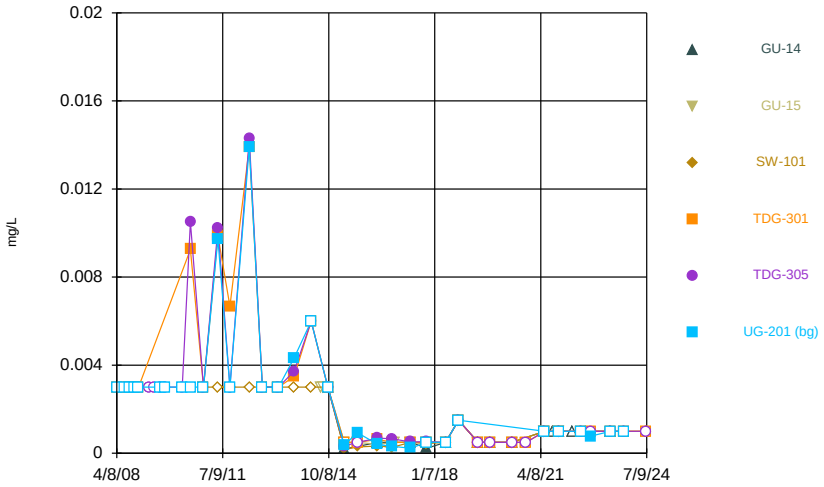
Time Series



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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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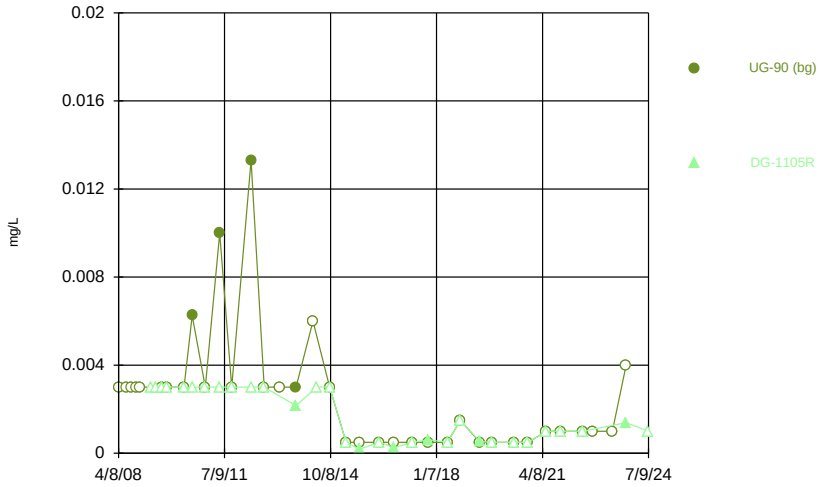
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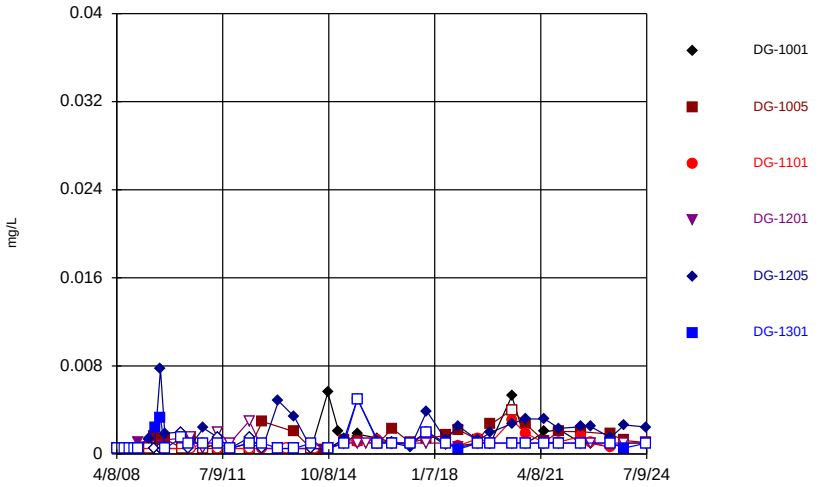
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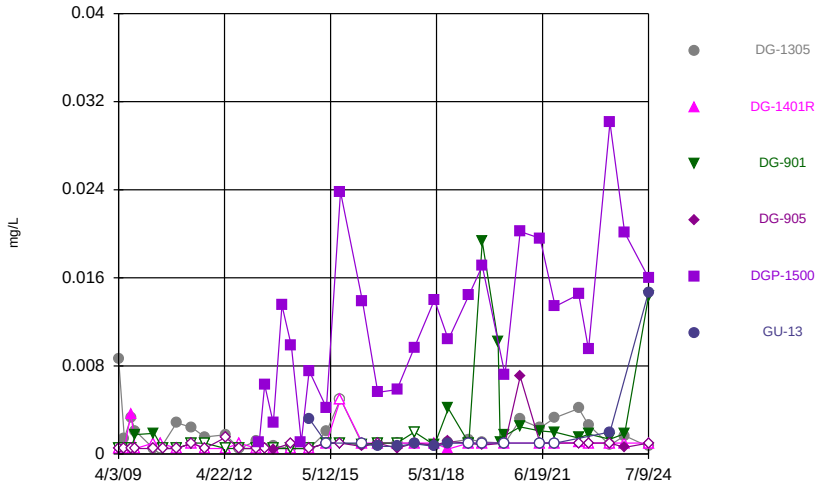
Time Series



Constituent: Arsenic Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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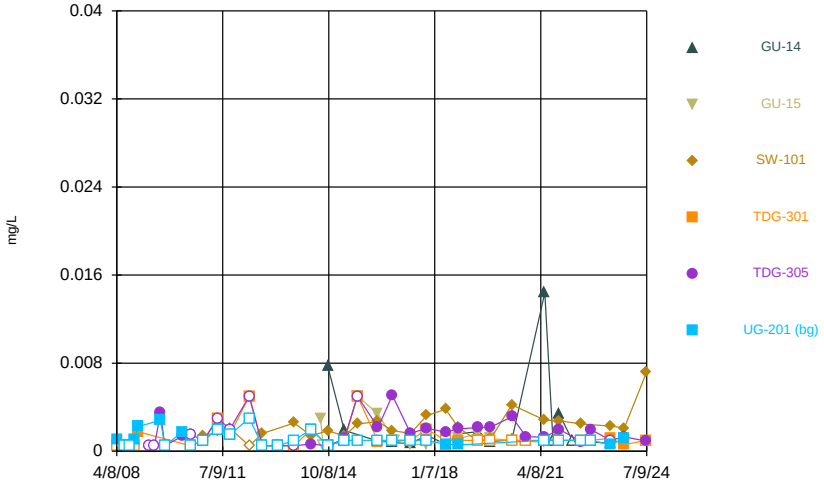
Time Series



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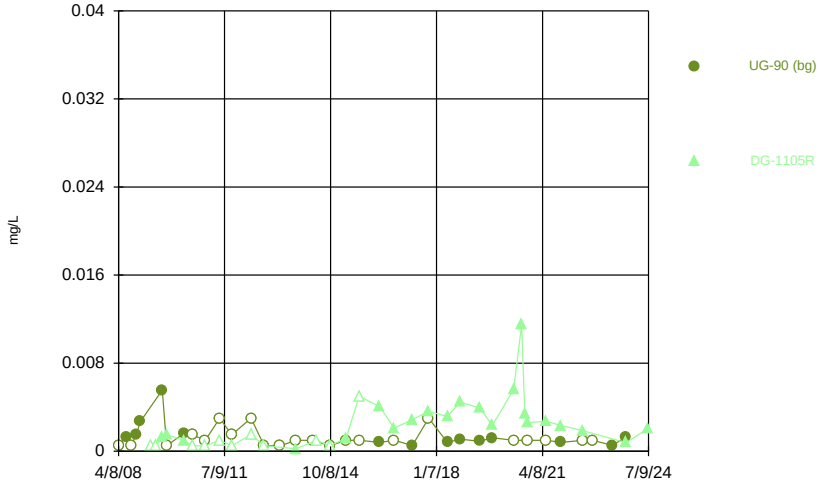
Time Series



Constituent: Arsenic Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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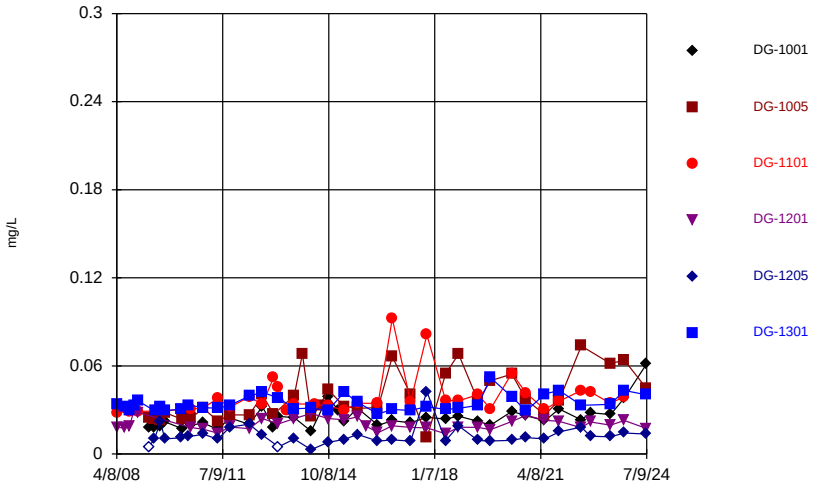
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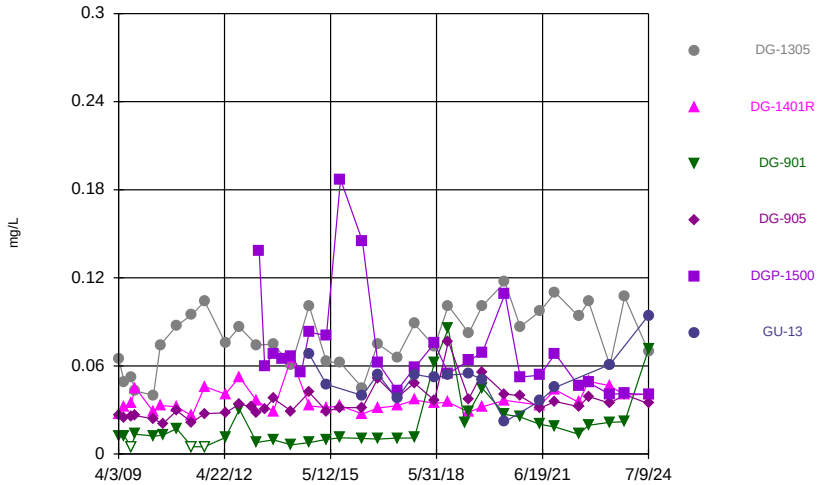
Time Series



Constituent: Barium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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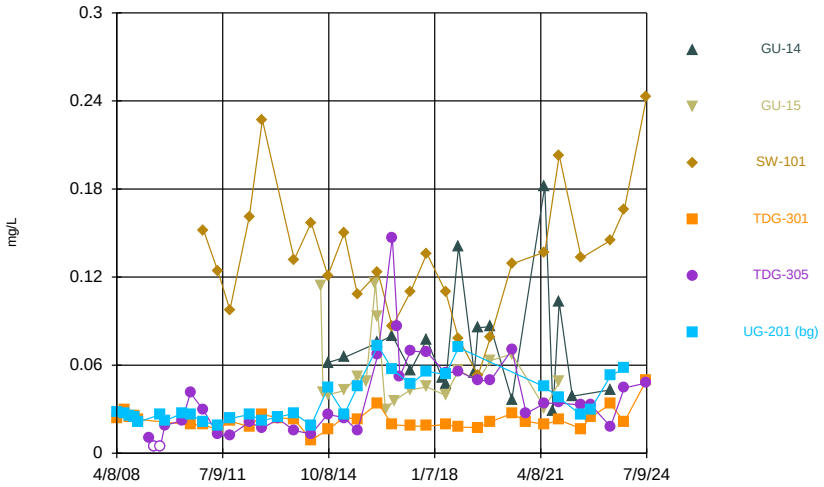
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Constituent: Barium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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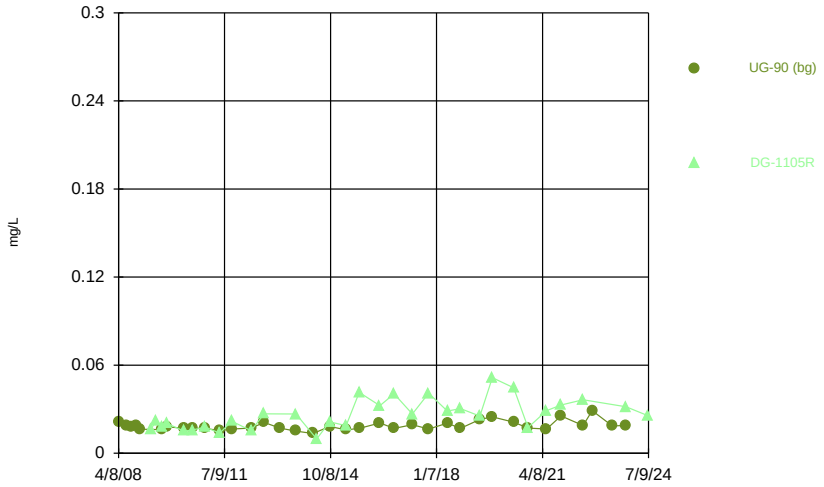
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Constituent: Barium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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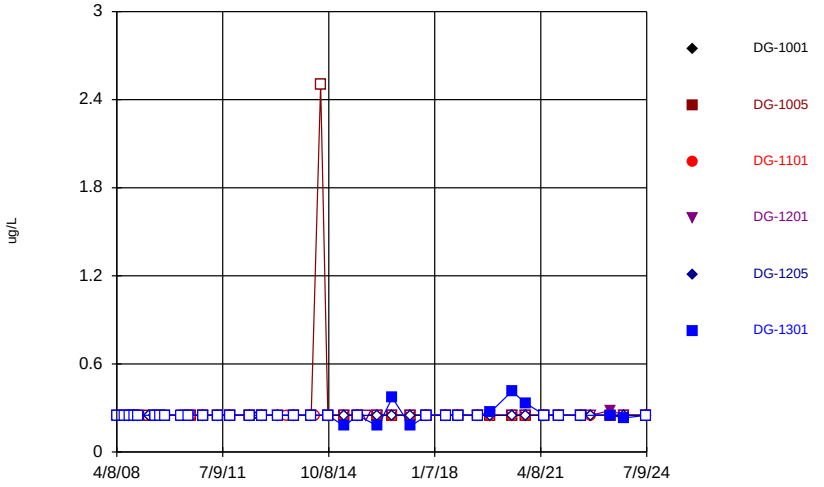
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Constituent: Barium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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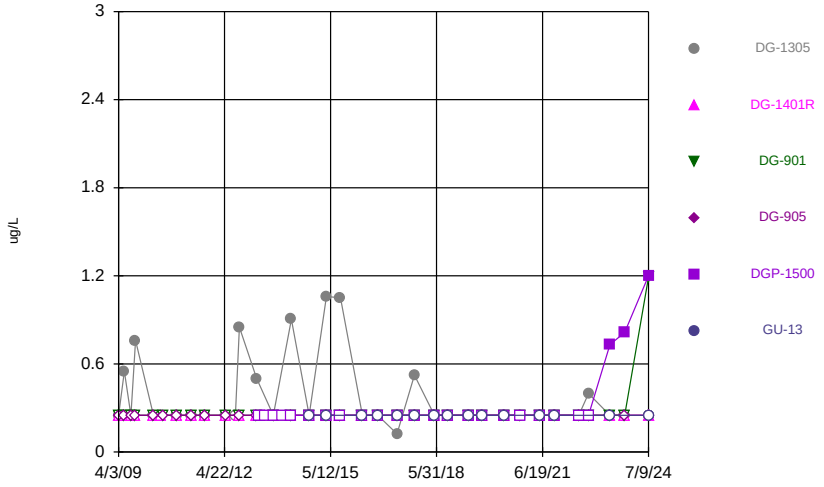
Time Series



Constituent: Benzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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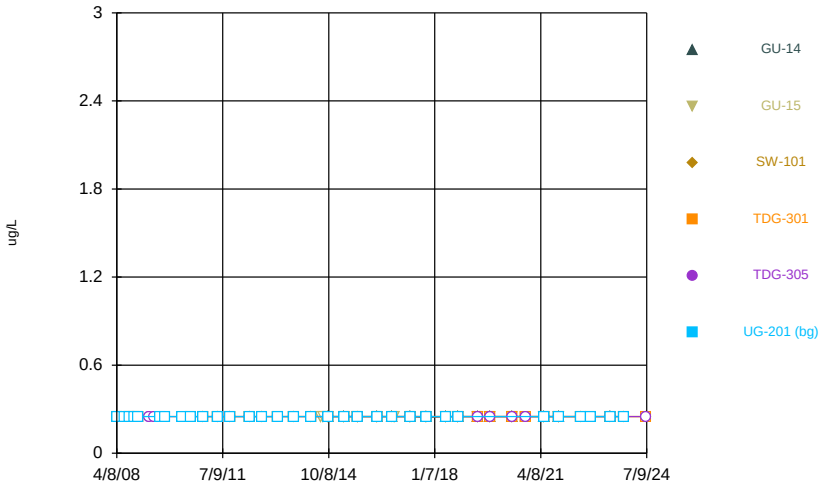
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Constituent: Benzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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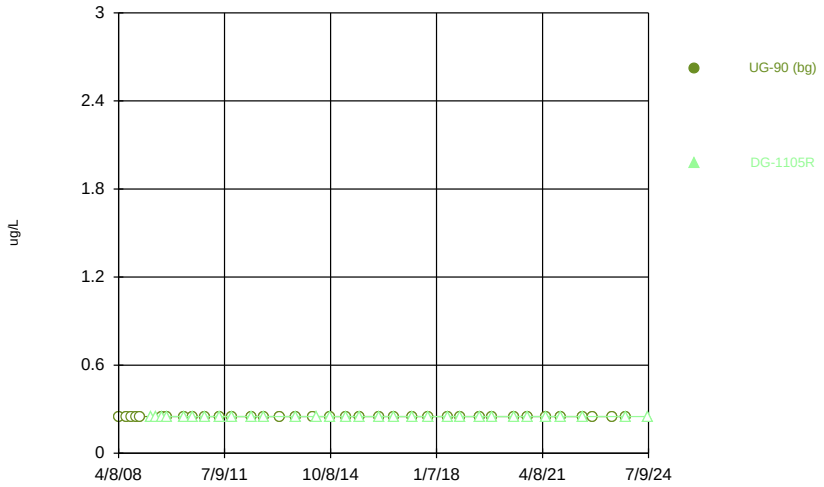
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Constituent: Benzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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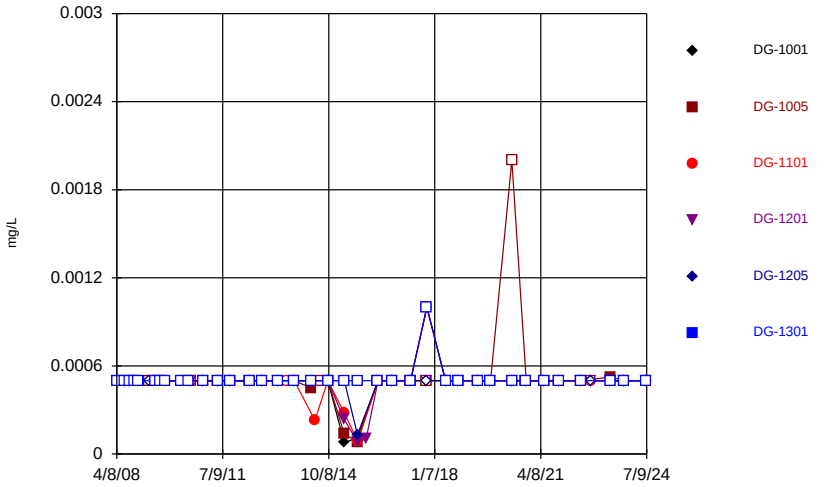
Time Series



Constituent: Benzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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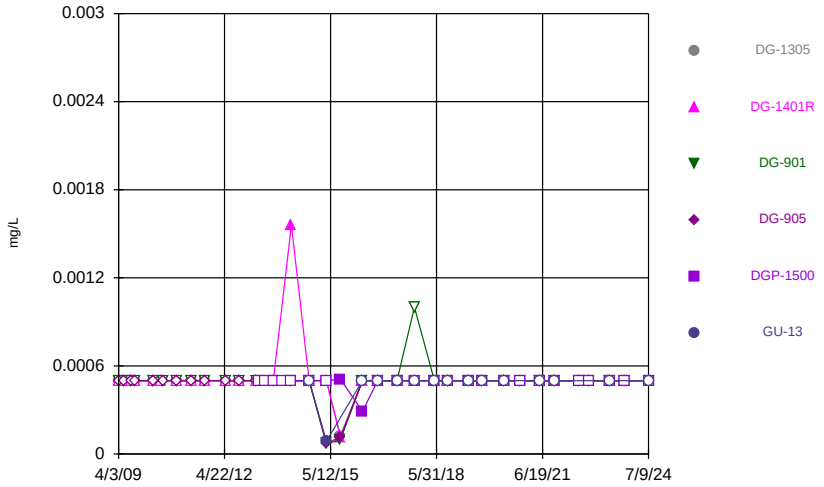
Time Series



Constituent: Beryllium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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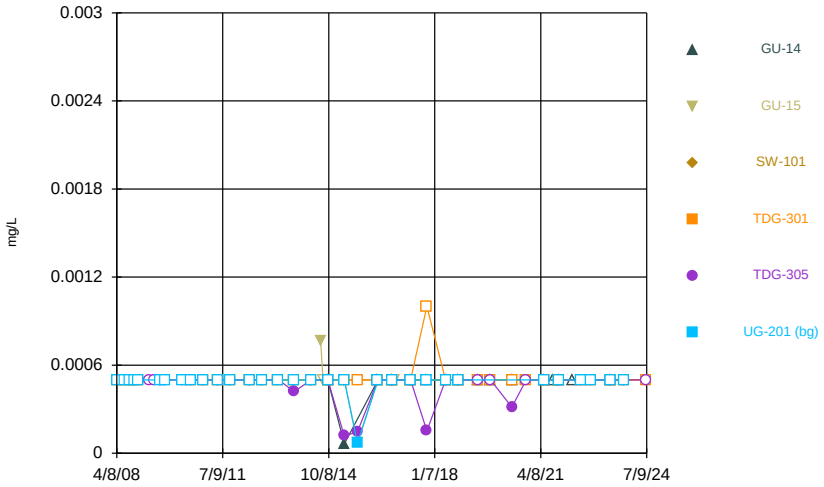
Time Series



Constituent: Beryllium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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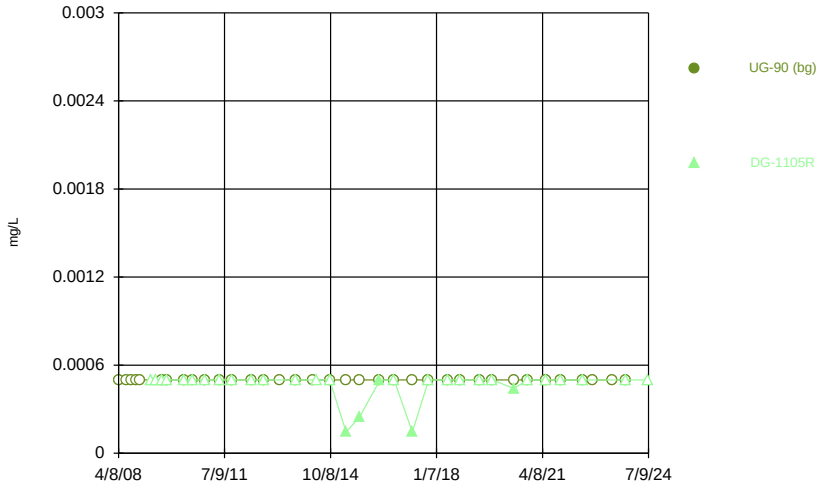
Time Series



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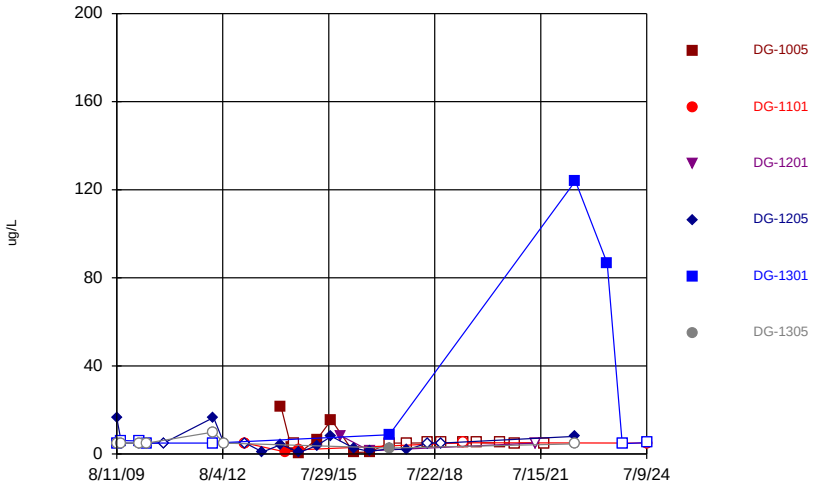
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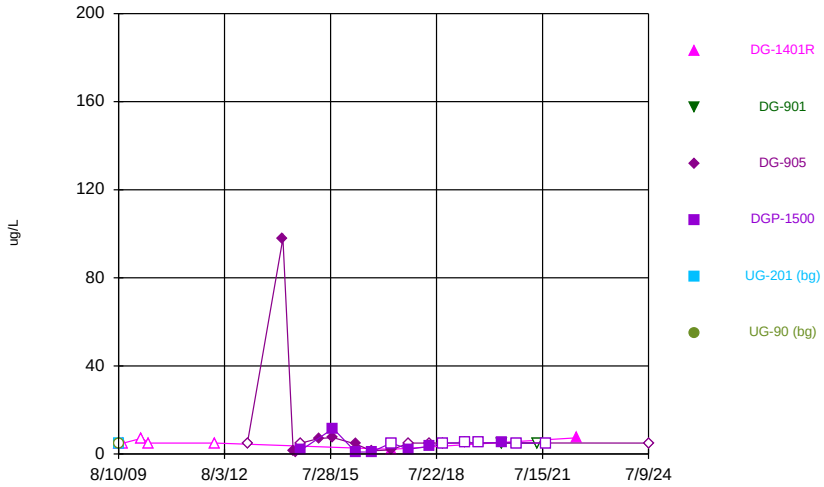
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

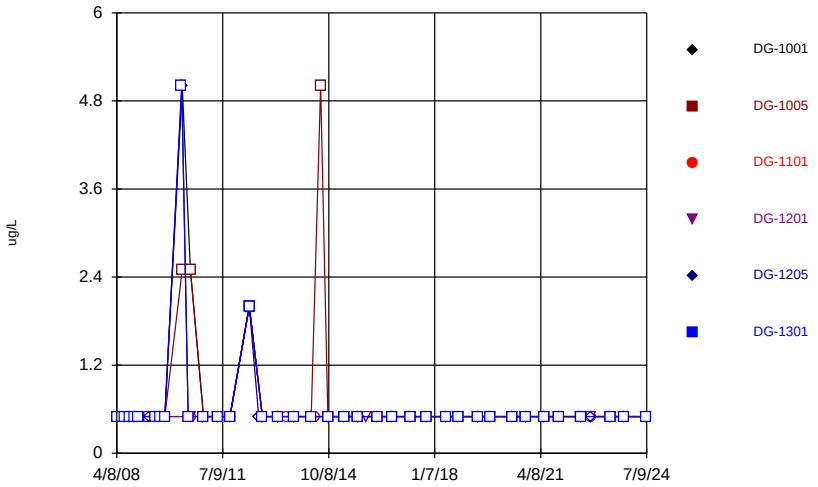
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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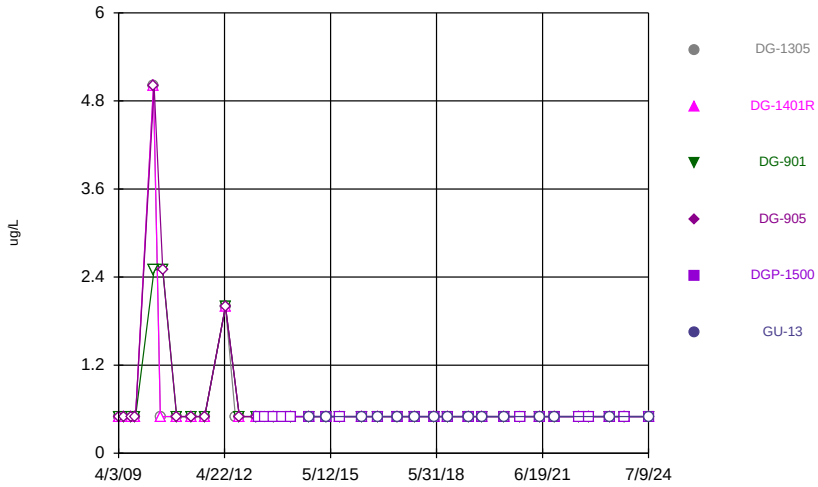
Time Series



Constituent: Bromodichloromethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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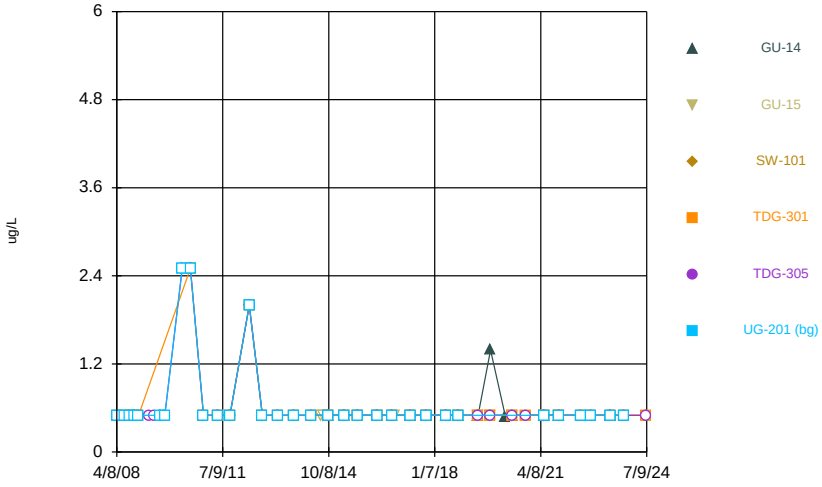
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Constituent: Bromodichloromethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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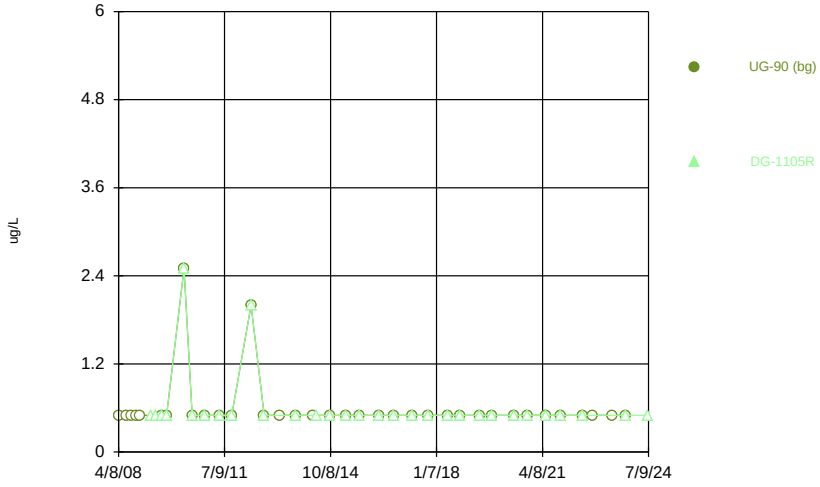
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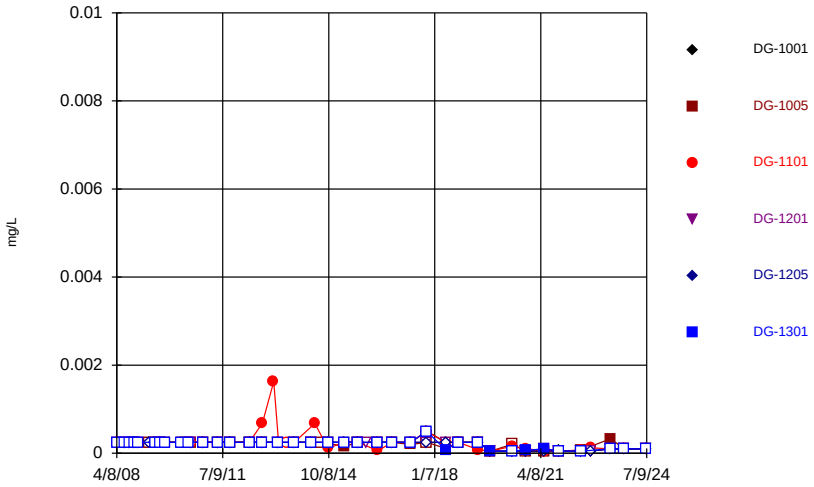
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Constituent: Bromodichloromethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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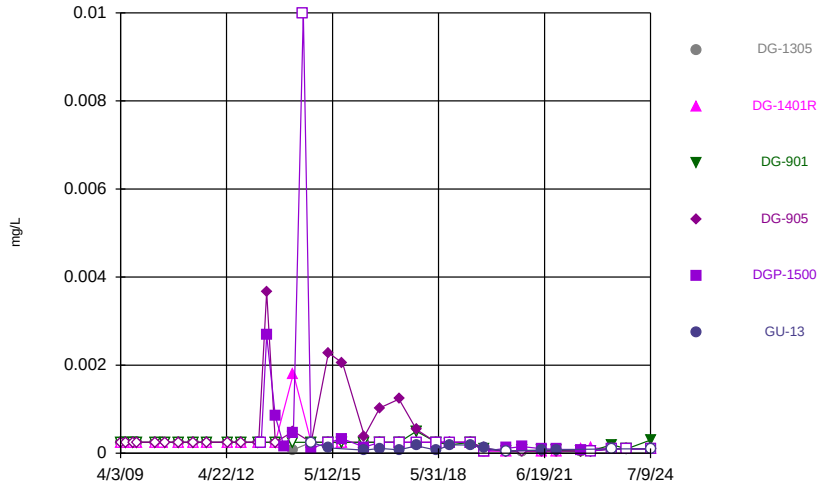
Time Series



Constituent: Cadmium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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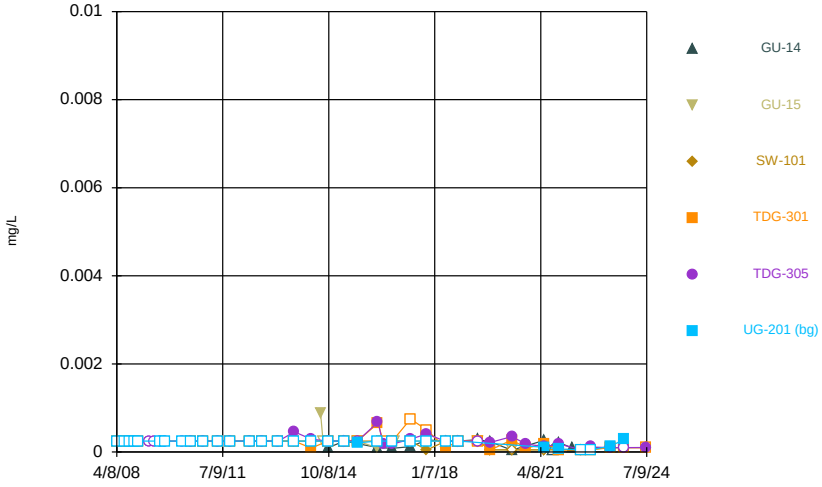
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Constituent: Cadmium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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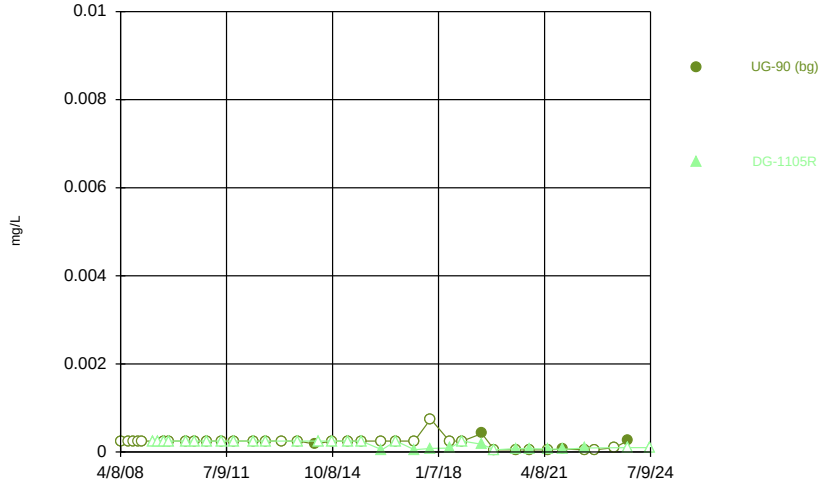
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Constituent: Cadmium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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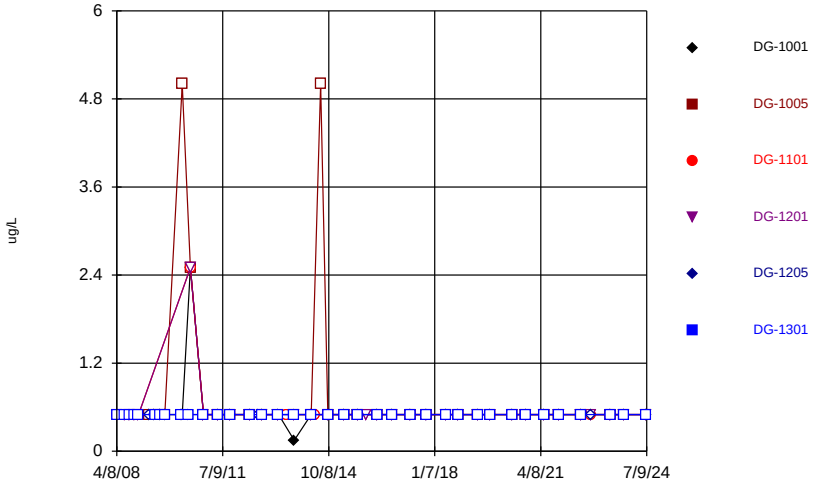
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Constituent: Cadmium Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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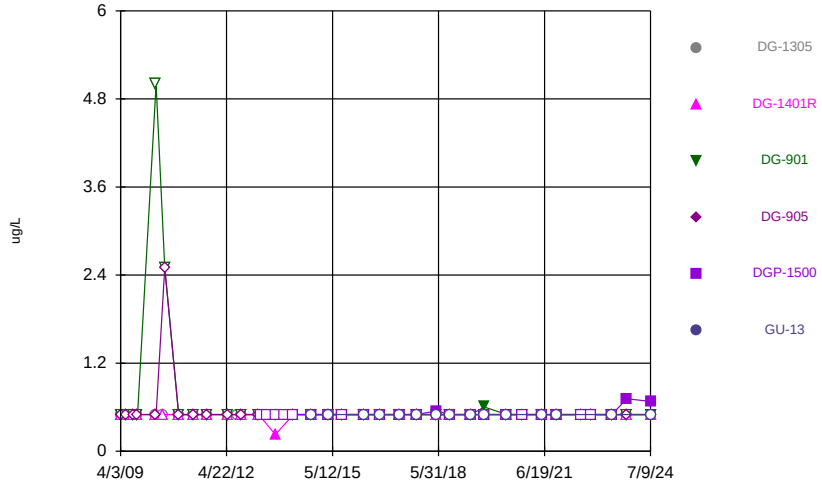
Time Series



Constituent: Carbon disulfide Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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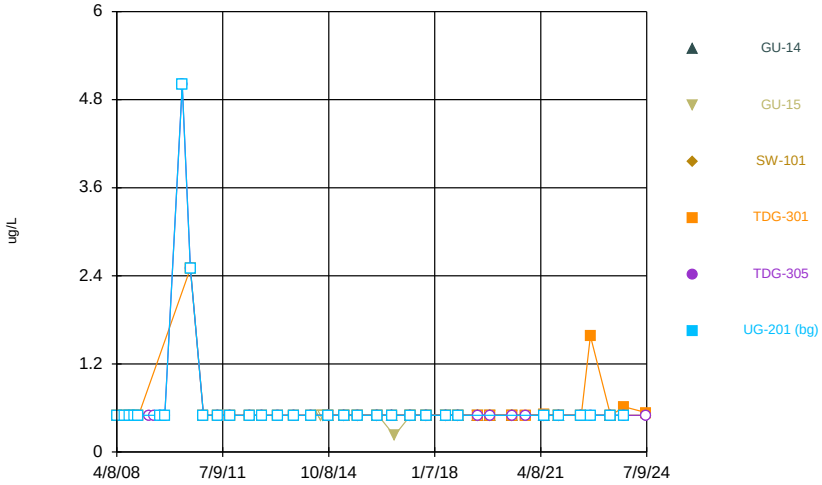
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Constituent: Carbon disulfide Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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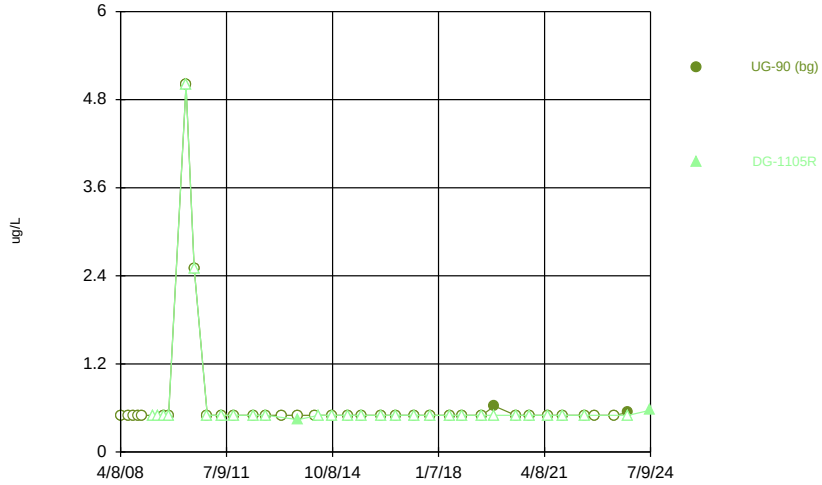
Time Series



Constituent: Carbon disulfide Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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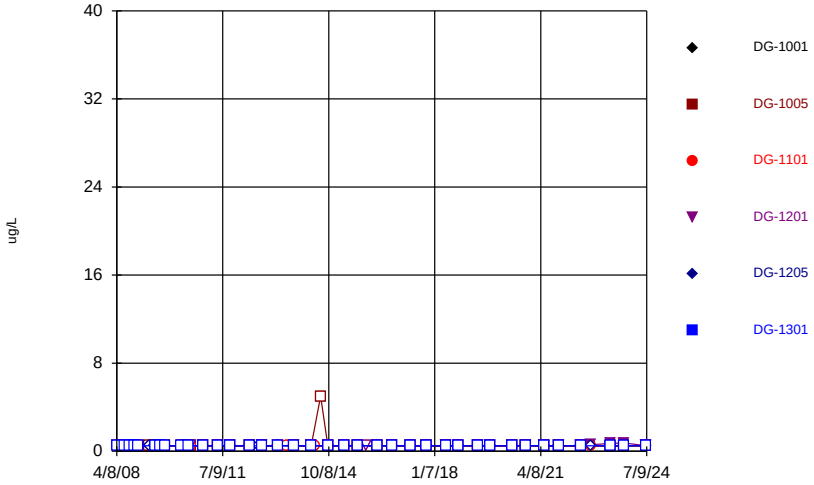
Time Series



Constituent: Carbon disulfide Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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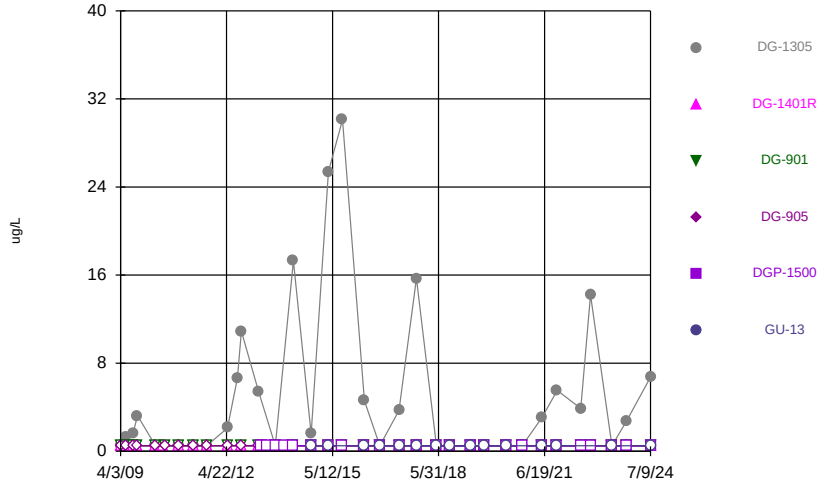
Time Series



Constituent: Chlorobenzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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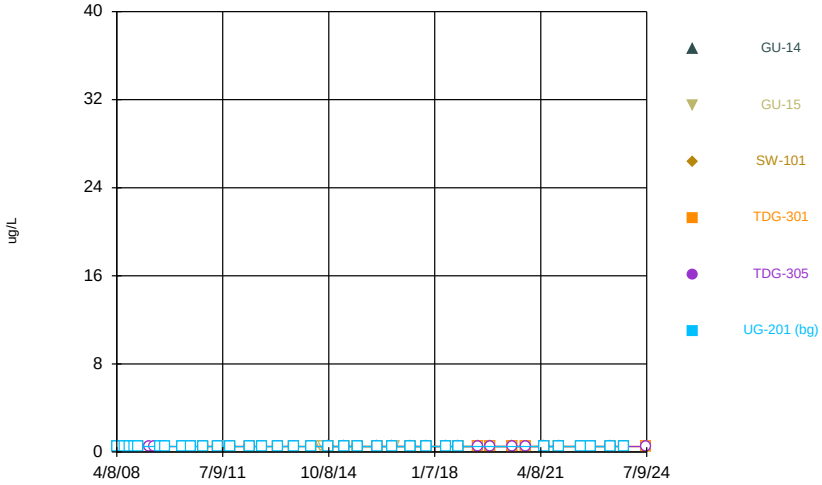
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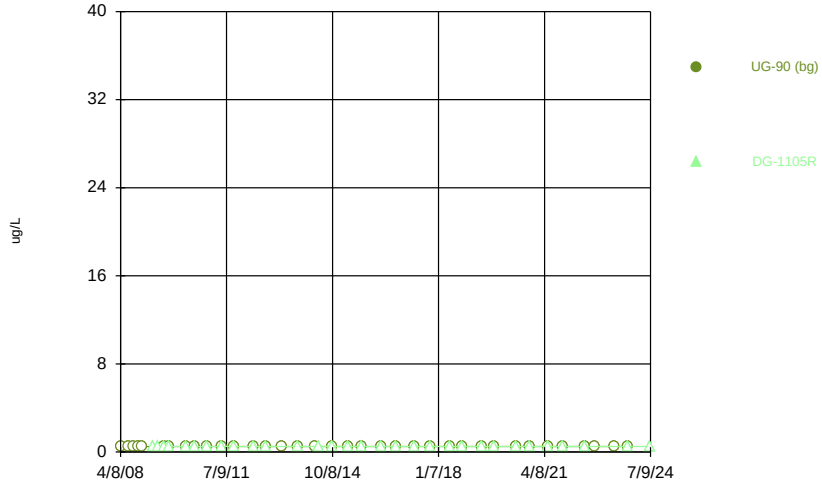
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Constituent: Chlorobenzene Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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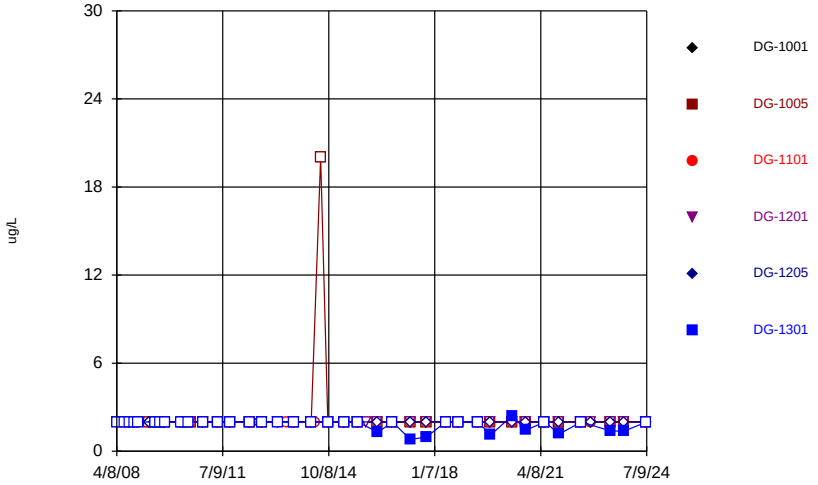
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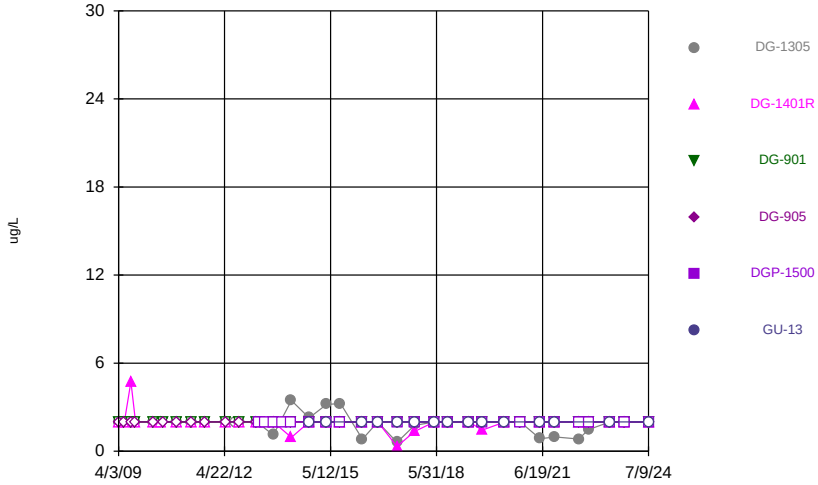
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Constituent: Chloroethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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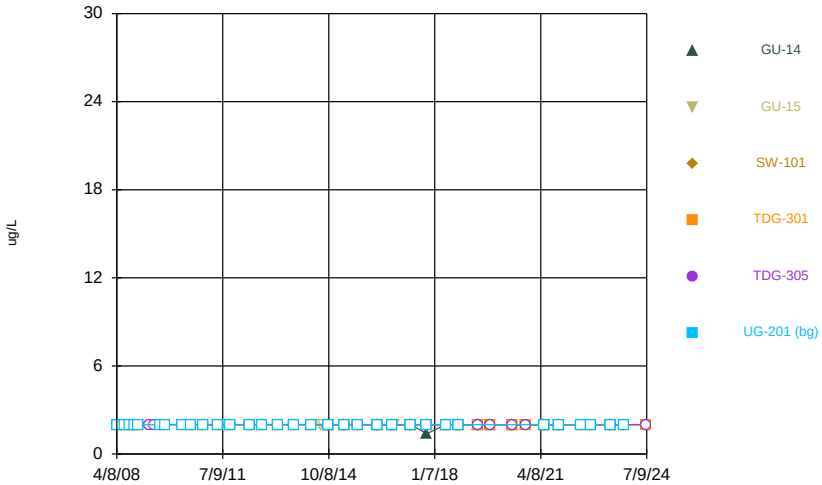
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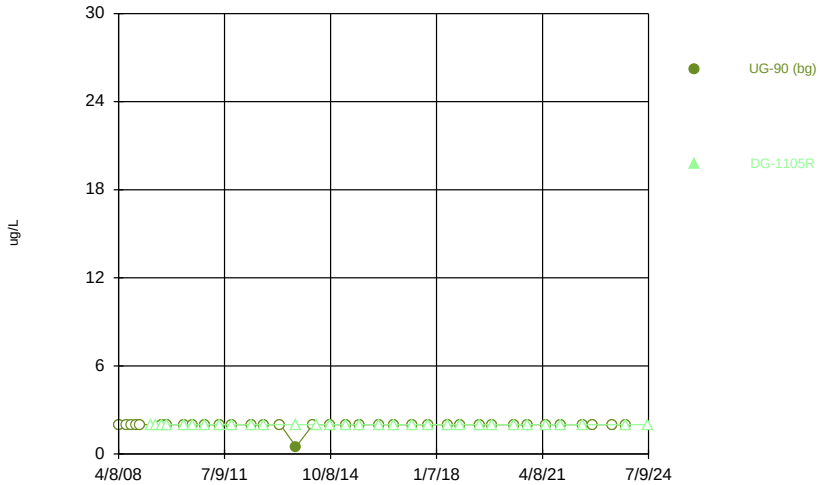
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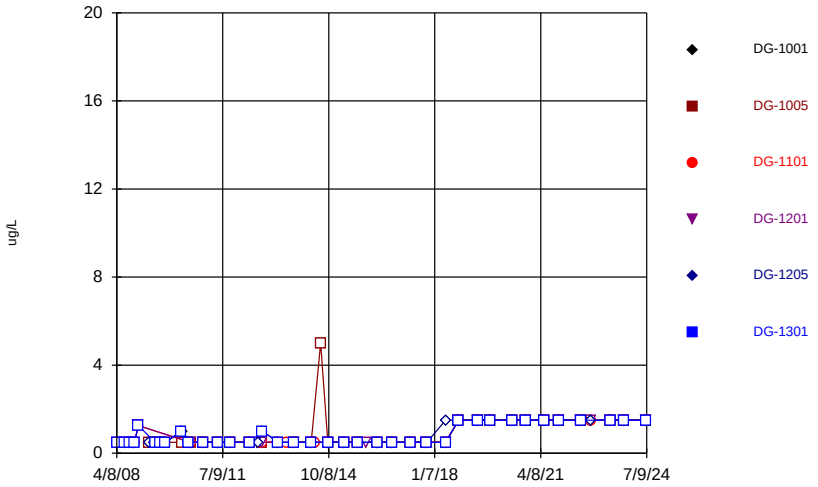
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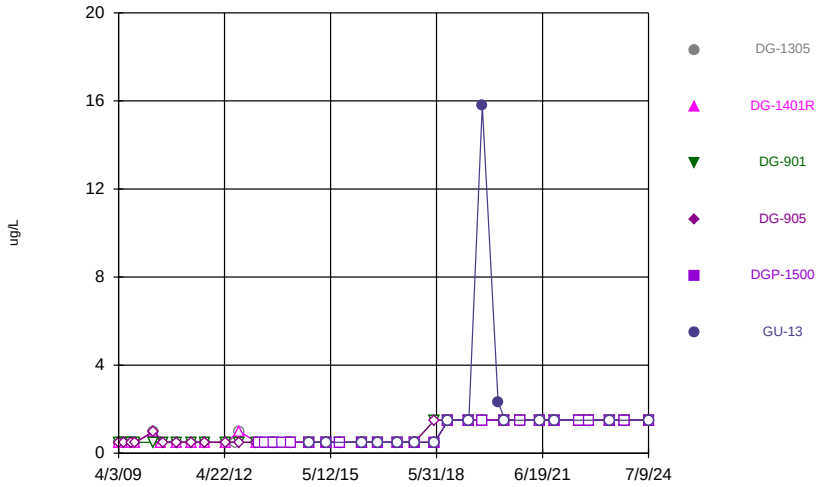
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Constituent: Chloroform Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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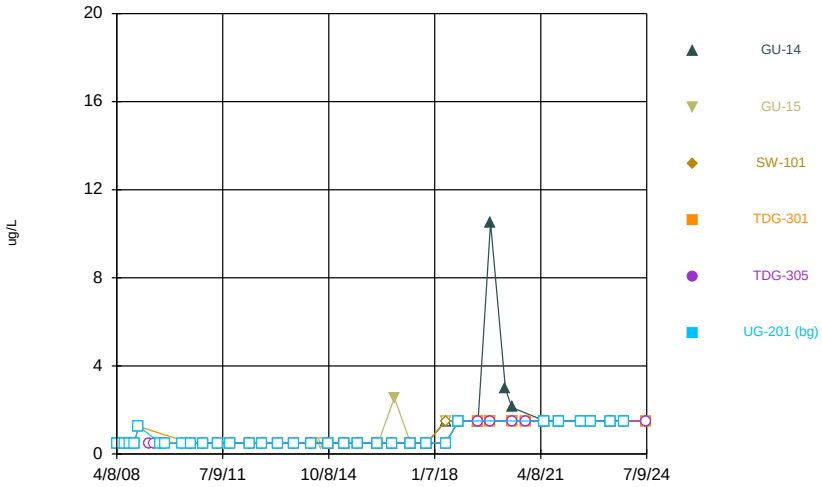
Time Series



Constituent: Chloroform Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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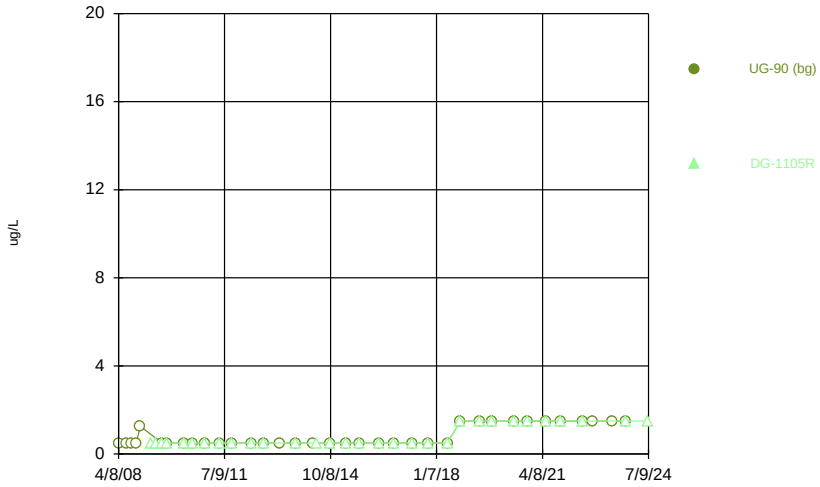
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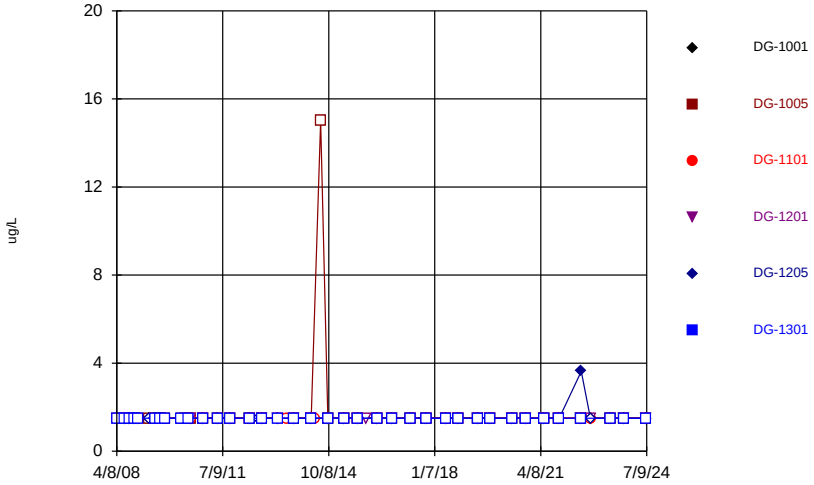
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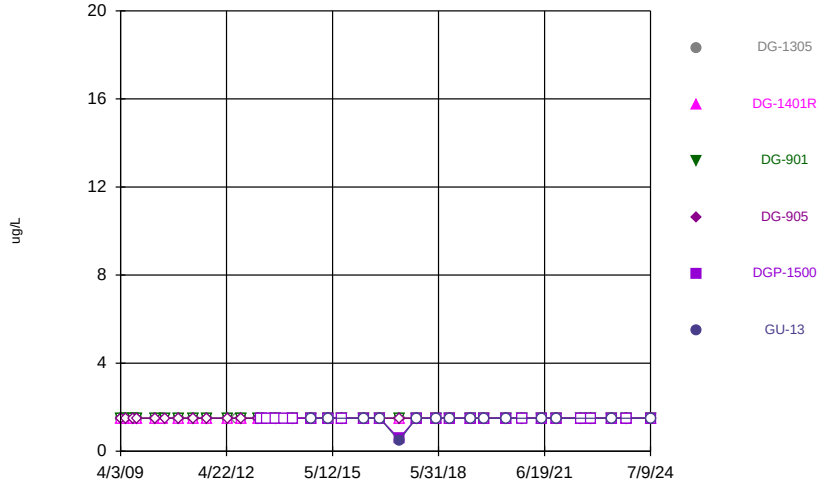
Time Series



Constituent: Chloromethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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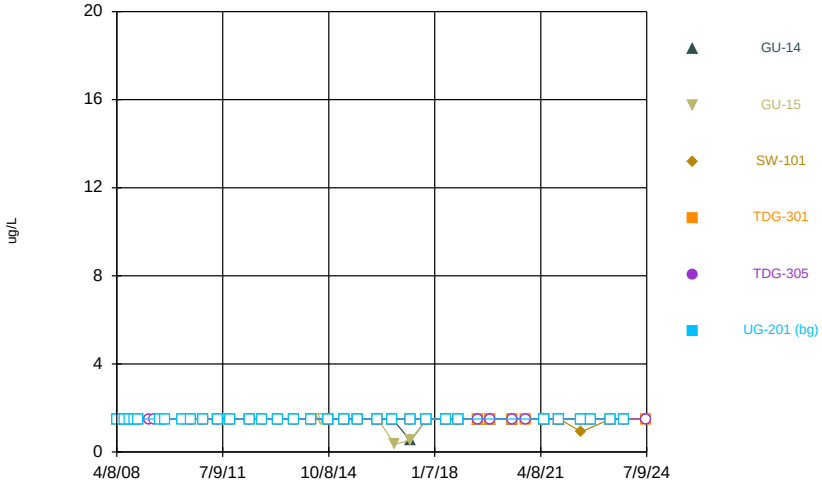
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Constituent: Chloromethane Analysis Run 10/16/2024 11:52 AM View: 2024SSN -Time Series
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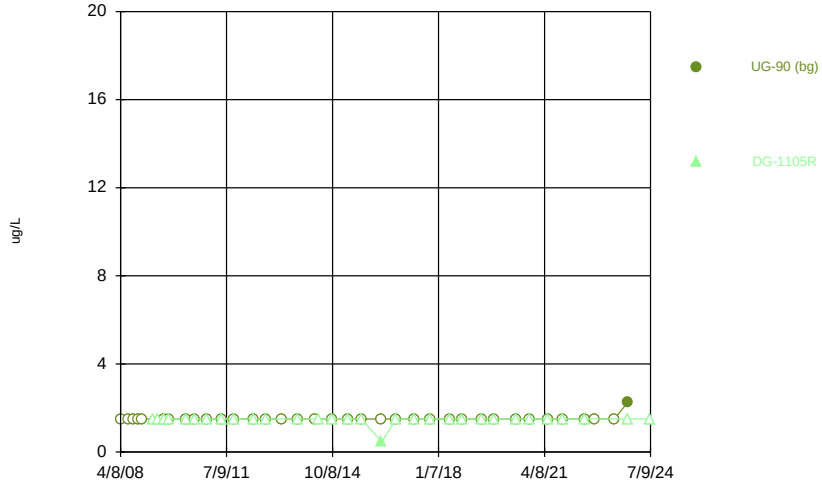
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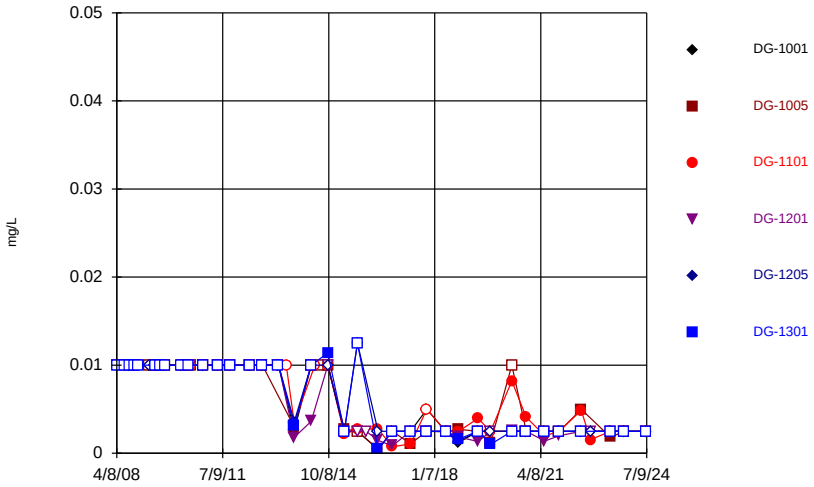
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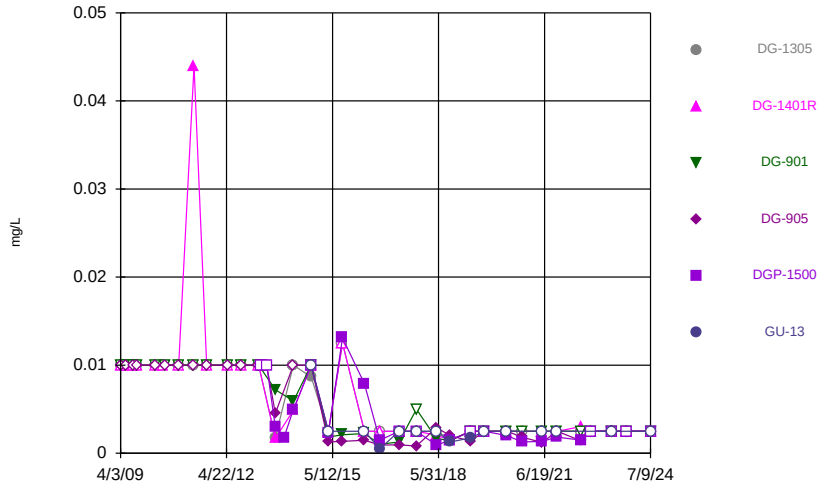
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Constituent: Chromium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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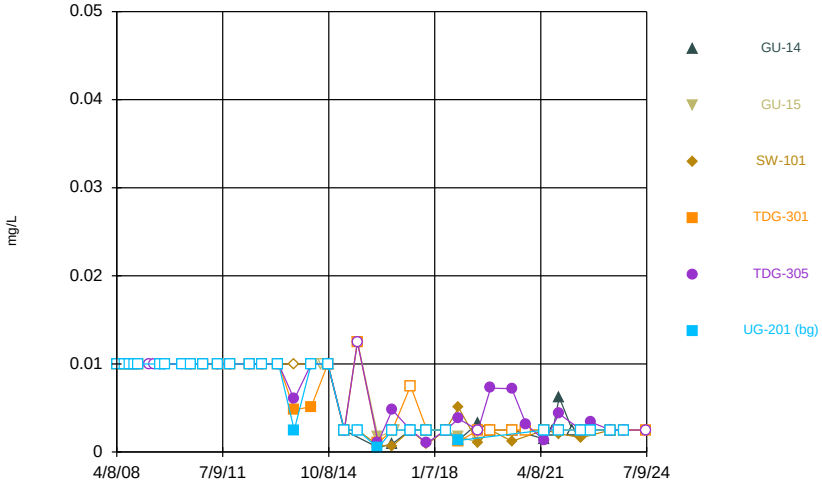
Time Series



Constituent: Chromium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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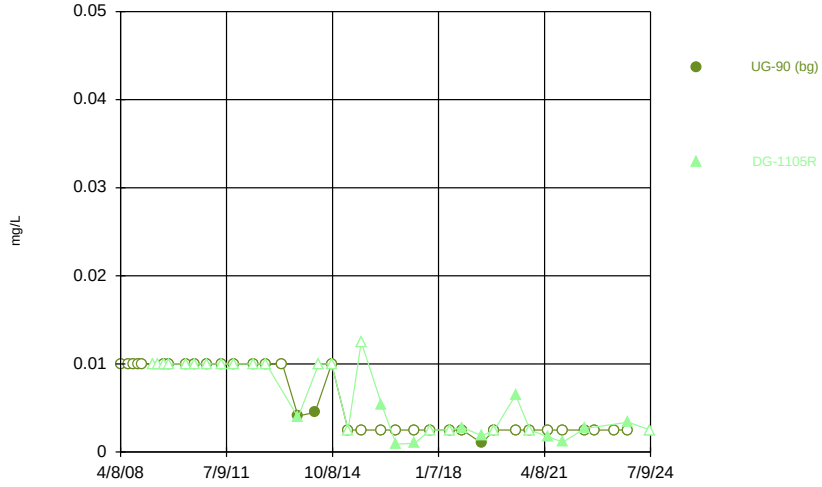
Time Series



Constituent: Chromium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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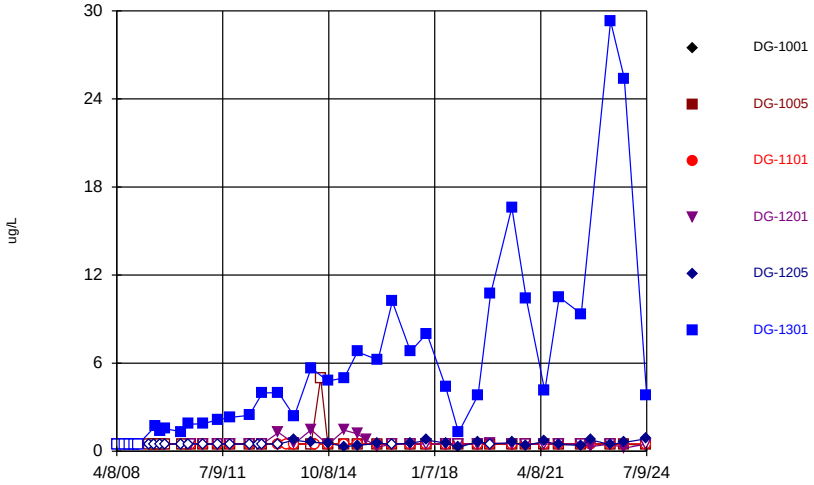
Time Series



Constituent: Chromium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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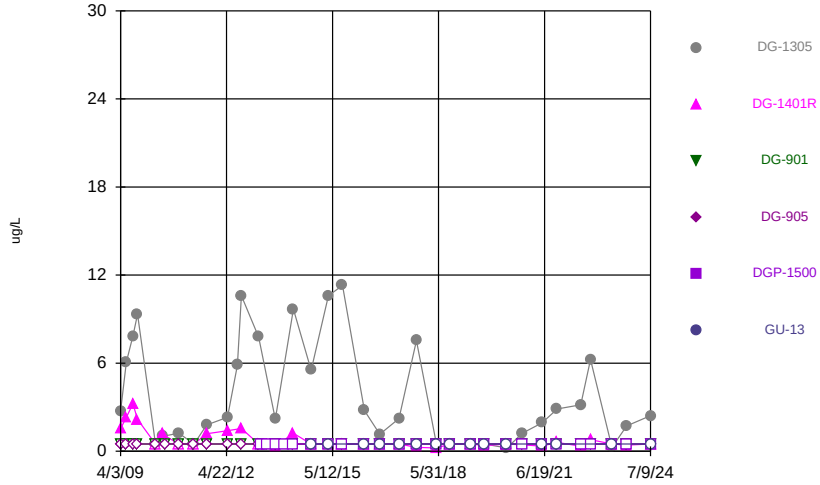
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

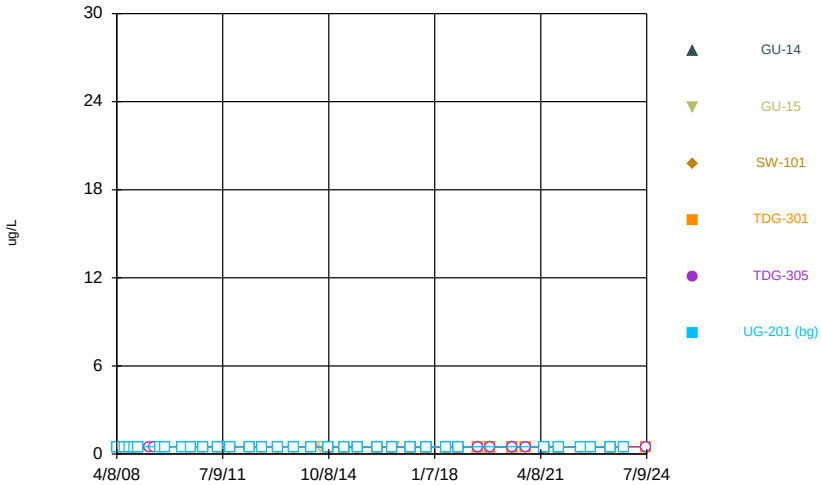
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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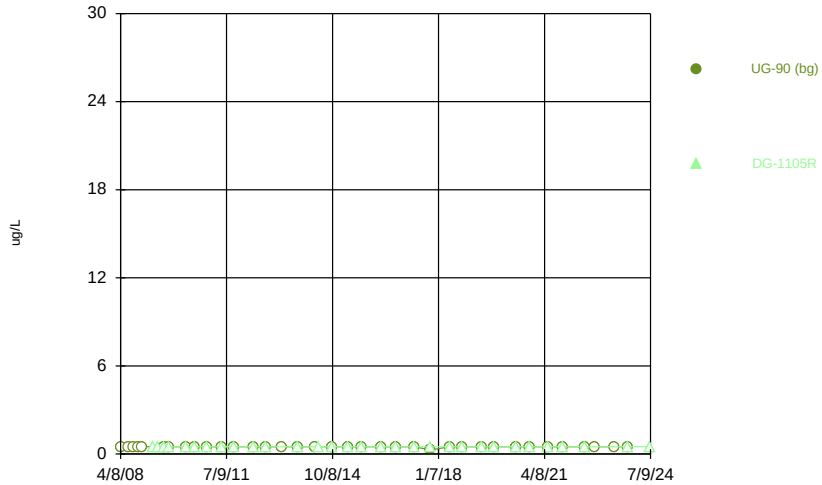
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

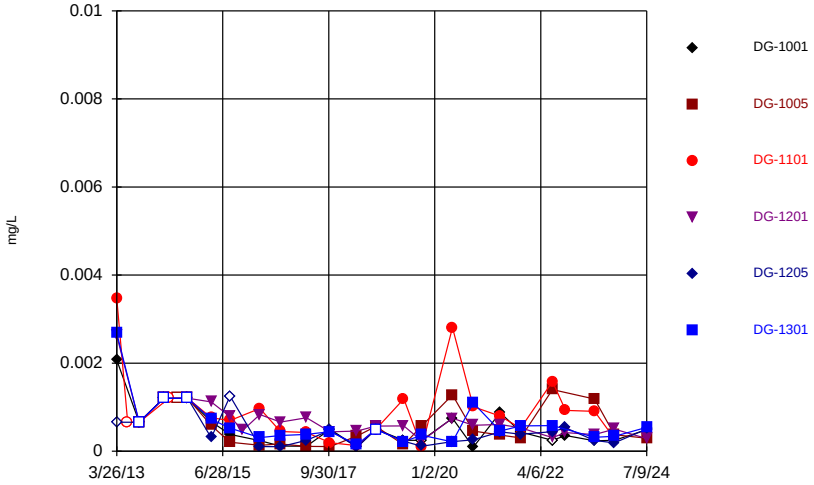
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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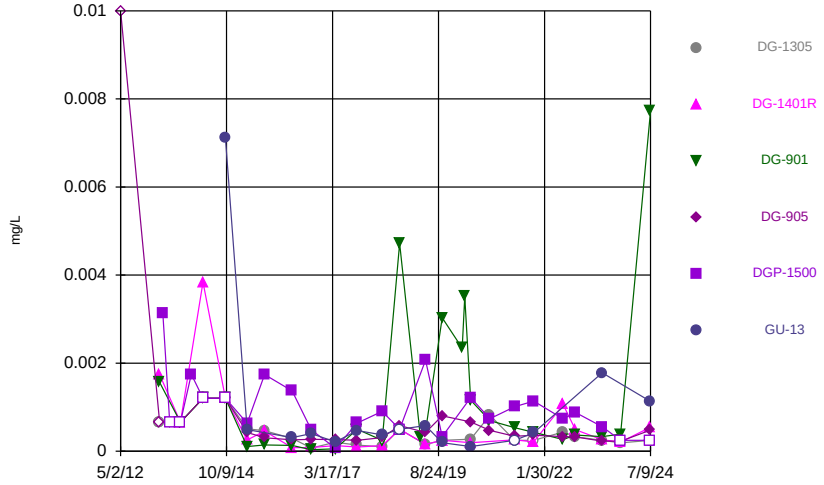
Time Series



Constituent: Cobalt Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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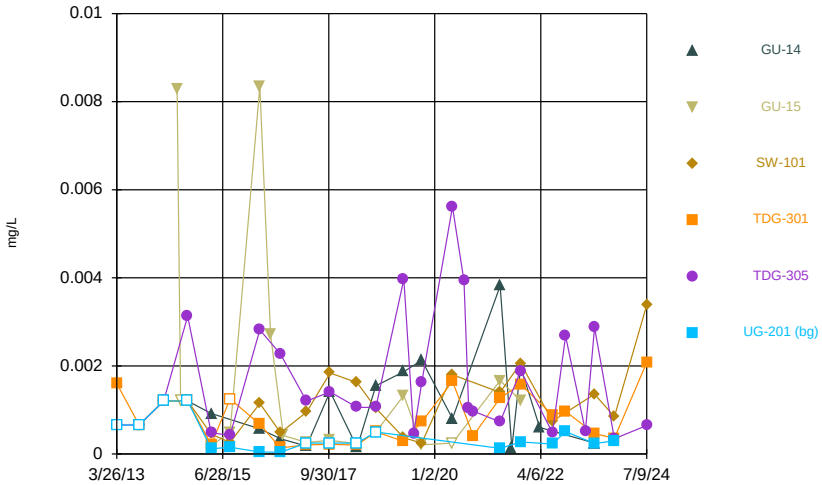
Time Series



Constituent: Cobalt Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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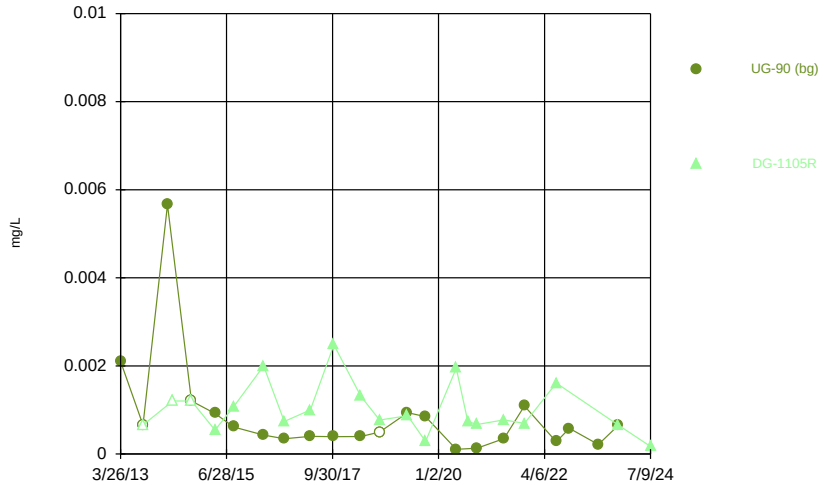
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Constituent: Cobalt Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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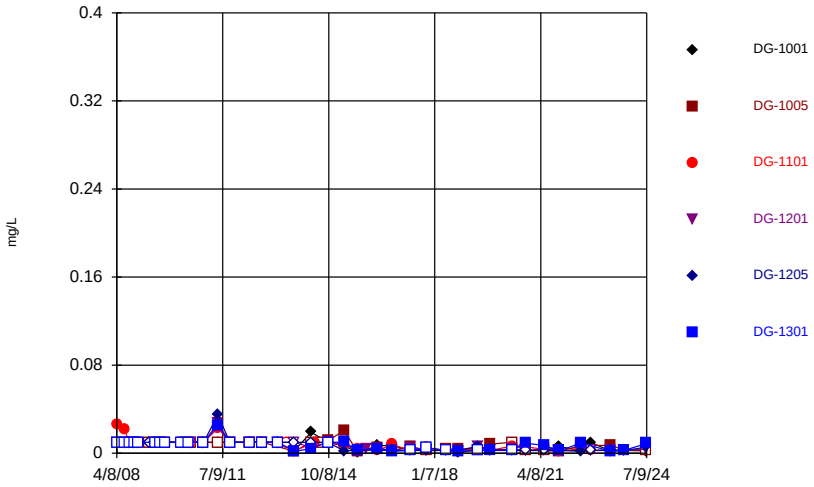
Time Series



Constituent: Cobalt Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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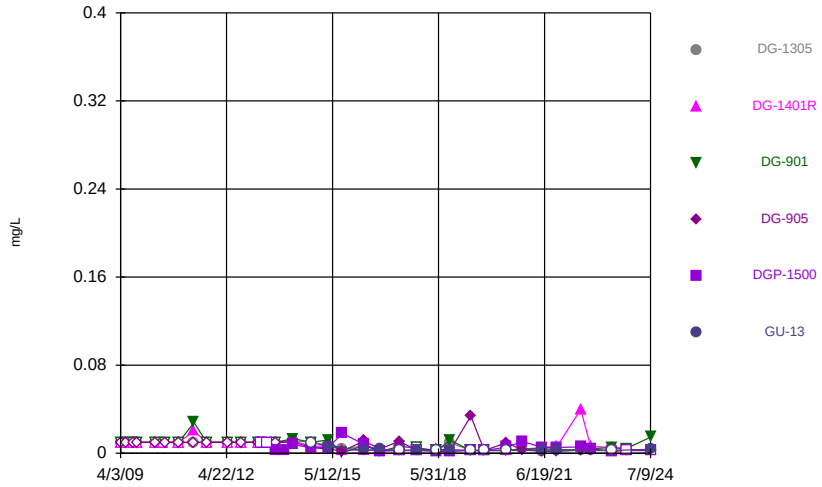
Time Series



Constituent: Copper Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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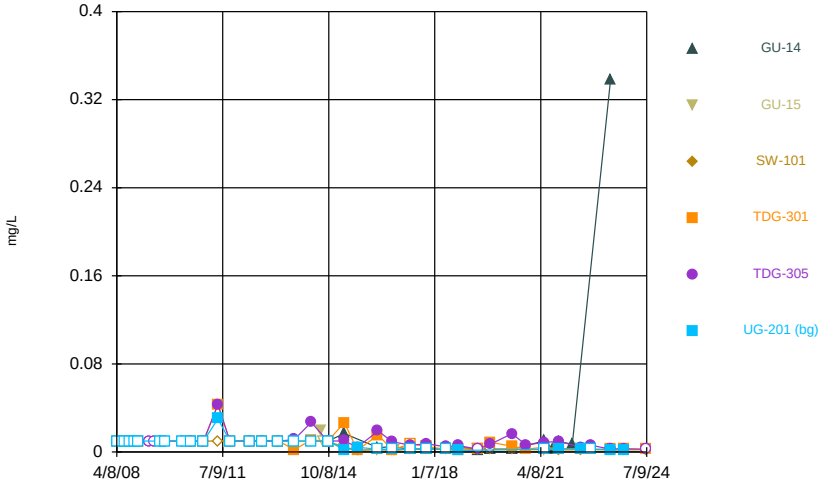
Time Series



Constituent: Copper Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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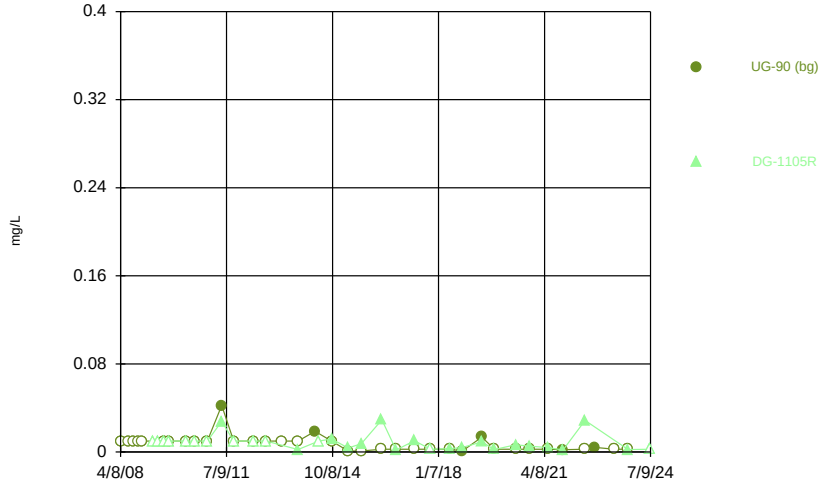
Time Series



Constituent: Copper Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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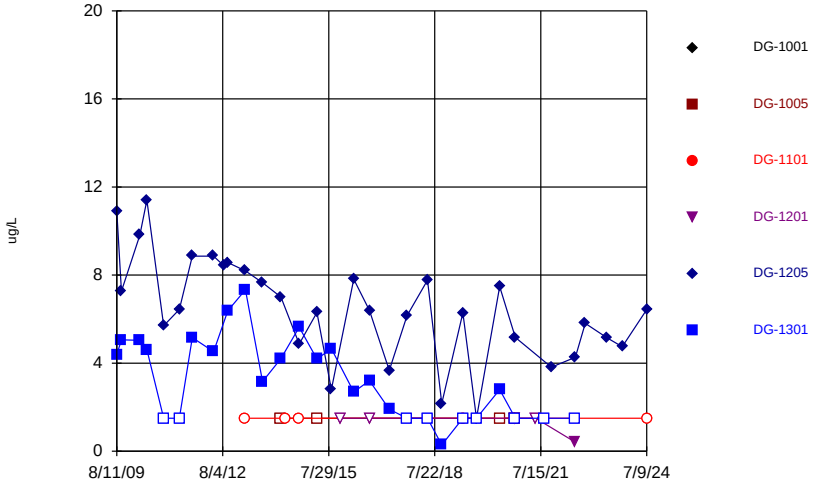
Time Series



Constituent: Copper Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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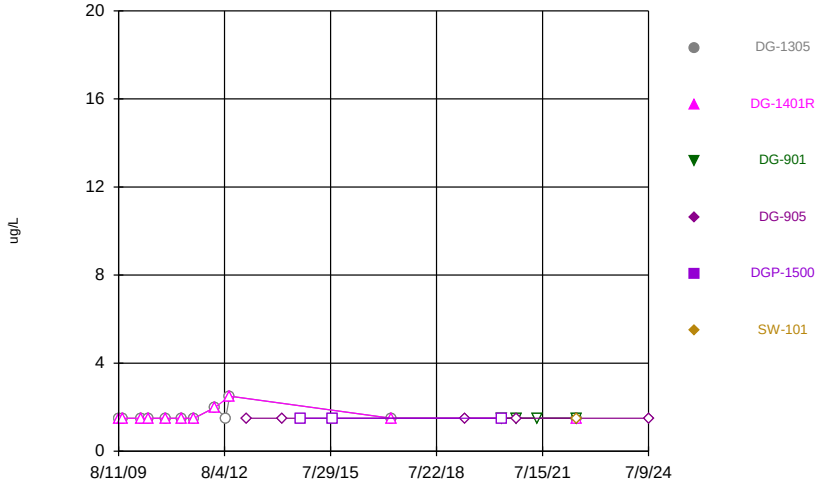
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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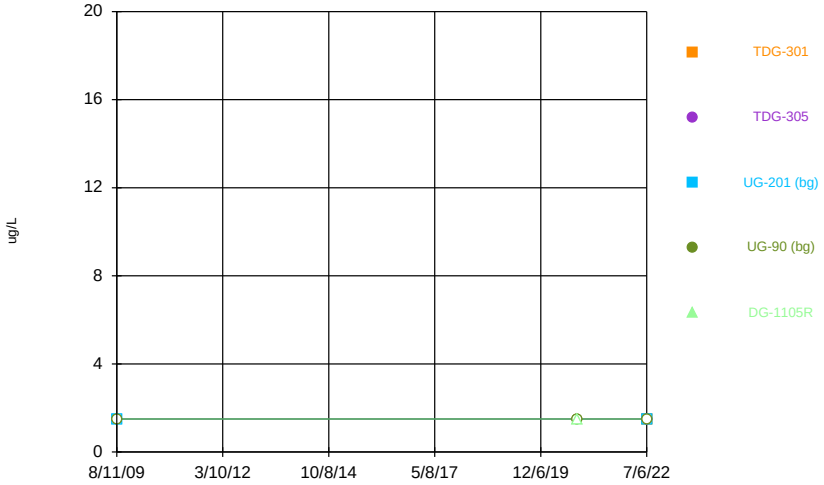
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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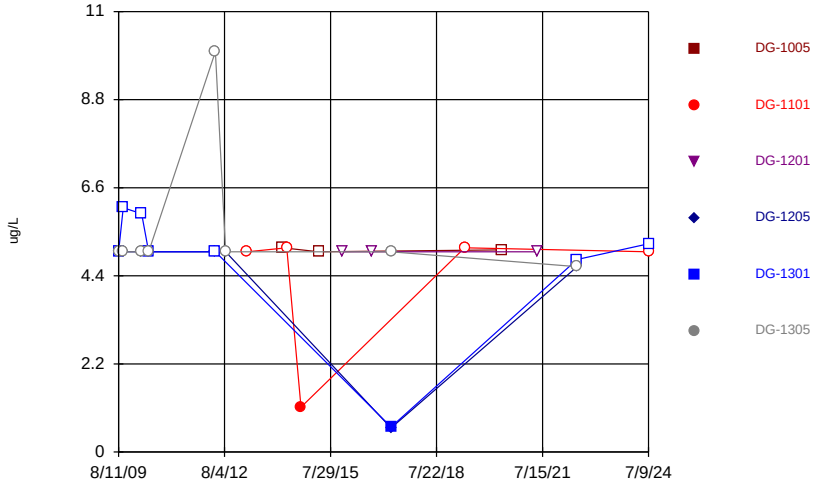
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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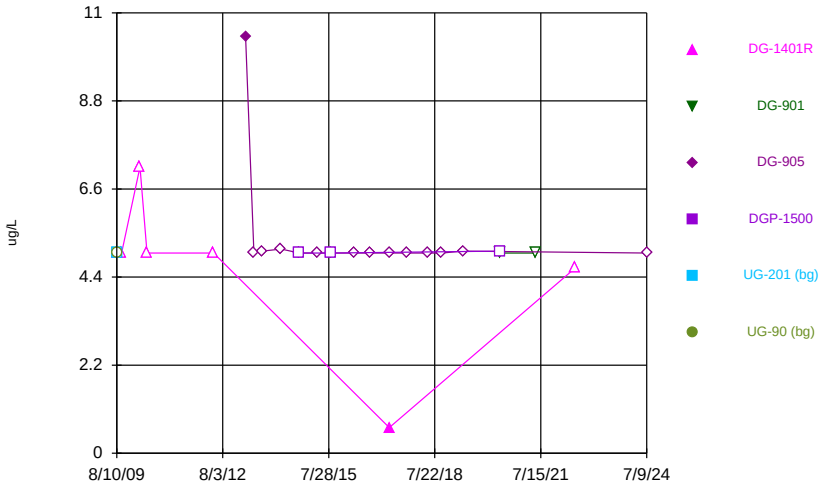
Time Series



Constituent: Di-n-butyl phthalate Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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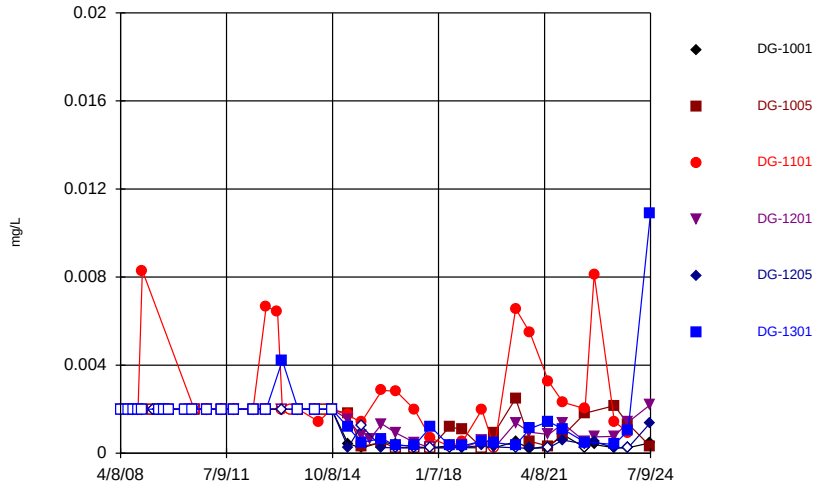
Time Series



Constituent: Di-n-butyl phthalate Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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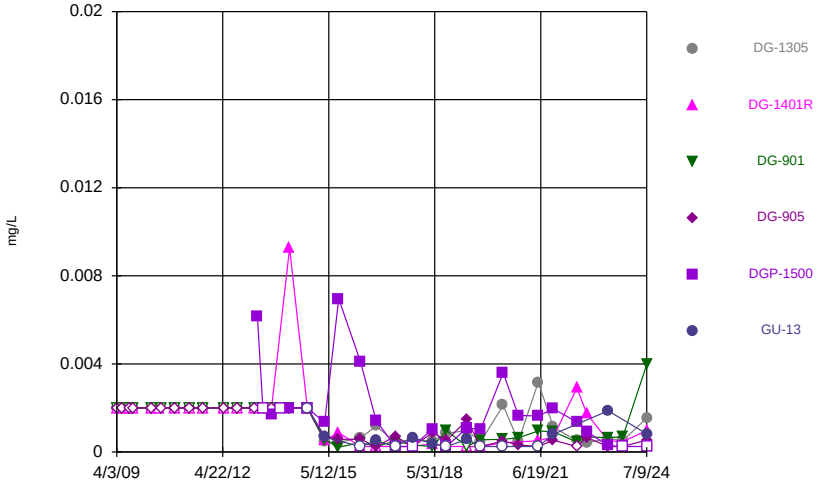
Time Series



Constituent: Lead Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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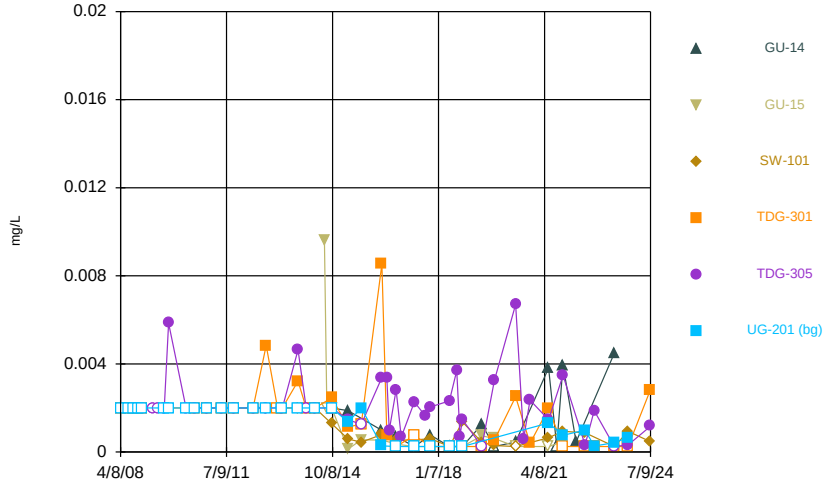
Time Series



Constituent: Lead Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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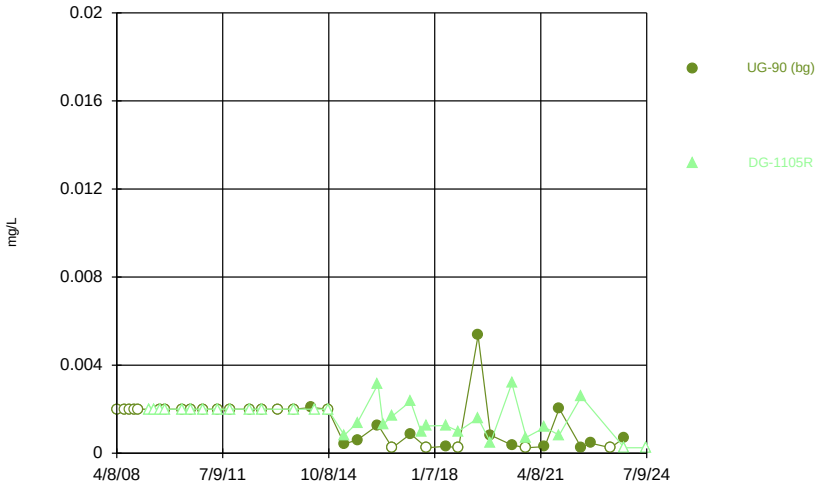
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Constituent: Lead Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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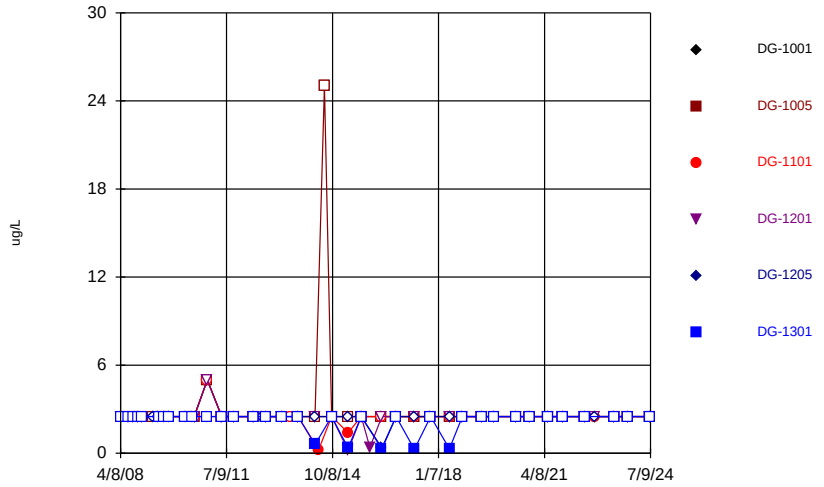
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Constituent: Lead Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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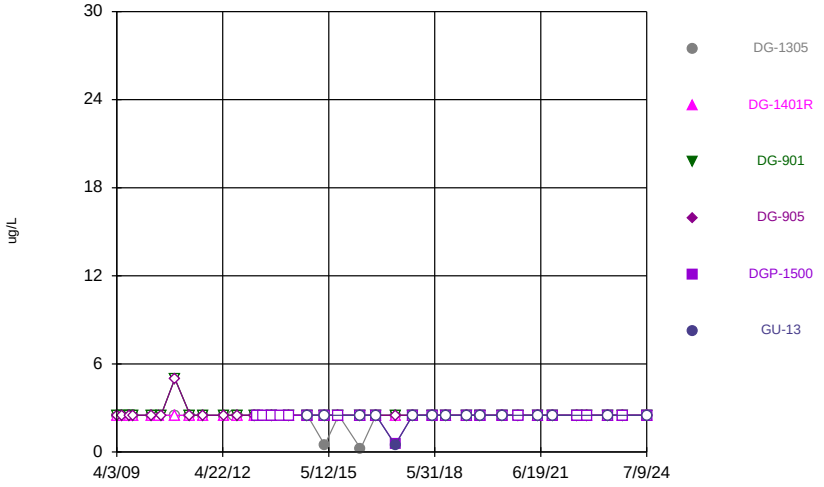
Time Series



Constituent: Methylene Chloride Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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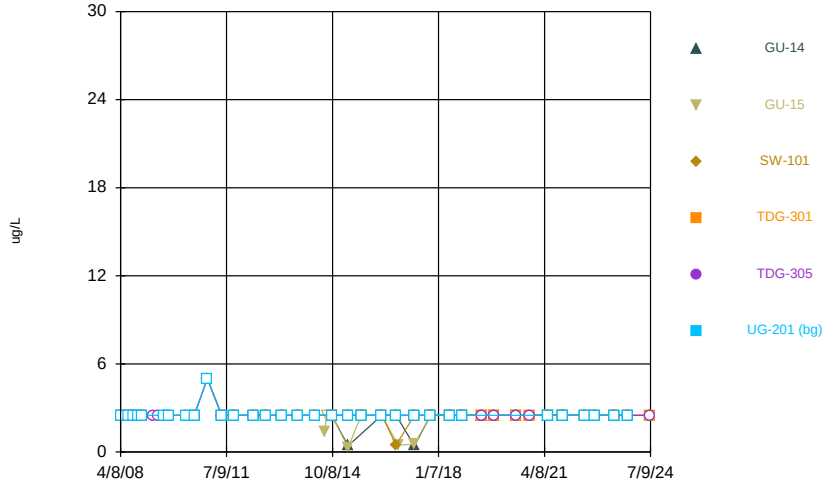
Time Series



Constituent: Methylene Chloride Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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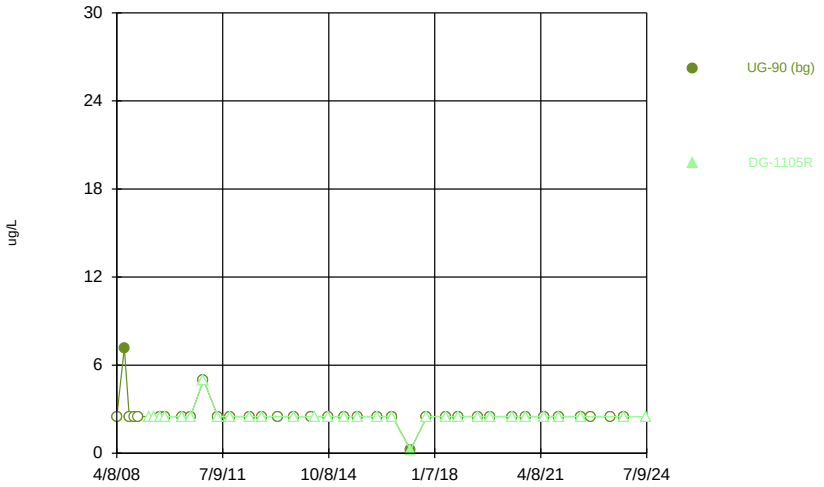
Time Series



Constituent: Methylene Chloride Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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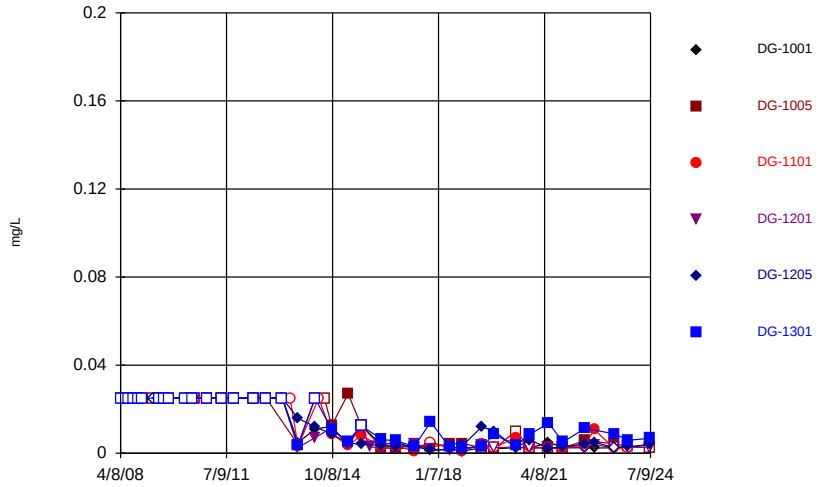
Time Series



Constituent: Methylene Chloride Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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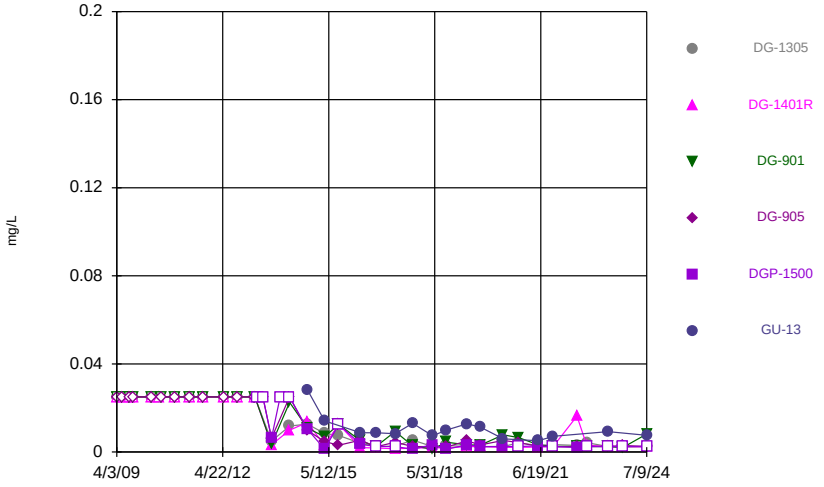
Time Series



Constituent: Nickel Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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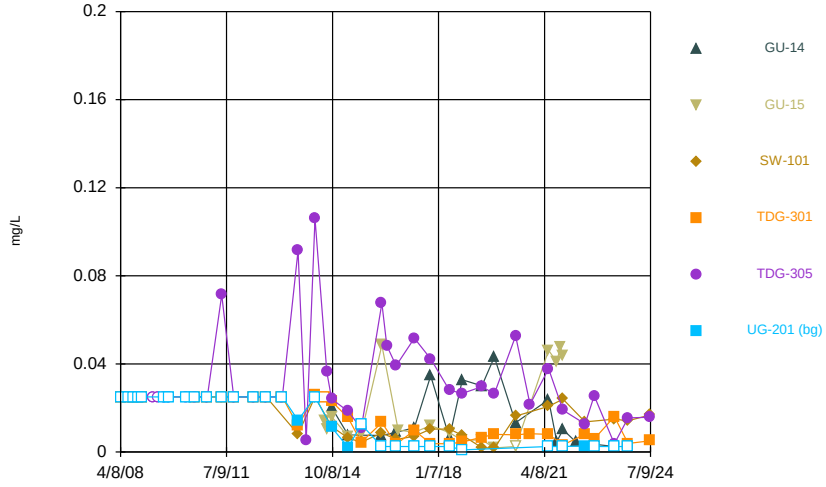
Time Series



Constituent: Nickel Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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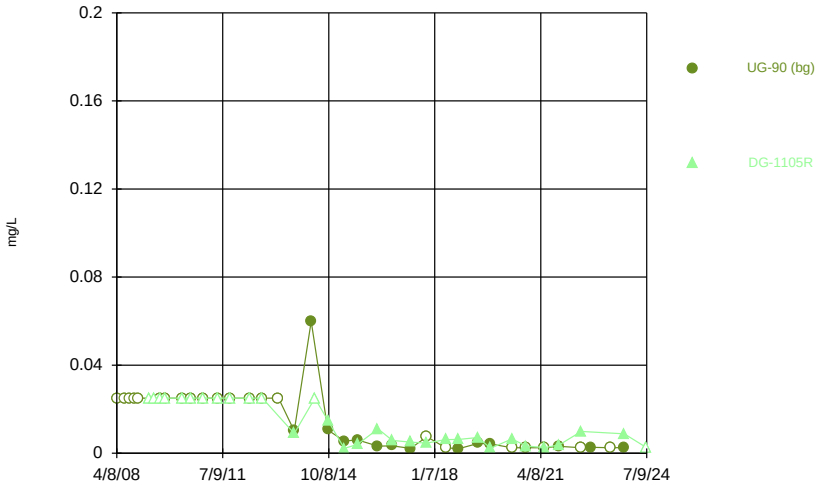
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Constituent: Nickel Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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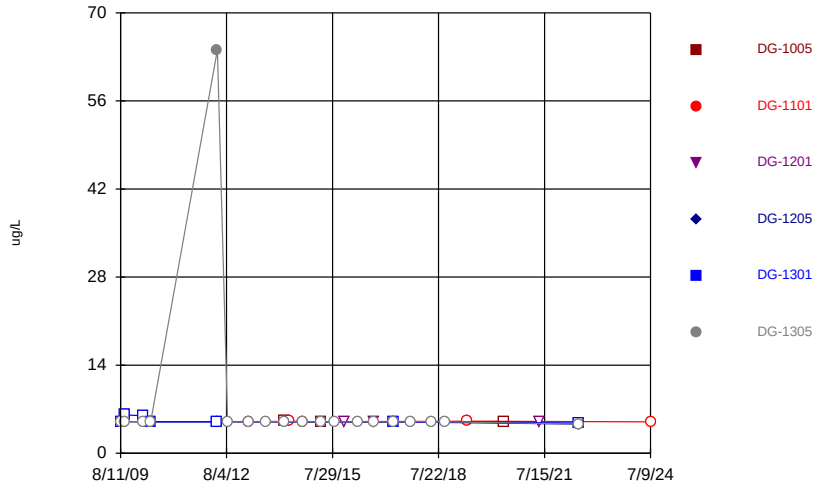
Time Series



Constituent: Nickel Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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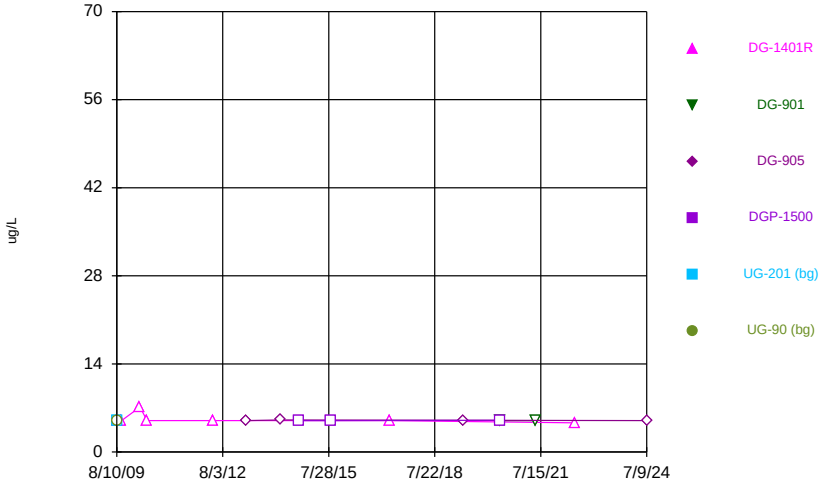
Time Series



Constituent: Parathion-ethyl Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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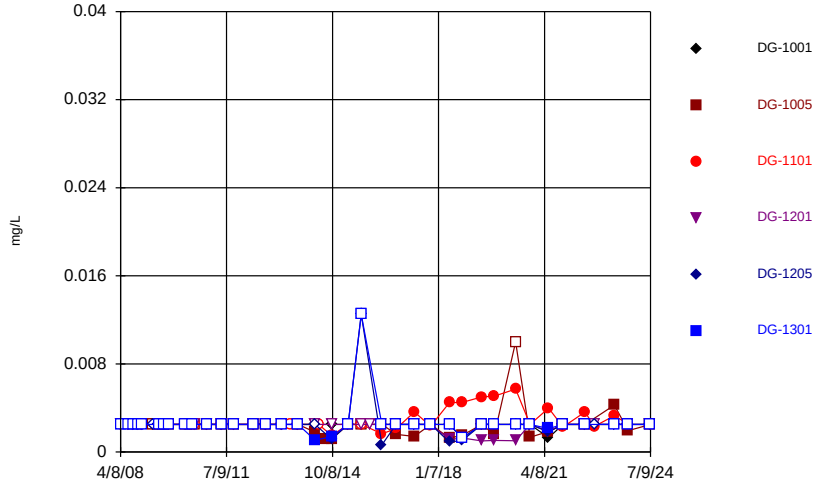
Time Series



Constituent: Parathion-ethyl Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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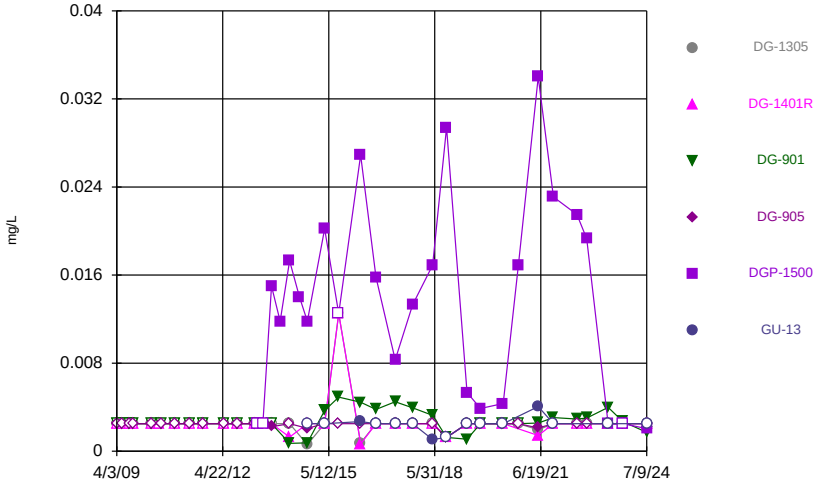
Time Series



Constituent: Selenium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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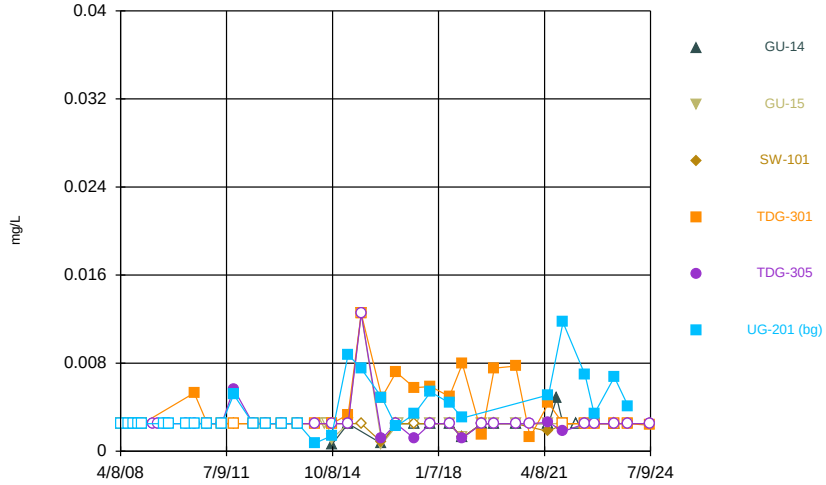
Time Series



Constituent: Selenium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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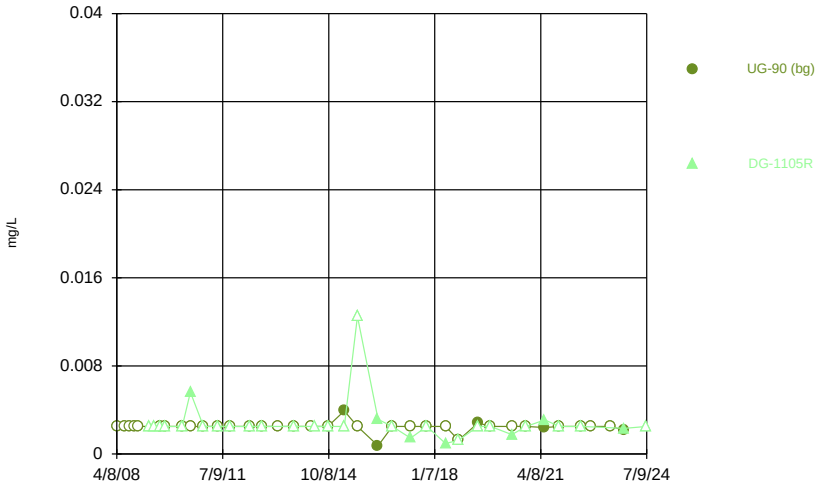
Time Series



Constituent: Selenium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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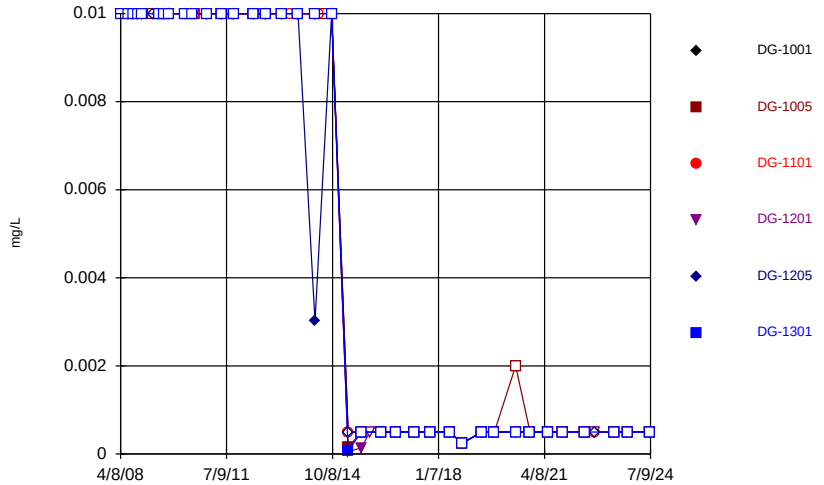
Time Series



Constituent: Selenium Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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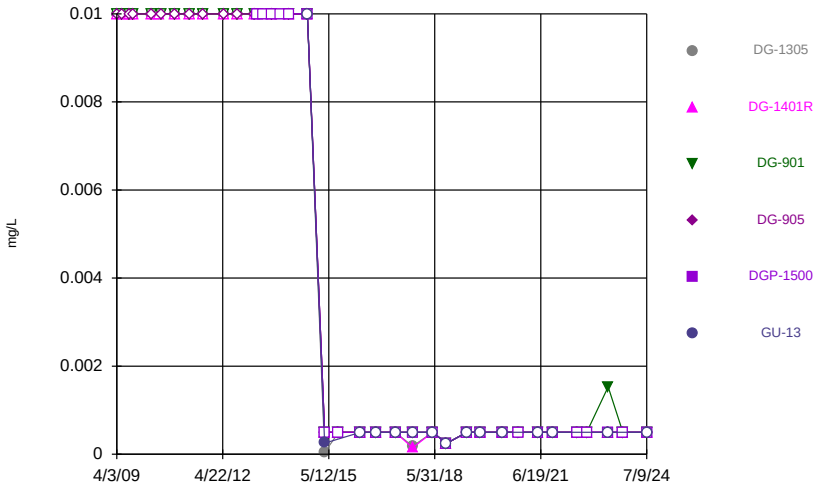
Time Series



Constituent: Silver Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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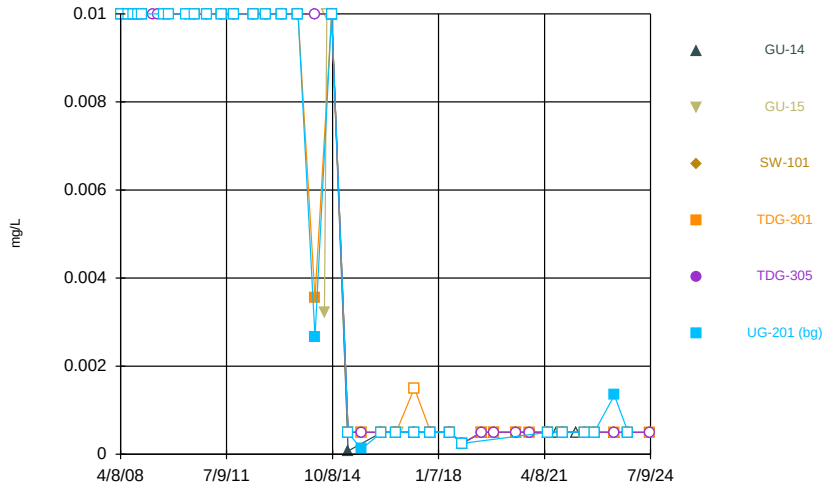
Time Series



Constituent: Silver Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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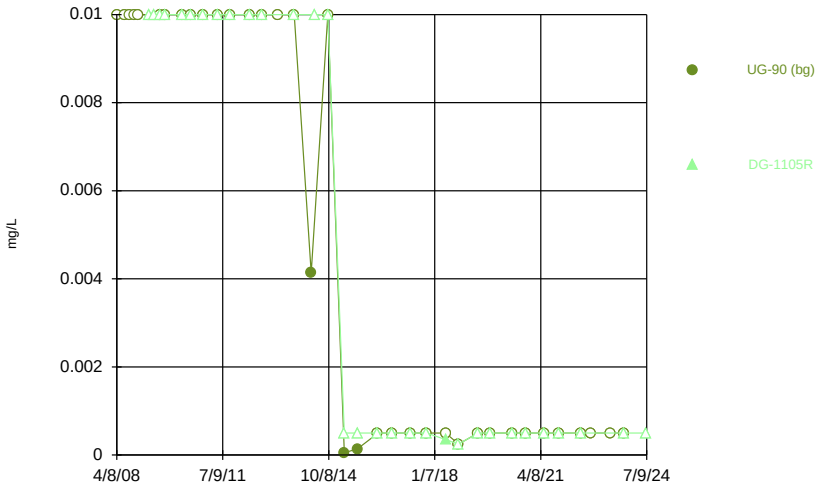
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Constituent: Silver Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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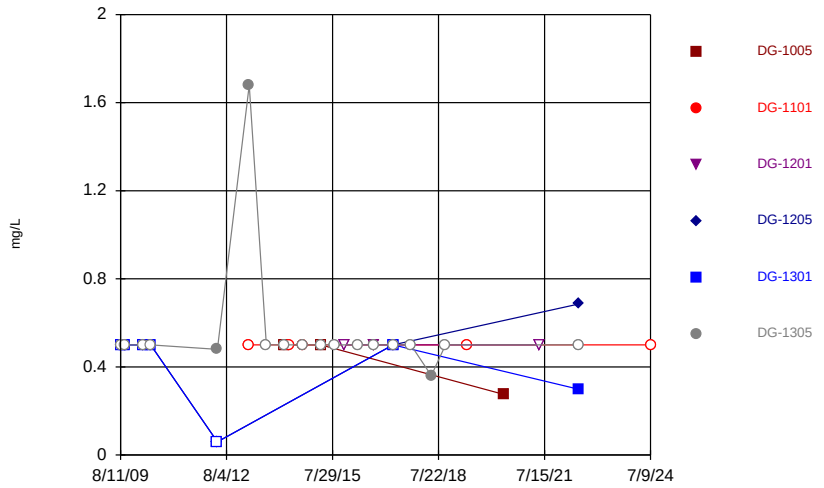
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Constituent: Silver Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
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Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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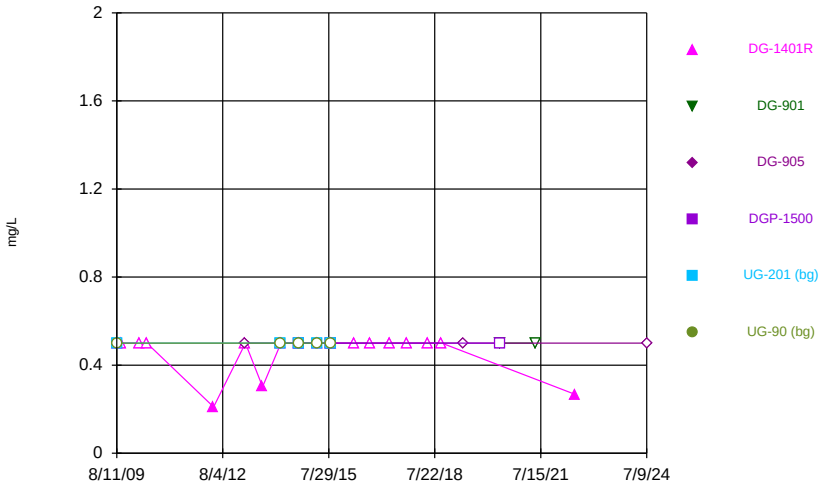
Time Series



Constituent: Sulfide Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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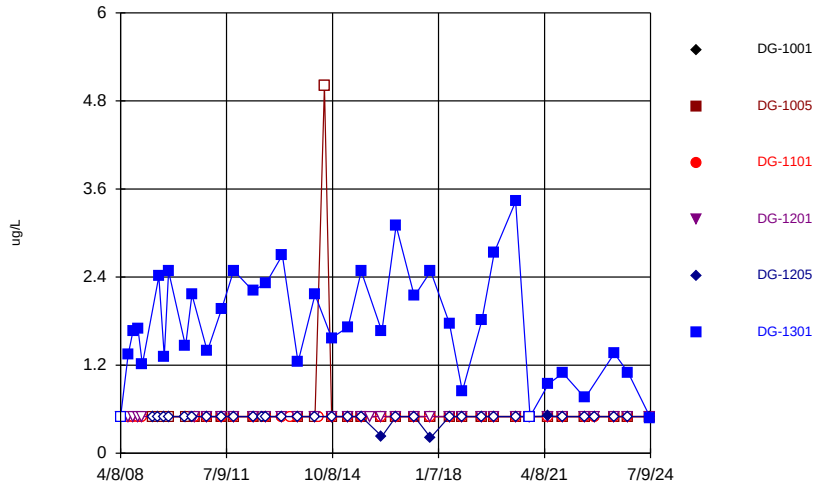
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Constituent: Sulfide Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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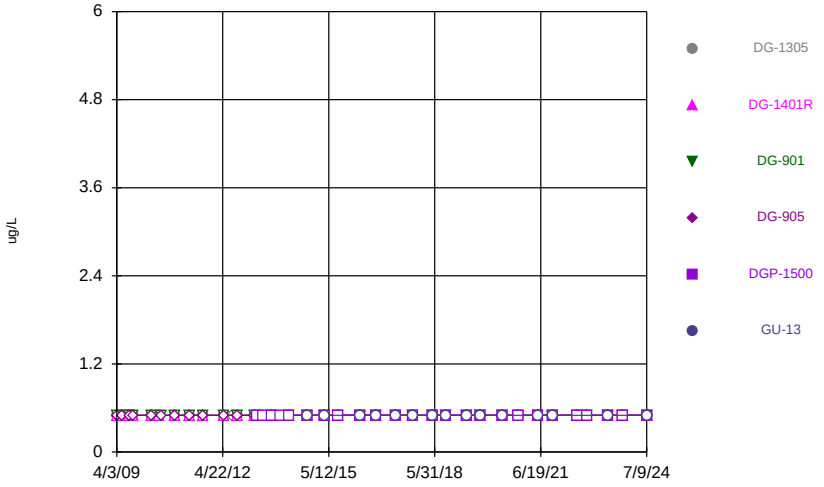
Time Series



Constituent: Tetrachloroethene Analysis Run 10/16/2024 11:53 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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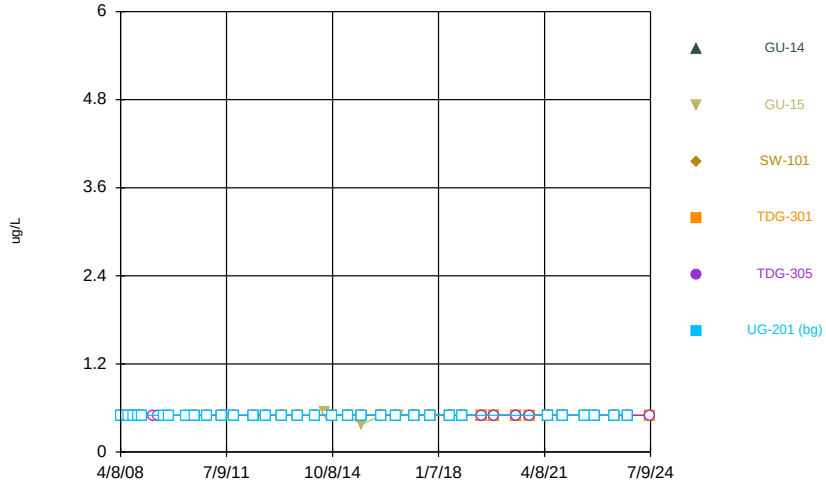
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
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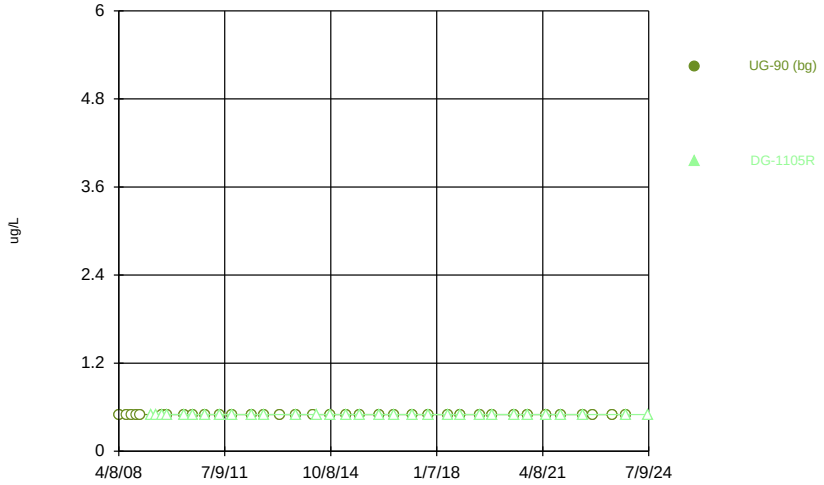
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Constituent: Tetrachloroethene Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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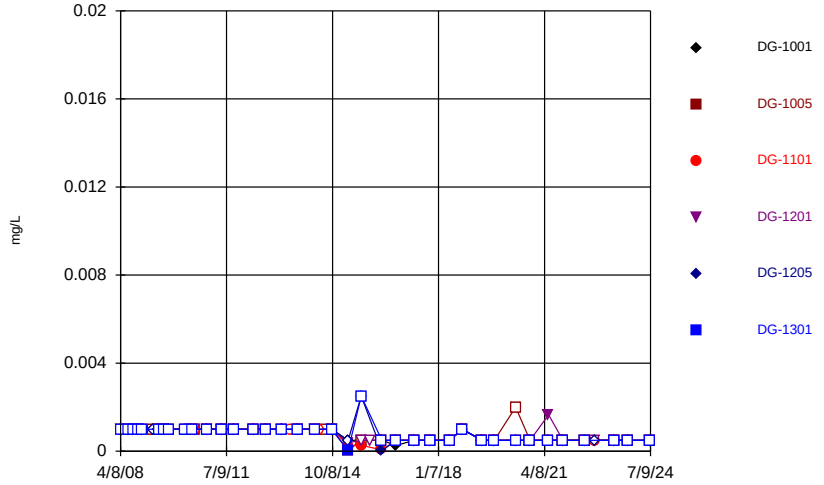
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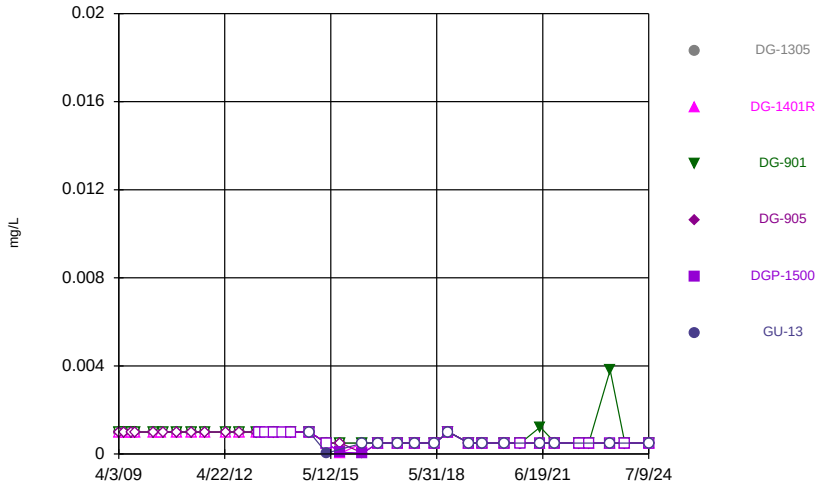
Time Series



Constituent: Thallium Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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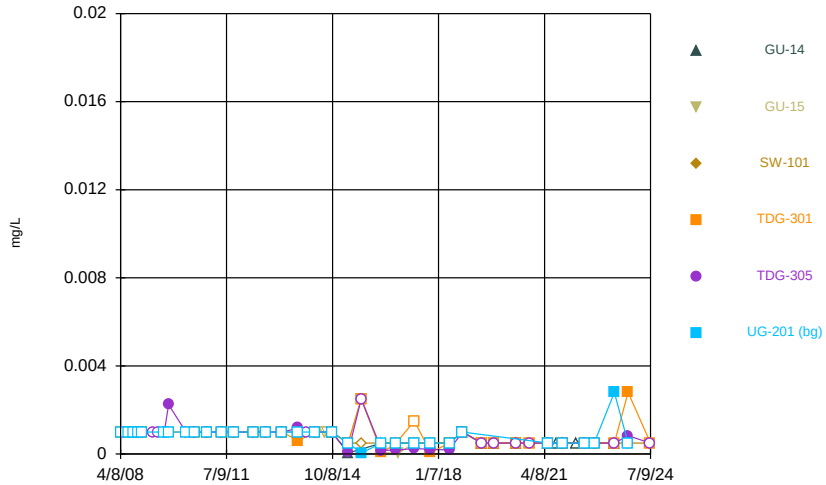
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Constituent: Thallium Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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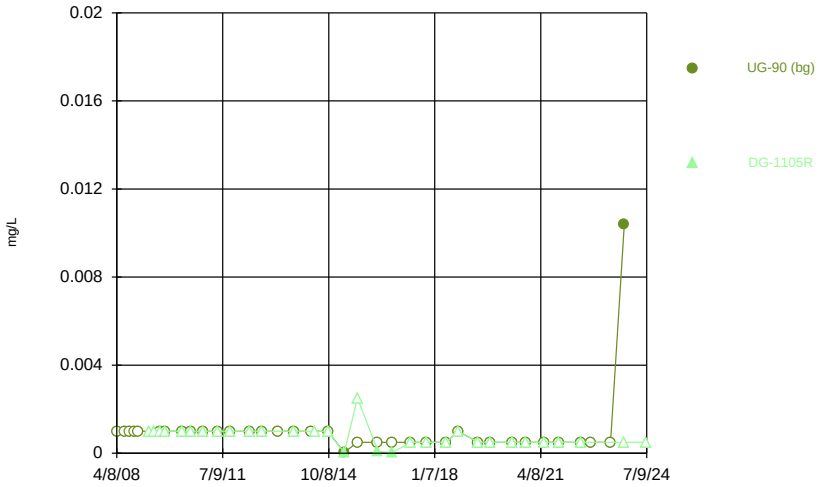
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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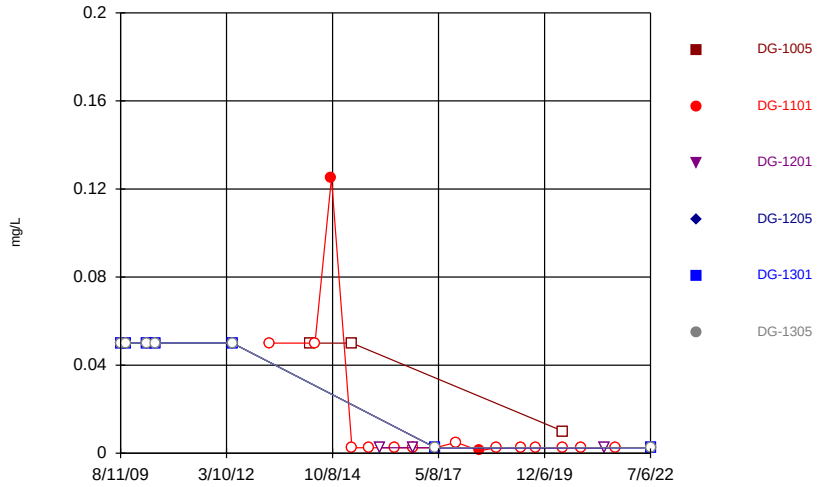
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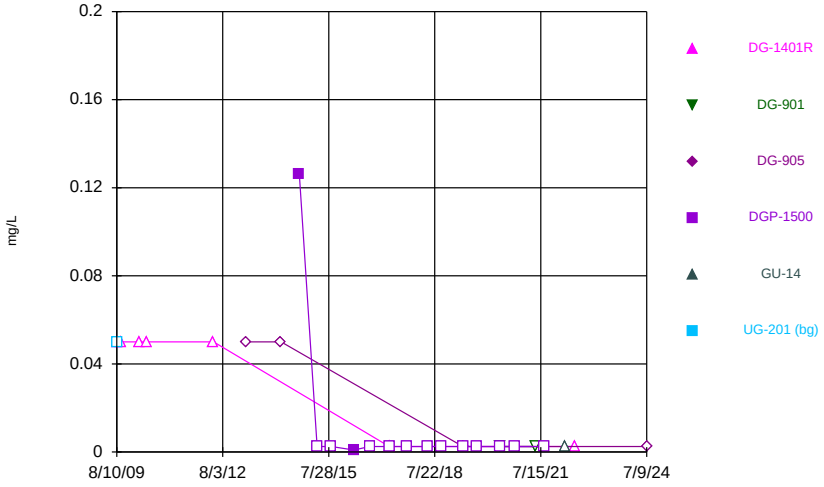
Time Series



Constituent: Tin Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
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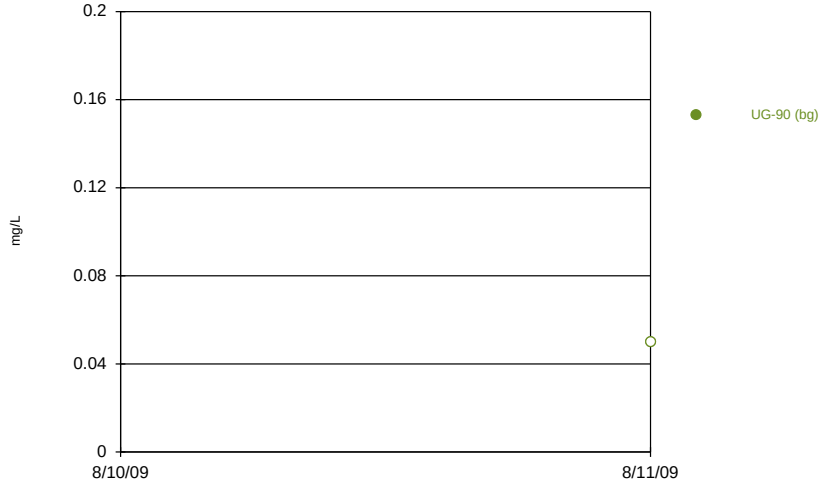
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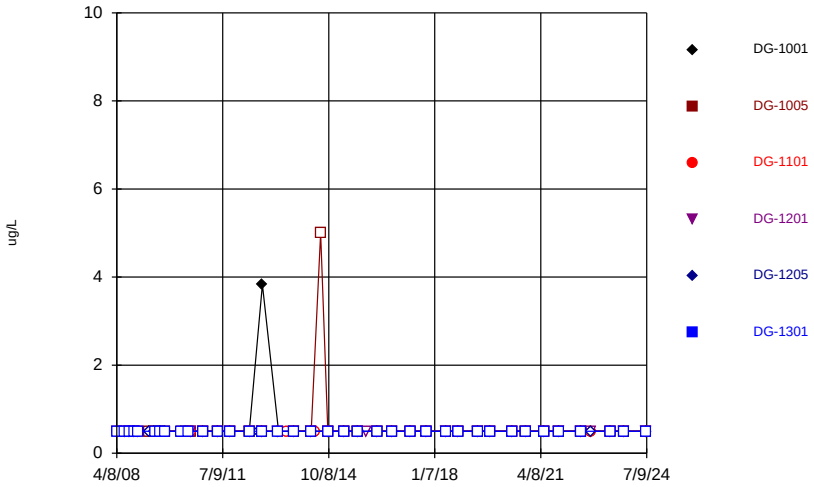
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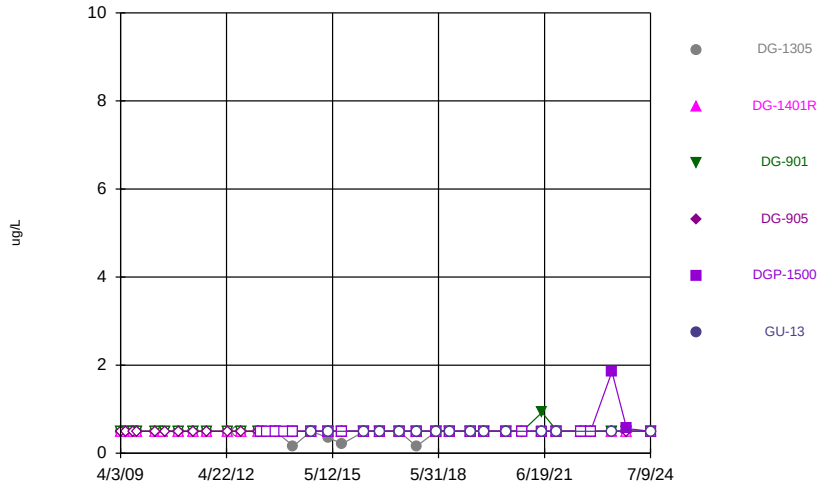
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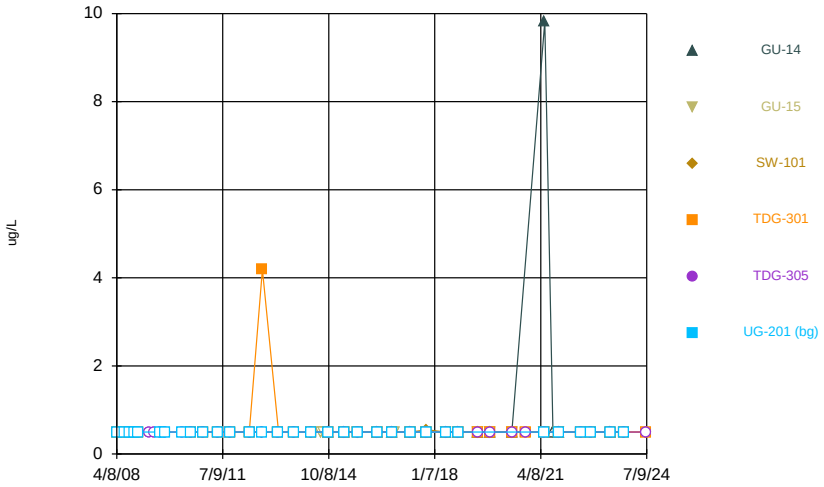
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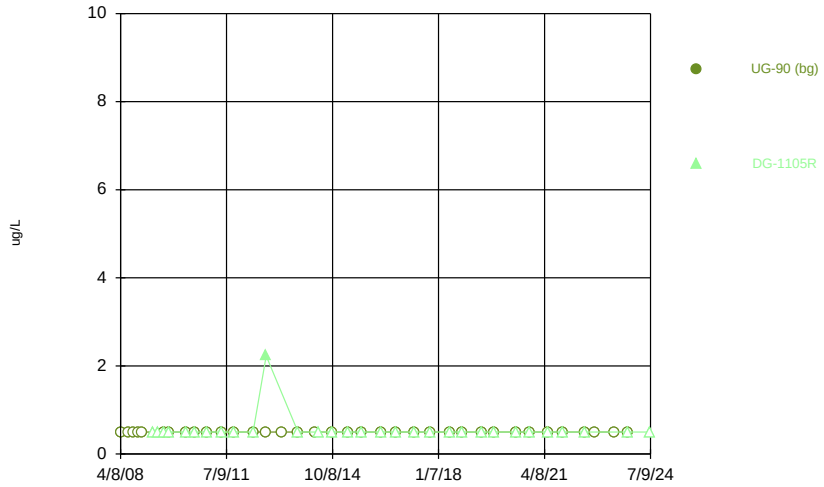
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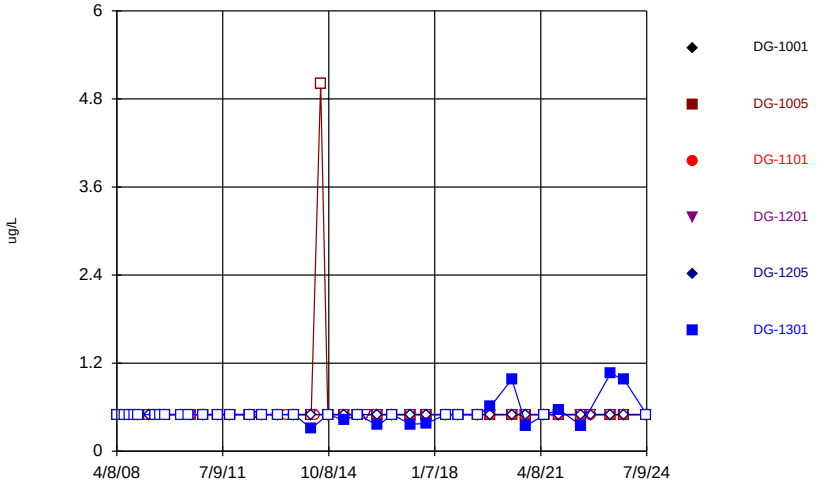
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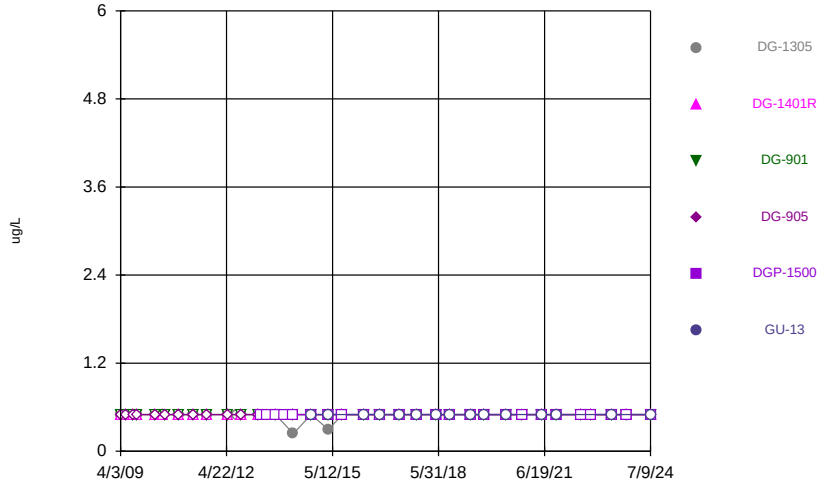
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Constituent: trans-1,2-Dichloroethene Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
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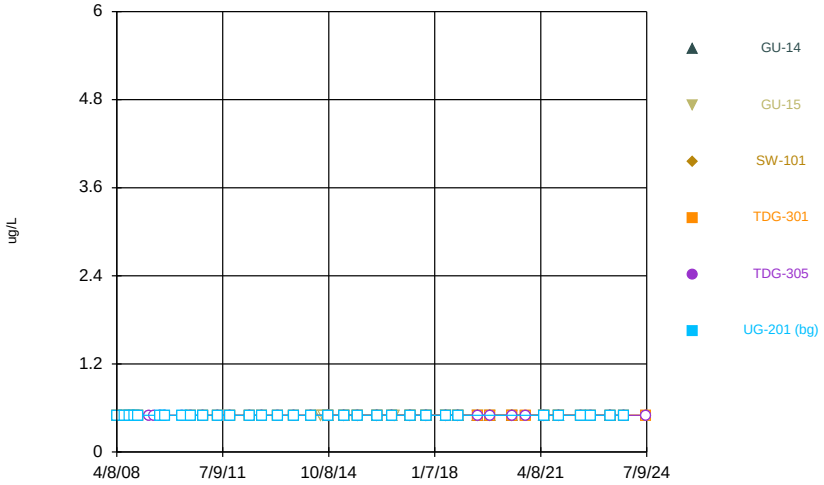
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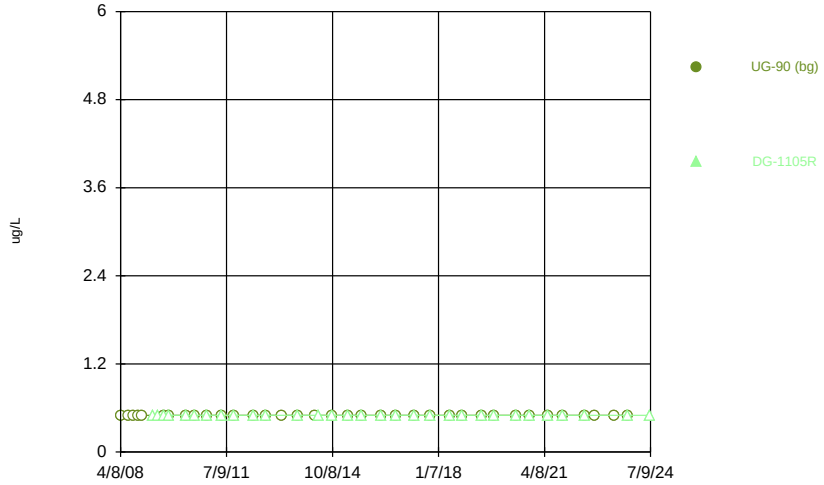
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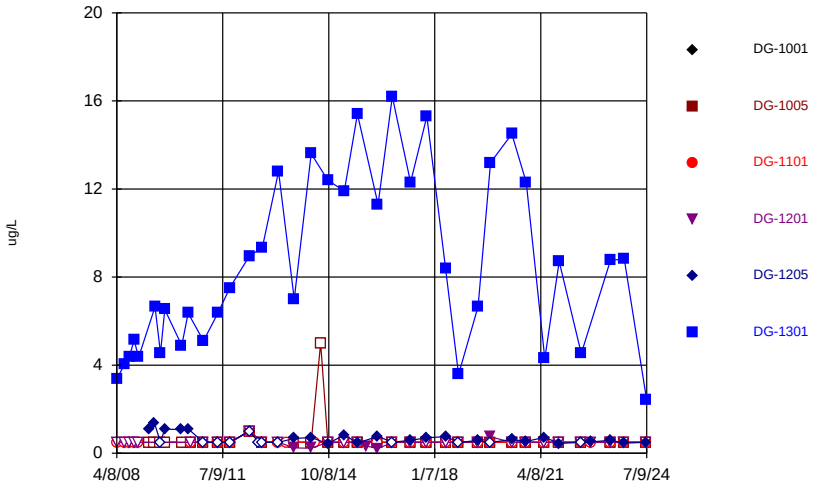
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Constituent: trans-1,2-Dichloroethene Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
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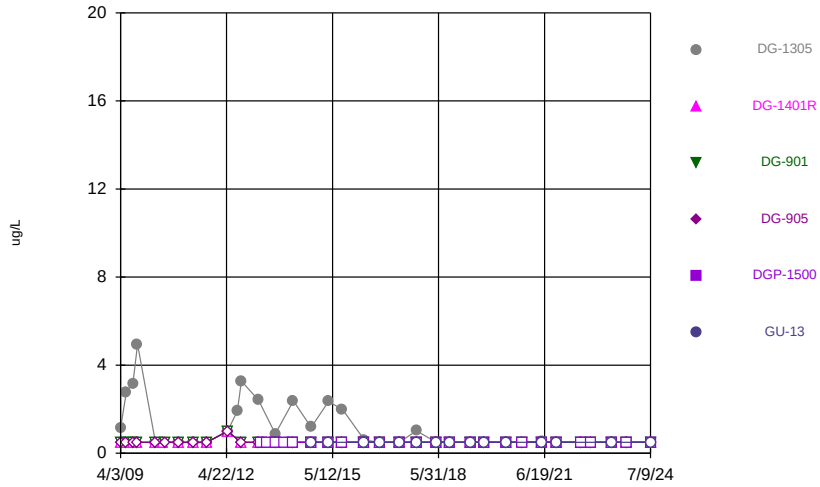
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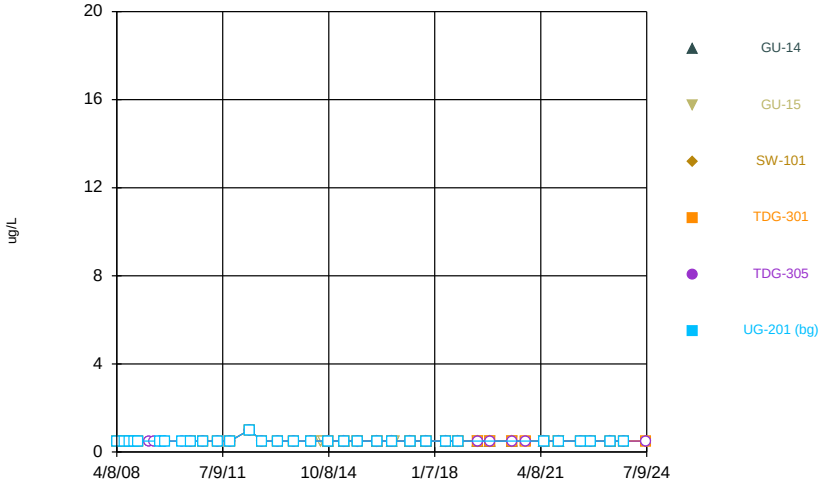
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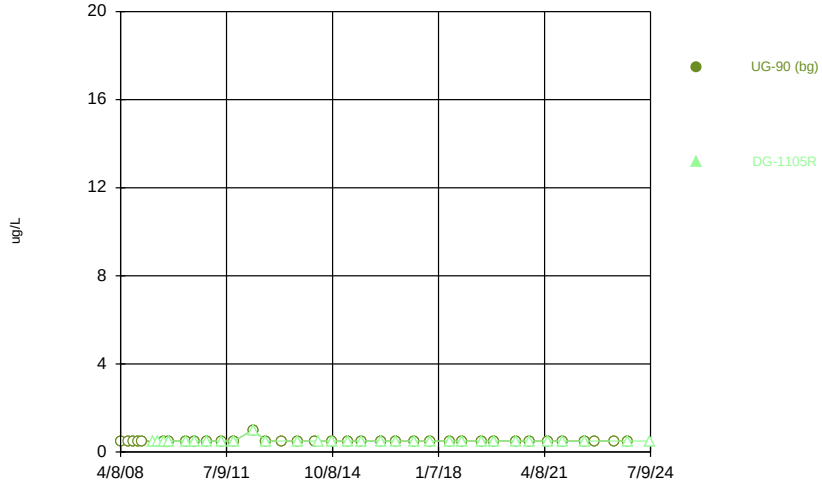
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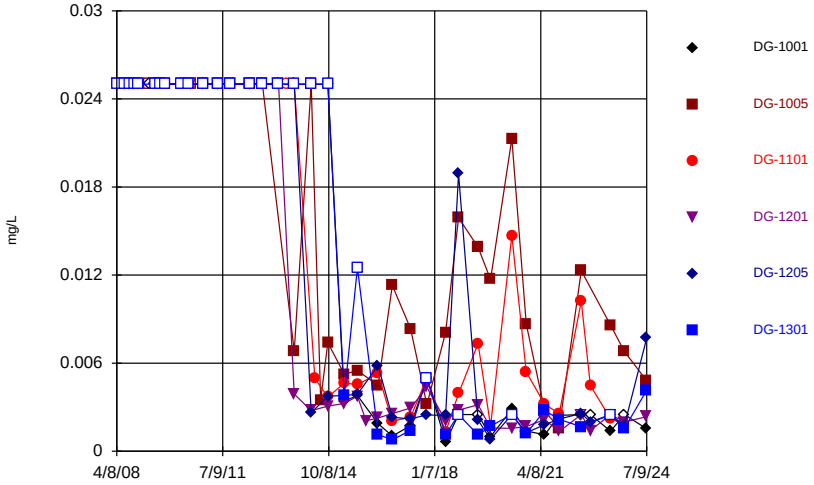
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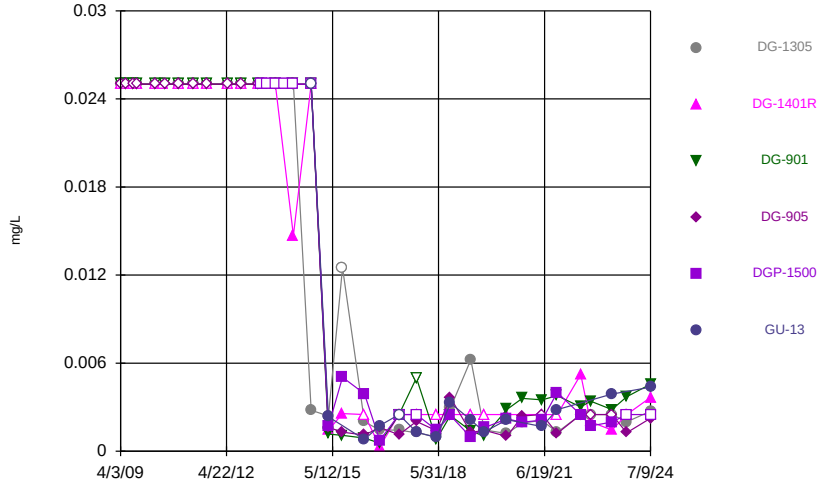
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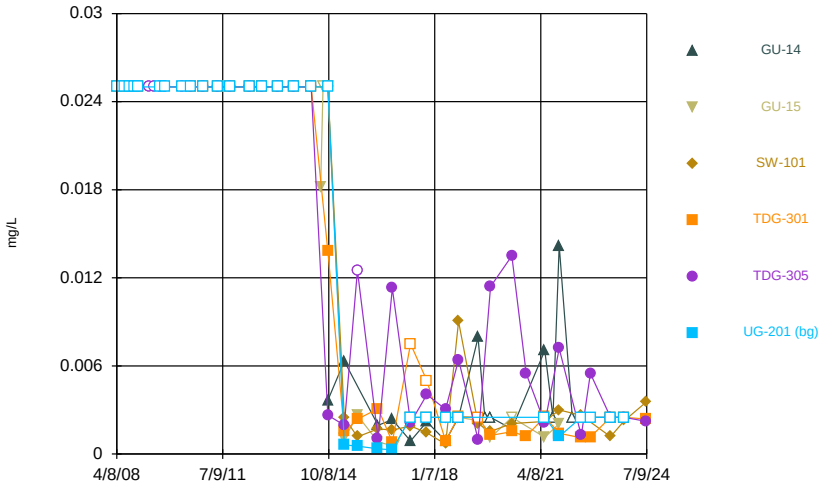
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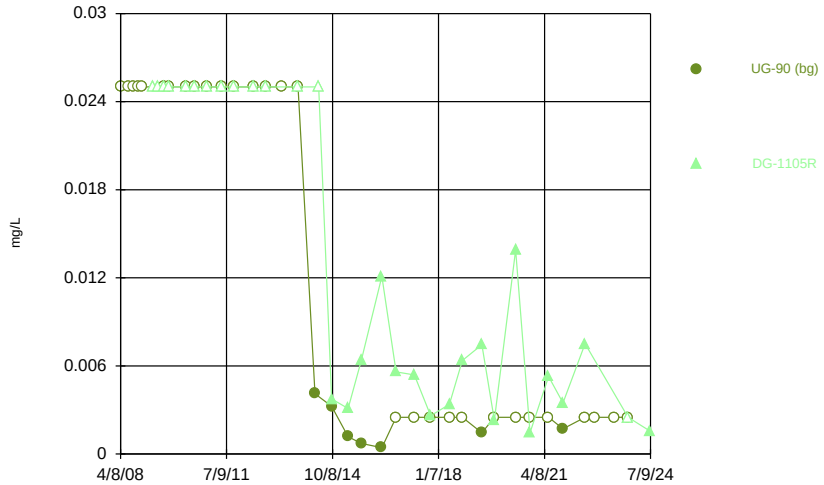
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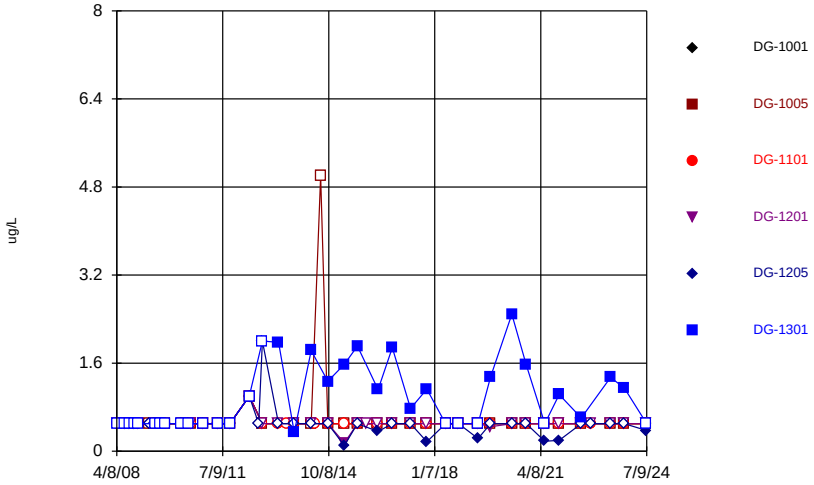
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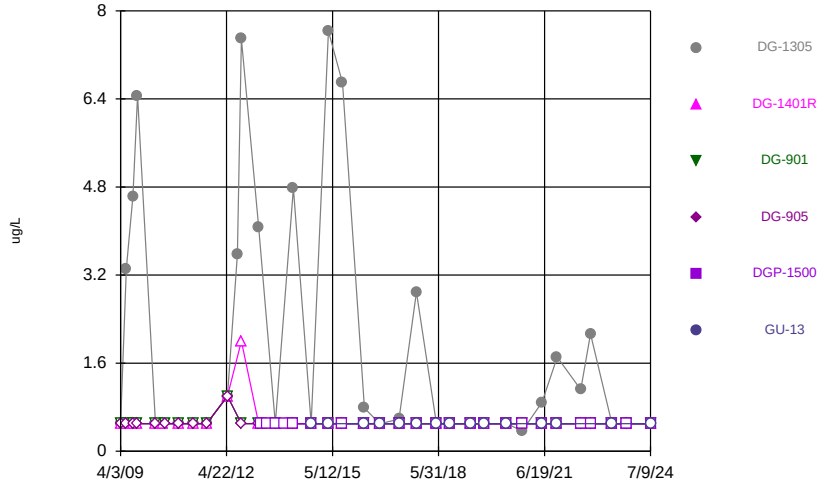
Time Series



Constituent: Vinyl chloride Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
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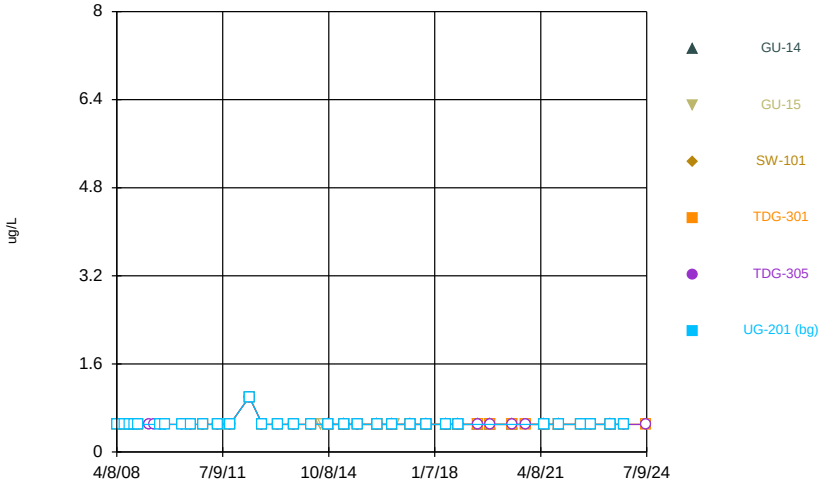
Time Series



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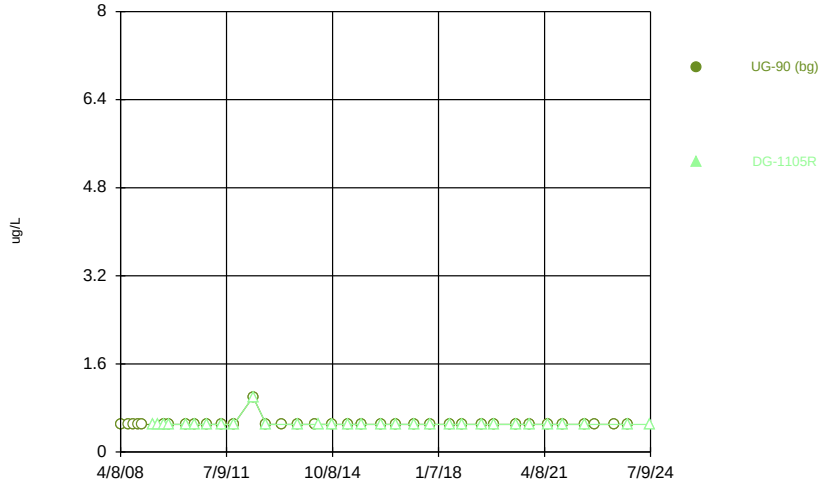
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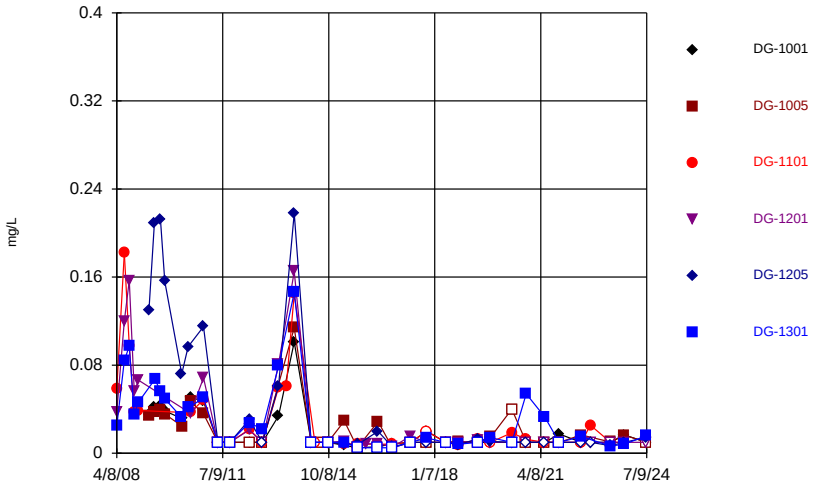
Time Series



Constituent: Vinyl chloride Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
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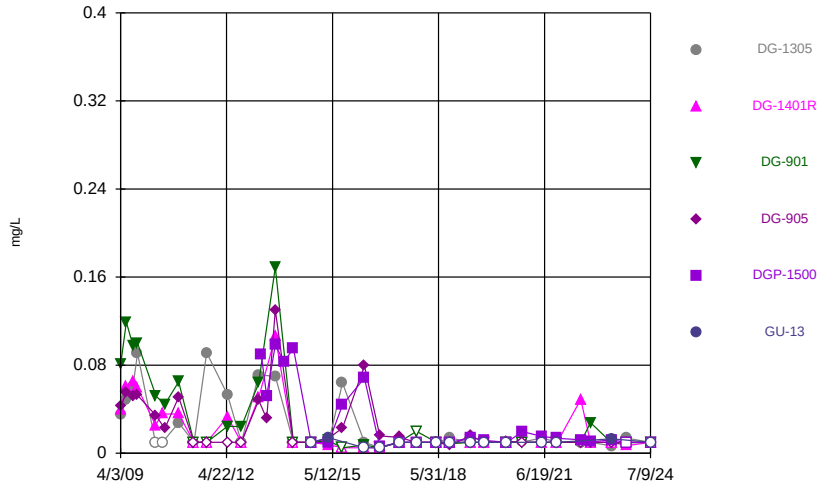
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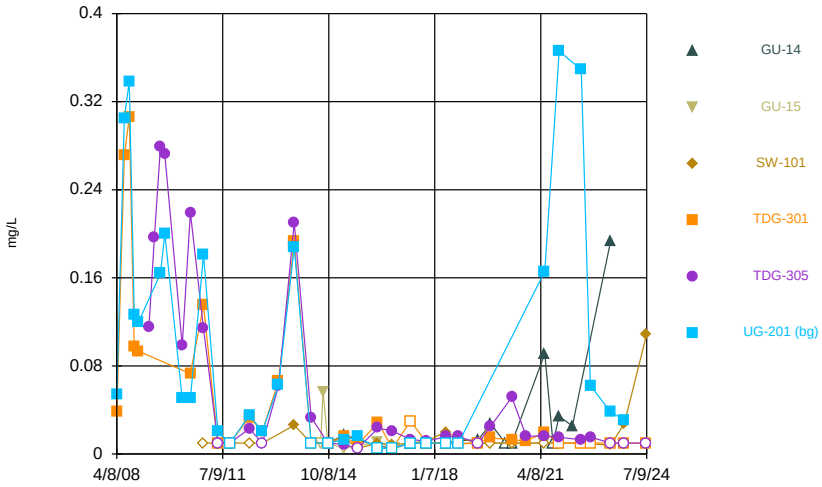
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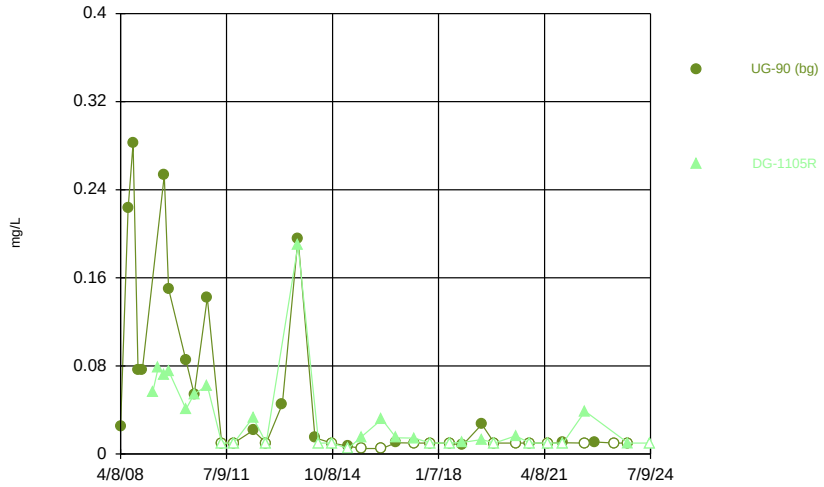
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Constituent: Zinc Analysis Run 10/16/2024 11:54 AM View: 2024SSN -Time Series
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Outlier Tests Summary Table and Graphs

BG Outlier Analysis

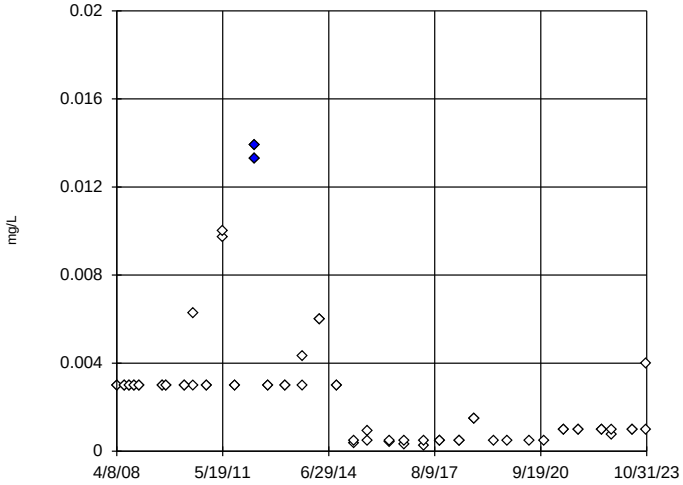
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master Printed 10/16/2024, 1:54 PM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	**UG-201,UG-90**	**Yes**	**0.0139,0.0133**	**n/a w/combined bg**	**OH**	**NaN**	**68**	**0.002647**	**0.002746**	**n/a**	**n/a**
Arsenic (mg/L)	**UG-201,UG-90**	**Yes**	**0.00555**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**68**	**0.001213**	**0.0008619**	**unknown**	**ShapiroFrancia**
Barium (mg/L)	**UG-201,UG-90**	**Yes**	**0.0733,0.0572,0.072,0.0579**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**68**	**0.02655**	**0.01386**	**unknown**	**ShapiroFrancia**
Beryllium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	68	0.0004936	0.00005251	n/a	n/a
Cadmium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	68	0.000224	0.0001009	n/a	n/a
Chromium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	68	0.006123	0.003821	n/a	n/a
Cobalt (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	EPA/OH	0.05	40	0.0006458	0.0009133	ln(x)	ShapiroWilk
Copper (mg/L)	**UG-201,UG-90**	**Yes**	**0.0423**	**n/a w/combined bg**	**OH**	**NaN**	**68**	**0.007487**	**0.006601**	**n/a**	**n/a**
Lead (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	68	0.001418	0.0009106	unknown	ShapiroFrancia
Nickel (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	68	0.01451	0.01202	unknown	ShapiroFrancia
Selenium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	68	0.003098	0.001769	unknown	ShapiroFrancia
Silver (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	68	0.005323	0.004741	n/a	n/a
Thallium (mg/L)	**UG-201,UG-90**	**Yes**	**0.0104**	**n/a w/combined bg**	**OH**	**NaN**	**68**	**0.0009452**	**0.00122**	**n/a**	**n/a**
Vanadium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	68	0.01354	0.01156	n/a	n/a
Zinc (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	68	0.07215	0.09665	unknown	ShapiroFrancia

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

Statistical outliers are drawn as solid.
Outliers per Ohio method.

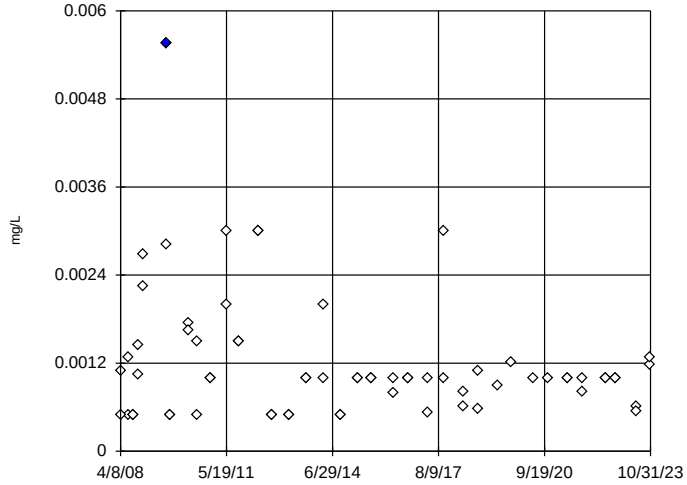
Constituent: Antimony Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.003296, low cutoff = -0.001408, based on IQR multiplier of 3.

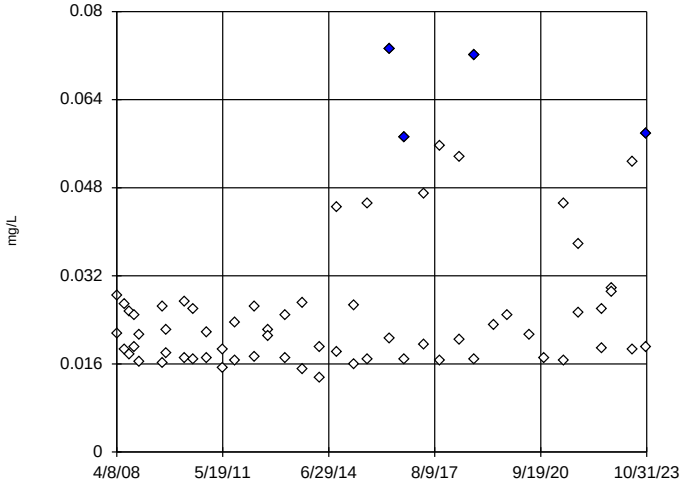
Constituent: Arsenic Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.05625, low cutoff = -0.01218, based on IQR multiplier of 3.

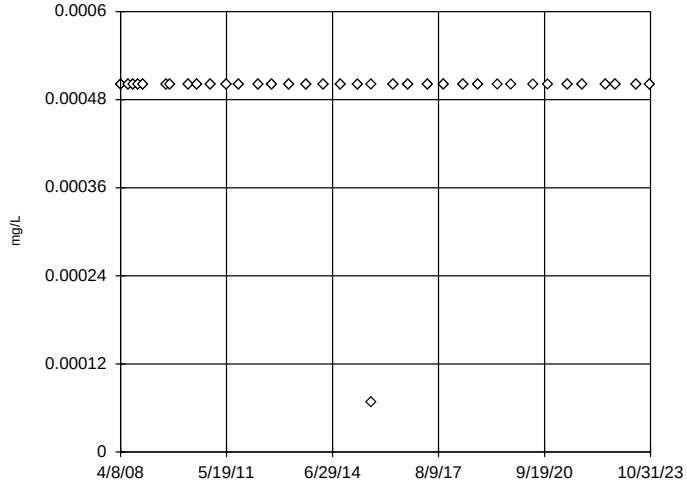
Constituent: Barium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No statistical outliers.

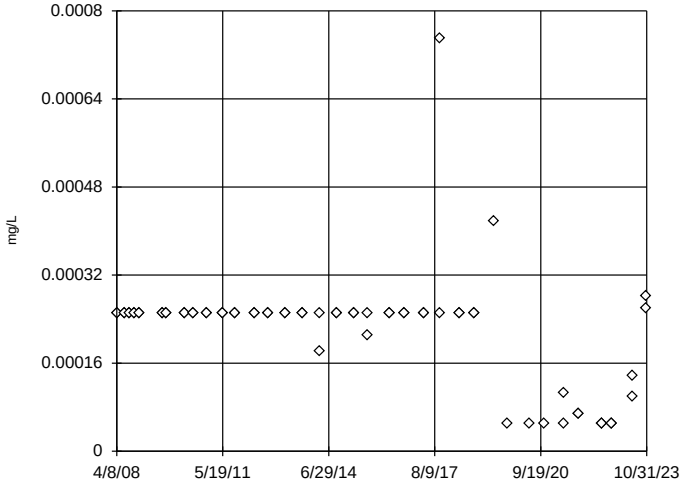
Constituent: Beryllium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No statistical outliers.

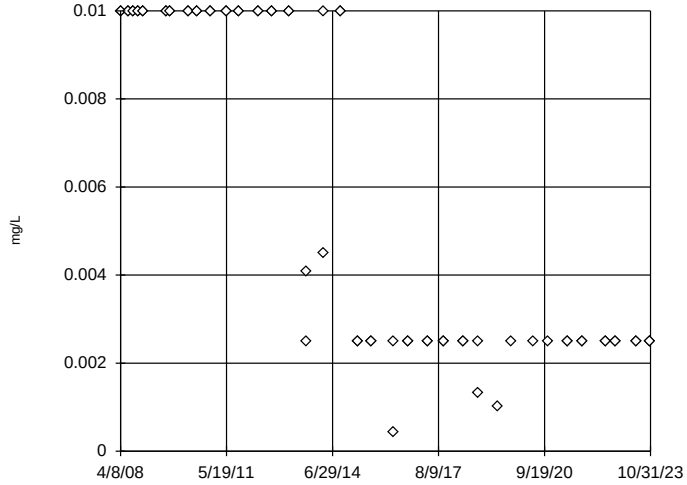
Constituent: Cadmium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No statistical outliers.

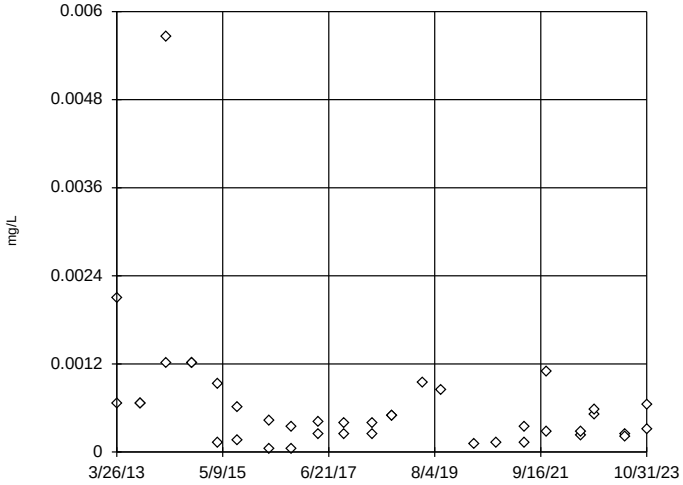
Constituent: Chromium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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EPA Screening (suspected outliers for Rosner's Test)

UG-201,UG-90



n = 40

Rosner's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.0006458, std. dev. 0.0009133, critical Tn 2.866

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9805
Critical = 0.919 (after natural log transformation)
The distribution was found to be log-normal.

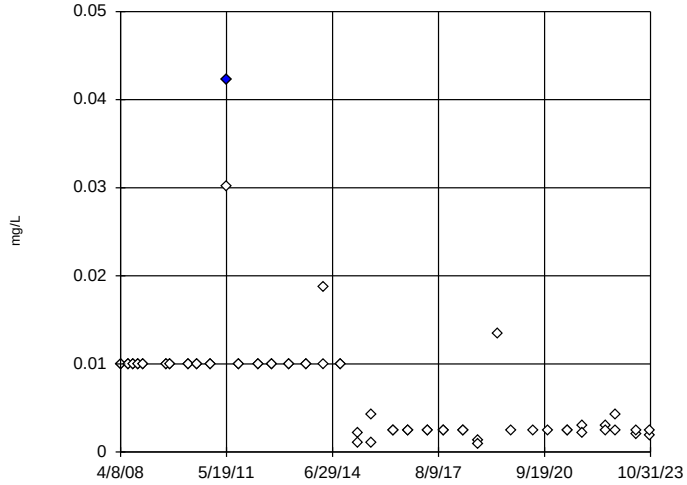
Constituent: Cobalt Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

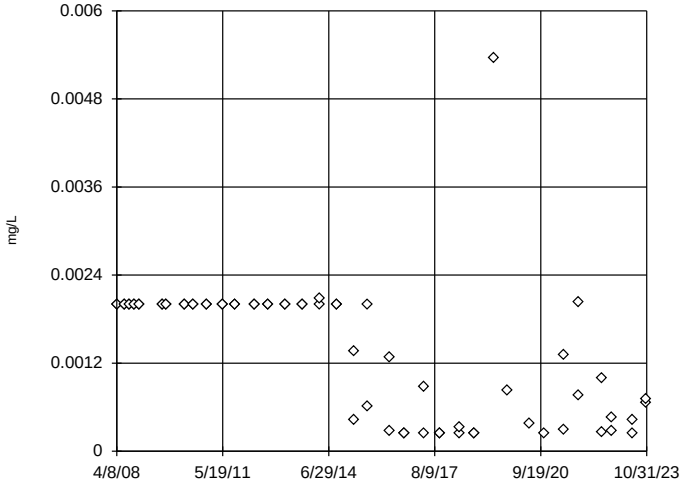
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Copper Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

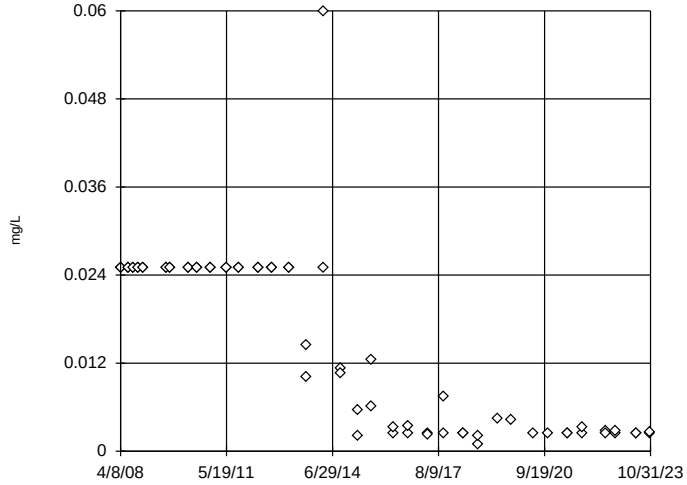
High cutoff = 0.006728, low cutoff = -0.004304, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

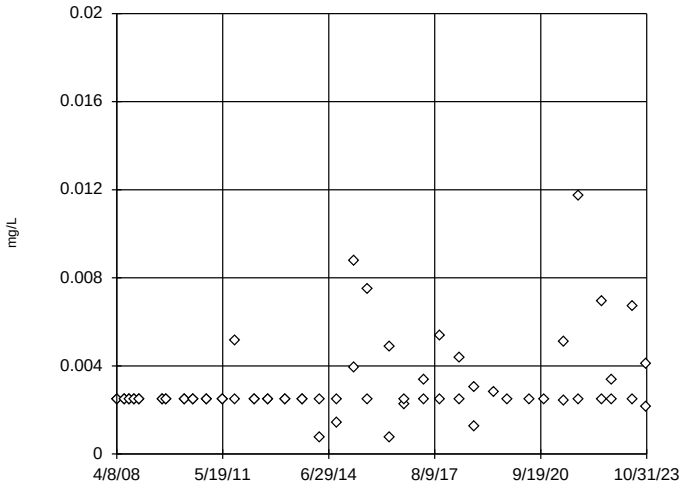
The results were invalidated, because both the lower and upper quartiles represent reporting limits.

Constituent: Nickel Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

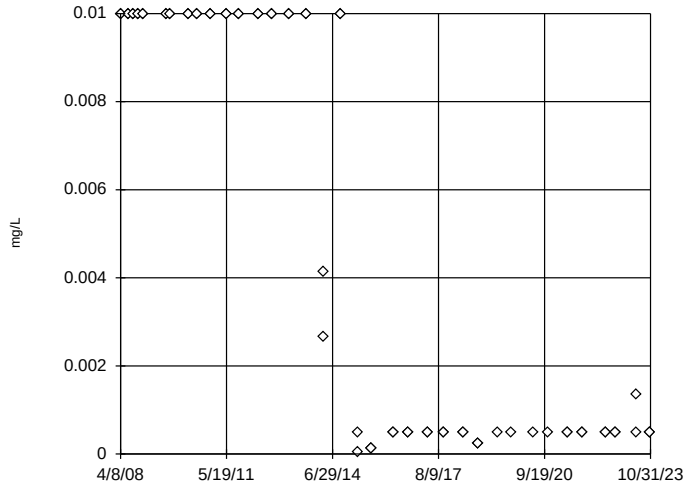
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

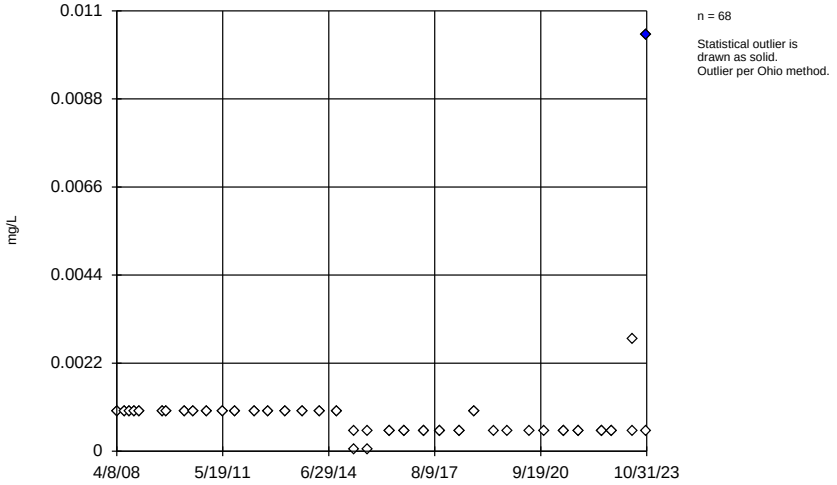
No statistical outliers.

Constituent: Silver Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

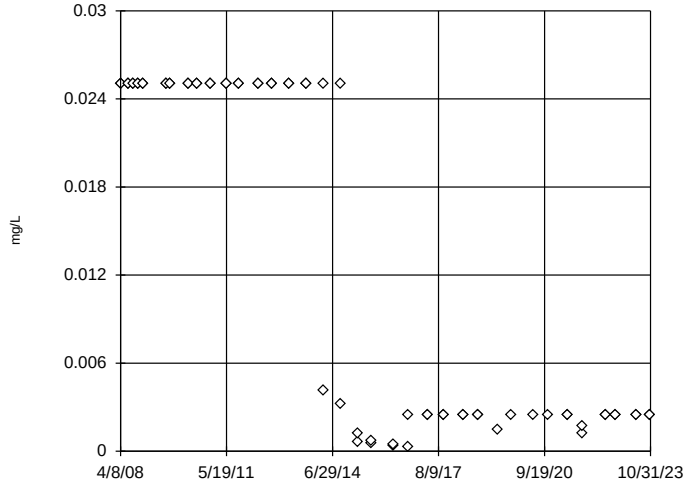
Statistical outlier is drawn as solid.
Outlier per Ohio method.

Constituent: Thallium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

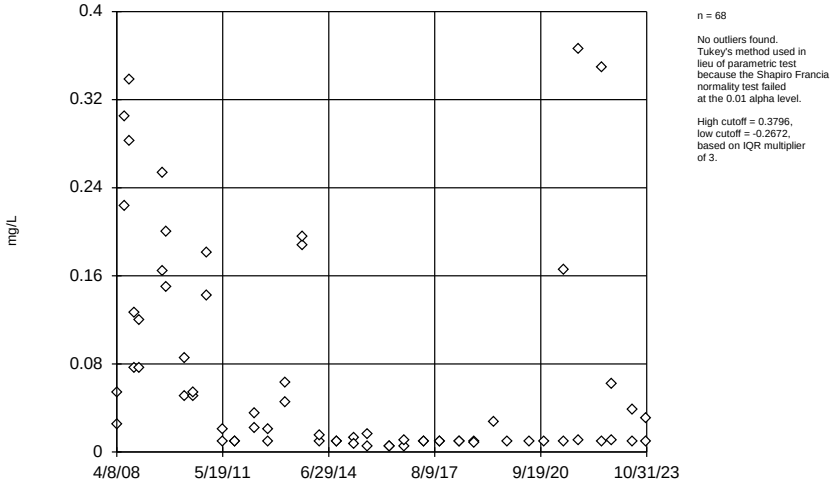
No statistical outliers.

Constituent: Vanadium Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 68

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.3796, low cutoff = -0.2672, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 10/16/2024 1:52 PM View: 2024SSN - BG Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Interwell Prediction Limit Summary Table and Graphs

Prediction Limit

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master Printed 10/16/2024, 2:09 PM

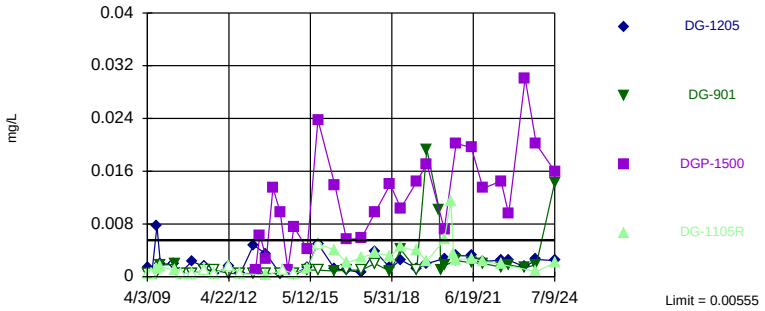
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	DG-1205	0.00555	n/a	7/9/2024	0.00244	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Arsenic (mg/L)	**DG-901**	**0.00555**	**n/a**	**7/9/2024**	**0.0143**	**Yes**	**68**	**66.18**	**n/a**	**0.0000178**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**DGP-1500**	**0.00555**	**n/a**	**7/9/2024**	**0.016**	**Yes**	**68**	**66.18**	**n/a**	**0.0000178**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	DG-1105R	0.00555	n/a	7/9/2024	0.0021	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Barium (mg/L)	DG-1001	0.0733	n/a	7/9/2024	0.0615	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1005	0.0733	n/a	7/9/2024	0.0445	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1201	0.0733	n/a	7/9/2024	0.0174	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1205	0.0733	n/a	7/9/2024	0.0136	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1301	0.0733	n/a	7/9/2024	0.0403	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1305	0.0733	n/a	7/9/2024	0.07	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1401R	0.0733	n/a	7/9/2024	0.0408	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-901	0.0733	n/a	7/9/2024	0.0713	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-905	0.0733	n/a	7/9/2024	0.0343	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DGP-1500	0.0733	n/a	7/9/2024	0.0405	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	TDG-301	0.0733	n/a	7/9/2024	0.0501	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	TDG-305	0.0733	n/a	7/9/2024	0.0479	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Barium (mg/L)	DG-1105R	0.0733	n/a	7/9/2024	0.0254	No	68	0	n/a	0.0000178	NP Inter (normality) ...
Cadmium (mg/L)	DG-901	0.00075	n/a	7/9/2024	0.000301	No	68	86.76	n/a	0.0000178	NP Inter (NDs) 1 of 3
Cobalt (mg/L)	DG-1001	0.001797	n/a	7/9/2024	0.000488J	No	40	27.5	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	DG-1205	0.001797	n/a	7/9/2024	0.000506	No	40	27.5	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	DG-1301	0.001797	n/a	7/9/2024	0.000543	No	40	27.5	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	DG-1401R	0.001797	n/a	7/9/2024	0.000548	No	40	27.5	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	**DG-901**	**0.001797**	**n/a**	**7/9/2024**	**0.00772**	**Yes**	**40**	**27.5**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	**TDG-301**	**0.001797**	**n/a**	**7/9/2024**	**0.00208**	**Yes**	**40**	**27.5**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	TDG-305	0.001797	n/a	7/9/2024	0.000649	No	40	27.5	ln(x)	0.0001951	Param Inter 1 of 3
Copper (mg/L)	DG-1205	0.0423	n/a	7/9/2024	0.00565	No	68	79.41	n/a	0.0000178	NP Inter (NDs) 1 of 3
Copper (mg/L)	DG-1301	0.0423	n/a	7/9/2024	0.00892	No	68	79.41	n/a	0.0000178	NP Inter (NDs) 1 of 3
Copper (mg/L)	DG-901	0.0423	n/a	7/9/2024	0.0146	No	68	79.41	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1001	0.00535	n/a	7/9/2024	0.000475J	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1201	0.00535	n/a	7/9/2024	0.00221	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1205	0.00535	n/a	7/9/2024	0.00139	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	**DG-1301**	**0.00535**	**n/a**	**7/9/2024**	**0.0109**	**Yes**	**68**	**66.18**	**n/a**	**0.0000178**	**NP Inter (NDs) 1 of 3**
Lead (mg/L)	DG-1305	0.00535	n/a	7/9/2024	0.00154	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1401R	0.00535	n/a	7/9/2024	0.000966	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-901	0.00535	n/a	7/9/2024	0.00397	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-905	0.00535	n/a	7/9/2024	0.000551	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	TDG-301	0.00535	n/a	7/9/2024	0.00284	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Lead (mg/L)	TDG-305	0.00535	n/a	7/9/2024	0.00117	No	68	66.18	n/a	0.0000178	NP Inter (NDs) 1 of 3
Nickel (mg/L)	DG-1001	0.0599	n/a	7/9/2024	0.004135J	No	68	73.53	n/a	0.0000178	NP Inter (NDs) 1 of 3
Nickel (mg/L)	DG-1301	0.0599	n/a	7/9/2024	0.00679	No	68	73.53	n/a	0.0000178	NP Inter (NDs) 1 of 3
Nickel (mg/L)	DG-901	0.0599	n/a	7/9/2024	0.00814	No	68	73.53	n/a	0.0000178	NP Inter (NDs) 1 of 3
Nickel (mg/L)	TDG-301	0.0599	n/a	7/9/2024	0.00508	No	68	73.53	n/a	0.0000178	NP Inter (NDs) 1 of 3
Nickel (mg/L)	TDG-305	0.0599	n/a	7/9/2024	0.0158	No	68	73.53	n/a	0.0000178	NP Inter (NDs) 1 of 3
Vanadium (mg/L)	DG-1205	0.025	n/a	7/9/2024	0.00771	No	68	82.35	n/a	0.0000178	NP Inter (NDs) 1 of 3

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Hollow symbols indicate censored values.

Exceeds Limit: DG-901, DGP-1500

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 68 background values. 66.18% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Comparing 4 points to limit. Assumes 14 future values.

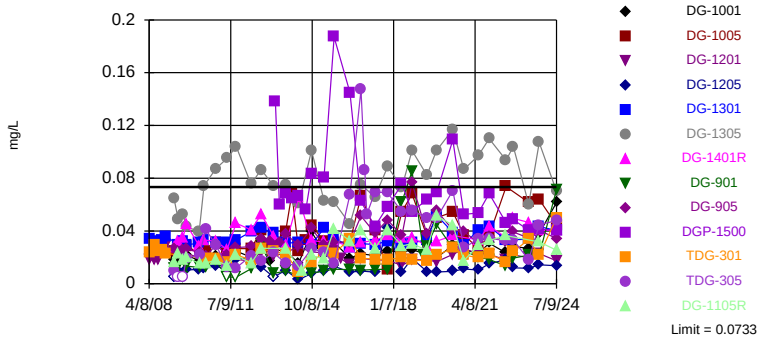
Constituent: Arsenic Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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 the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 68 background values. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Comparing 13 points to limit. Assumes 5 future values.

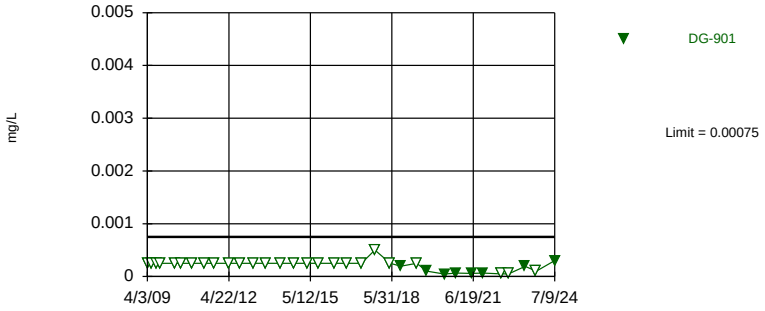
Constituent: Barium Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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 68 background values. 86.76% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Assumes 17 future values.

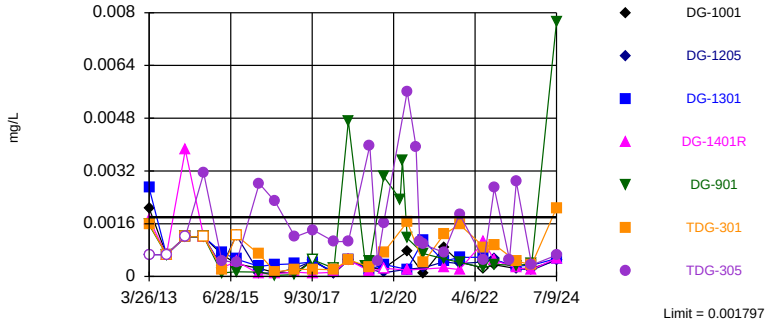
Constituent: Cadmium Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Exceeds Limit: DG-901, TDG-301

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-8.042, Std. Dev.=0.9914, n=40, 27.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9805, critical = 0.919. Kappa = 1.735 (c=15, w=18, 1 of 3, event alpha = 0.05132). Report alpha = 0.003506. Individual comparison alpha = 0.0001951. Comparing 7 points to limit. Assumes 11 future values.

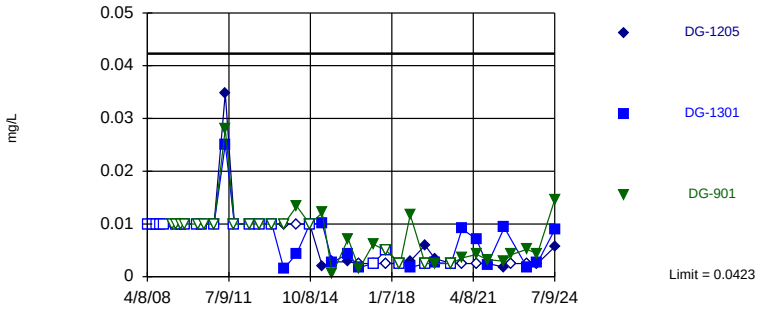
Constituent: Cobalt Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 68 background values. 79.41% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Comparing 3 points to limit. Assumes 15 future values.

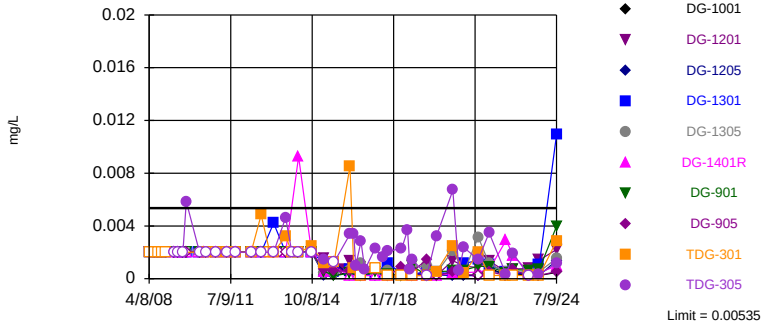
Constituent: Copper Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

Exceeds Limit: DG-1301

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 68 background values. 66.18% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Comparing 10 points to limit. Assumes 8 future values.

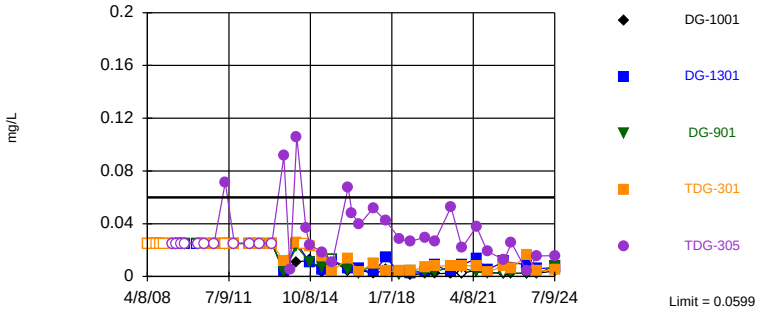
Constituent: Lead Analysis Run 10/16/2024 2:08 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 68 background values. 73.53% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Comparing 5 points to limit. Assumes 13 future values.

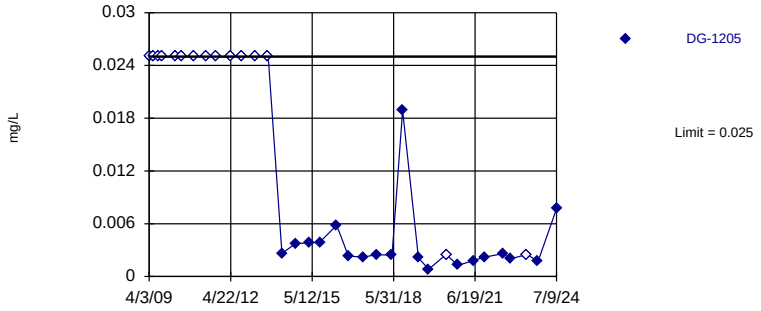
Constituent: Nickel Analysis Run 10/16/2024 2:09 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 68 background values. 82.35% NDs. Annual per-constituent alpha = 0.0006407. Individual comparison alpha = 0.0000178 (1 of 3). Assumes 17 future values.

Constituent: Vanadium Analysis Run 10/16/2024 2:09 PM View: 2024SSN - DM&AM Interwell PL
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Intrawell Prediction Limit Summary Table and Graphs

Intrawell Prediction Limit

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master Printed 10/16/2024, 2:18 PM

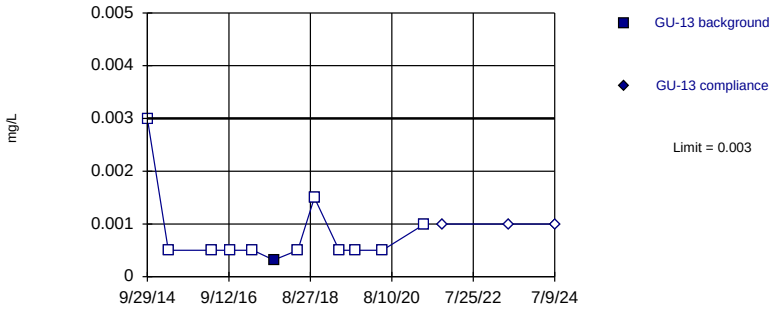
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GU-13	0.003	n/a	7/9/2024	0.001ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	**GU-13**	**0.00322**	**n/a**	**7/9/2024**	**0.0147**	**Yes**	**12**	**50**	**n/a**	**0.01077**	**NP Intra (normality) ...**
Barium (mg/L)	**GU-13**	**0.08545**	**n/a**	**7/9/2024**	**0.0944**	**Yes**	**12**	**0**	**No**	**0.0001951**	**Param Intra 1 of 2**
Beryllium (mg/L)	GU-13	0.0005	n/a	7/9/2024	0.0005ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GU-13	0.0002568	n/a	7/9/2024	0.0001ND	No	12	16.67	No	0.0001951	Param Intra 1 of 2
Chromium (mg/L)	GU-13	0.01	n/a	7/9/2024	0.0025ND	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GU-13	0.00712	n/a	7/9/2024	0.00113	No	12	16.67	n/a	0.01077	NP Intra (normality) ...
Copper (mg/L)	GU-13	0.01	n/a	7/9/2024	0.00351J	No	12	50	n/a	0.01077	NP Intra (normality) ...
Lead (mg/L)	GU-13	0.002	n/a	7/9/2024	0.000824	No	12	58.33	n/a	0.01077	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GU-13	0.03349	n/a	7/9/2024	0.00756	No	12	0	sqrt(x)	0.0001951	Param Intra 1 of 2
Selenium (mg/L)	GU-13	0.00406	n/a	7/9/2024	0.0025ND	No	12	75	n/a	0.01077	NP Intra (NDs) 1 of 2
Silver (mg/L)	GU-13	0.01	n/a	7/9/2024	0.0005ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GU-13	0.001	n/a	7/9/2024	0.0005ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GU-13	0.025	n/a	7/9/2024	0.00436J	No	12	16.67	n/a	0.01077	NP Intra (normality) ...
Zinc (mg/L)	GU-13	0.0141	n/a	7/9/2024	0.01ND	No	12	91.67	n/a	0.01077	NP Intra (NDs) 1 of 2

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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 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

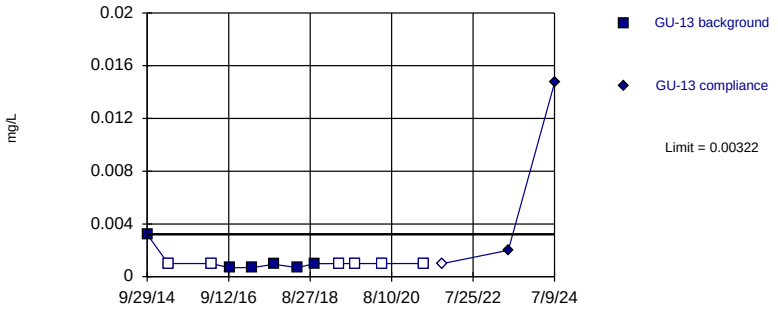
Constituent: Antimony Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 50% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

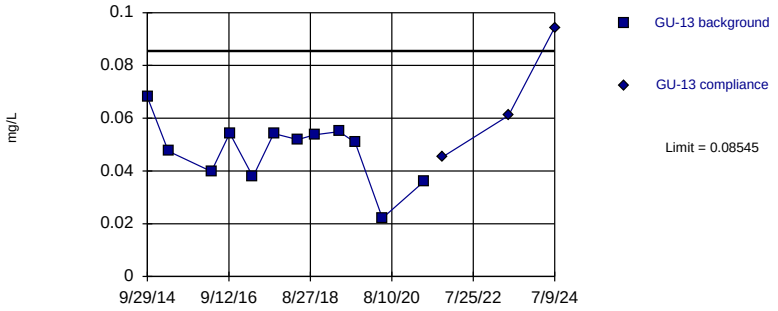
Constituent: Arsenic Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0476, Std. Dev.=0.01191, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9304, critical = 0.805. Kappa = 3.178 (c=15, w=18, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001951.

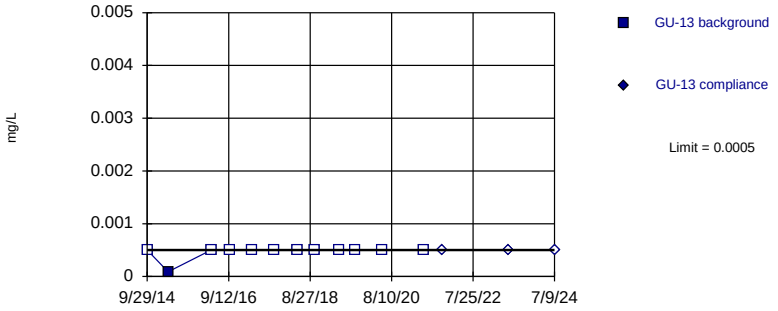
Constituent: Barium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

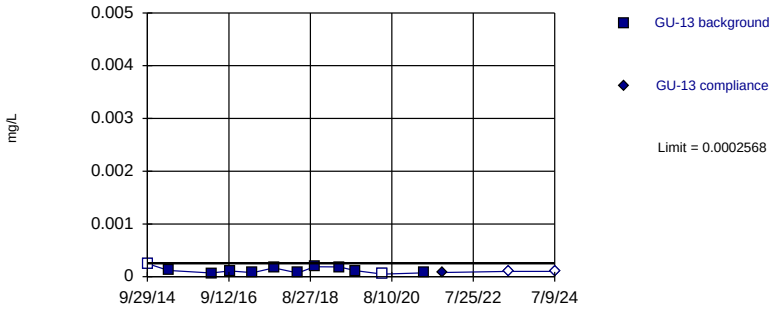
Constituent: Beryllium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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=0.000114, Std. Dev.=0.00004495, n=12, 16.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9053, critical = 0.805. Kappa = 3.178 (c=15, w=18, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001951.

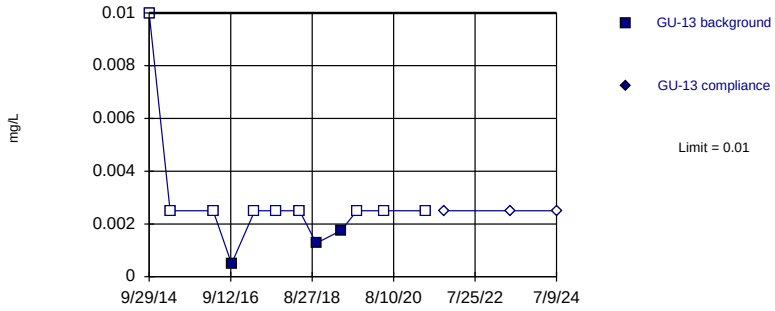
Constituent: Cadmium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

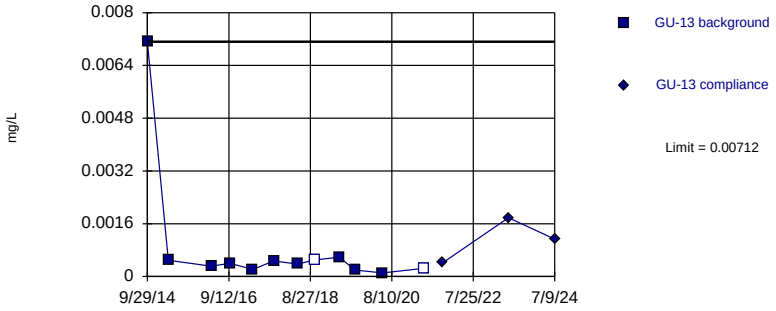
Constituent: Chromium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 16.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

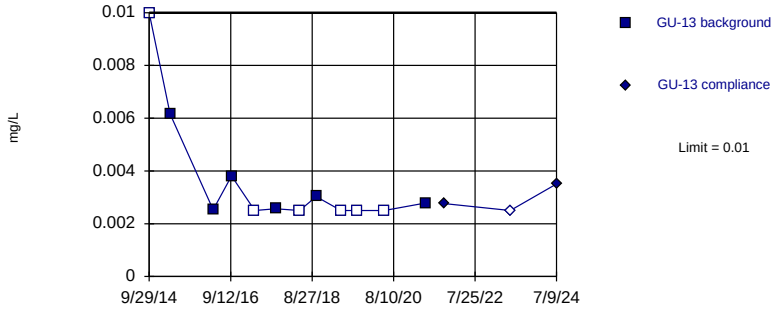
Constituent: Cobalt Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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 12 background values. 50% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

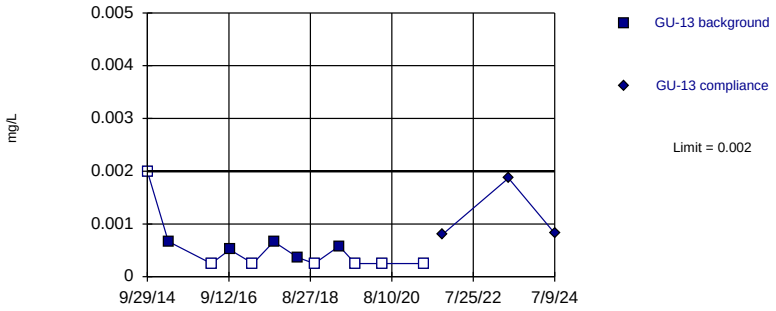
Constituent: Copper Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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 12 background values. 58.33% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

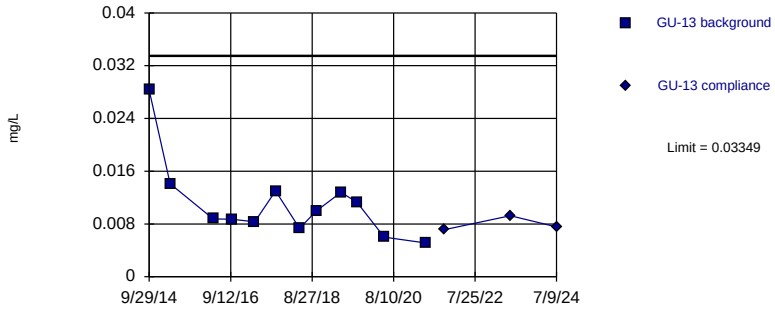
Constituent: Lead Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1028, Std. Dev.=0.02525, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8724, critical = 0.805. Kappa = 3.178 (c=15, w=18, 1 of 2, event alpha = 0.05132). Report alpha = 0.0001951.

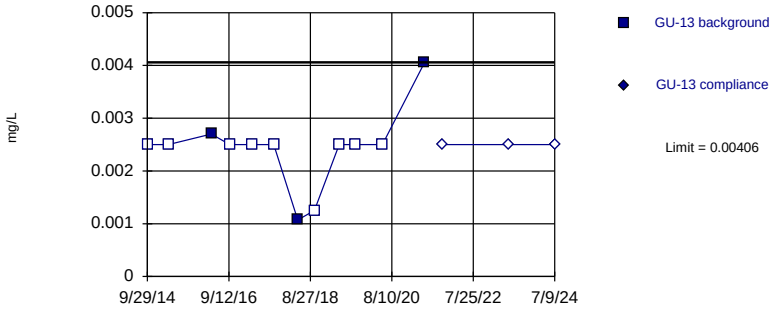
Constituent: Nickel Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 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 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

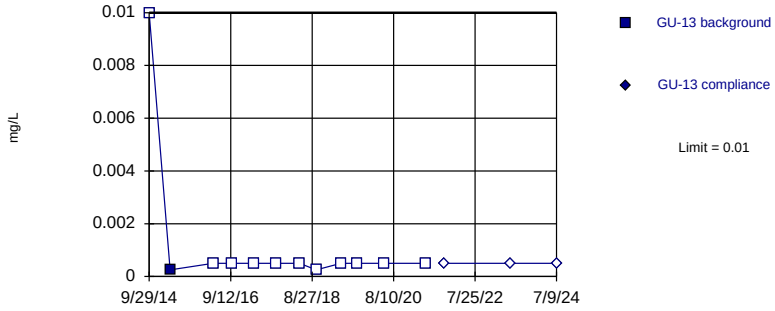
Constituent: Selenium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



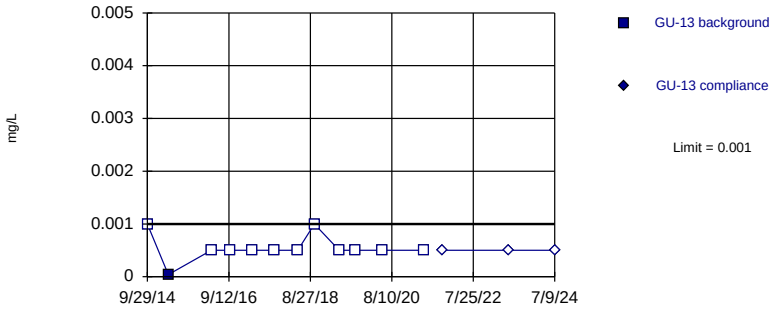
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Silver Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



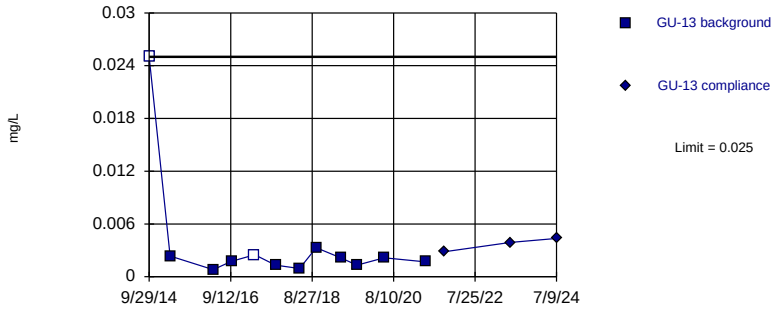
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



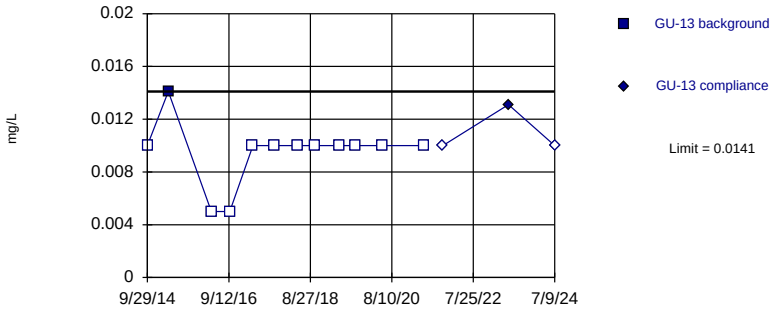
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. 16.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Vanadium Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas 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 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Zinc Analysis Run 10/16/2024 2:17 PM View: 2024SSN - Intra PL - GU-13
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Mann-Kendall/Sen’s Slope Trend Test Summary Table and Graphs

Trend Test

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM Printed 10/16/2024, 2:27 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,1-Dichloroethane (ug/L)	DG-1205	0.2319	12	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1301	-1.261	-8	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1305	0.4708	4	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1401R	-0.09706	-2	-21	No	8	0	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1205	0.04487	10	21	No	8	0	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1301	-0.05748	-7	-21	No	8	25	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1305	0.0357	7	21	No	8	25	0.01	NP
1,4-Dichlorobenzene (ug/L)	DG-1305	0.111	5	21	No	8	37.5	0.01	NP
Acetone (ug/L)	DG-901	0	7	21	No	8	87.5	0.01	NP
Antimony (mg/L)	DG-1101	0	1	21	No	8	87.5	0.01	NP
Antimony (mg/L)	DG-1205	0	-7	-21	No	8	87.5	0.01	NP
Arsenic (mg/L)	DG-901	-0.0001525	-6	-21	No	8	0	0.01	NP
Arsenic (mg/L)	DG-905	0	-11	-21	No	8	75	0.01	NP
Arsenic (mg/L)	DG-1005	-0.0004627	-20	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	DG-1101	-0.0004493	-16	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	DG-1205	-0.0002122	-10	-21	No	8	0	0.01	NP
Arsenic (mg/L)	DG-1305	-0.0007471	-14	-21	No	8	0	0.01	NP
Arsenic (mg/L)	DGP-1500	-0.0005405	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	DG-901	0.001475	8	21	No	8	0	0.01	NP
Barium (mg/L)	DG-905	0.0006146	2	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1005	0.002847	6	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1101	-0.002807	-6	-21	No	8	0	0.01	NP
Barium (mg/L)	DG-1201	-0.001705	-16	-21	No	8	0	0.01	NP
Barium (mg/L)	DG-1205	0.0006721	6	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1301	0.001116	7	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1305	-0.002276	-2	-21	No	8	0	0.01	NP
Barium (mg/L)	DG-1401R	0.001696	8	21	No	8	0	0.01	NP
Barium (mg/L)	DGP-1500	-0.003978	-18	-21	No	8	0	0.01	NP
Benzene (ug/L)	DG-901	0	7	21	No	8	87.5	0.01	NP
Benzene (ug/L)	DGP-1500	0.2357	18	21	No	8	62.5	0.01	NP
Bis[2-ethylhexyl]phthalate (ug/L)	DG-1301	0.007107	1	21	No	8	62.5	0.01	NP
Cadmium (mg/L)	DG-901	0.00002794	9	21	No	8	37.5	0.01	NP
Cadmium (mg/L)	DG-1005	0.00001417	8	21	No	8	75	0.01	NP
Cadmium (mg/L)	DG-1101	-6.6e-7	-2	-21	No	8	37.5	0.01	NP
Cadmium (mg/L)	DG-1201	0	7	21	No	8	87.5	0.01	NP
Cadmium (mg/L)	DG-1301	0.000009645	8	21	No	8	75	0.01	NP
Cadmium (mg/L)	DG-1401R	0.00001622	16	21	No	8	75	0.01	NP
Cadmium (mg/L)	DGP-1500	-0.000002268	-7	-21	No	8	50	0.01	NP
Chlorobenzene (ug/L)	DG-1305	0.9626	7	21	No	8	25	0.01	NP
Chloromethane (ug/L)	DG-1205	0	-1	-21	No	8	87.5	0.01	NP
Chromium (mg/L)	DG-1101	-0.0008132	-9	-21	No	8	37.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	DG-1301	-0.3607	-2	-21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	DG-1305	0.2462	4	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-901	-0.00006049	-4	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1005	-0.00008156	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1101	-0.0004267	-14	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1201	-0.00008175	-16	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1205	0.00001158	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1301	-0.000002631	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1305	-0.00006955	-9	-21	No	8	37.5	0.01	NP

Trend Test

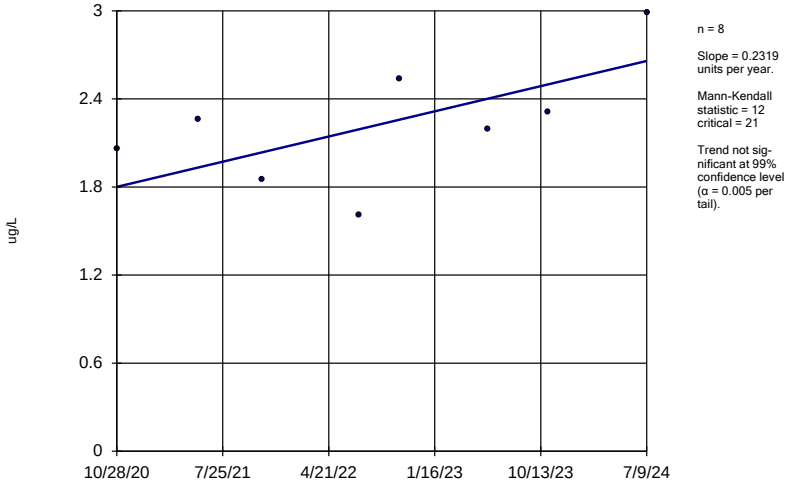
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM Printed 10/16/2024, 2:27 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Cobalt (mg/L)	DG-1401R	0.0000279	8	21	No	8	0	0.01	NP
Cobalt (mg/L)	DGP-1500	-0.0002421	-17	-21	No	8	25	0.01	NP
Copper (mg/L)	DG-901	0.0008065	14	21	No	8	0	0.01	NP
Copper (mg/L)	DG-1005	-0.000366	-3	-21	No	8	50	0.01	NP
Copper (mg/L)	DG-1101	-0.001156	-16	-21	No	8	12.5	0.01	NP
Copper (mg/L)	DG-1205	0	7	21	No	8	75	0.01	NP
Copper (mg/L)	DG-1301	-0.000007036	0	21	No	8	12.5	0.01	NP
Copper (mg/L)	DG-1305	0	-1	-21	No	8	75	0.01	NP
Copper (mg/L)	DG-1401R	-0.0004462	-4	-21	No	8	12.5	0.01	NP
Copper (mg/L)	DGP-1500	-0.001607	-18	-21	No	8	25	0.01	NP
Dichlorodifluoromethane (ug/L)	DG-1205	0.1586	0	21	No	8	0	0.01	NP
Lead (mg/L)	DG-901	0.0000188	4	21	No	8	0	0.01	NP
Lead (mg/L)	DG-905	0	2	21	No	8	50	0.01	NP
Lead (mg/L)	DG-1005	-0.00008523	-4	-21	No	8	0	0.01	NP
Lead (mg/L)	DG-1101	-0.001344	-18	-21	No	8	0	0.01	NP
Lead (mg/L)	DG-1201	0.0002501	8	21	No	8	0	0.01	NP
Lead (mg/L)	DG-1205	0.00008194	9	21	No	8	25	0.01	NP
Lead (mg/L)	DG-1301	0.0001241	4	21	No	8	0	0.01	NP
Lead (mg/L)	DG-1305	0.000009199	2	21	No	8	0	0.01	NP
Lead (mg/L)	DG-1401R	0.00005794	4	21	No	8	0	0.01	NP
Lead (mg/L)	**DGP-1500**	**-0.0005193**	**-23**	**-21**	**Yes**	**8**	**25**	**0.01**	**NP**
Nickel (mg/L)	DG-901	-0.0003156	-11	-21	No	8	25	0.01	NP
Nickel (mg/L)	DG-1005	0	-4	-21	No	8	62.5	0.01	NP
Nickel (mg/L)	DG-1101	-0.00009913	-3	-21	No	8	12.5	0.01	NP
Nickel (mg/L)	DG-1205	-0.00004223	0	21	No	8	12.5	0.01	NP
Nickel (mg/L)	DG-1301	0.0002347	2	21	No	8	0	0.01	NP
Nickel (mg/L)	DG-1305	-0.0004965	-13	-21	No	8	25	0.01	NP
Nickel (mg/L)	DG-1401R	0.00003402	3	21	No	8	25	0.01	NP
Selenium (mg/L)	DG-1005	0.00001437	3	21	No	8	50	0.01	NP
Selenium (mg/L)	DG-1101	-0.0003525	-8	-21	No	8	0	0.01	NP
Selenium (mg/L)	DGP-1500	-0.008752	-18	-21	No	8	12.5	0.01	NP
Silver (mg/L)	DG-901	0	3	21	No	8	87.5	0.01	NP
Tetrachloroethene (ug/L)	DG-1301	-0.1424	-4	-21	No	8	12.5	0.01	NP
Thallium (mg/L)	DG-901	0	-1	-21	No	8	75	0.01	NP
Thallium (mg/L)	DG-1201	0	-5	-21	No	8	87.5	0.01	NP
Toluene (ug/L)	DGP-1500	0	7	21	No	8	75	0.01	NP
trans-1,2-Dichloroethene (ug/L)	DG-1301	0.01347	3	21	No	8	25	0.01	NP
Trichloroethene (ug/L)	DG-1301	-1.771	-10	-21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1005	-0.003159	-10	-21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1101	-0.001753	-18	-21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1205	0.0005205	12	21	No	8	12.5	0.01	NP
Vanadium (mg/L)	DG-1401R	0	0	21	No	8	50	0.01	NP
Vinyl chloride (ug/L)	DG-1301	-0.3346	-11	-21	No	8	25	0.01	NP
Vinyl chloride (ug/L)	DG-1305	0	-1	-21	No	8	37.5	0.01	NP
Zinc (mg/L)	DG-901	0	-4	-21	No	8	62.5	0.01	NP
Zinc (mg/L)	DG-1101	0	-8	-21	No	8	62.5	0.01	NP
Zinc (mg/L)	DG-1301	-0.001607	-7	-21	No	8	25	0.01	NP
Zinc (mg/L)	DG-1401R	0	-5	-21	No	8	75	0.01	NP

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Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.2319 units per year.

Mann-Kendall statistic = 12
critical = 21

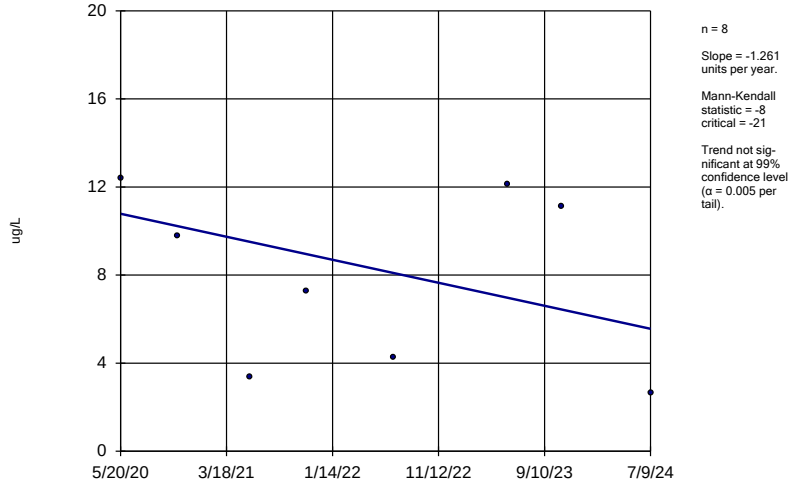
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = -1.261 units per year.

Mann-Kendall statistic = -8
critical = -21

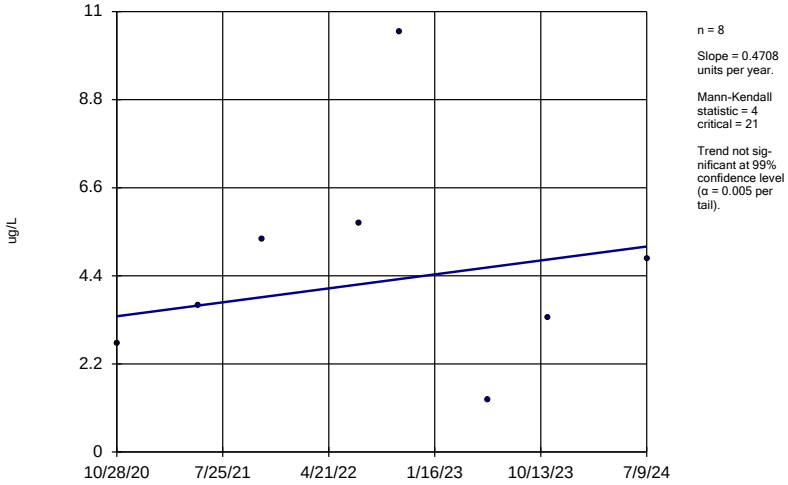
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.4708 units per year.

Mann-Kendall statistic = 4
critical = 21

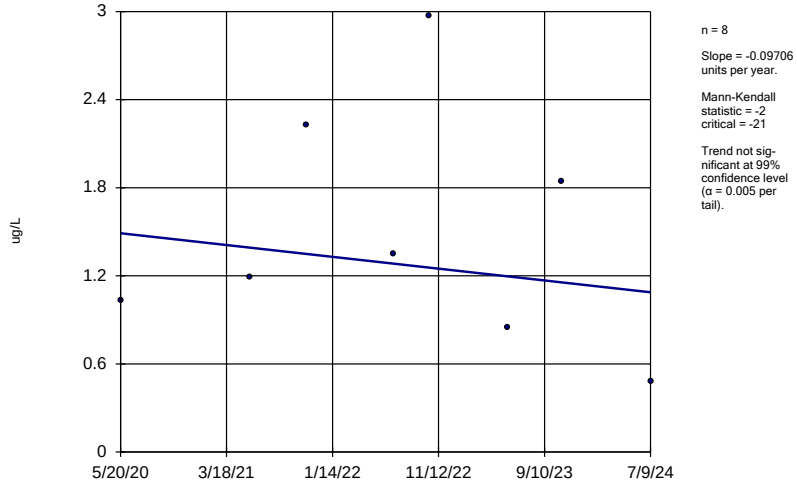
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1401R



n = 8

Slope = -0.09706 units per year.

Mann-Kendall statistic = -2
critical = -21

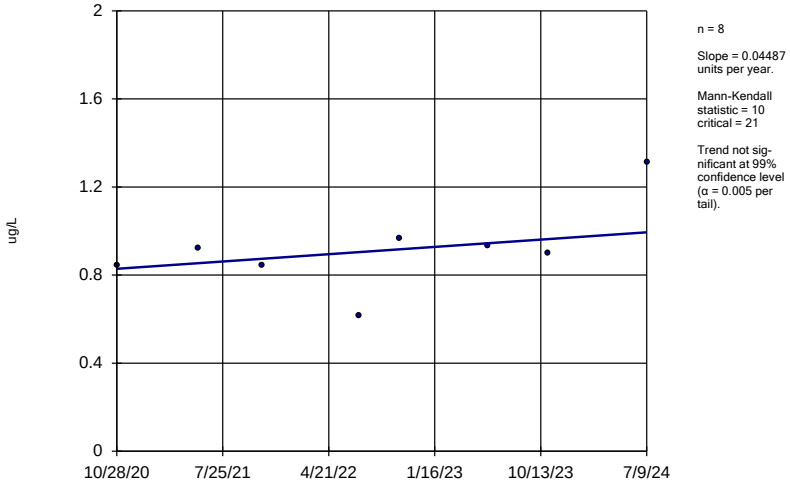
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.04487 units per year.

Mann-Kendall statistic = 10 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

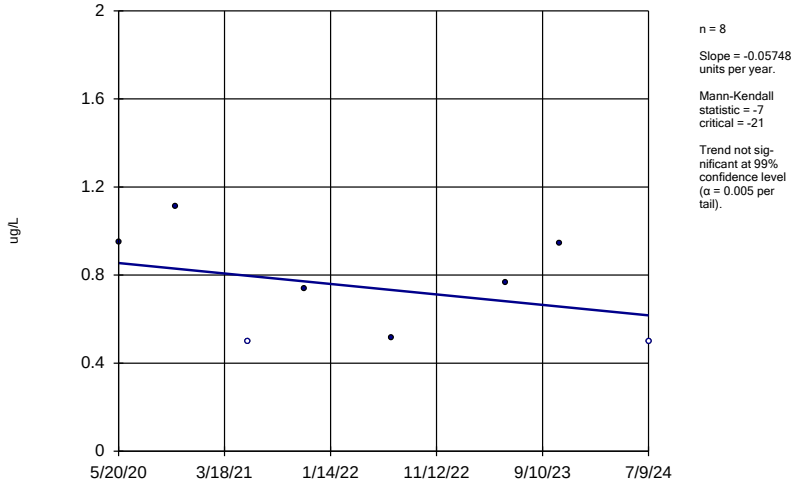
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.05748 units per year.

Mann-Kendall statistic = -7 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

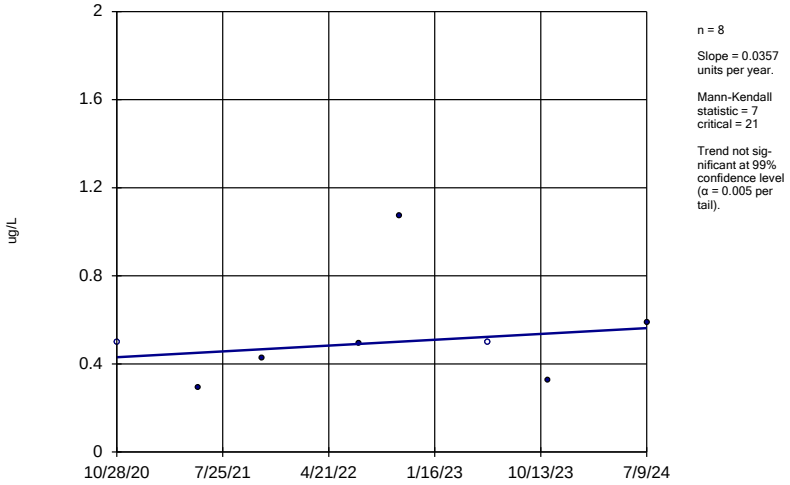
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.0357 units per year.

Mann-Kendall statistic = 7 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

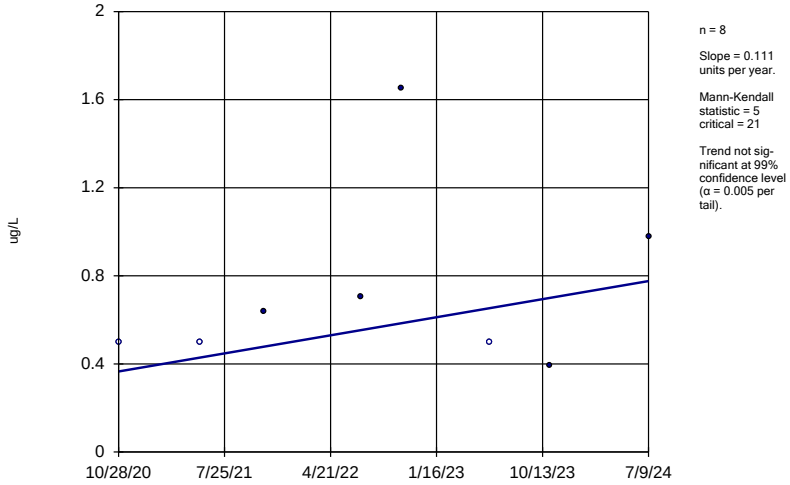
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.111 units per year.

Mann-Kendall statistic = 5 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

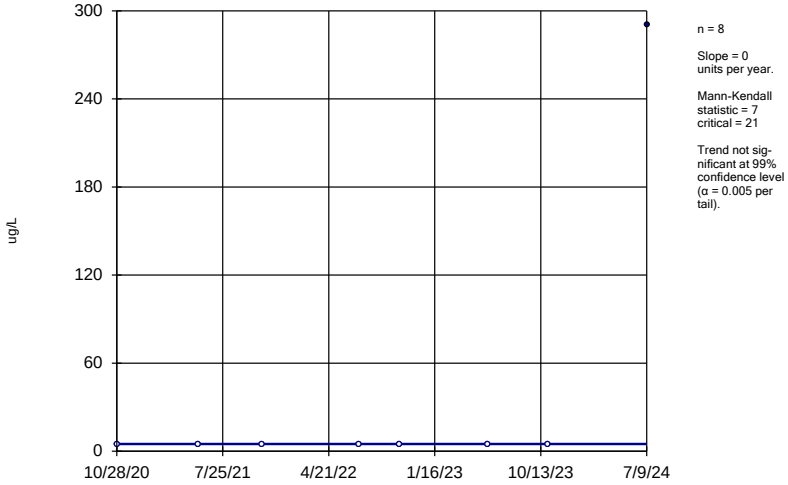
Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901

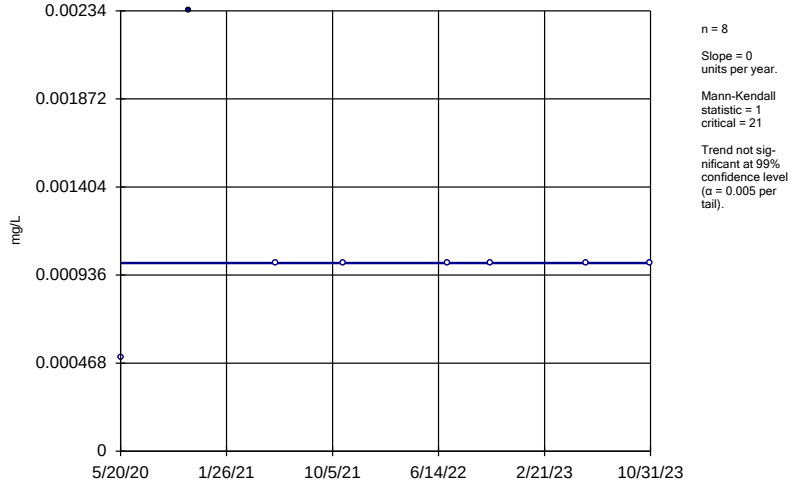


Constituent: Acetone Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101

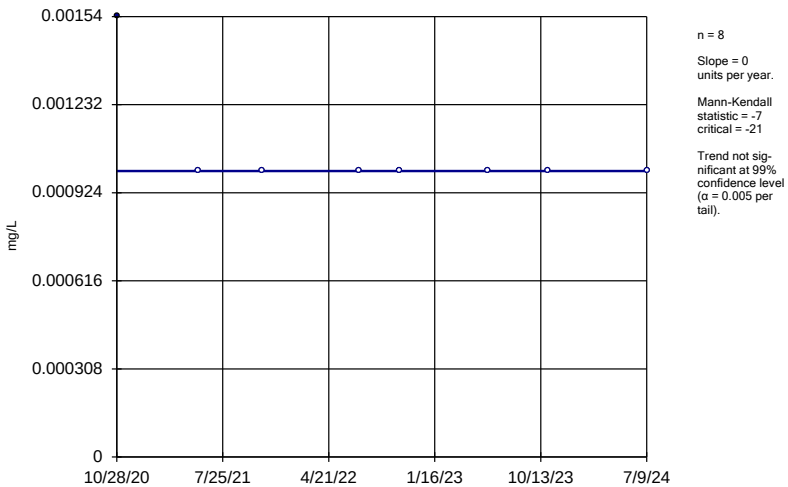


Constituent: Antimony Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205

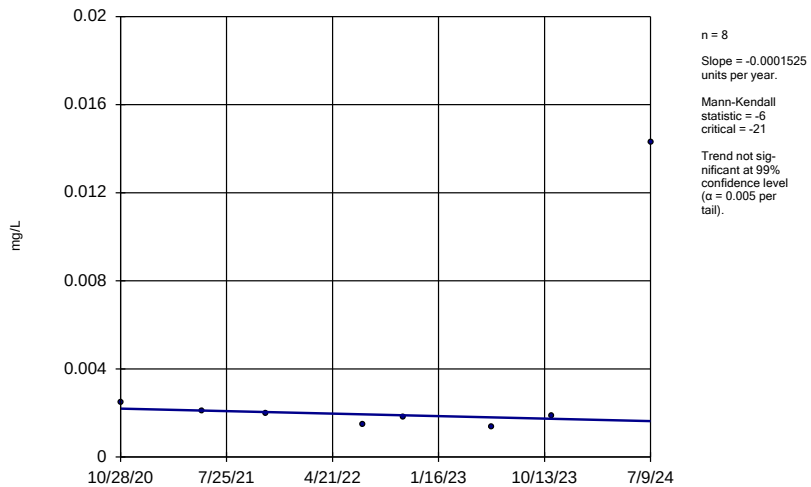


Constituent: Antimony Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-901

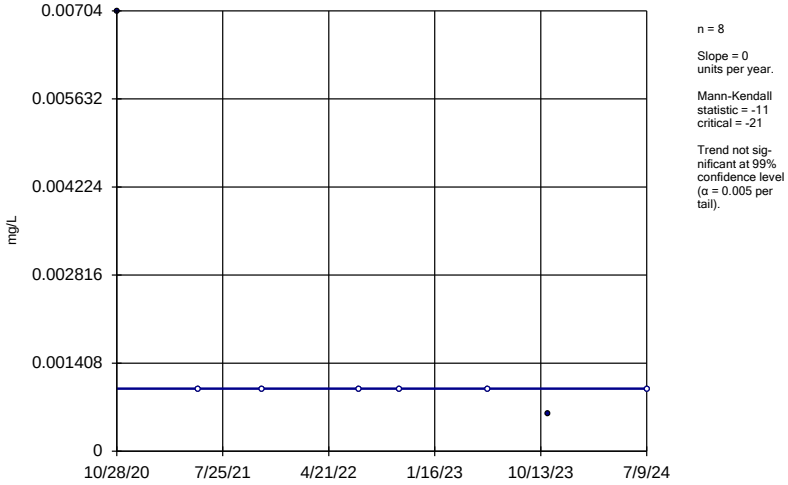


Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-905



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -21

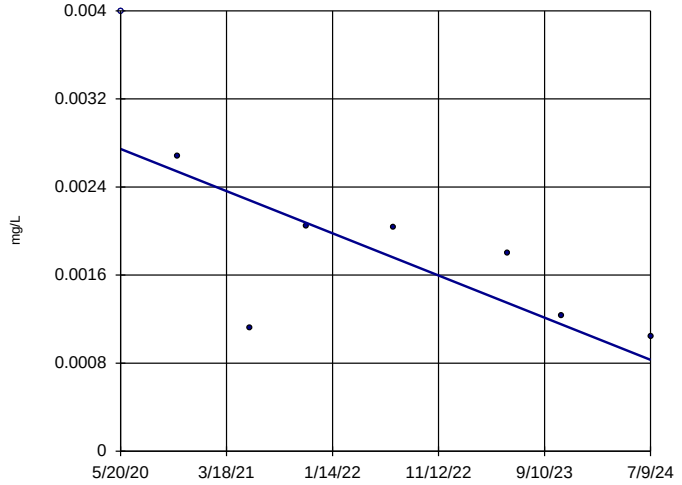
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = -0.0004627 units per year.

Mann-Kendall statistic = -20
critical = -21

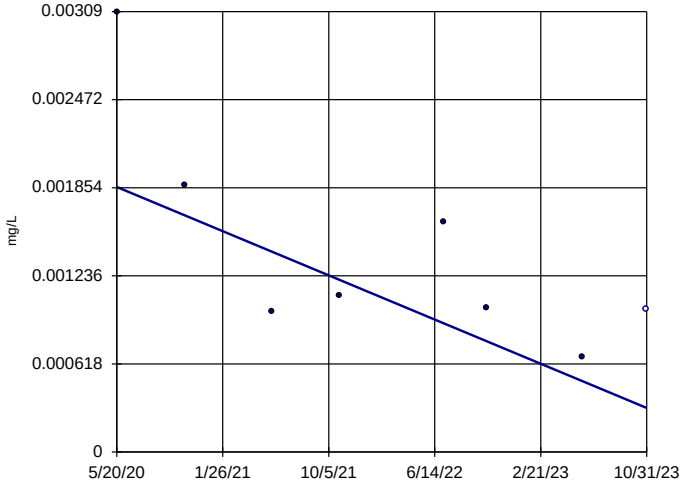
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.0004493 units per year.

Mann-Kendall statistic = -16
critical = -21

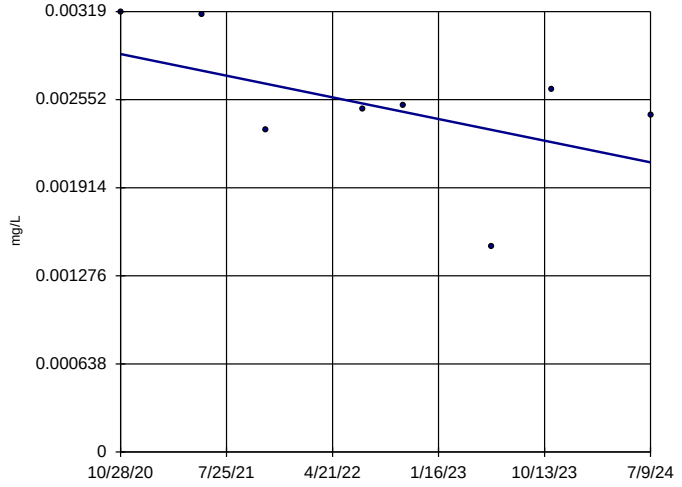
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1205



n = 8

Slope = -0.0002122 units per year.

Mann-Kendall statistic = -10
critical = -21

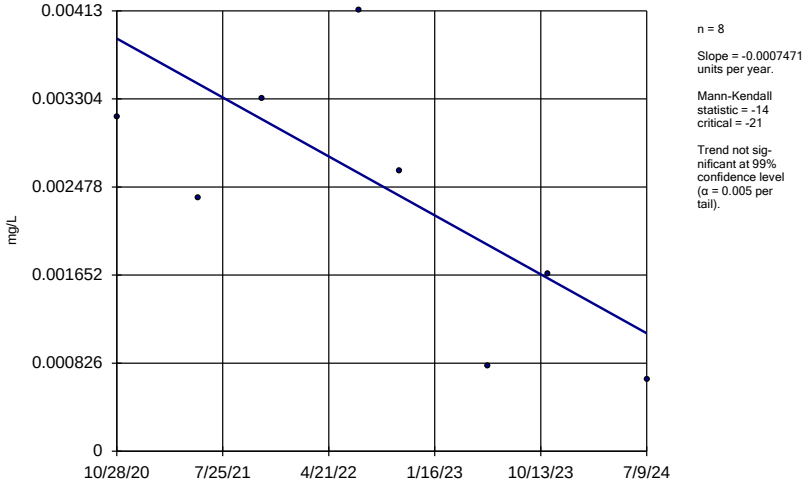
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1305

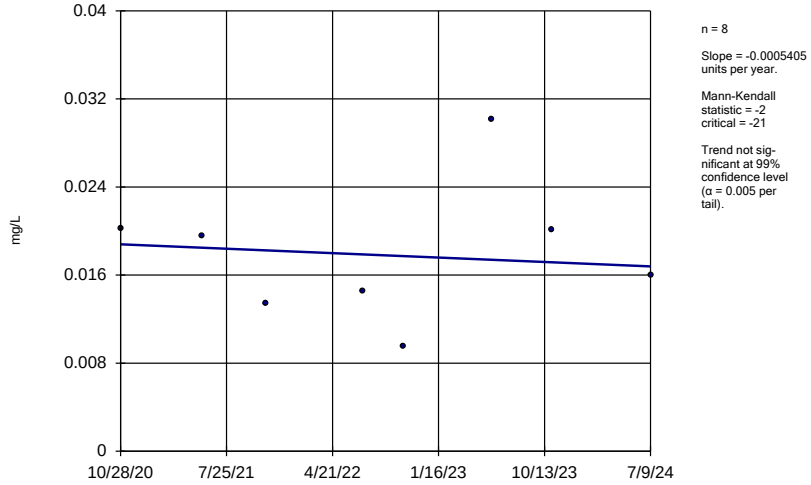


Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DGP-1500

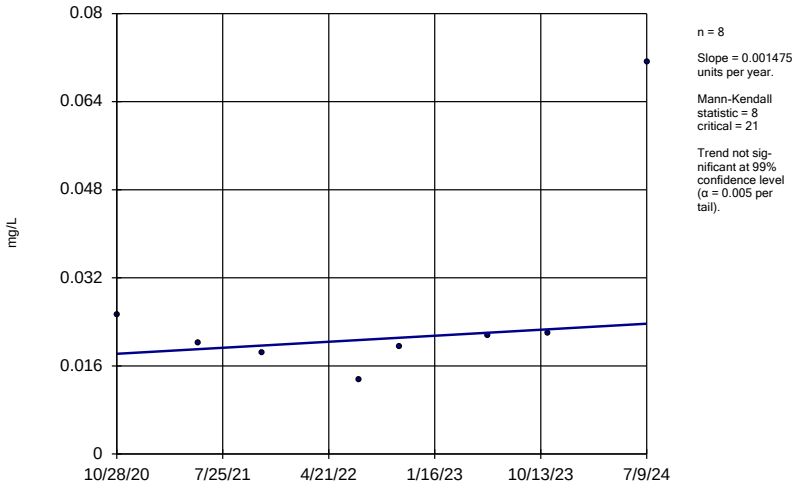


Constituent: Arsenic Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-901

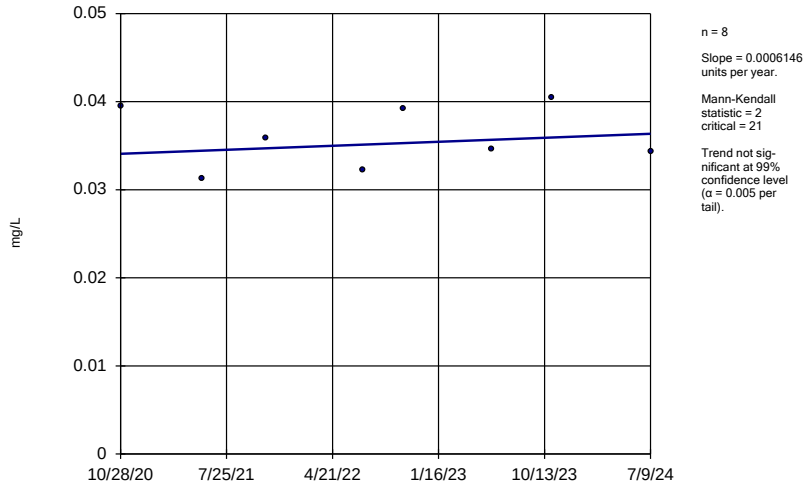


Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-905

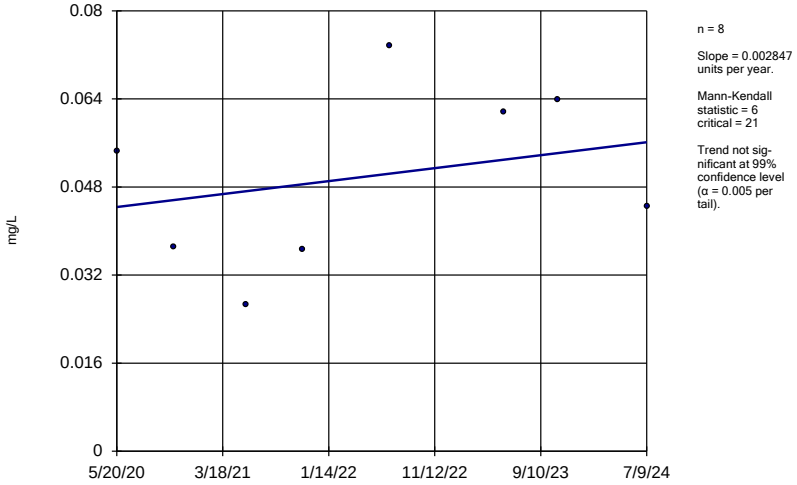


Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.002847 units per year.

Mann-Kendall statistic = 6
critical = 21

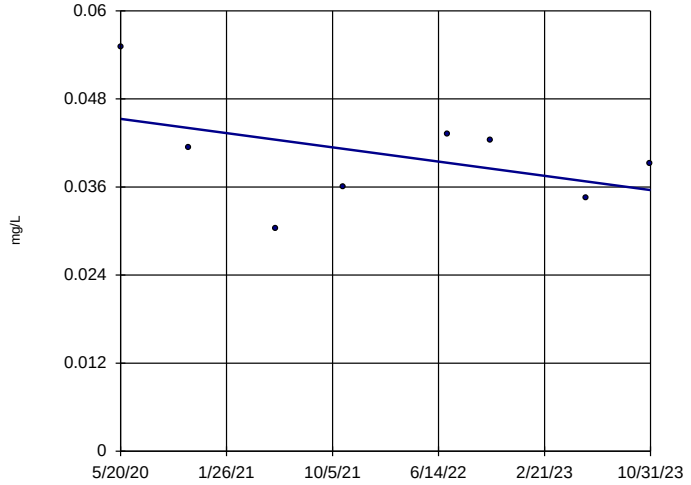
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.002807 units per year.

Mann-Kendall statistic = -6
critical = -21

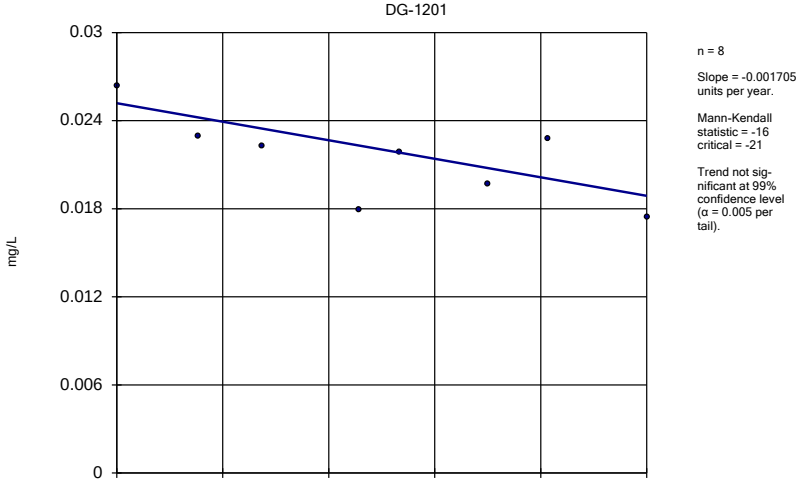
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1201



n = 8

Slope = -0.001705 units per year.

Mann-Kendall statistic = -16
critical = -21

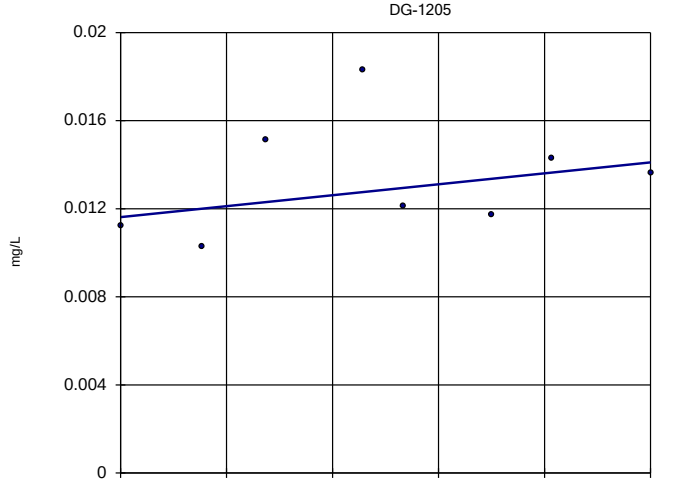
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.0006721 units per year.

Mann-Kendall statistic = 6
critical = 21

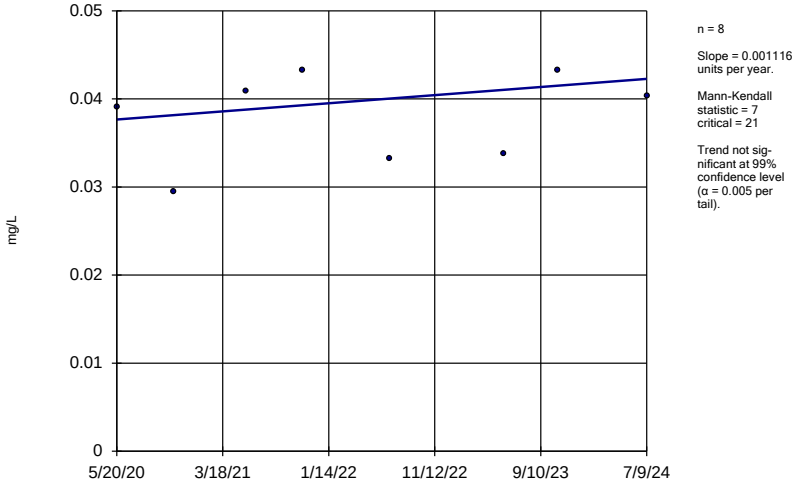
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1301



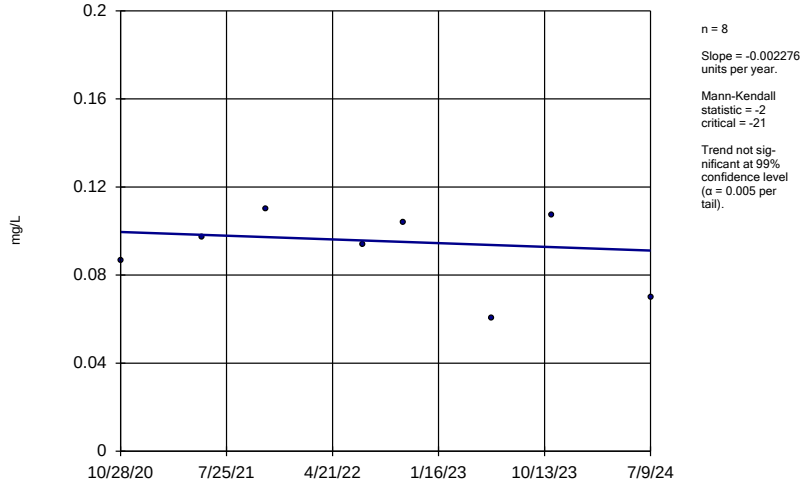
Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1305



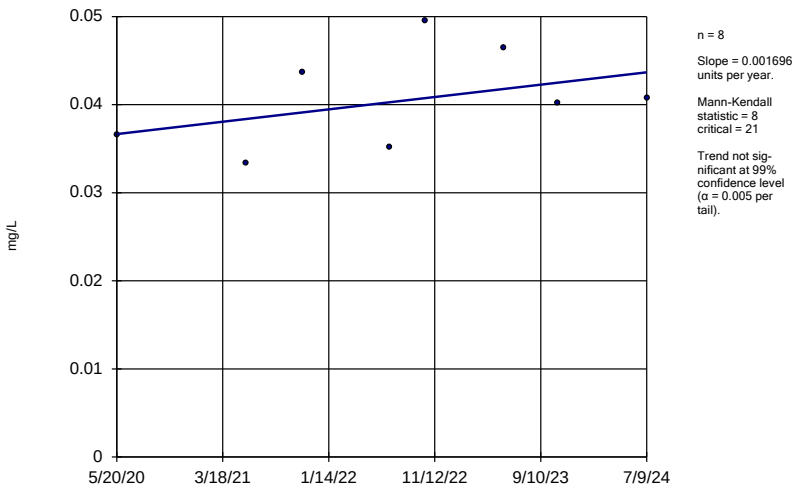
Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1401R



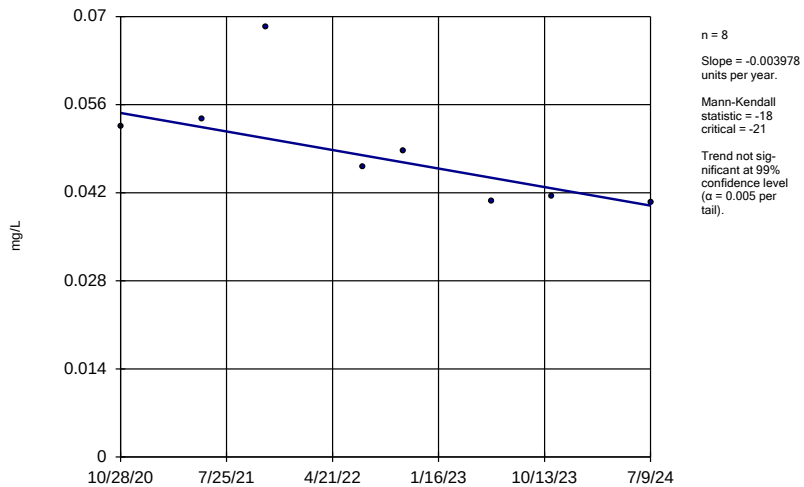
Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DGP-1500



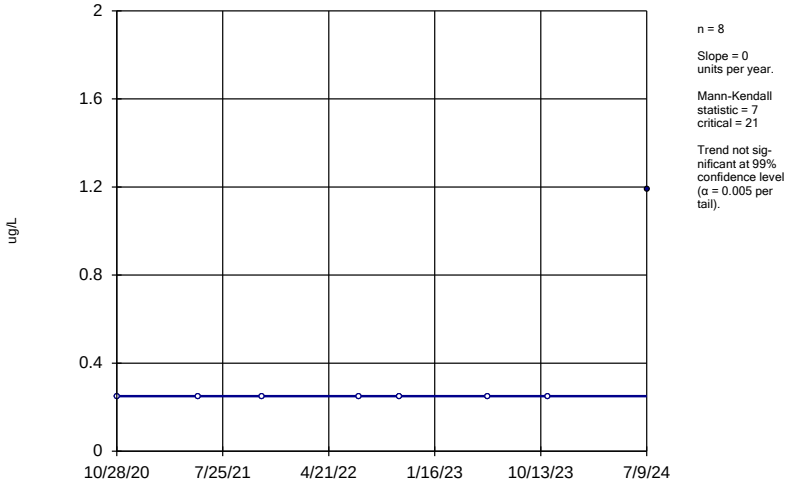
Constituent: Barium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901

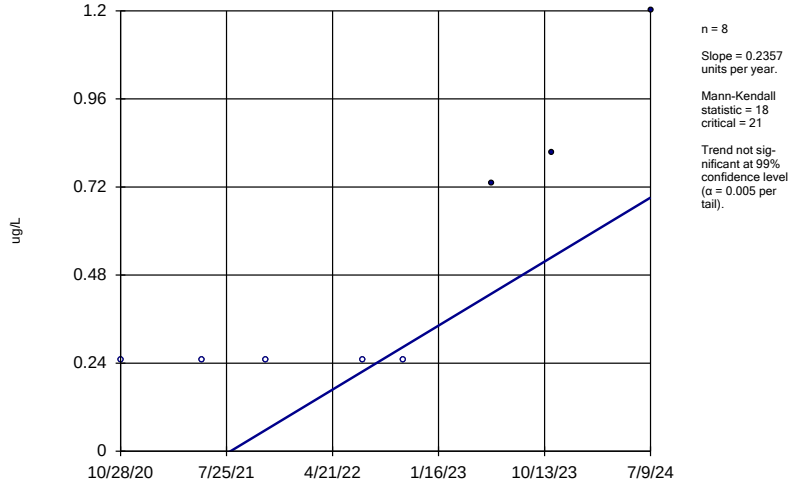


Constituent: Benzene Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500

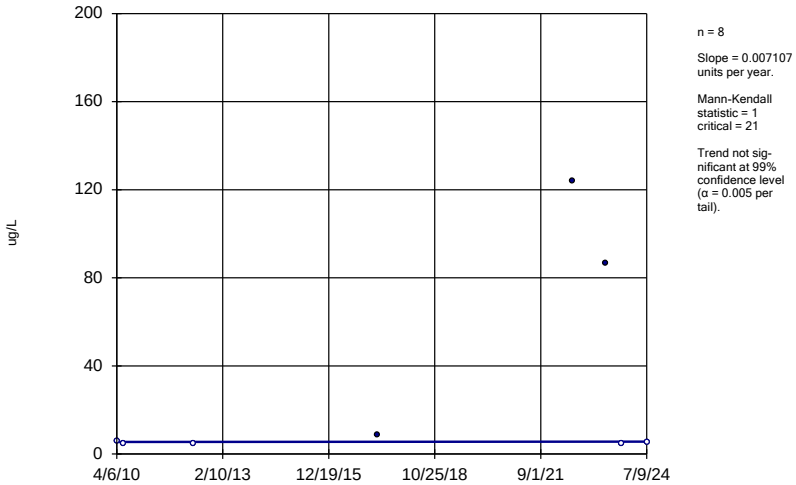


Constituent: Benzene Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301

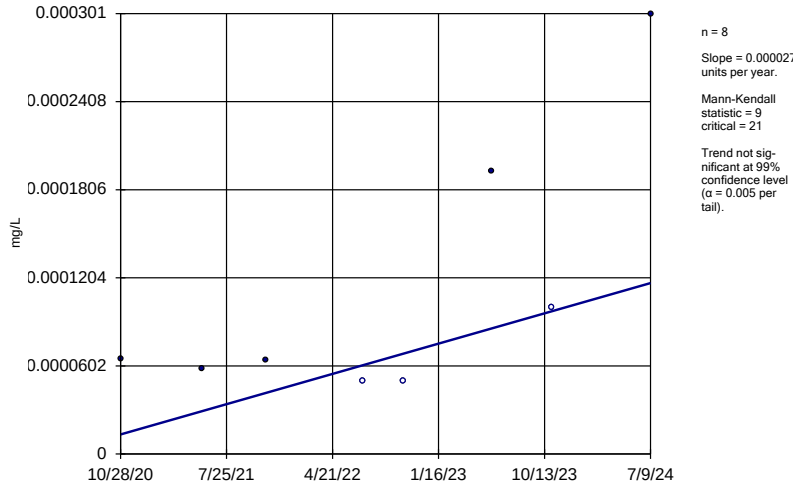


Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901

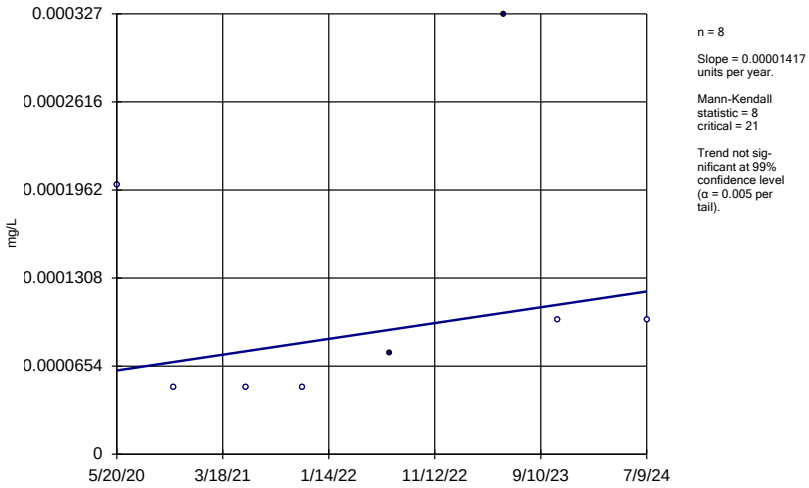


Constituent: Cadmium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.00001417 units per year.

Mann-Kendall statistic = 8
critical = 21

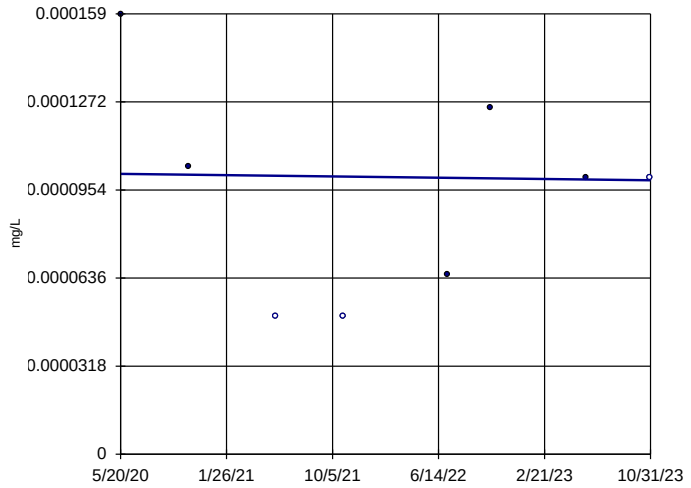
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -6.6e-7 units per year.

Mann-Kendall statistic = -2
critical = -21

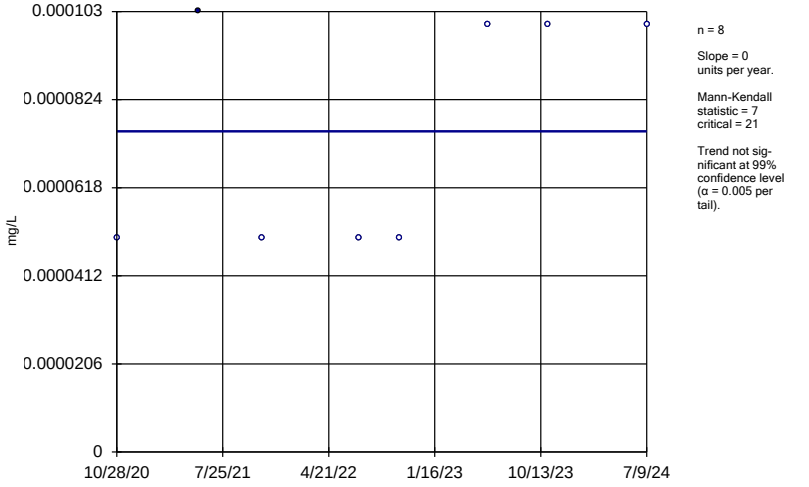
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1201



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 21

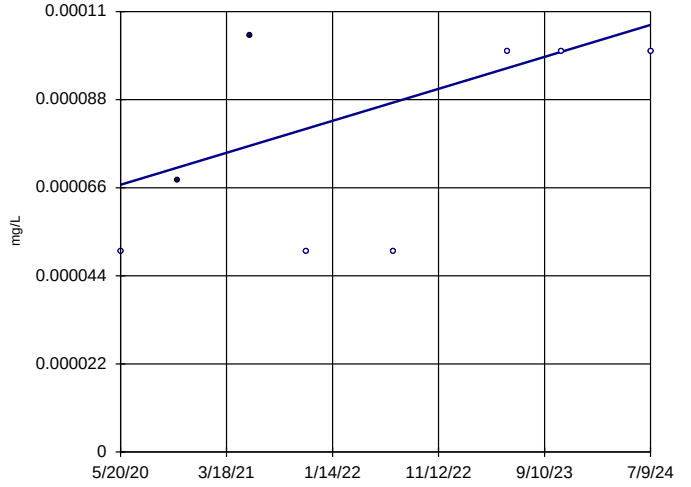
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.000009645 units per year.

Mann-Kendall statistic = 8
critical = 21

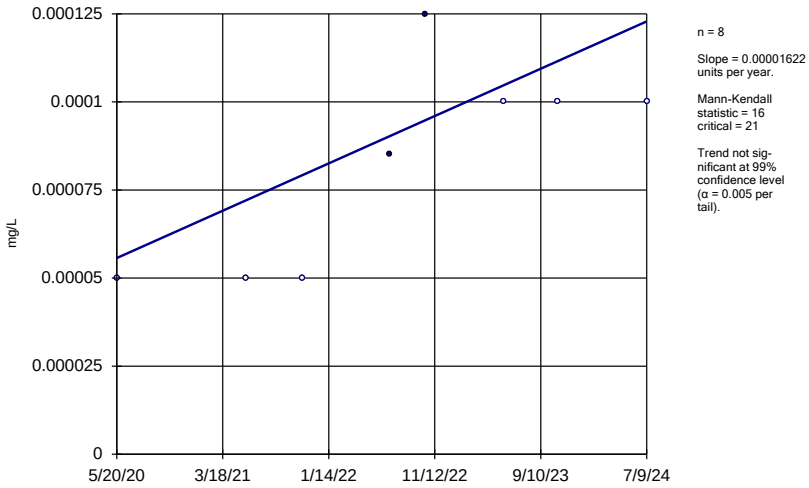
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:24 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.00001622 units per year.

Mann-Kendall statistic = 16
critical = 21

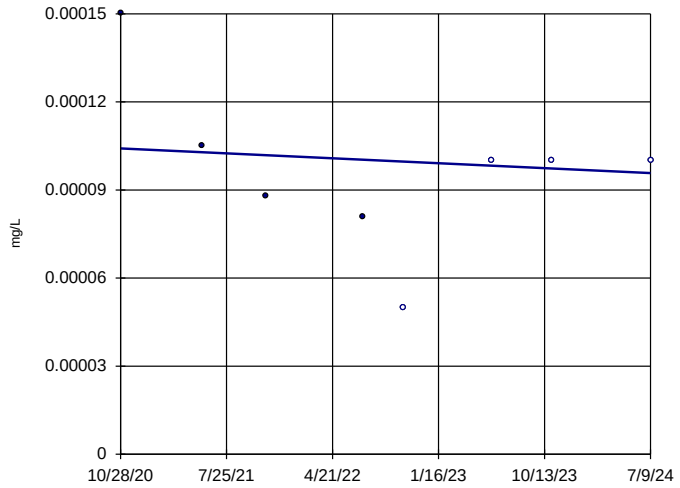
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.000002268 units per year.

Mann-Kendall statistic = -7
critical = -21

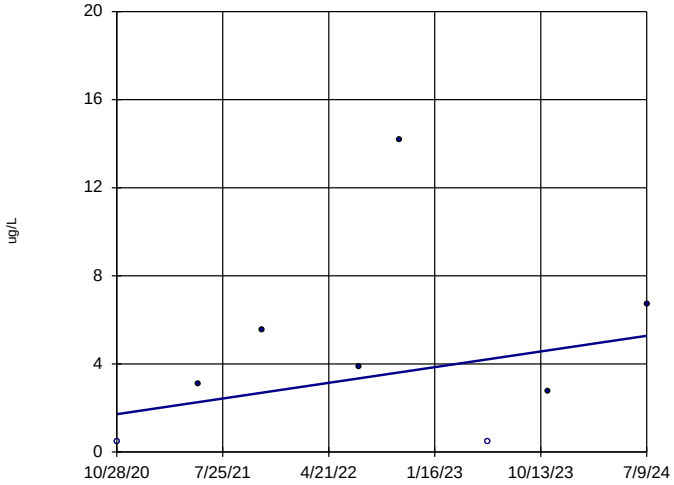
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cadmium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.9626 units per year.

Mann-Kendall statistic = 7
critical = 21

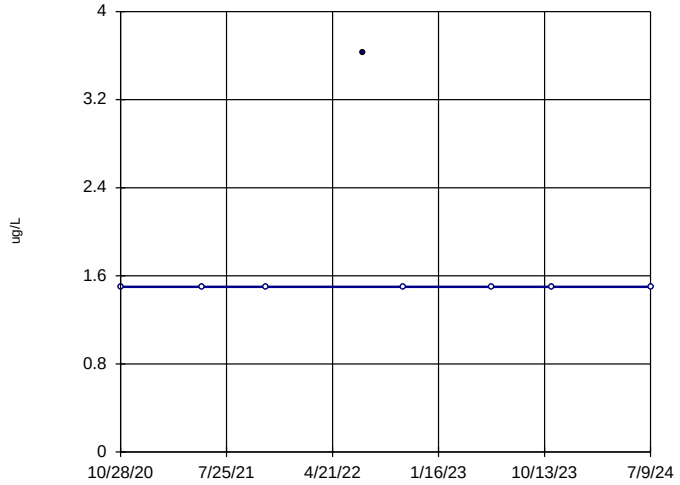
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chlorobenzene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

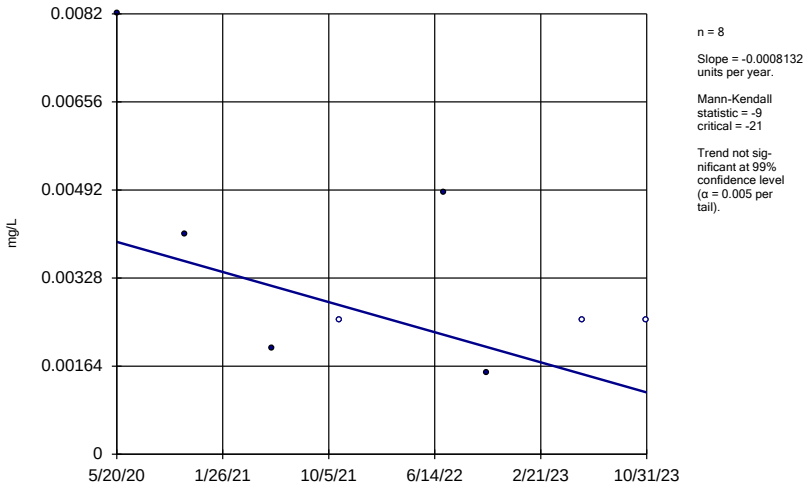
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloromethane Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101

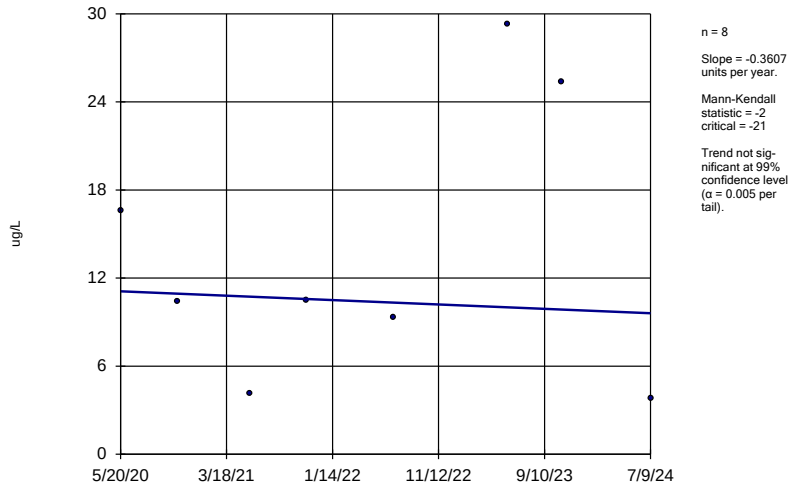


Constituent: Chromium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1301

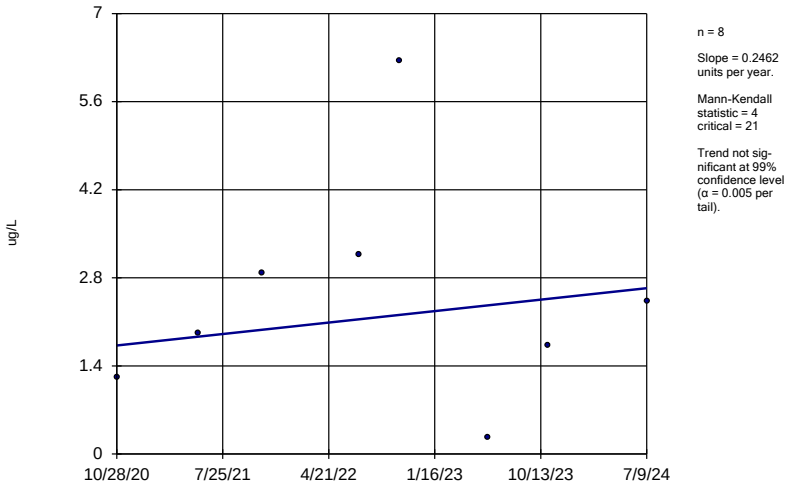


Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1305

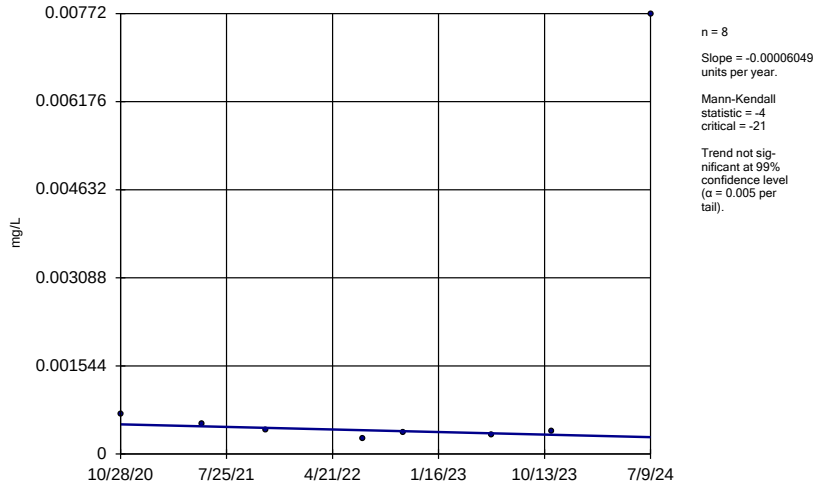


Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-901

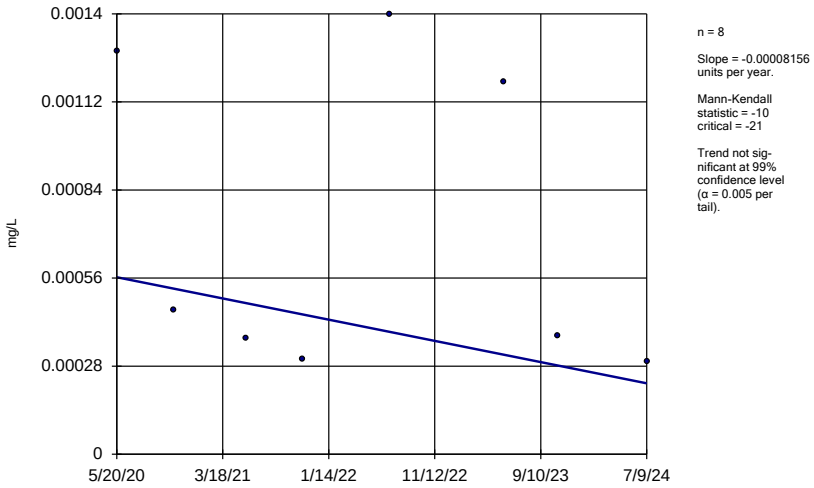


Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1005

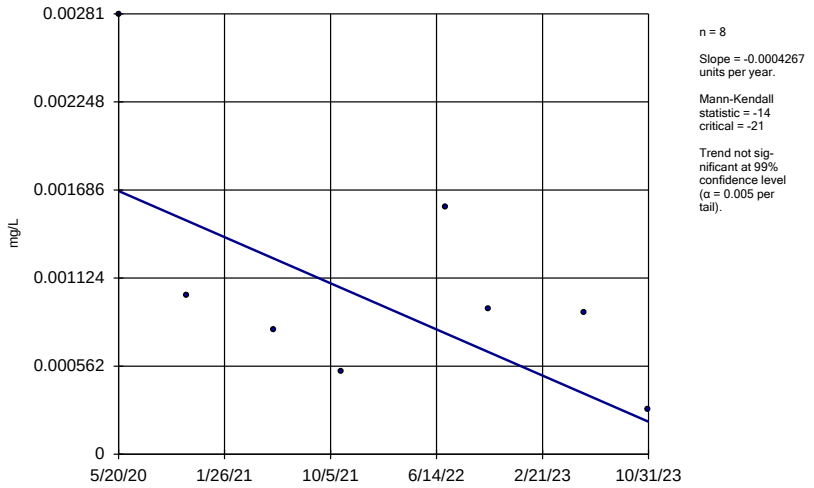


Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1101

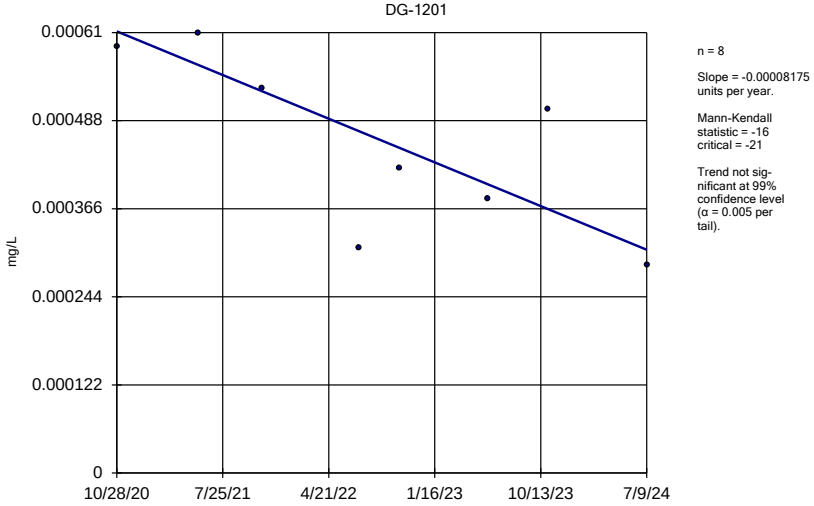


Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1201

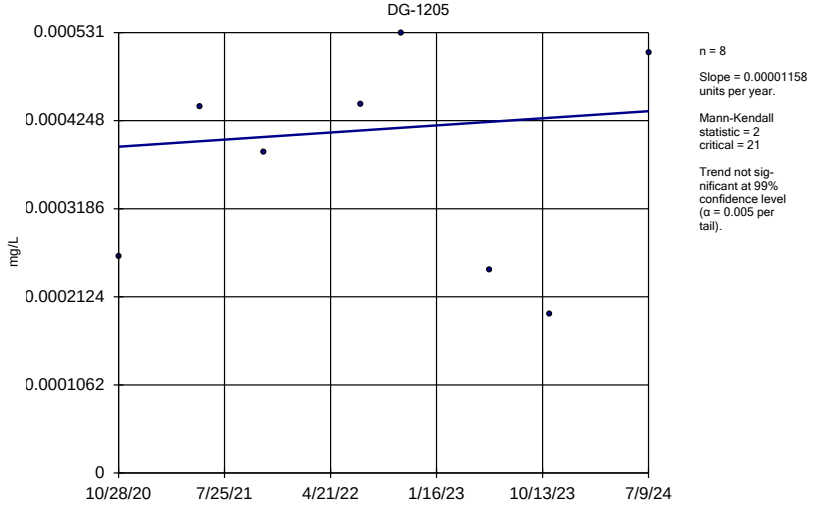


Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1205

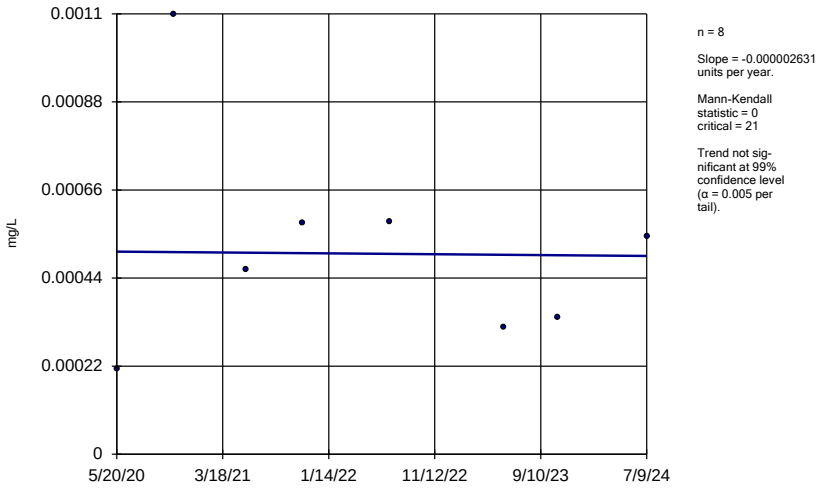


Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.000002631 units per year.

Mann-Kendall statistic = 0
critical = 21

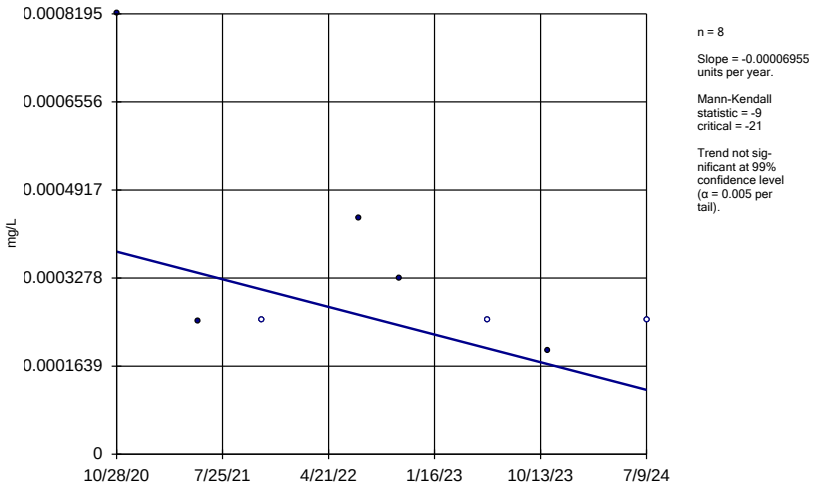
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = -0.00006955 units per year.

Mann-Kendall statistic = -9
critical = -21

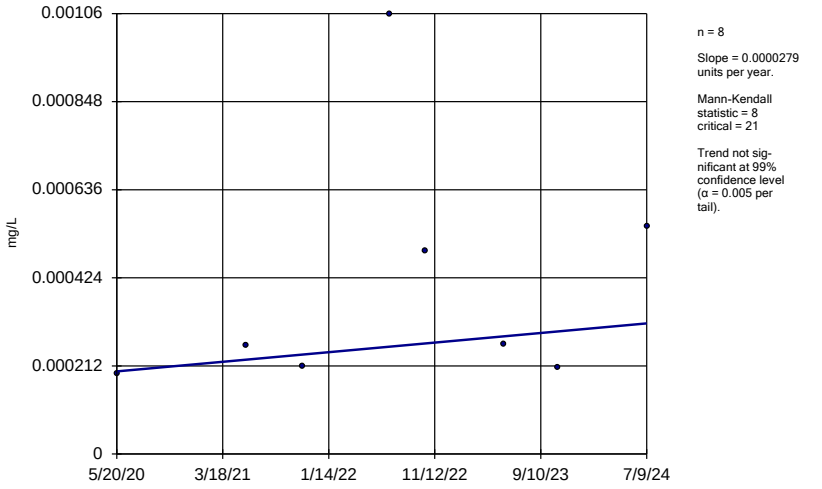
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.0000279 units per year.

Mann-Kendall statistic = 8
critical = 21

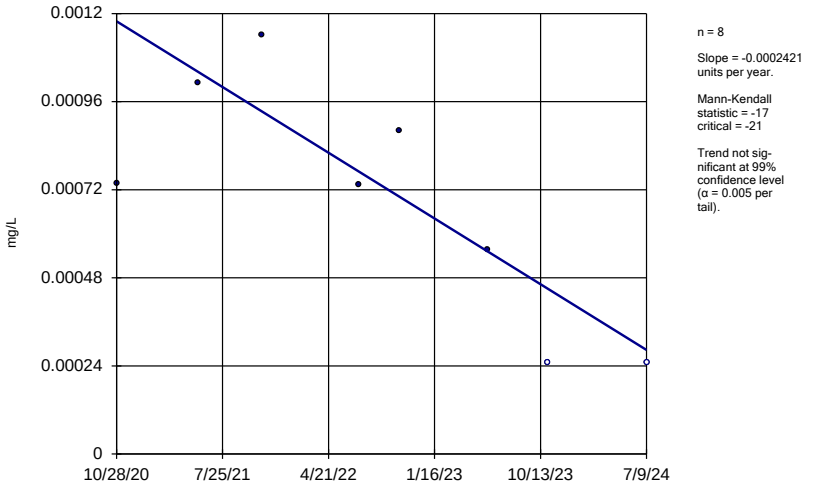
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.0002421 units per year.

Mann-Kendall statistic = -17
critical = -21

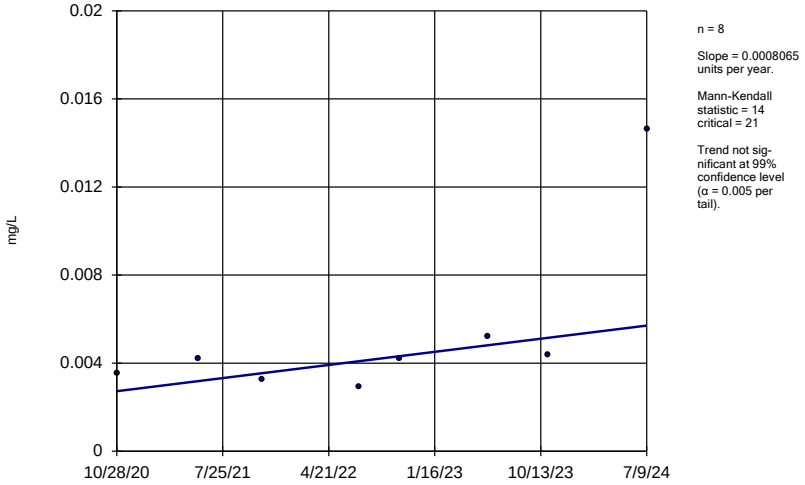
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-901



n = 8

Slope = 0.0008065 units per year.

Mann-Kendall statistic = 14 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

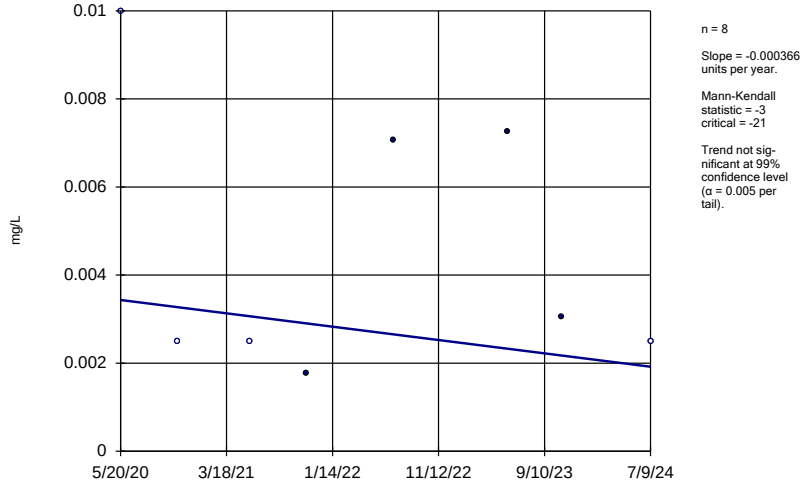
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = -0.000366 units per year.

Mann-Kendall statistic = -3 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

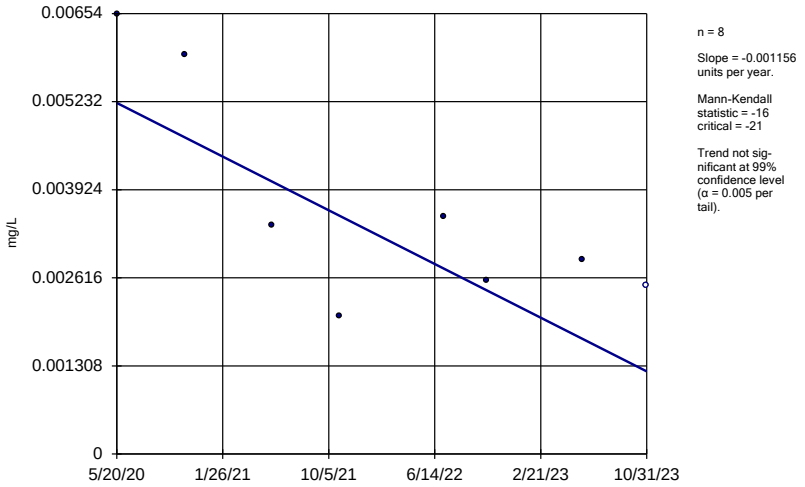
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.001156 units per year.

Mann-Kendall statistic = -16 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

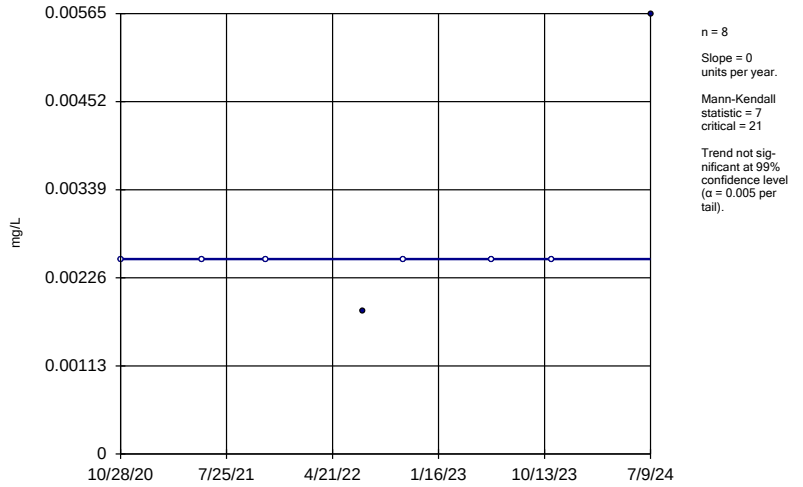
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



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).

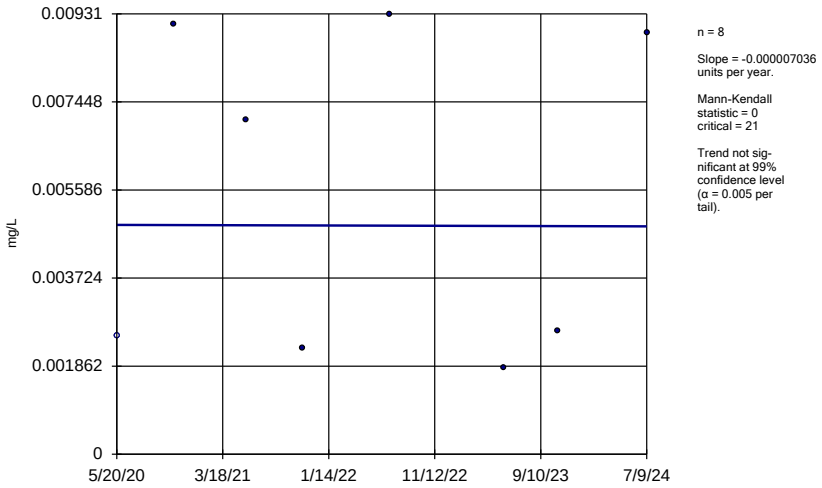
Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.000007036 units per year.

Mann-Kendall statistic = 0
critical = 21

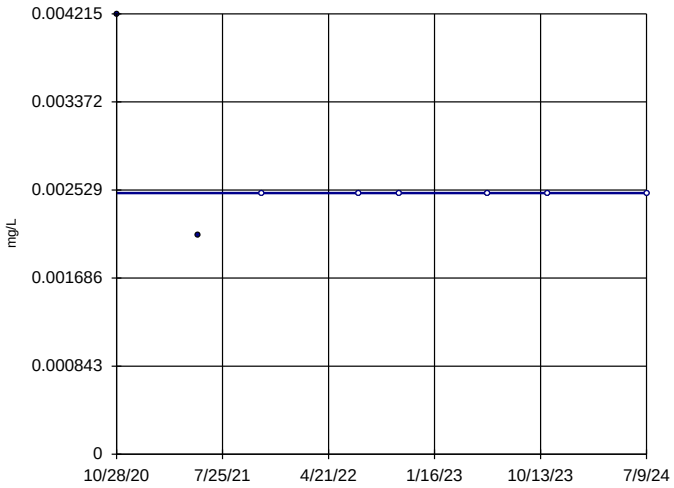
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

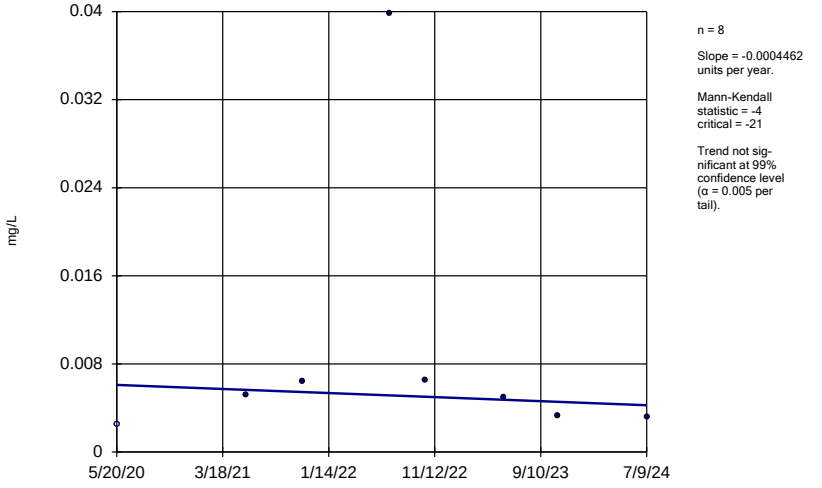
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = -0.0004462 units per year.

Mann-Kendall statistic = -4
critical = -21

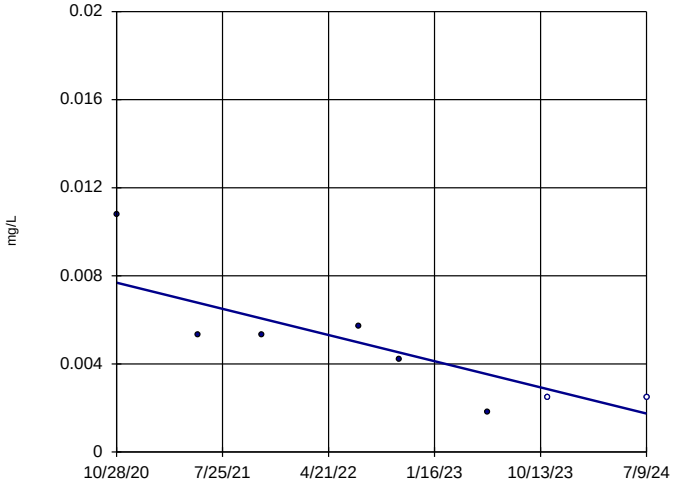
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.001607 units per year.

Mann-Kendall statistic = -18
critical = -21

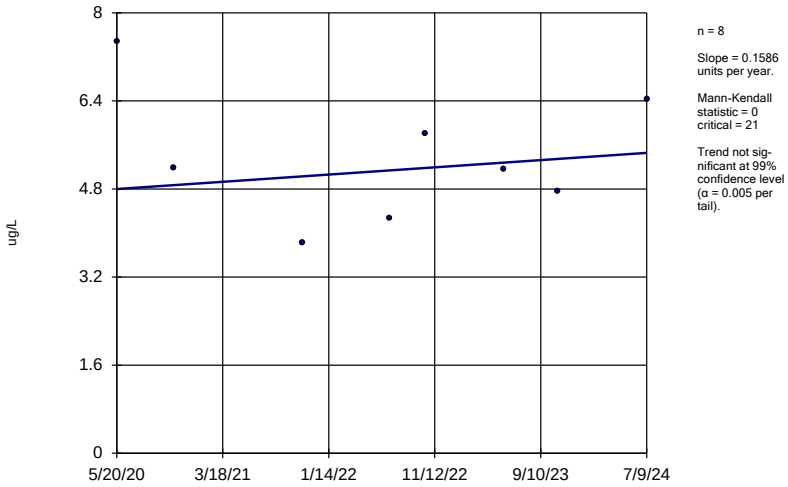
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Copper Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1205

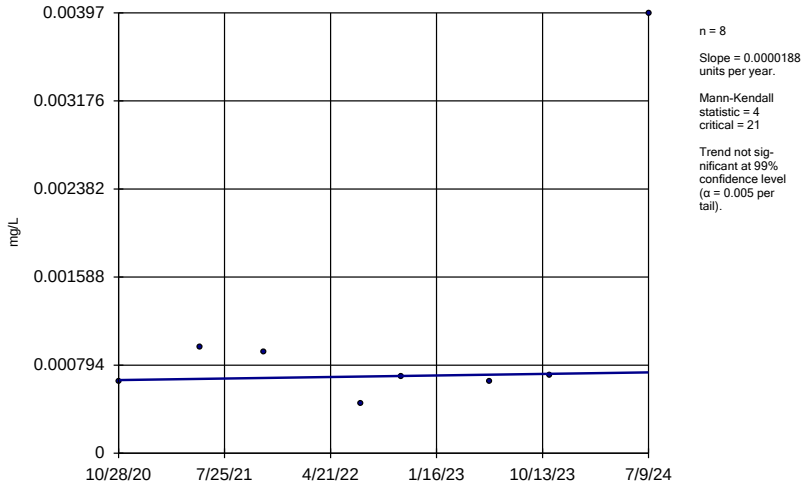


Constituent: Dichlorodifluoromethane Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-901

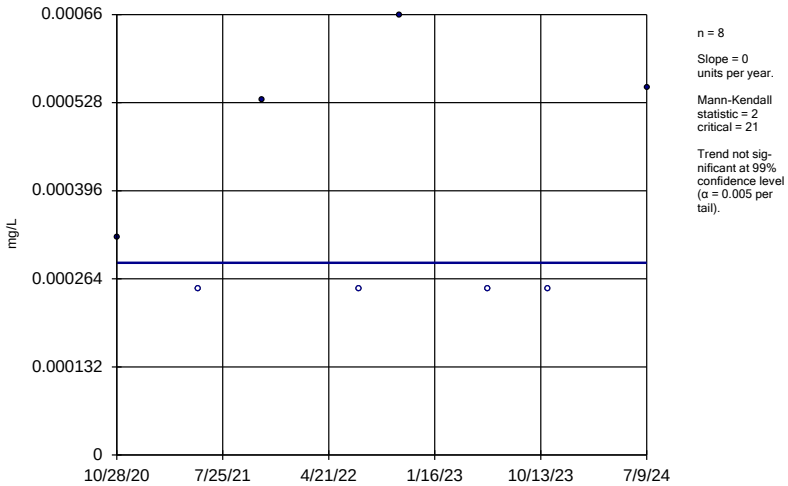


Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-905

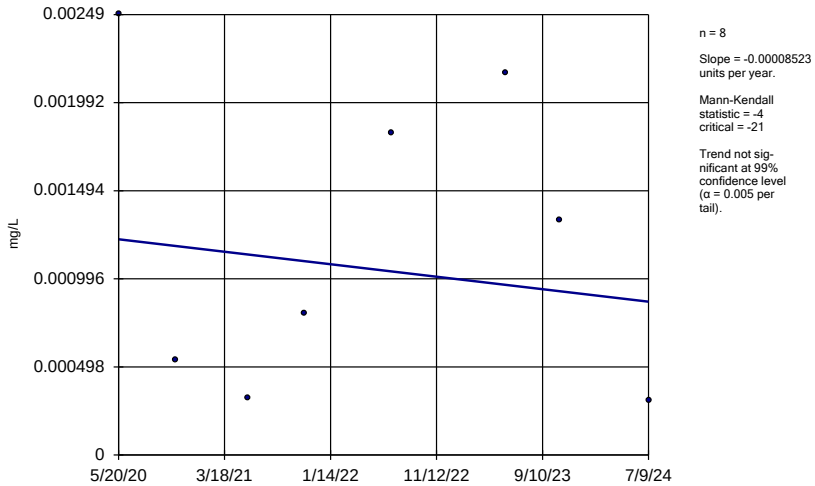


Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1005

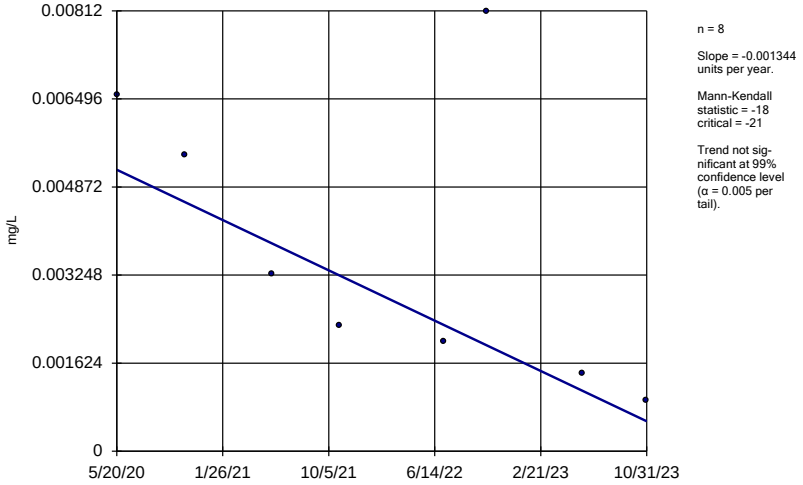


Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.001344 units per year.

Mann-Kendall statistic = -18
critical = -21

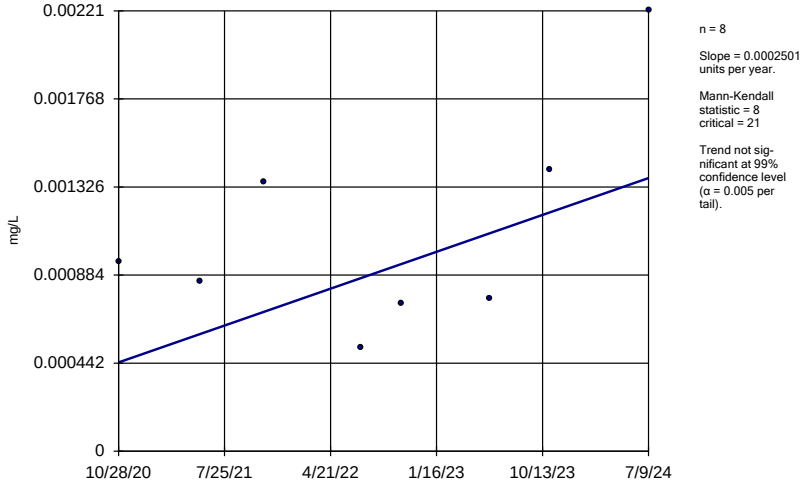
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1201



n = 8

Slope = 0.0002501 units per year.

Mann-Kendall statistic = 8
critical = 21

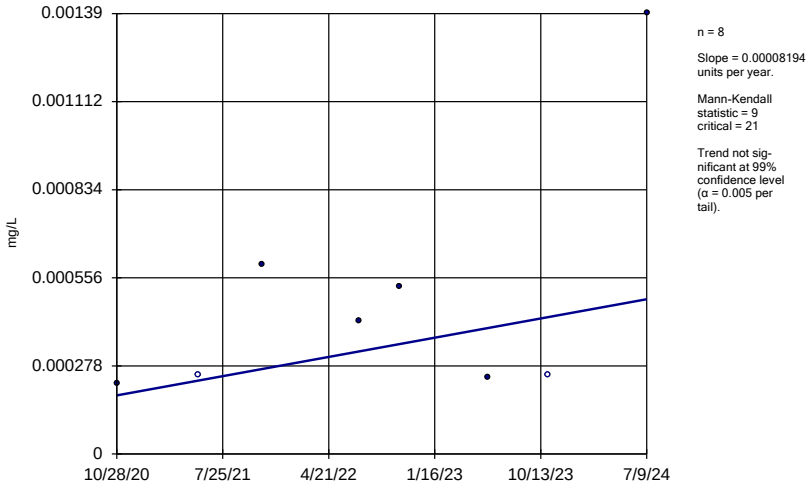
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.00008194 units per year.

Mann-Kendall statistic = 9
critical = 21

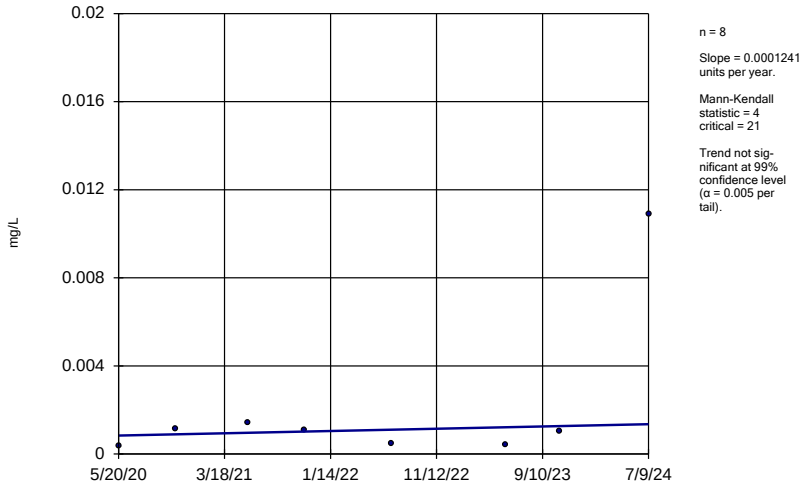
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.0001241 units per year.

Mann-Kendall statistic = 4
critical = 21

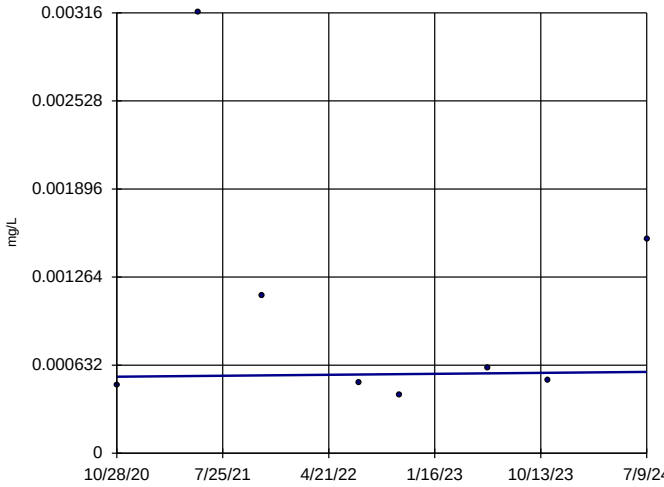
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.000009199 units per year.

Mann-Kendall statistic = 2
critical = 21

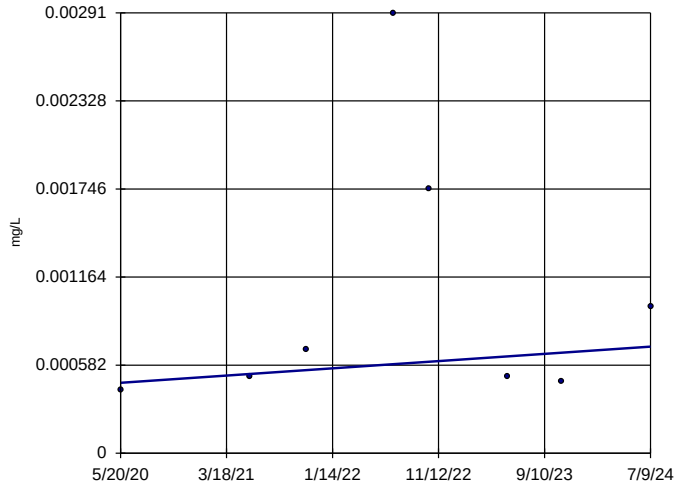
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.00005794 units per year.

Mann-Kendall statistic = 4
critical = 21

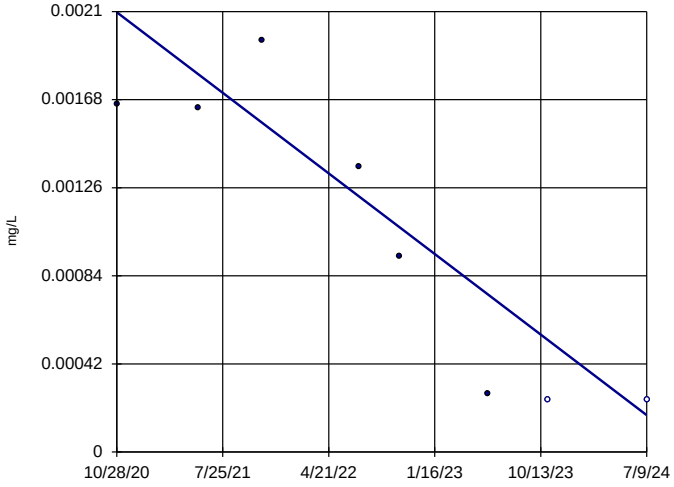
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.0005193 units per year.

Mann-Kendall statistic = -23
critical = -21

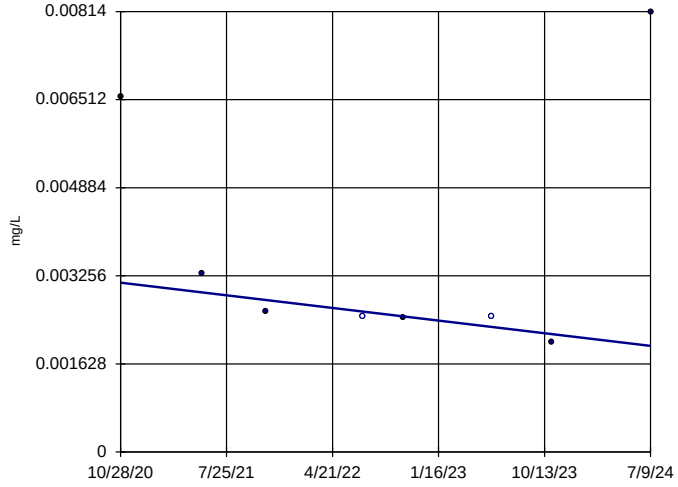
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = -0.0003156 units per year.

Mann-Kendall statistic = -11
critical = -21

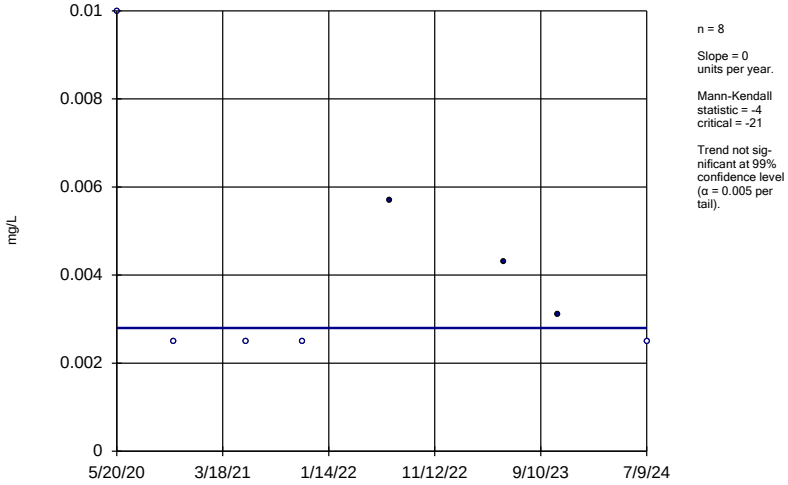
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = -4
critical = -21

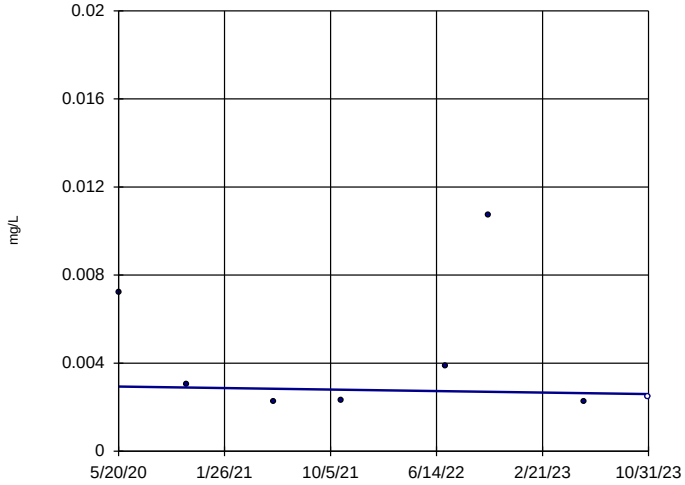
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.00009913
units per year.

Mann-Kendall
statistic = -3
critical = -21

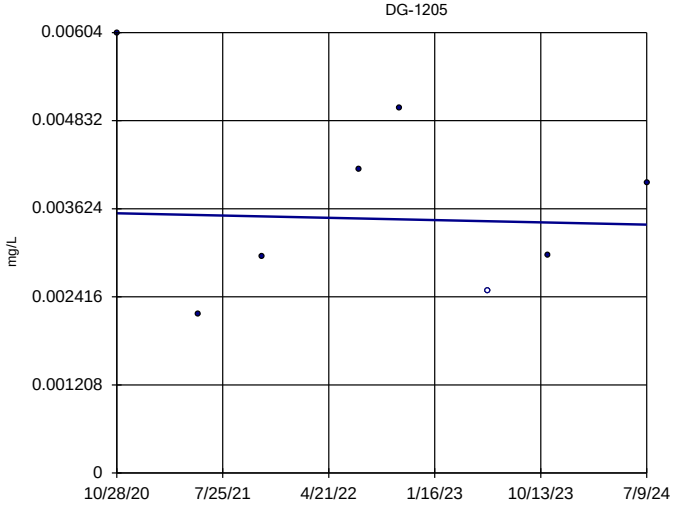
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = -0.00004223
units per year.

Mann-Kendall
statistic = 0
critical = 21

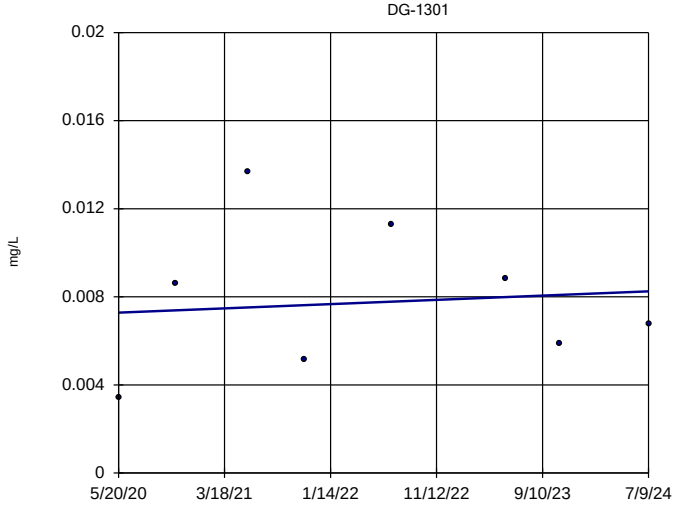
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.0002347
units per year.

Mann-Kendall
statistic = 2
critical = 21

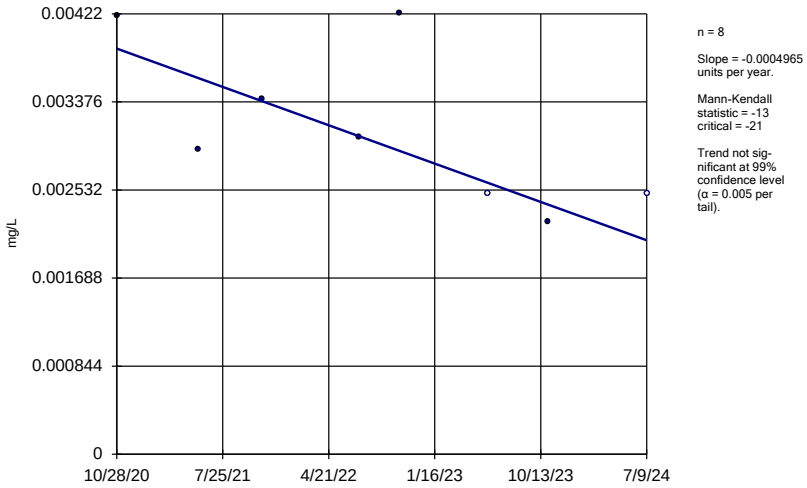
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = -0.0004965 units per year.

Mann-Kendall statistic = -13
critical = -21

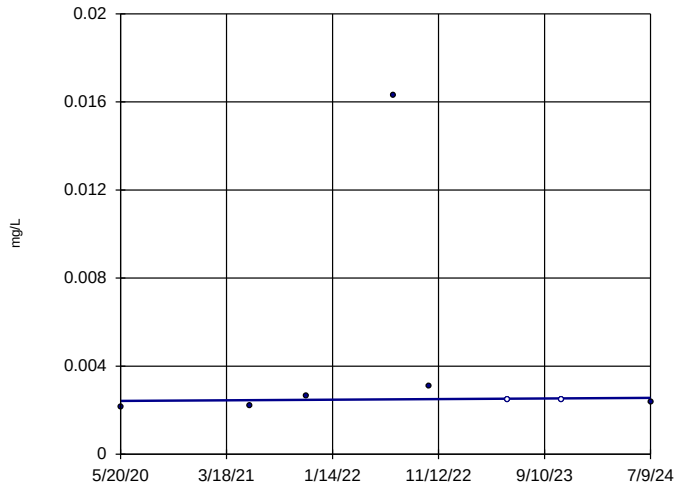
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.00003402 units per year.

Mann-Kendall statistic = 3
critical = 21

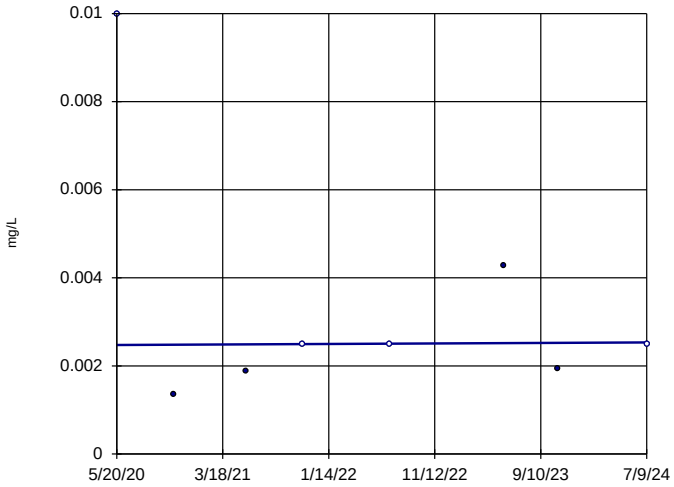
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.00001437 units per year.

Mann-Kendall statistic = 3
critical = 21

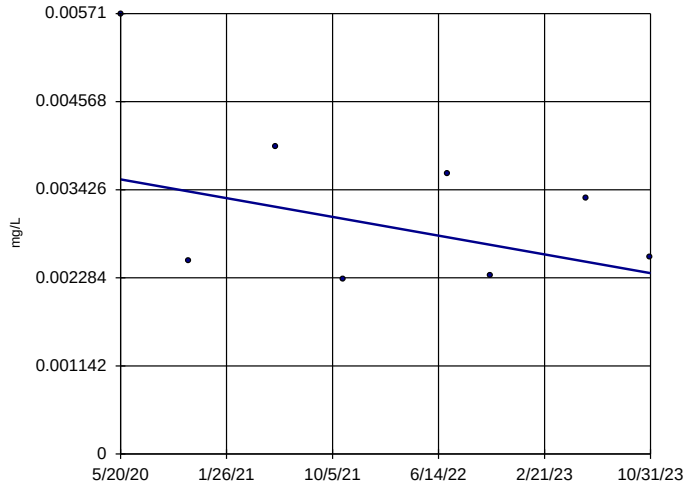
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.0003525 units per year.

Mann-Kendall statistic = -8
critical = -21

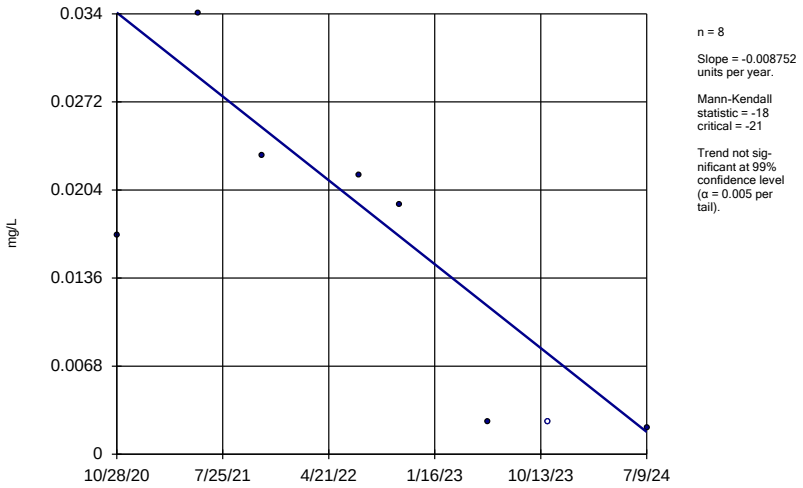
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.008752 units per year.

Mann-Kendall statistic = -18
critical = -21

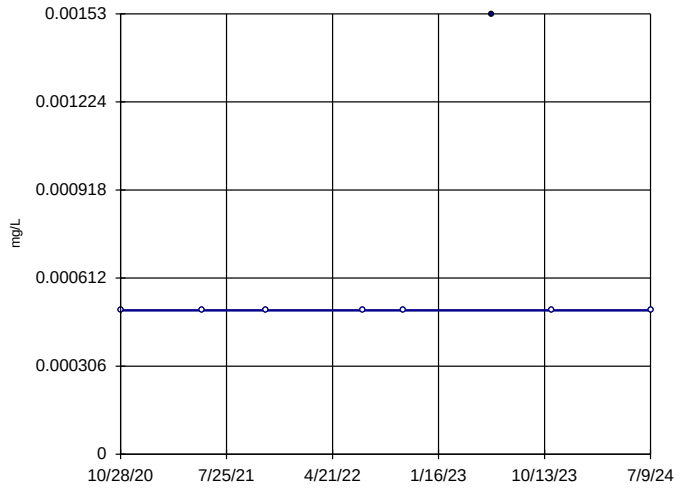
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 3
critical = 21

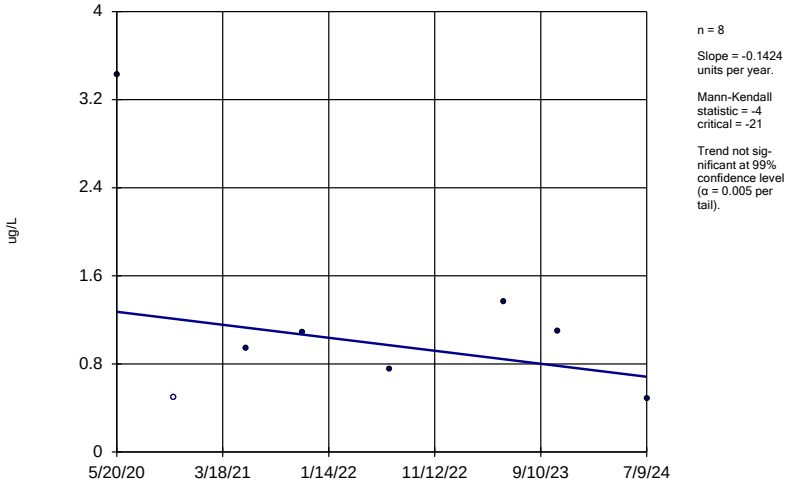
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Silver Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.1424 units per year.

Mann-Kendall statistic = -4
critical = -21

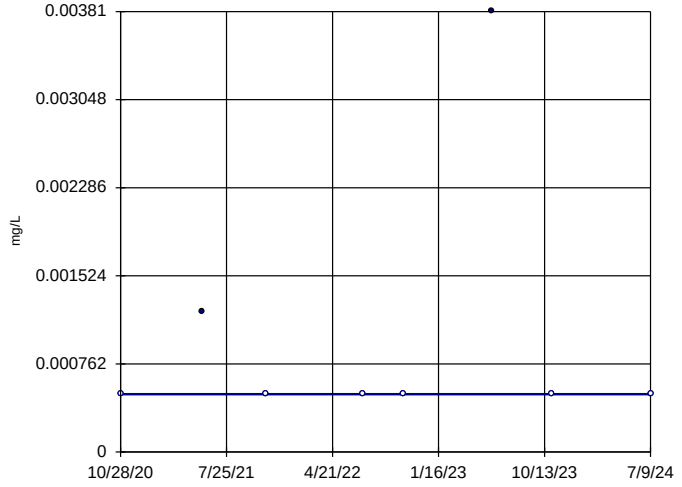
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Tetrachloroethene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

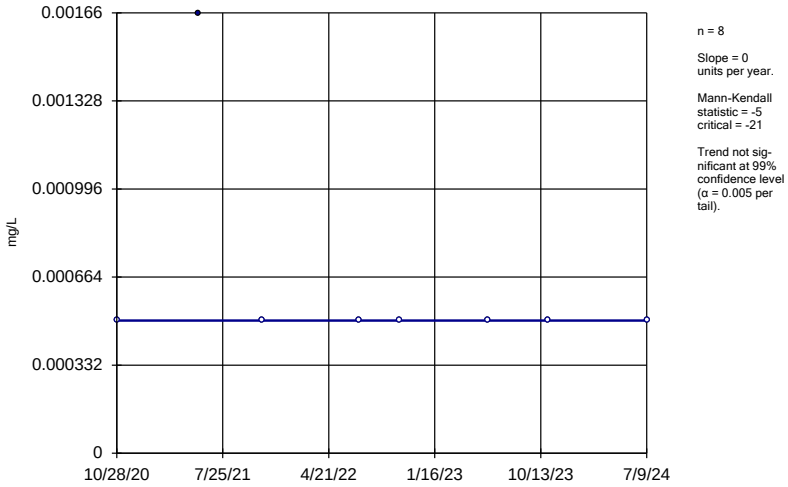
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1201

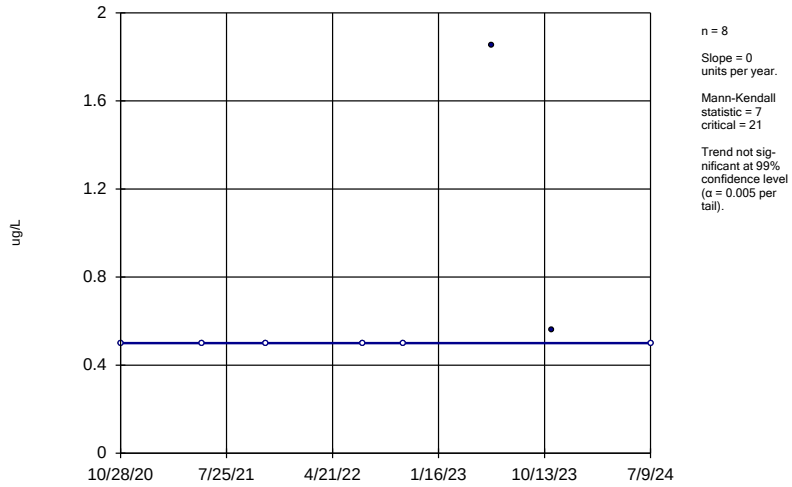


Constituent: Thallium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500

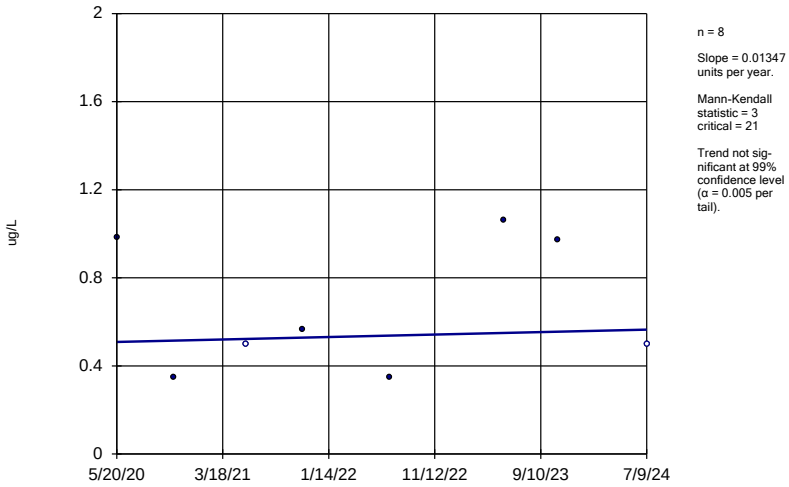


Constituent: Toluene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301

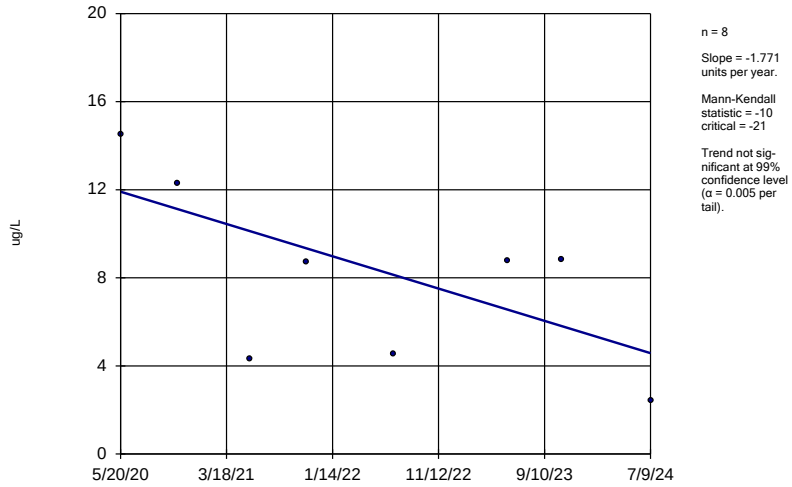


Constituent: trans-1,2-Dichloroethene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1301

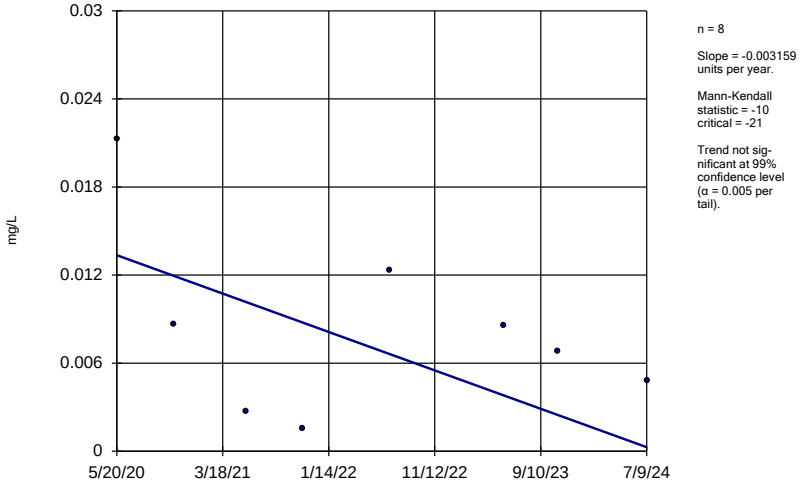


Constituent: Trichloroethene Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1005



n = 8

Slope = -0.003159 units per year.

Mann-Kendall statistic = -10 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

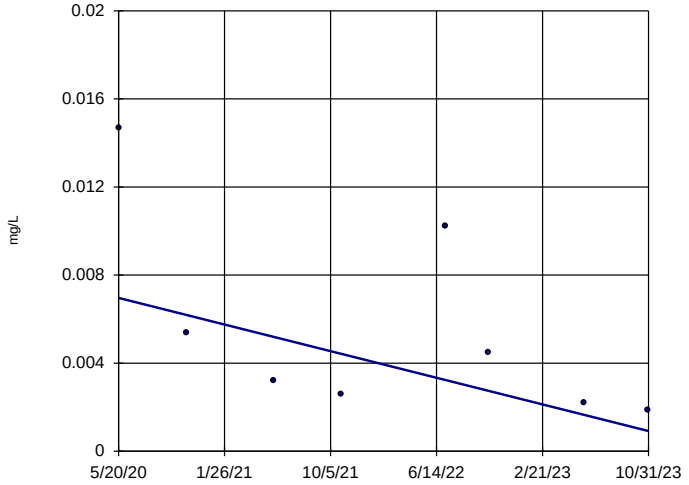
Constituent: Vanadium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.001753 units per year.

Mann-Kendall statistic = -18 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Vanadium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

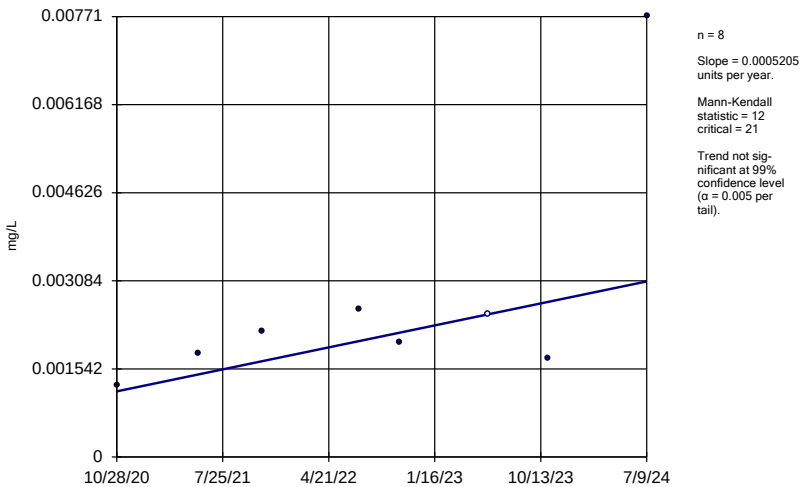
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.0005205 units per year.

Mann-Kendall statistic = 12 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Vanadium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

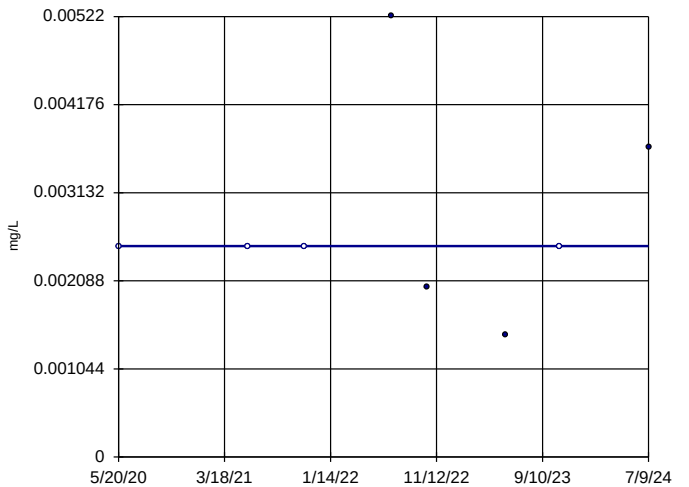
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

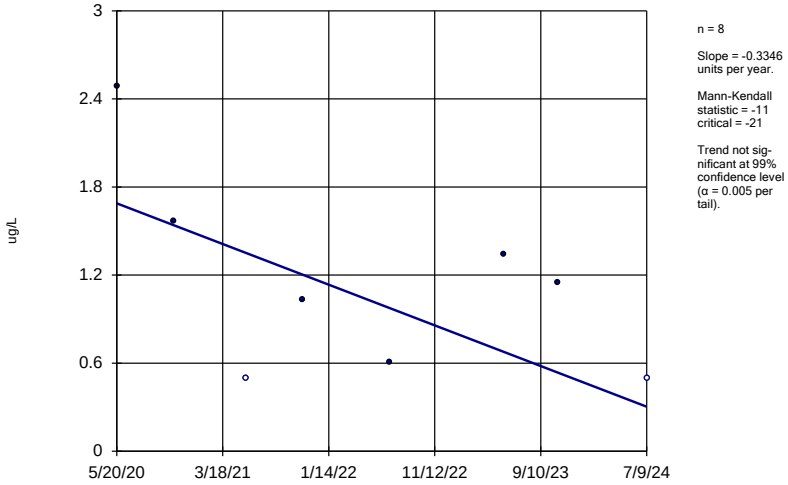
Constituent: Vanadium Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.3346 units per year.

Mann-Kendall statistic = -11
critical = -21

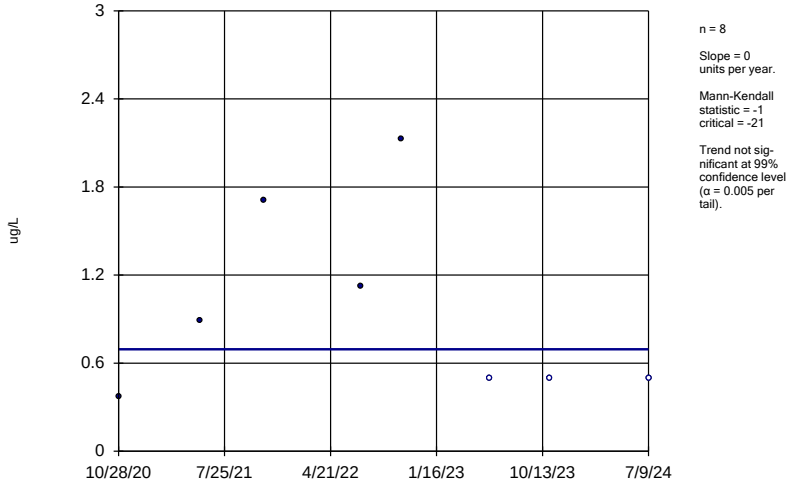
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Vinyl chloride Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -21

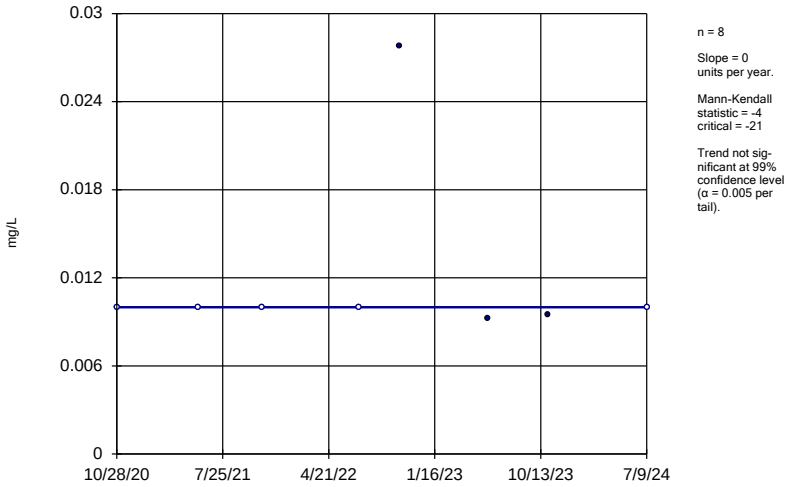
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Vinyl chloride Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -4
critical = -21

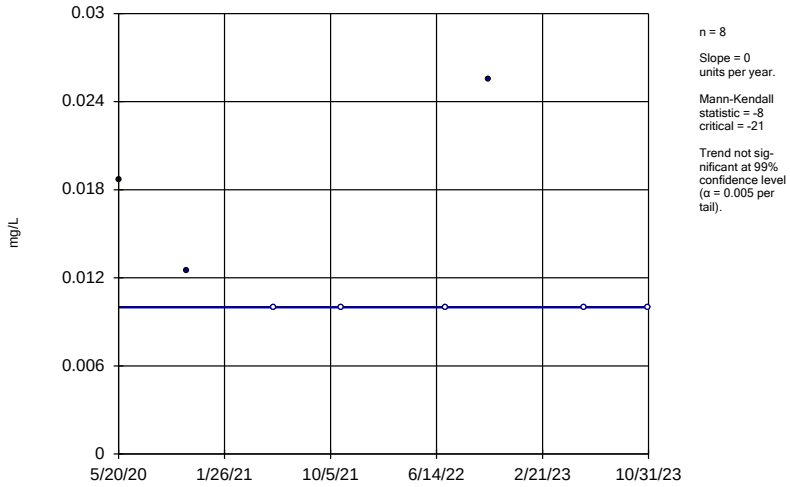
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 10/16/2024 2:25 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -8
critical = -21

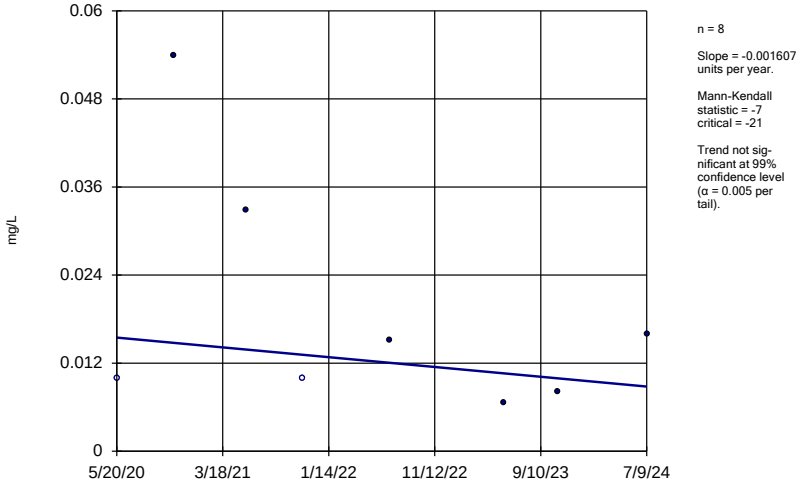
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 10/16/2024 2:26 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.001607 units per year.

Mann-Kendall statistic = -7
critical = -21

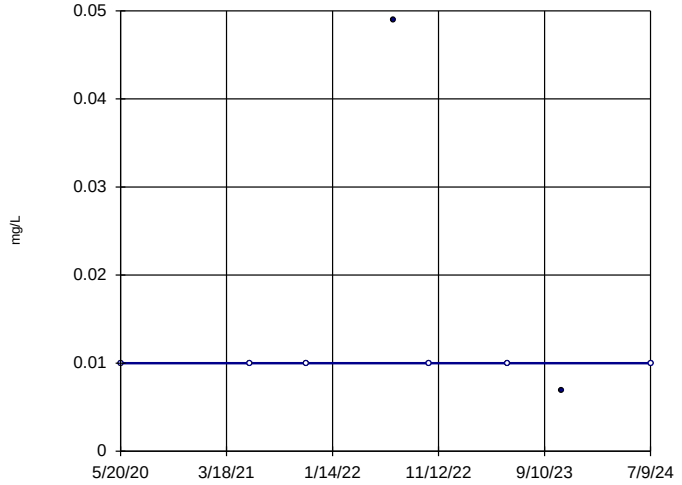
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 10/16/2024 2:26 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 10/16/2024 2:26 PM View: 2024SSN - Mann Kendall
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Confidence Interval Summary Table and Graphs

Confidence Interval

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM Printed 10/16/2024, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1-Dichloroethane (ug/L)	DG-1205	2.672	1.78	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1301	12.13	3.598	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1305	7.603	1.75	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1401R	2.353	0.6306	140	No	8	0	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1205	1.12	0.7138	5	No	8	0	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1301	1.019	0.6277	5	No	8	25	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1305	0.7557	0.2545	5	No	8	25	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	DG-1305	1.197	0.4015	75	No	8	37.5	No	0.01	Param.
Acetone (ug/L)	DG-901	290	5	6300	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	DG-1101	0.00234	0.0005	0.0139	No	8	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	DG-1205	0.00154	0.001	0.0139	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	DG-901	0.0143	0.00134	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	DG-905	0.00704	0.000595	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	DG-1005	0.003038	0.0009503	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	DG-1101	0.002241	0.0005925	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	DG-1205	0.003095	0.001965	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	DG-1305	0.003635	0.001042	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	**DGP-1500**	**0.02448**	**0.01137**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Barium (mg/L)	DG-901	0.0713	0.0135	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	DG-905	0.03961	0.03222	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1005	0.06692	0.03267	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1101	0.0481	0.0324	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1201	0.02454	0.01827	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1205	0.01606	0.01059	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1301	0.04336	0.03244	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1305	0.11	0.07216	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1401R	0.0467	0.0347	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DGP-1500	0.05891	0.03904	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	DG-901	1.19	0.25	5	No	8	87.5	No	0.004	NP (NDs)
Benzene (ug/L)	DGP-1500	1.2	0.25	5	No	8	62.5	No	0.004	NP (NDs)
Bis[2-ethylhexyl]phthalate (ug/L)	DG-1301	124	4.715	6	No	8	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-901	0.000301	0.00005	0.005	No	8	37.5	No	0.004	NP (normality)
Cadmium (mg/L)	DG-1005	0.000327	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-1101	0.0001329	0.00006229	0.005	No	8	37.5	No	0.01	Param.
Cadmium (mg/L)	DG-1201	0.000103	0.00005	0.005	No	8	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-1301	0.000104	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-1401R	0.000125	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	DGP-1500	0.0001288	0.0000746	0.005	No	8	50	No	0.01	Param.
Chlorobenzene (ug/L)	DG-1305	9.038	0.5075	100	No	8	25	No	0.01	Param.
Chloromethane (ug/L)	DG-1205	3.63	1.5	3	No	8	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	DG-1101	0.006011	0.001495	0.1	No	8	37.5	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	DG-1301	23.65	3.712	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	DG-1305	4.37	0.594	70	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-901	0.00772	0.000265	0.0021	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	DG-1005	0.001224	0.0001925	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1101	0.001937	0.0002736	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1201	0.0005848	0.0003241	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1205	0.0005116	0.0002406	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1301	0.0008041	0.0002289	0.0021	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1305	0.0008195	0.000192	0.0021	No	8	37.5	No	0.004	NP (normality)

Confidence Interval

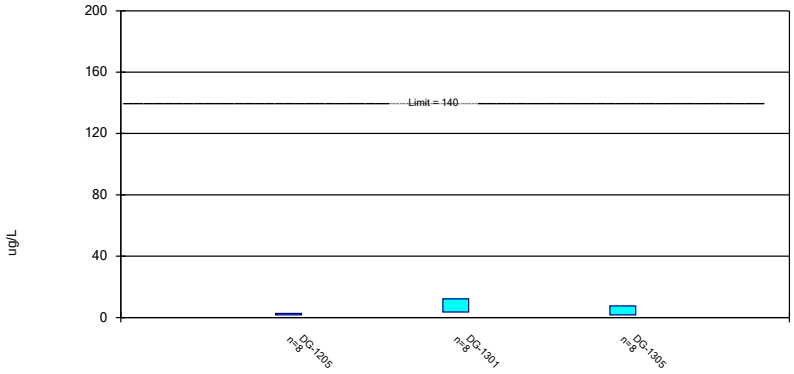
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM Printed 10/16/2024, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	DG-1401R	0.00106	0.000194	0.0021	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	DGP-1500	0.0009945	0.0005207	0.0021	No	8	25	No	0.01	Param.
Copper (mg/L)	DG-901	0.0146	0.00293	1.3	No	8	0	No	0.004	NP (normality)
Copper (mg/L)	DG-1005	0.006114	0.001419	1.3	No	8	50	No	0.01	Param.
Copper (mg/L)	DG-1101	0.005434	0.001919	1.3	No	8	12.5	No	0.01	Param.
Copper (mg/L)	DG-1205	0.00565	0.00184	1.3	No	8	75	No	0.004	NP (NDs)
Copper (mg/L)	DG-1301	0.009094	0.001796	1.3	No	8	12.5	No	0.01	Param.
Copper (mg/L)	DG-1305	0.004215	0.00209	1.3	No	8	75	No	0.004	NP (NDs)
Copper (mg/L)	DG-1401R	0.0398	0.0025	1.3	No	8	12.5	No	0.004	NP (normality)
Copper (mg/L)	DGP-1500	0.007503	0.00171	1.3	No	8	25	No	0.01	Param.
Dichlorodifluoromethane (ug/L)	DG-1205	6.618	4.102	1000	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-901	0.00397	0.000453	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DG-905	0.0005575	0.0002858	0.015	No	8	50	No	0.01	Param.
Lead (mg/L)	DG-1005	0.002131	0.0003132	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1101	0.006555	0.0009756	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1201	0.001674	0.0005285	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1205	0.00139	0.000223	0.015	No	8	25	No	0.004	NP (normality)
Lead (mg/L)	DG-1301	0.0109	0.000373	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DG-1305	0.00316	0.000415	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DG-1401R	0.00291	0.00042	0.015	No	8	0	No	0.004	NP (normality)
Nickel (mg/L)	DG-901	0.00814	0.00204	0.1	No	8	25	No	0.004	NP (normality)
Nickel (mg/L)	DG-1005	0.01	0.0025	0.1	No	8	62.5	No	0.004	NP (NDs)
Nickel (mg/L)	DG-1101	0.0107	0.00228	0.1	No	8	12.5	No	0.004	NP (normality)
Nickel (mg/L)	DG-1205	0.005133	0.002327	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	DG-1301	0.01153	0.004394	0.1	No	8	0	No	0.01	Param.
Nickel (mg/L)	DG-1305	0.004088	0.002583	0.1	No	8	25	No	0.01	Param.
Nickel (mg/L)	DG-1401R	0.0163	0.00216	0.1	No	8	25	No	0.004	NP (normality)
Selenium (mg/L)	DG-1005	0.01	0.00134	0.05	No	8	50	No	0.004	NP (normality)
Selenium (mg/L)	DG-1101	0.004529	0.002046	0.05	No	8	0	No	0.01	Param.
Selenium (mg/L)	DGP-1500	0.02771	0.002744	0.05	No	8	12.5	No	0.01	Param.
Silver (mg/L)	DG-901	0.00153	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Tetrachloroethene (ug/L)	DG-1301	3.43	0.48	5	No	8	12.5	No	0.004	NP (normality)
Thallium (mg/L)	DG-901	0.00381	0.0005	0.0104	No	8	75	No	0.004	NP (NDs)
Thallium (mg/L)	DG-1201	0.00166	0.0005	0.0104	No	8	87.5	No	0.004	NP (NDs)
Toluene (ug/L)	DGP-1500	1.85	0.5	1000	No	8	75	No	0.004	NP (NDs)
trans-1,2-Dichloroethene (ug/L)	DG-1301	1.012	0.3789	100	No	8	25	No	0.01	Param.
Trichloroethene (ug/L)	DG-1301	12.42	3.663	5	No	8	0	No	0.01	Param.
Vanadium (mg/L)	DG-1005	0.015	0.001694	0.035	No	8	0	No	0.01	Param.
Vanadium (mg/L)	DG-1101	0.01041	0.0007406	0.035	No	8	0	No	0.01	Param.
Vanadium (mg/L)	DG-1205	0.00771	0.00126	0.035	No	8	12.5	No	0.004	NP (normality)
Vanadium (mg/L)	DG-1401R	0.004099	0.00136	0.035	No	8	50	No	0.01	Param.
Vinyl chloride (ug/L)	DG-1301	1.814	0.5367	2	No	8	25	No	0.01	Param.
Vinyl chloride (ug/L)	DG-1305	1.643	0.3831	2	No	8	37.5	No	0.01	Param.
Zinc (mg/L)	DG-901	0.0278	0.0092	2	No	8	62.5	No	0.004	NP (NDs)
Zinc (mg/L)	DG-1101	0.0255	0.01	2	No	8	62.5	No	0.004	NP (NDs)
Zinc (mg/L)	DG-1301	0.03559	0.003357	2	No	8	25	No	0.01	Param.
Zinc (mg/L)	DG-1401R	0.0489	0.00696	2	No	8	75	No	0.004	NP (NDs)

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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.

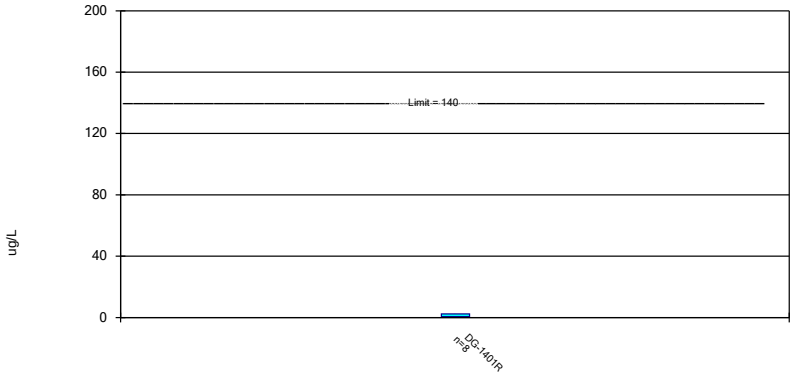


Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:41 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

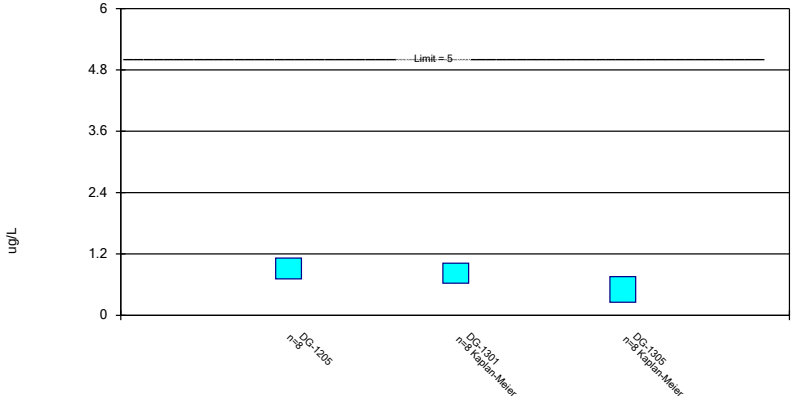


Constituent: 1,1-Dichloroethane Analysis Run 10/16/2024 2:41 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

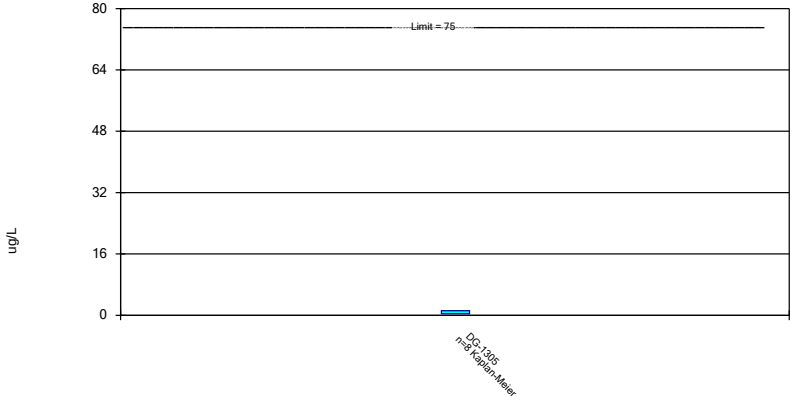


Constituent: 1,2-Dichloropropane Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

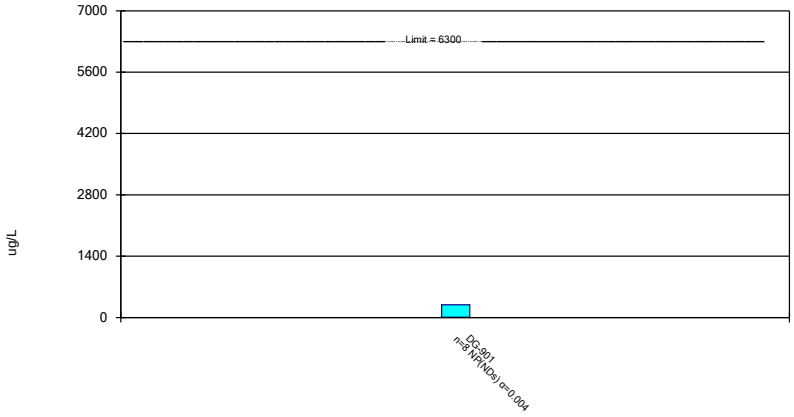


Constituent: 1,4-Dichlorobenzene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

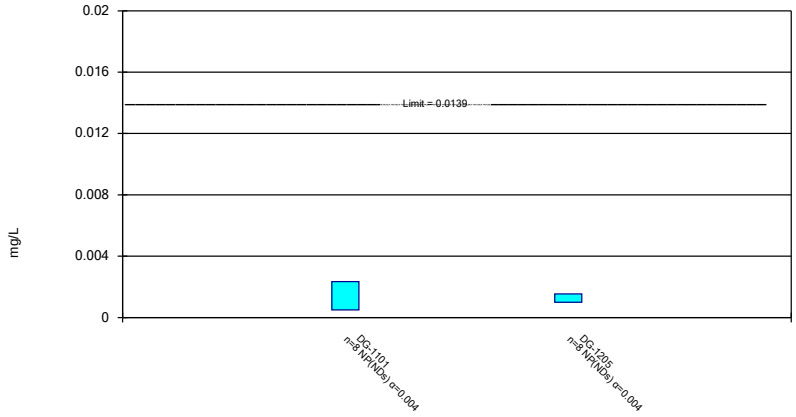


Constituent: Acetone Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

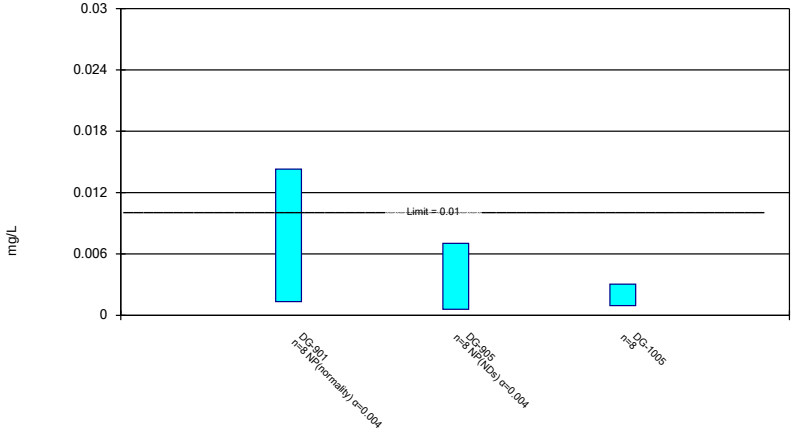


Constituent: Antimony Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

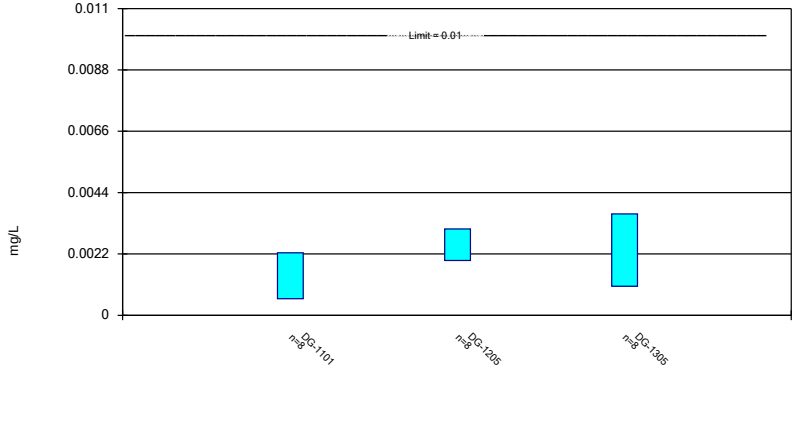


Constituent: Arsenic Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

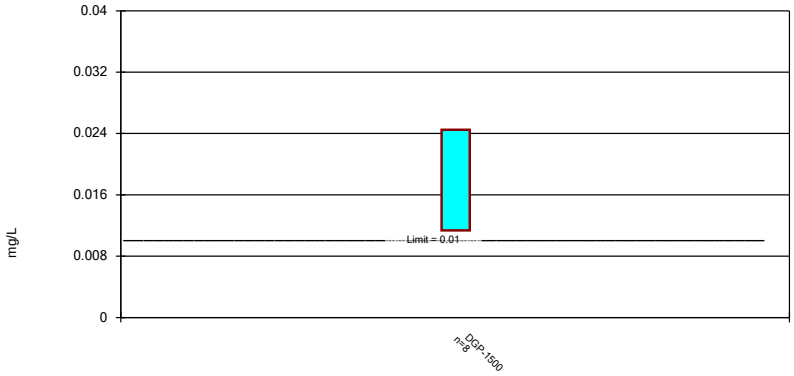


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Parametric Confidence Interval

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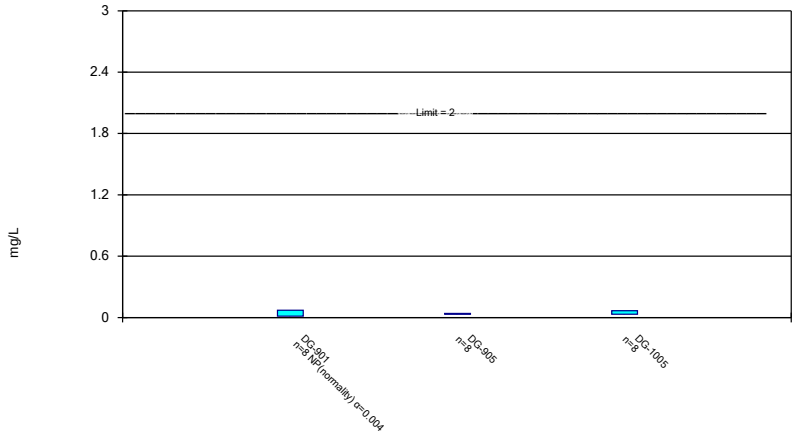


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

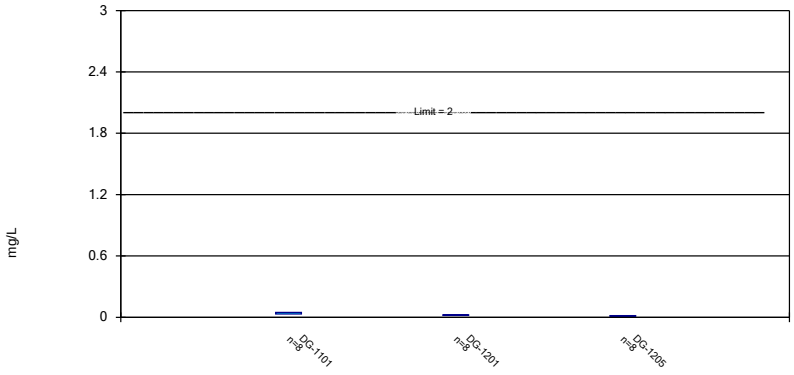


Constituent: Barium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Parametric Confidence Interval

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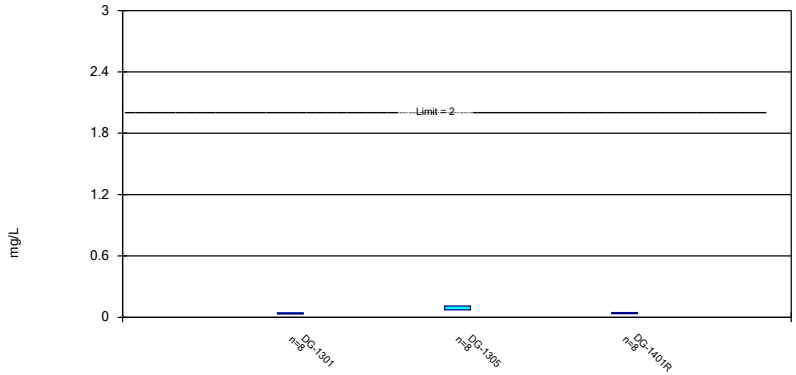


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Parametric Confidence Interval

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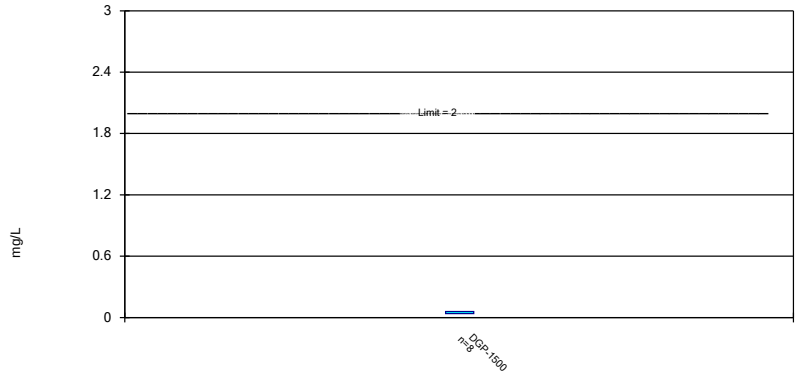


Constituent: Barium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 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.

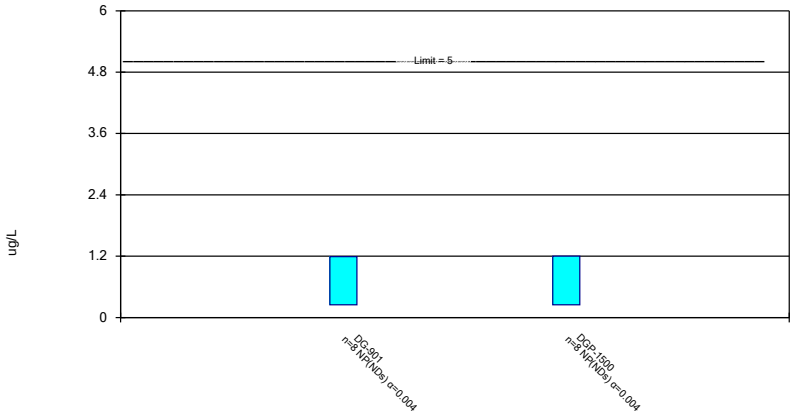


Constituent: Barium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

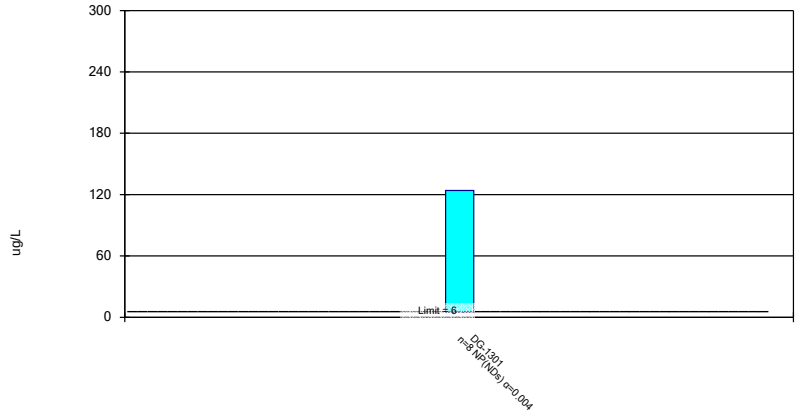


Constituent: Benzene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

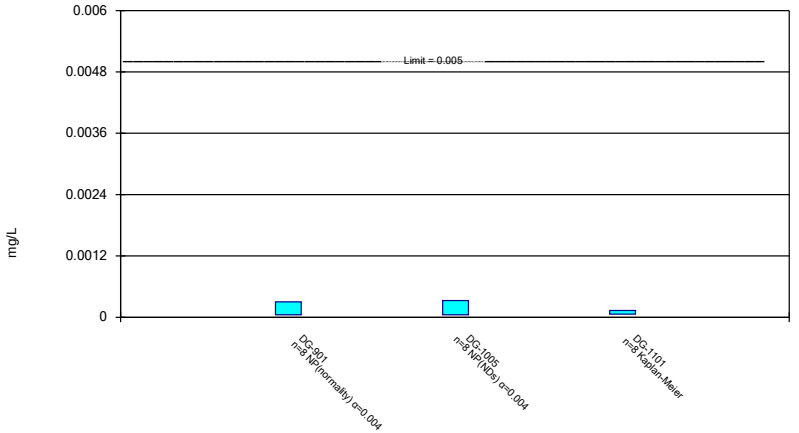


Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Int
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

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.

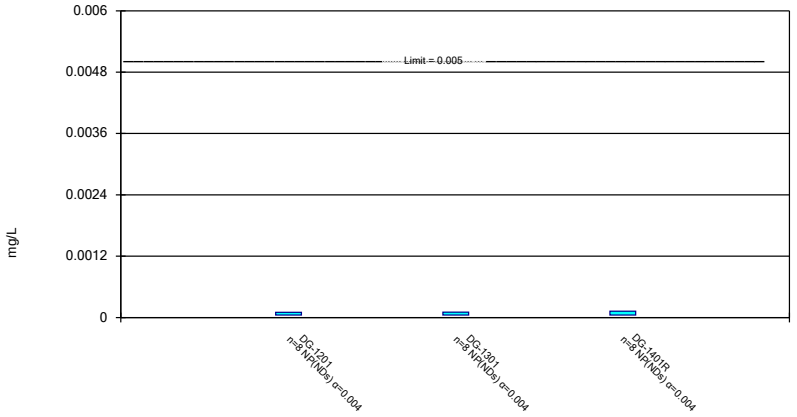


Constituent: Cadmium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

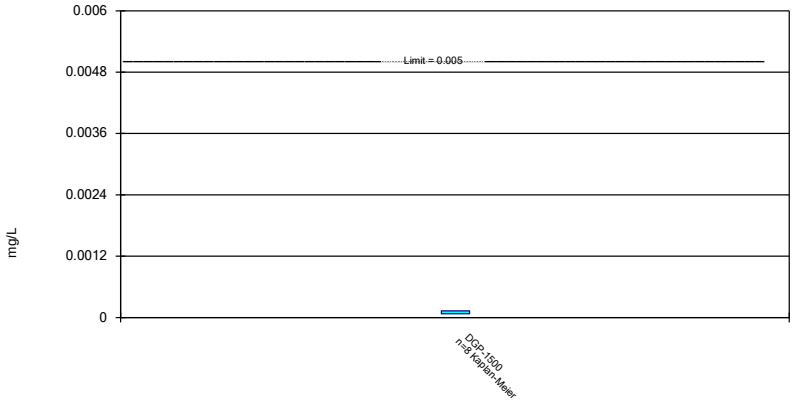


Constituent: Cadmium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 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.

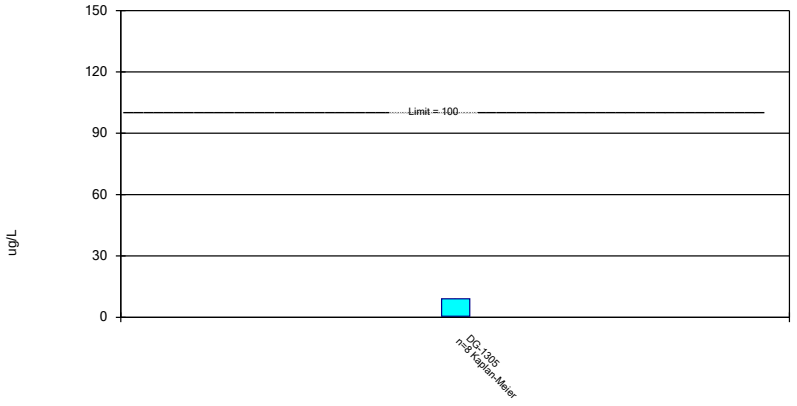


Constituent: Cadmium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 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.

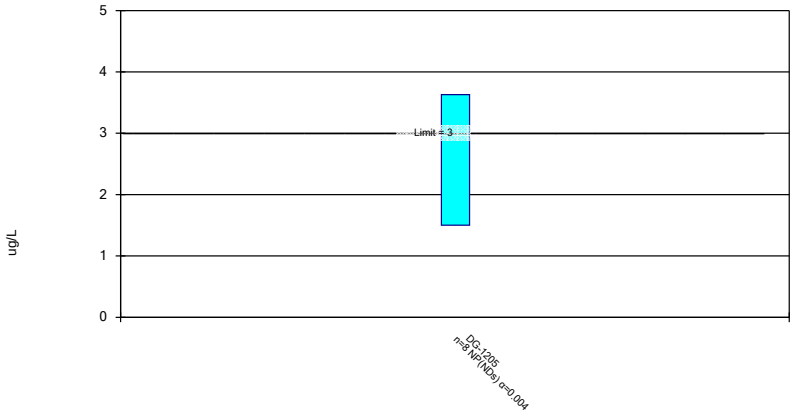


Constituent: Chlorobenzene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Chloromethane Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-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.

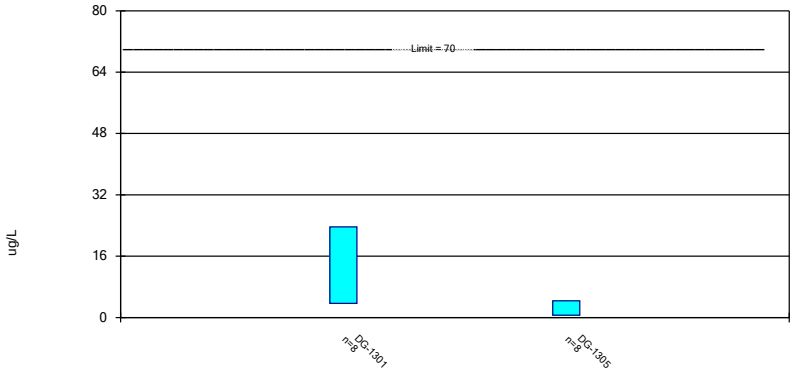


Constituent: Chromium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

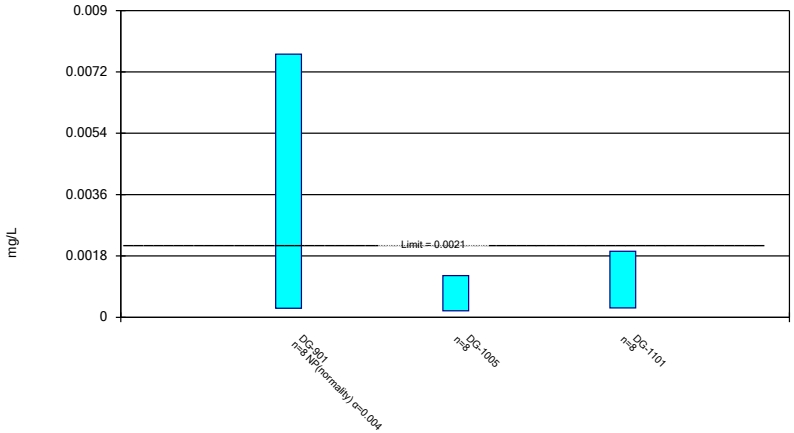


Constituent: cis-1,2-Dichloroethene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interv
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

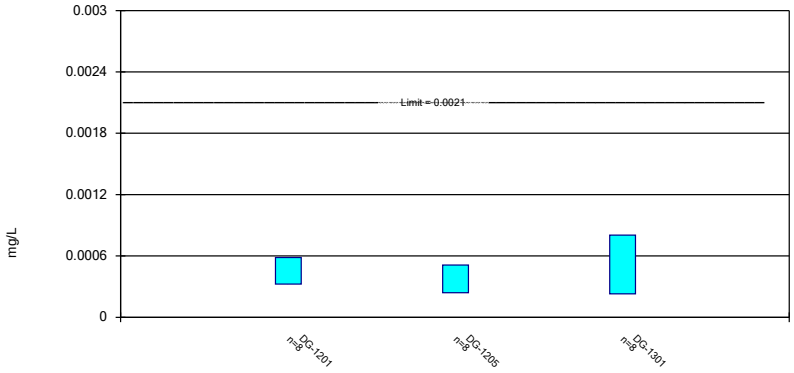


Constituent: Cobalt Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

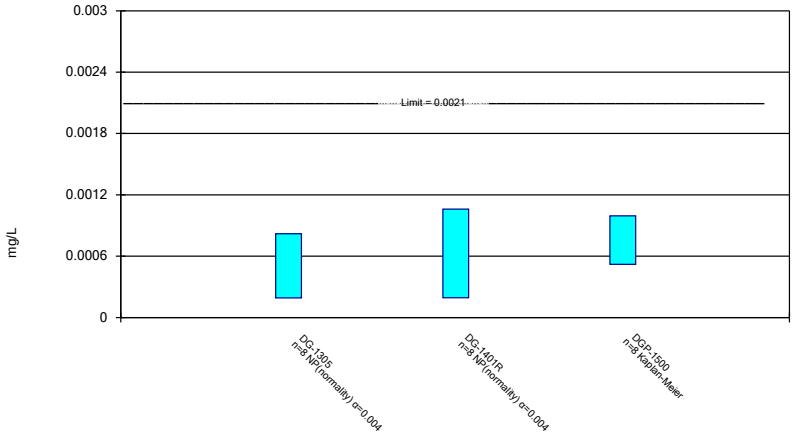


Constituent: Cobalt Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

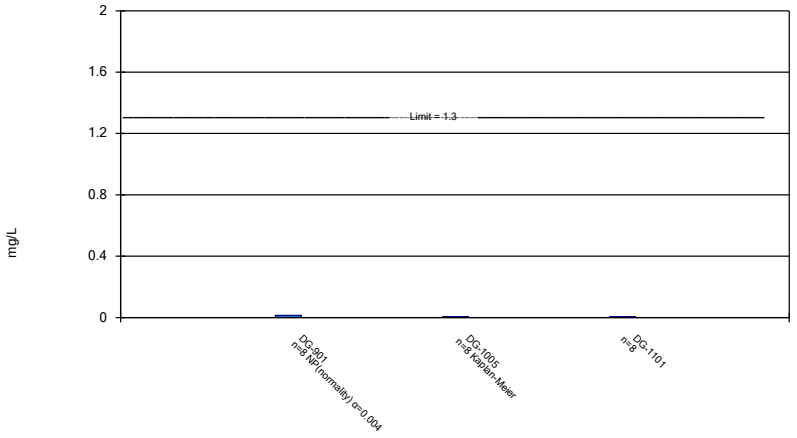


Constituent: Cobalt Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

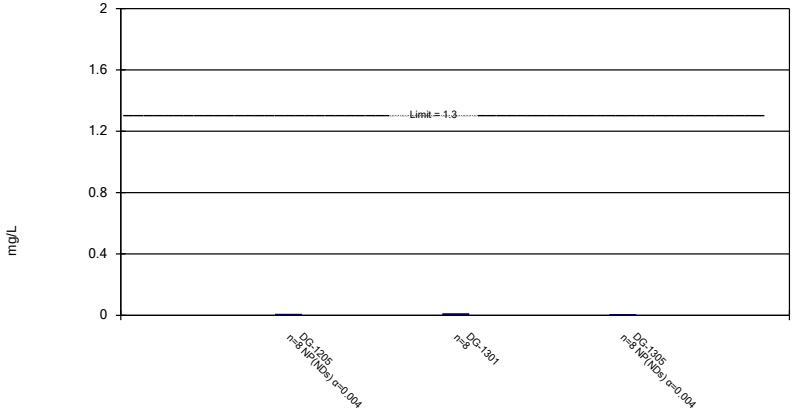


Constituent: Copper Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

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.

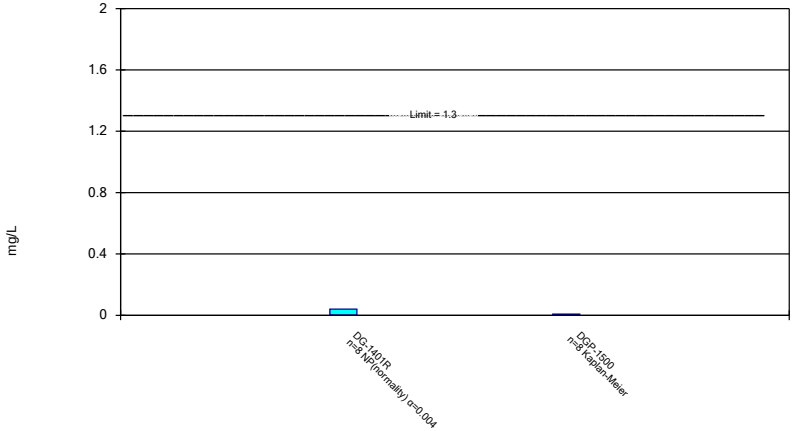


Constituent: Copper Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

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.

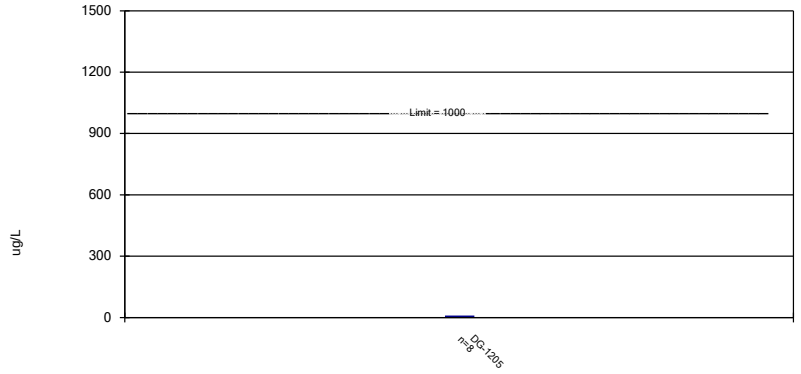


Constituent: Copper Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 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.

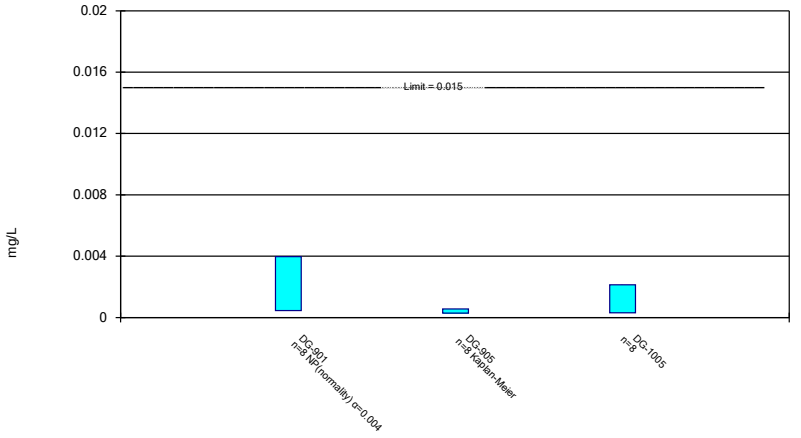


Constituent: Dichlorodifluoromethane Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Inte
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

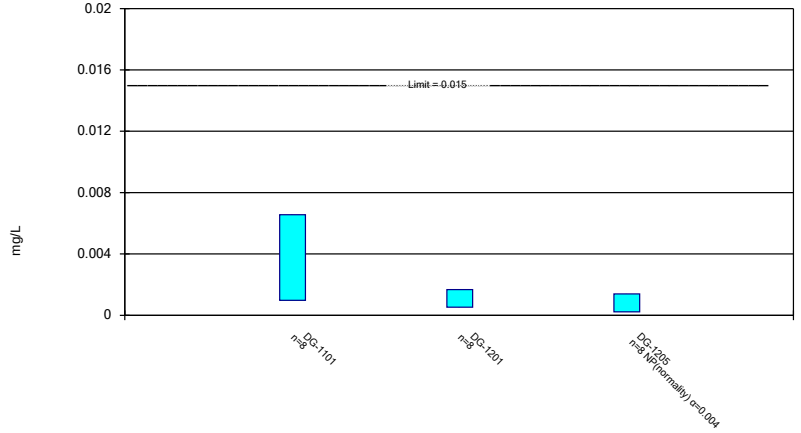


Constituent: Lead Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

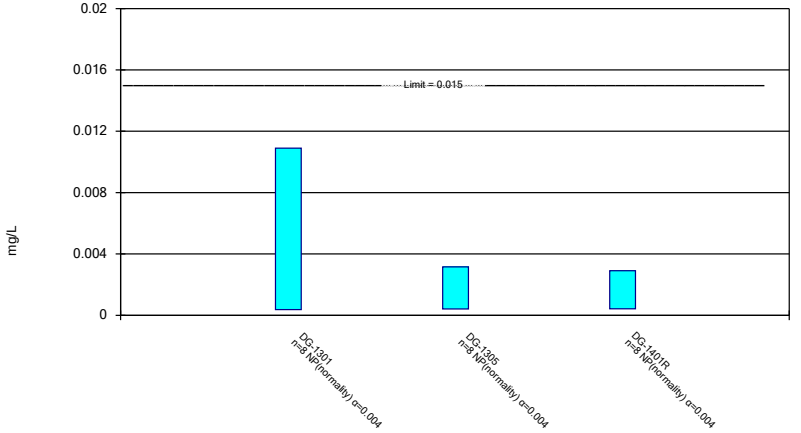


Constituent: Lead Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

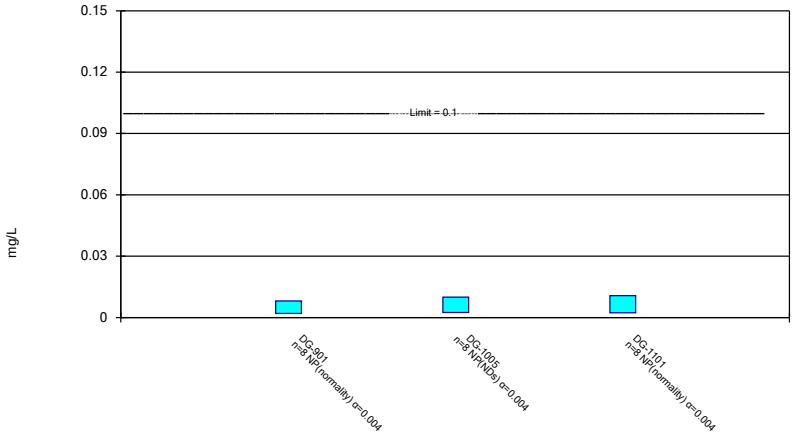


Constituent: Lead Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

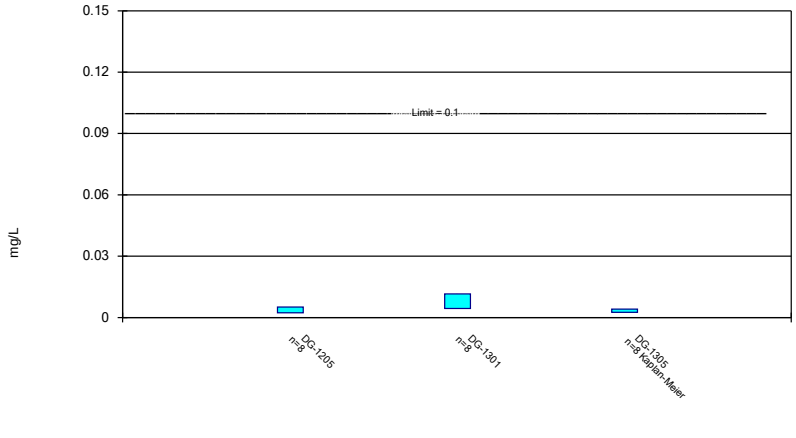


Constituent: Nickel Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 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.

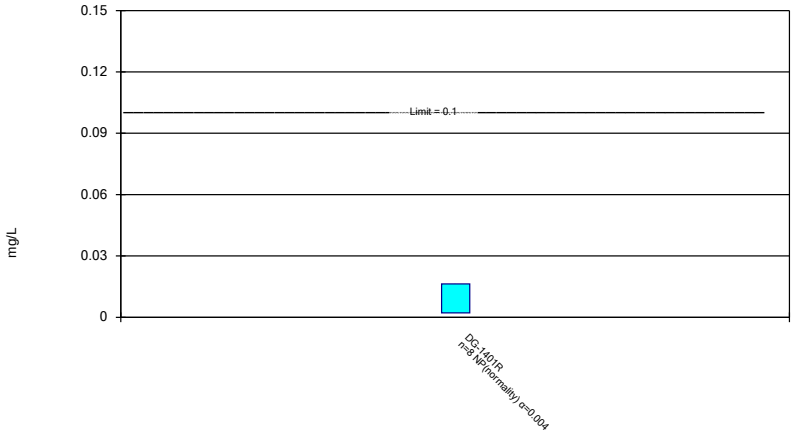


Constituent: Nickel Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

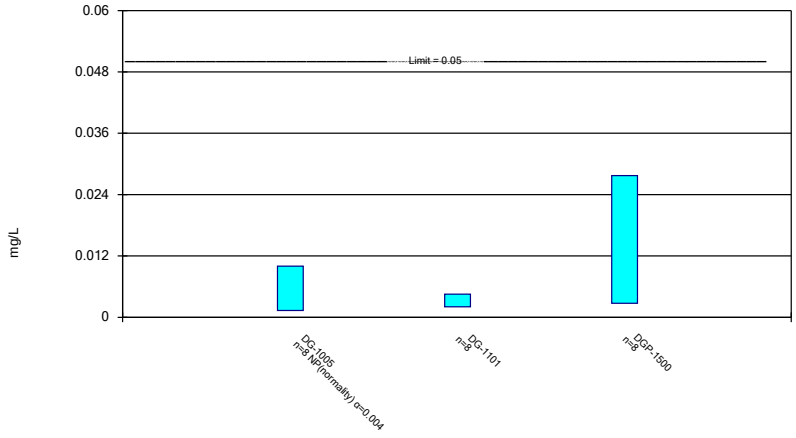


Constituent: Nickel Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

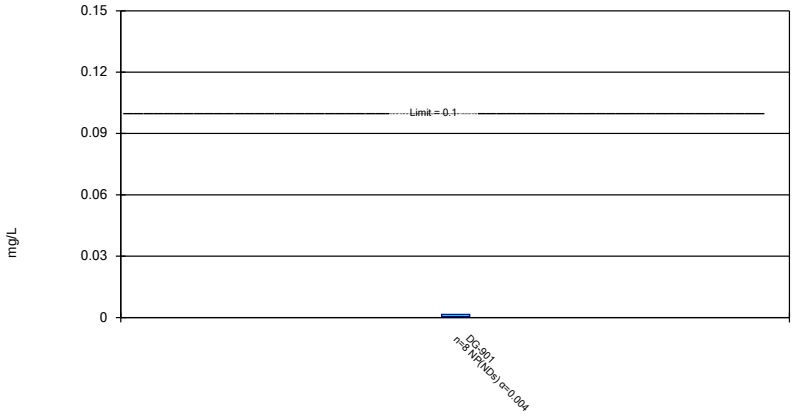


Constituent: Selenium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

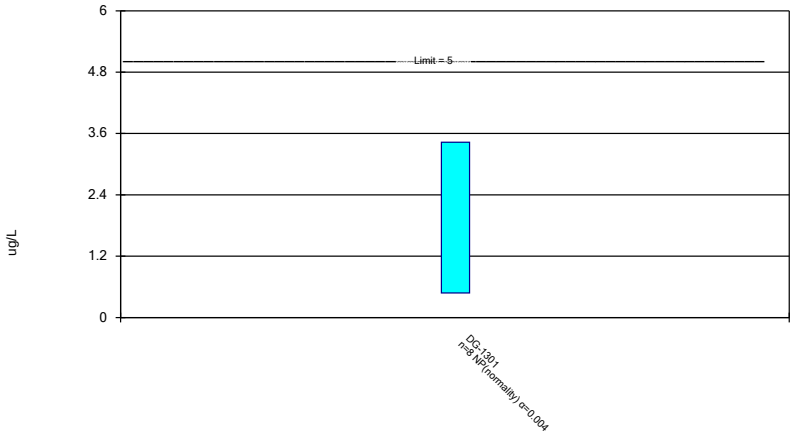


Constituent: Silver Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

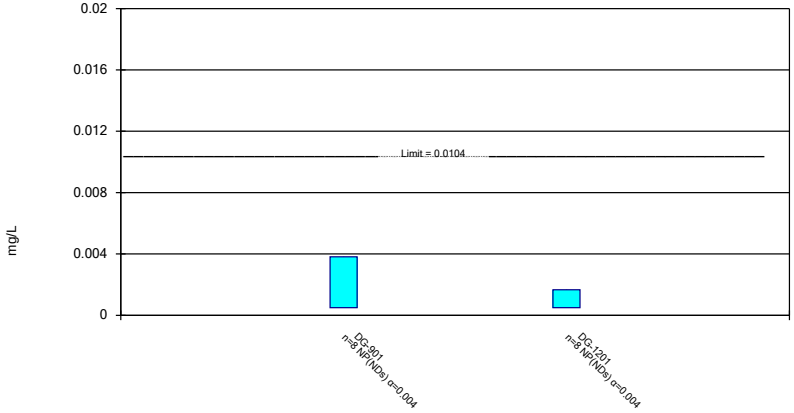


Constituent: Tetrachloroethene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

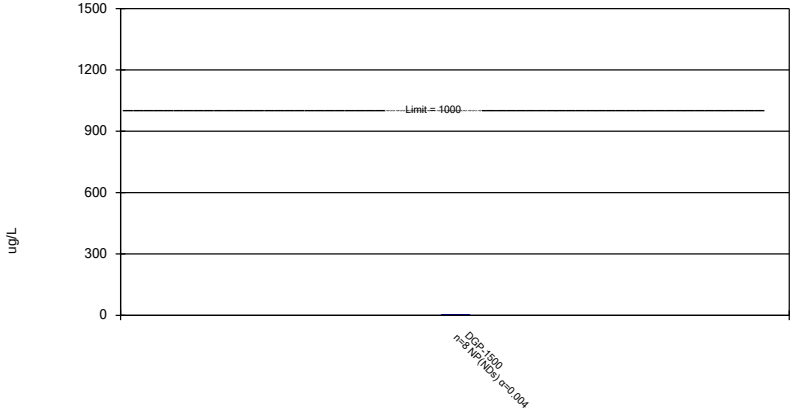


Constituent: Thallium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

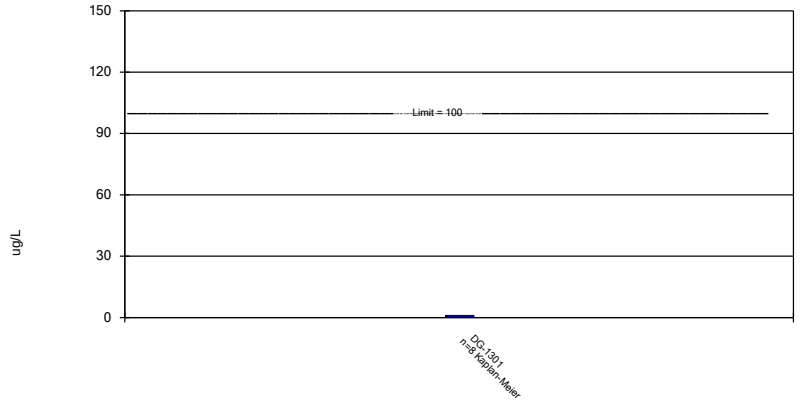


Constituent: Toluene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

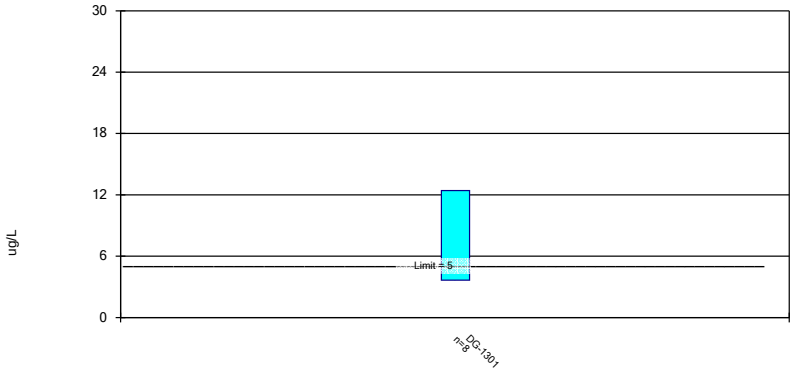


Constituent: trans-1,2-Dichloroethene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Int
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

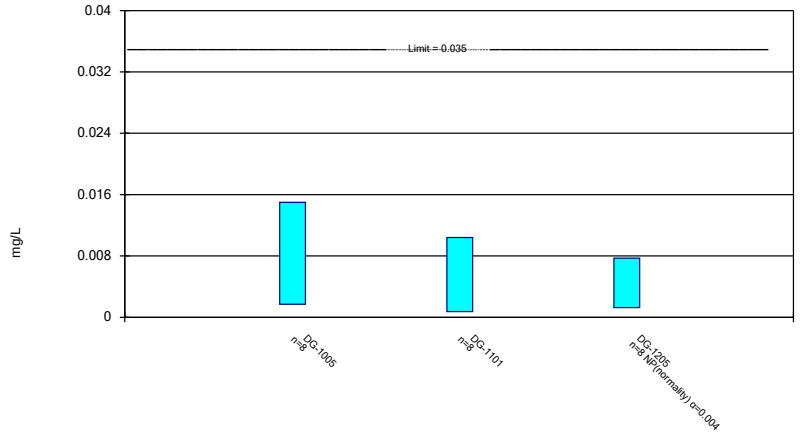


Constituent: Trichloroethene Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

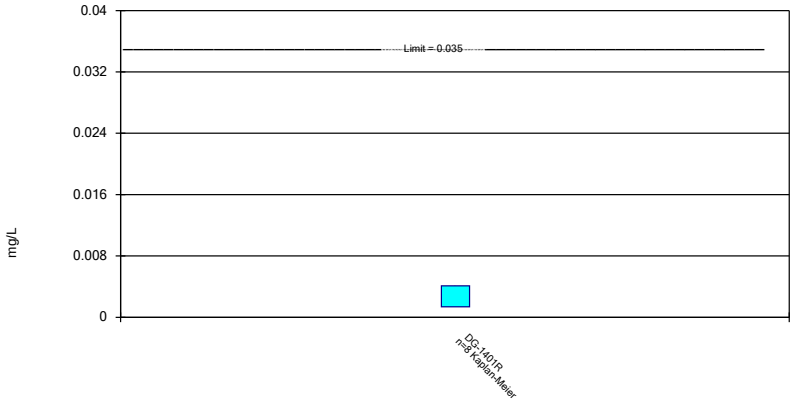


Constituent: Vanadium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

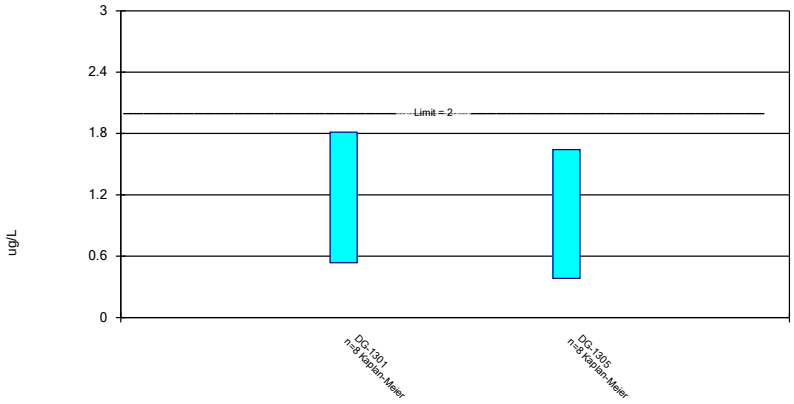


Constituent: Vanadium Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

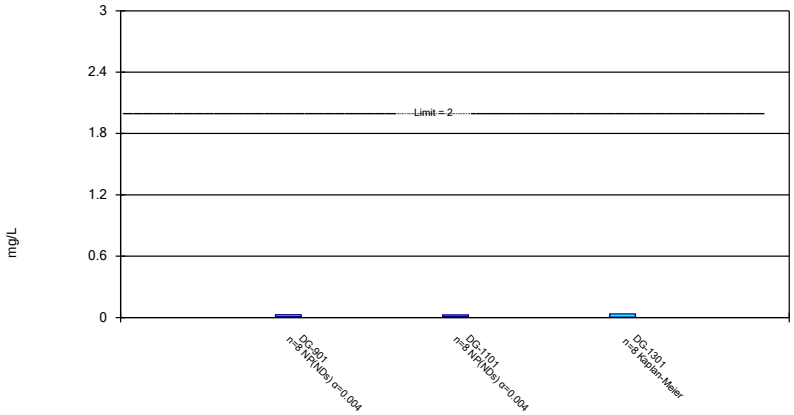


Constituent: Vinyl chloride Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

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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.

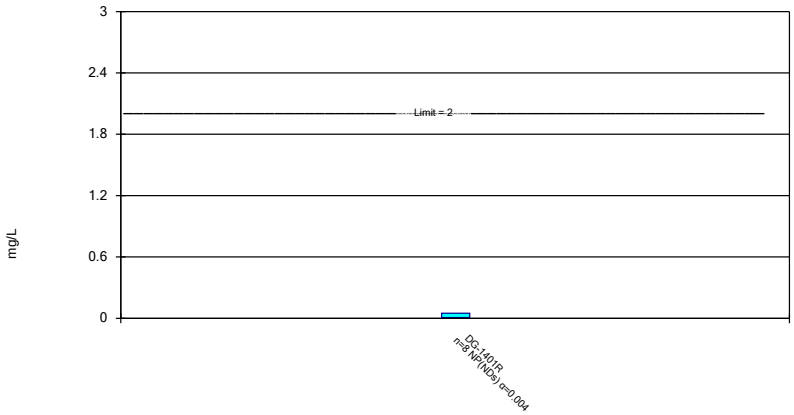


Constituent: Zinc Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Sanitas™ v.10.0.22 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Zinc Analysis Run 10/16/2024 2:42 PM View: 2024SSN - Confidence Interval
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Theil-Sen Confidence Bands Summary Table and Graphs

Trend Test

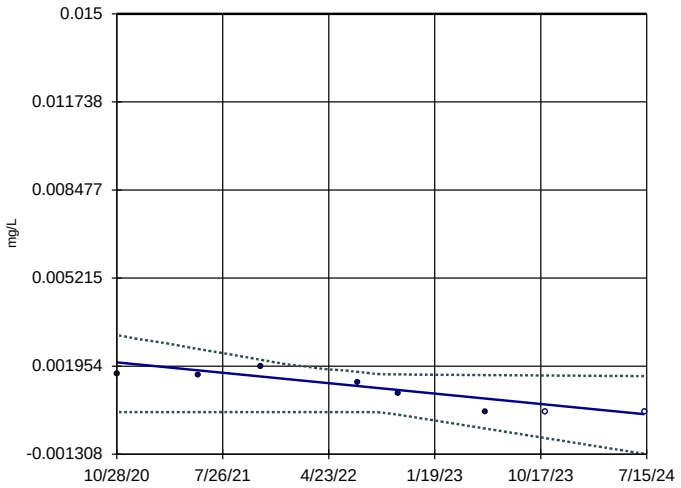
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM Printed 10/16/2024, 2:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Lead (mg/L)	**DGP-1500**	**-0.0005193**	**-23**	**-21**	**Yes**	**8**	**25**	**0.01**	**NP**

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Hollow symbols indicate censored values.

Sen's Slope and 99% Confidence Band

DGP-1500



n = 8

Slope = -0.0005193 units per year.

Mann-Kendall statistic = -23
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below GWPS mg/L (0.015).

Constituent: Lead Analysis Run 10/16/2024 2:48 PM View: 2024SSN - Thiel Sen

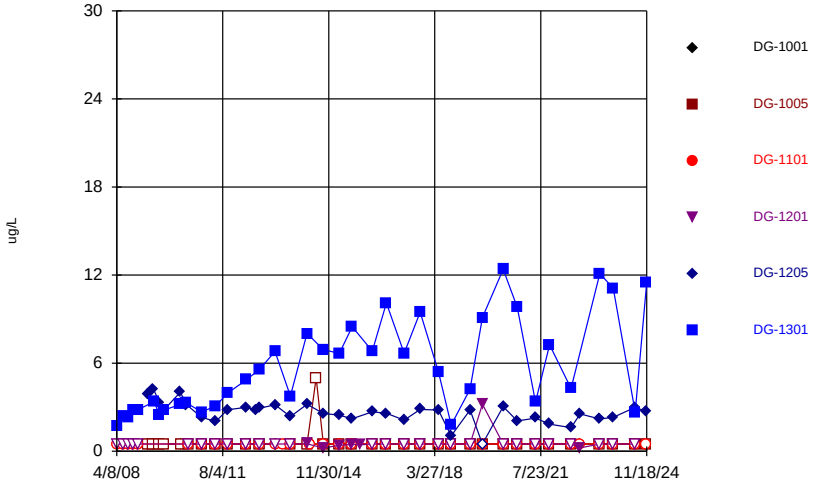
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-HMSP-2024SSN-AM

Attachment B
2nd 2024 Statistical Evaluation Output

Time Series Plots

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

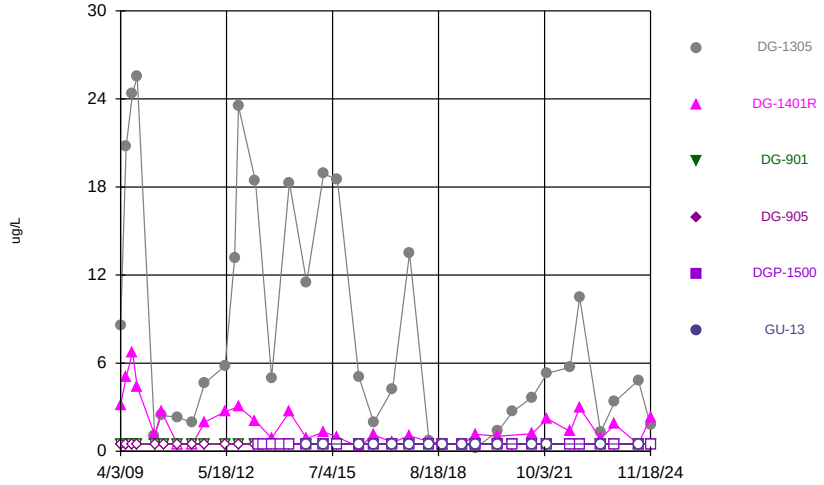
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

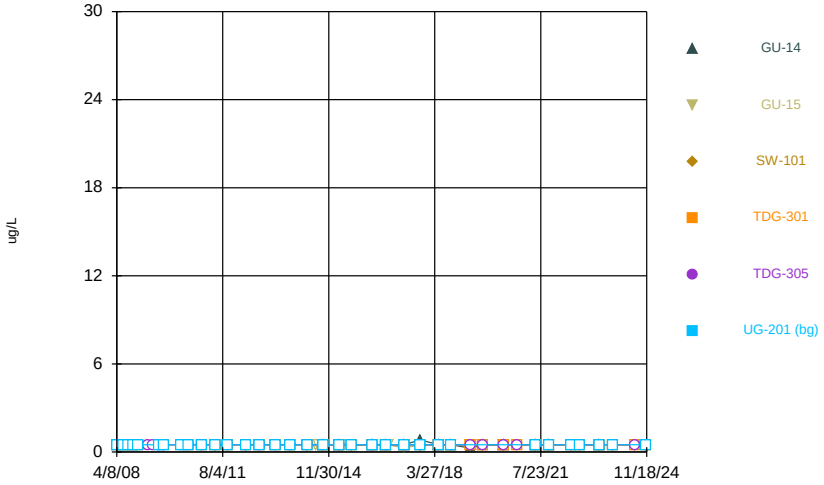
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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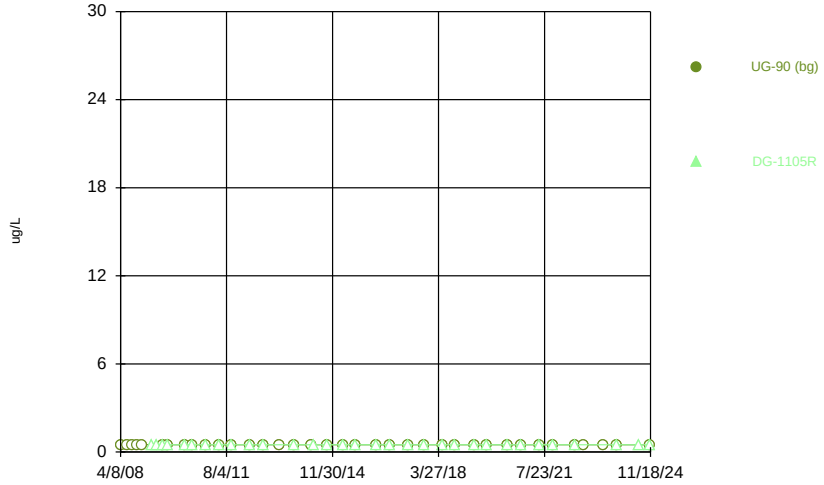
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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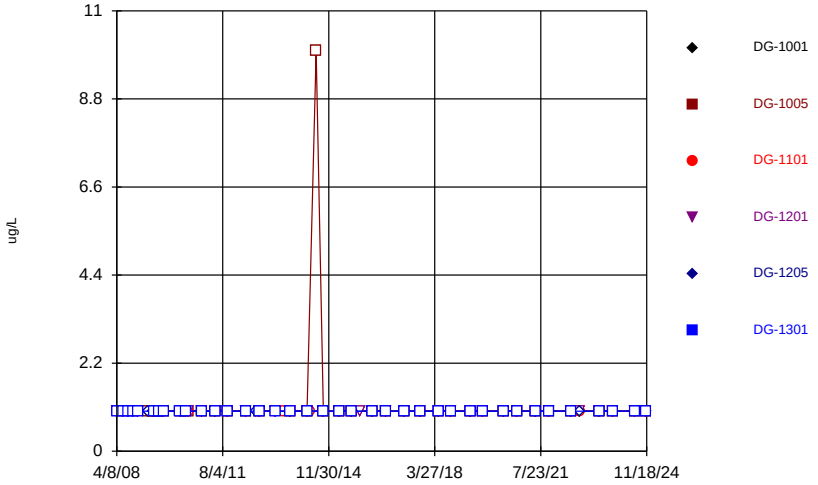
Time Series



Constituent: 1,1-Dichloroethane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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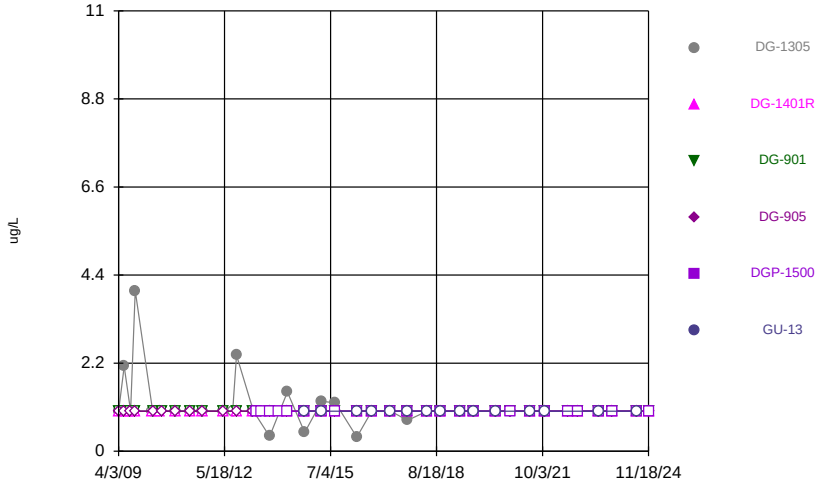
Time Series



Constituent: 1,1-Dichloroethene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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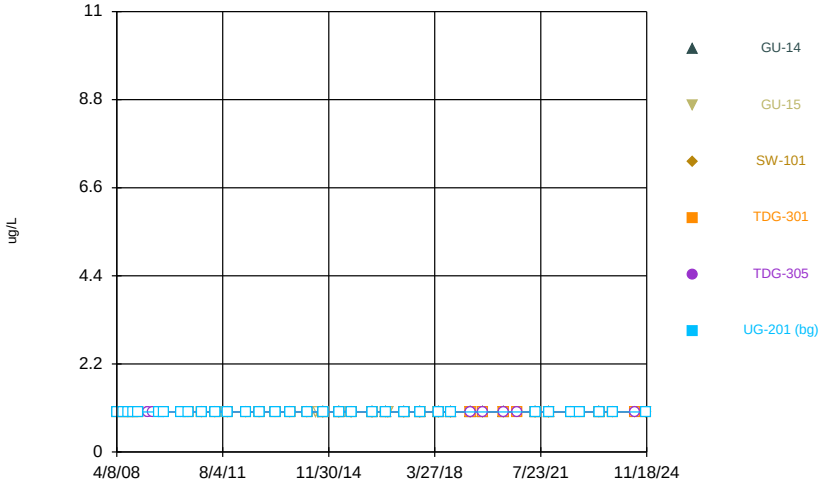
Time Series



Constituent: 1,1-Dichloroethene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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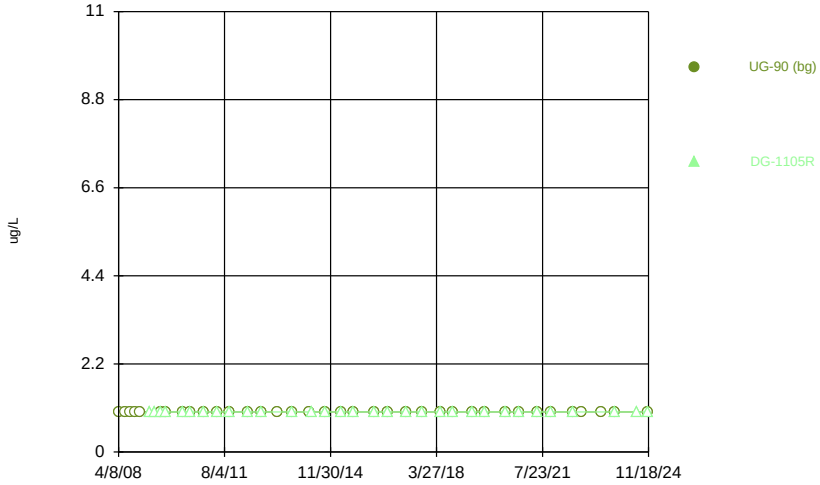
Time Series



Constituent: 1,1-Dichloroethene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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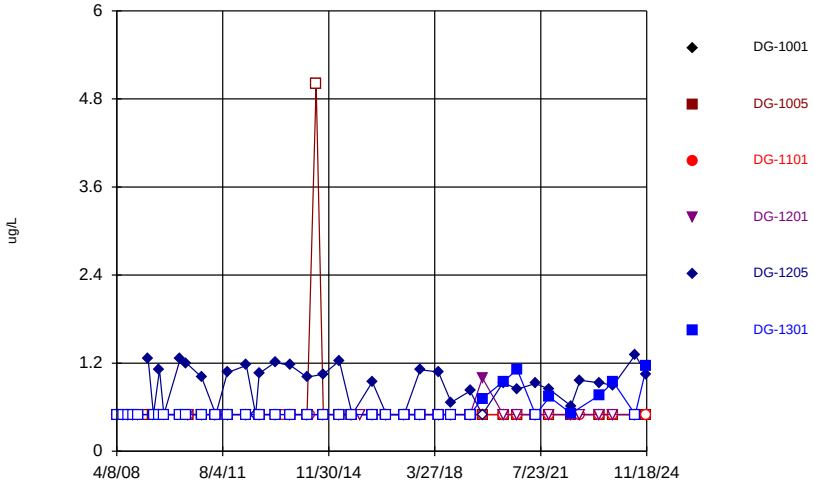
Time Series



Constituent: 1,1-Dichloroethene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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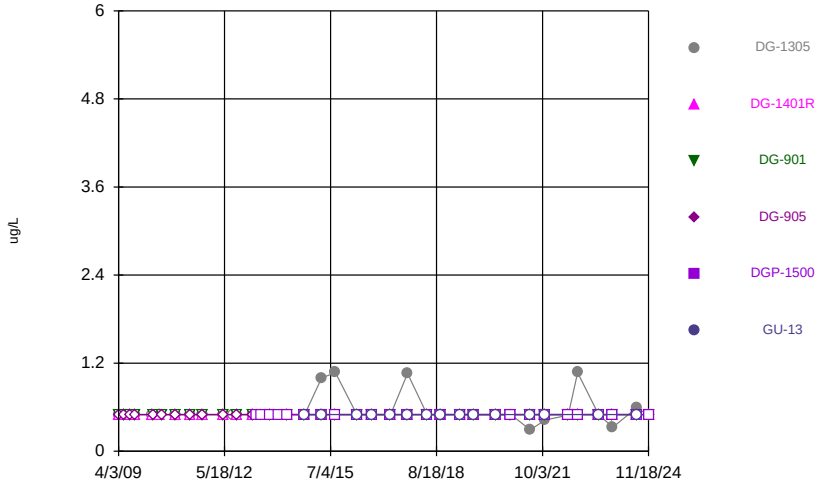
Time Series



Constituent: 1,2-Dichloropropane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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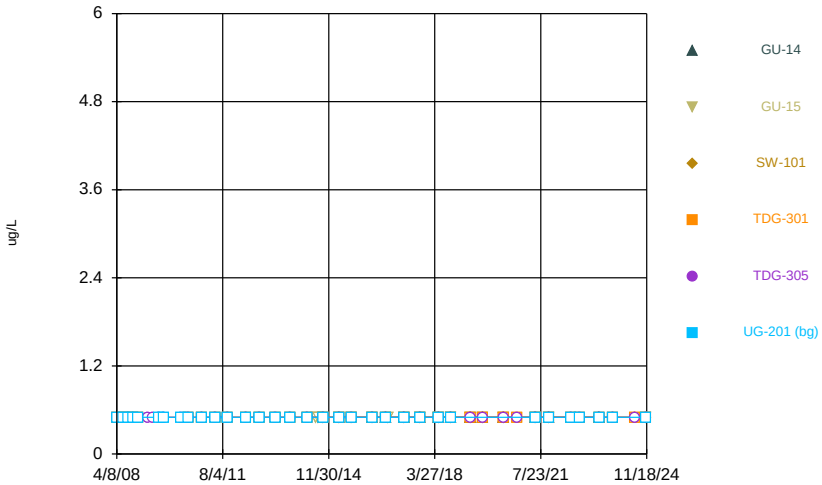
Time Series



Constituent: 1,2-Dichloropropane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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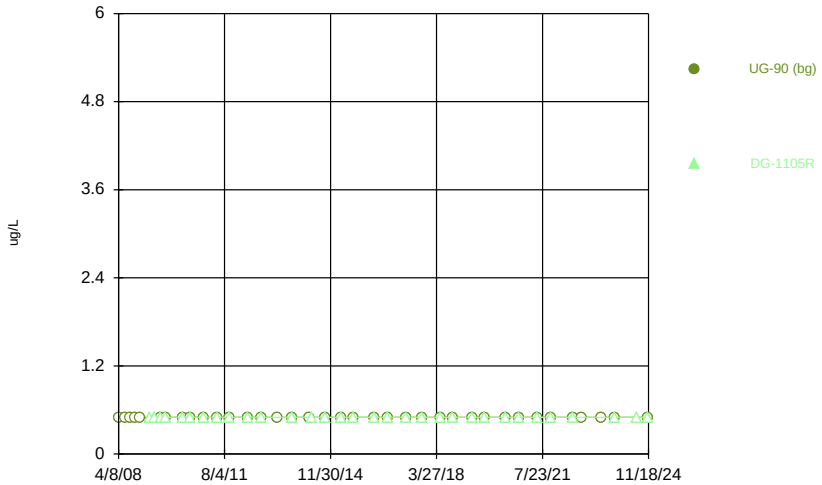
Time Series



Constituent: 1,2-Dichloropropane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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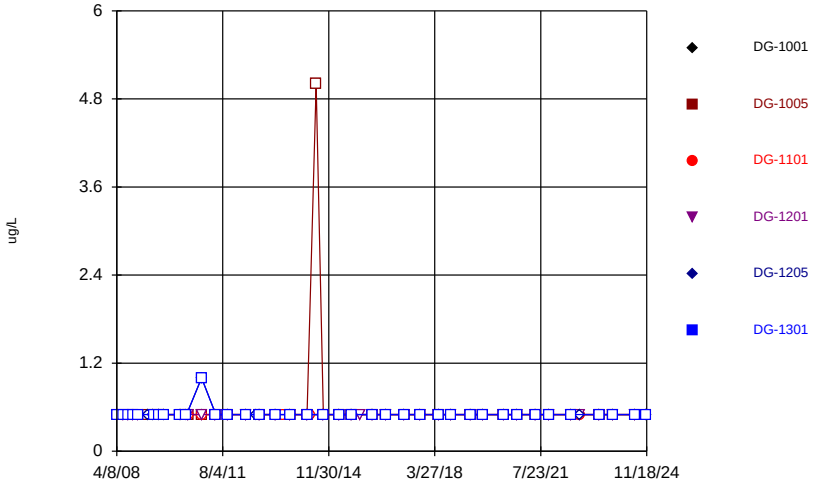
Time Series



Constituent: 1,2-Dichloropropane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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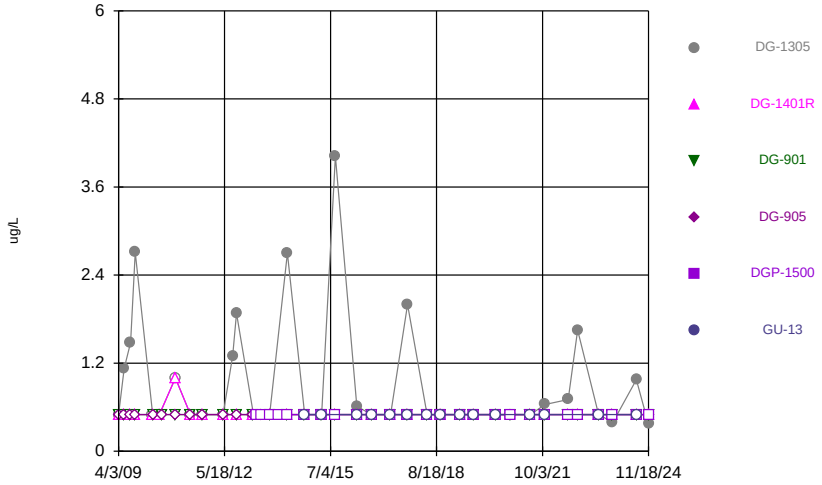
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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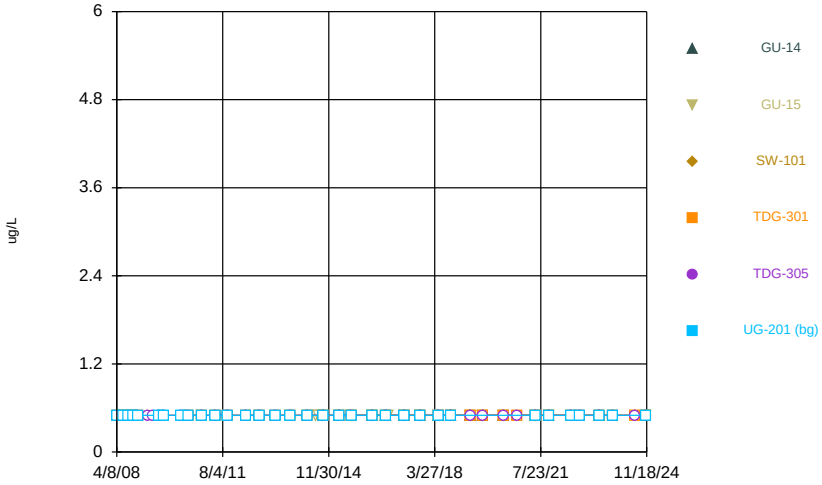
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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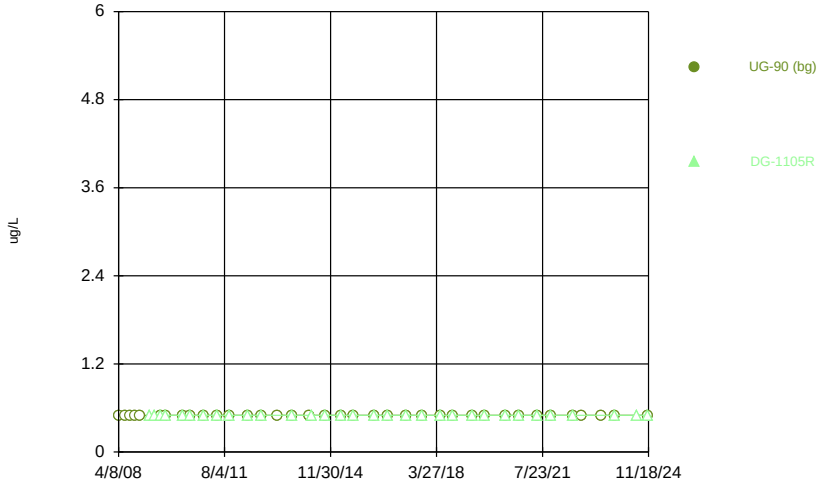
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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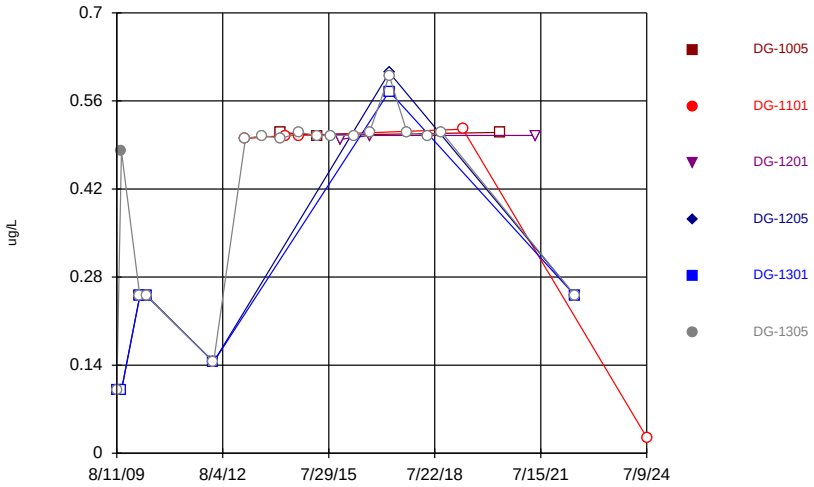
Time Series



Constituent: 1,4-Dichlorobenzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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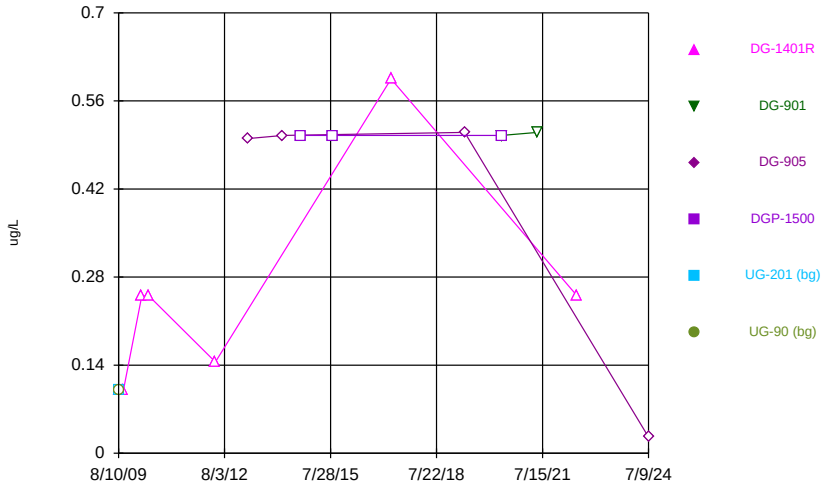
Time Series



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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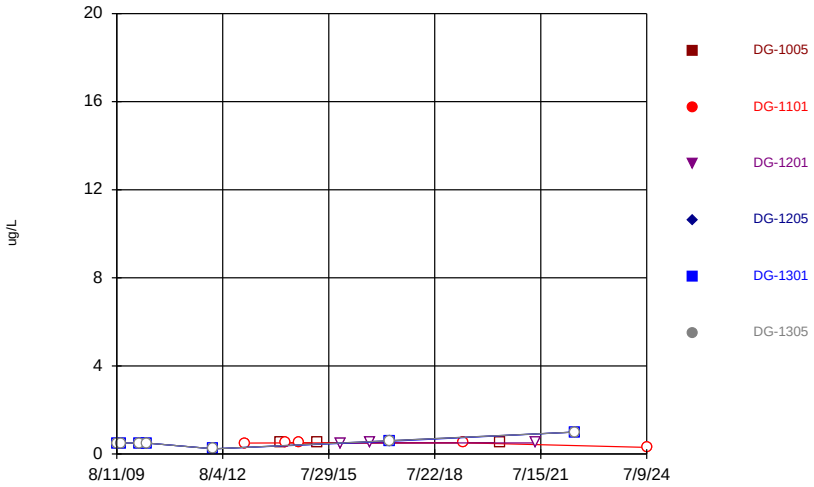
Time Series



Constituent: 2,4,5-TP [Silvex] [2C] Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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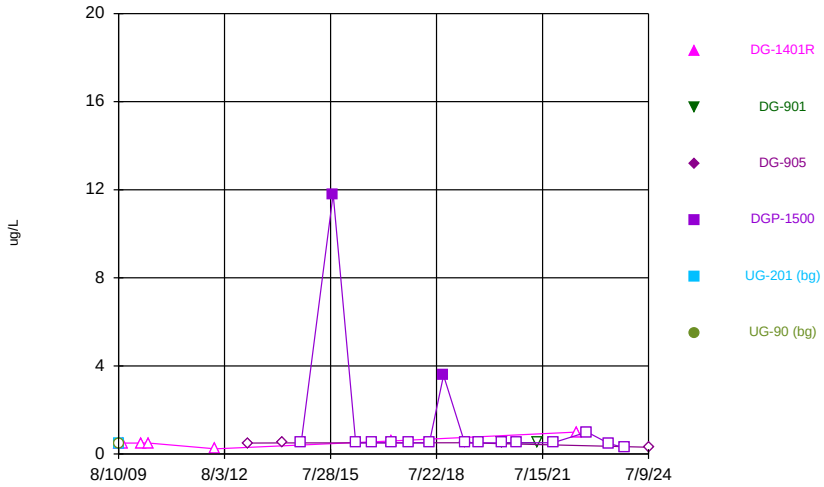
Time Series



Constituent: 2,4-D [2C] Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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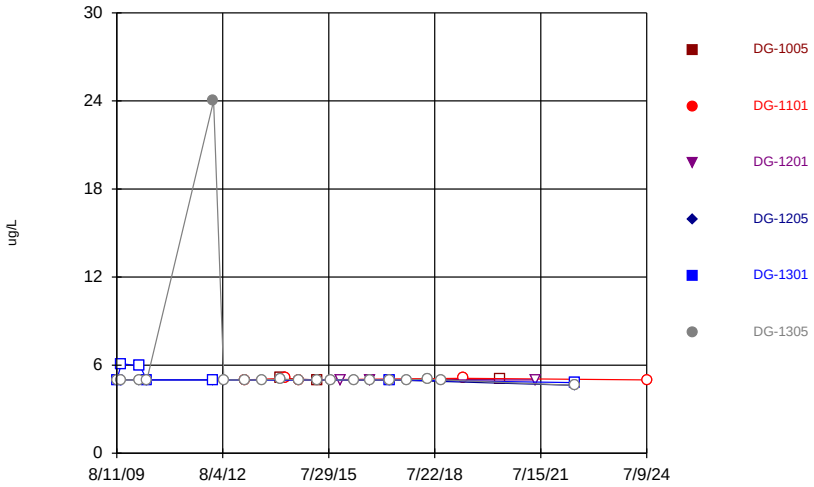
Time Series



Constituent: 2,4-D [2C] Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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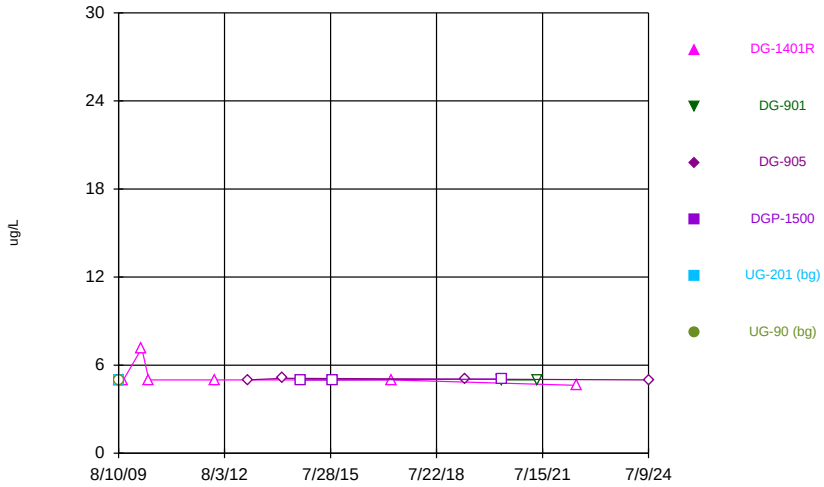
Time Series



Constituent: 2,4-Dinitrotoluene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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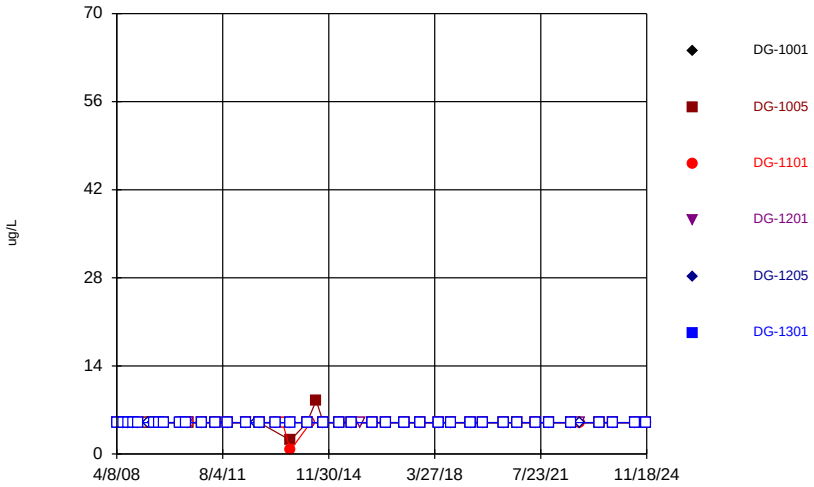
Time Series



Constituent: 2,4-Dinitrotoluene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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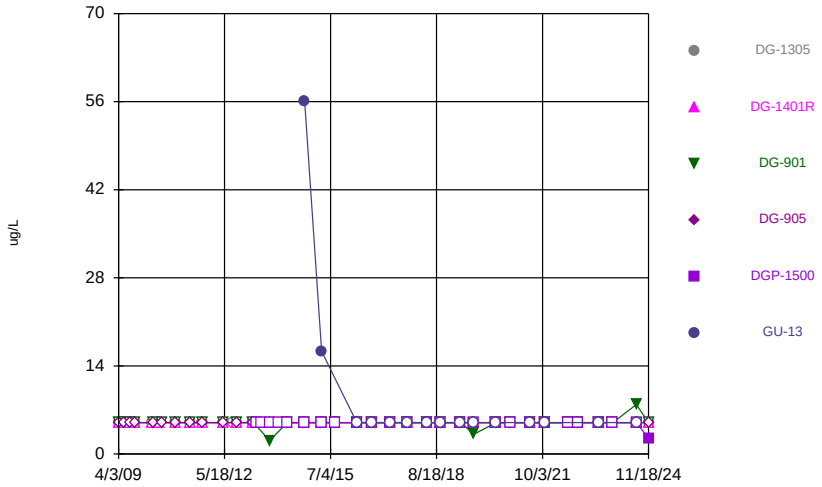
Time Series



Constituent: 2-Butanone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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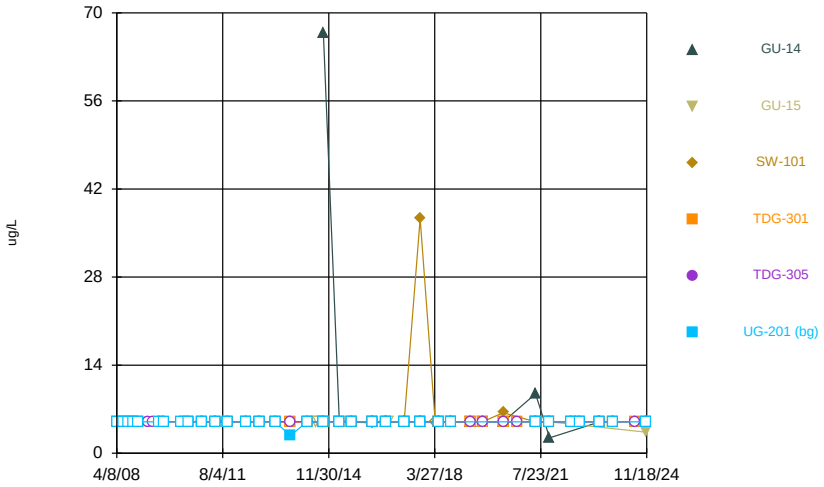
Time Series



Constituent: 2-Butanone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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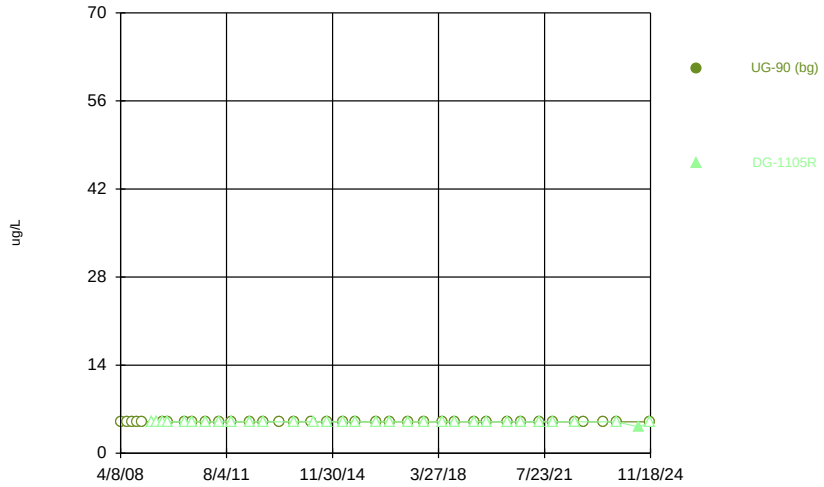
Time Series



Constituent: 2-Butanone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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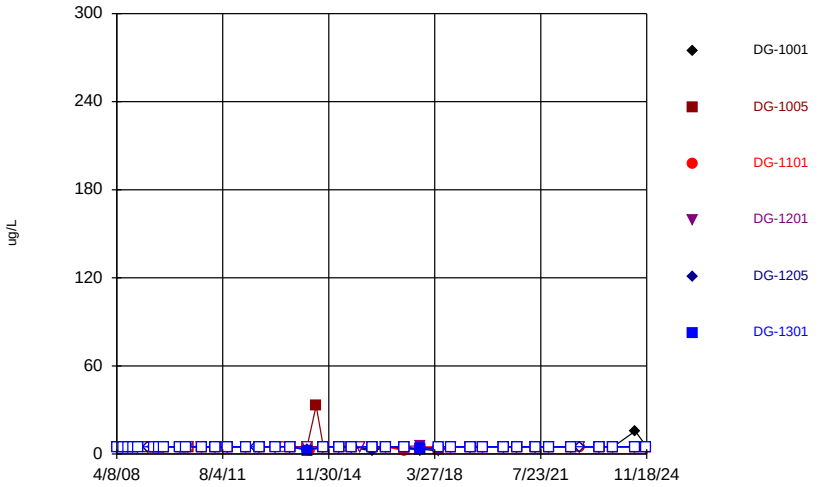
Time Series



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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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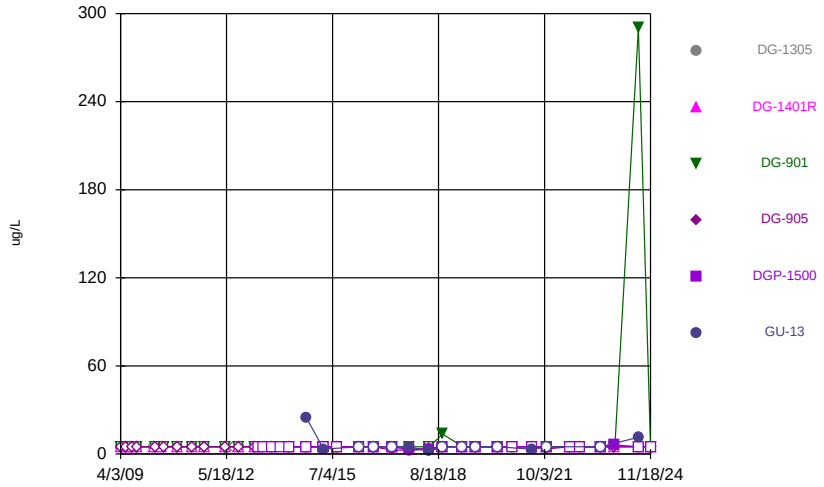
Time Series



Constituent: Acetone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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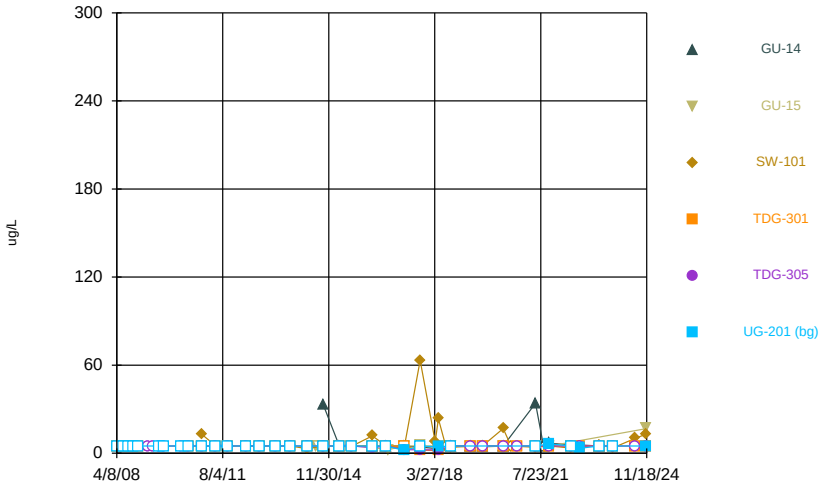
Time Series



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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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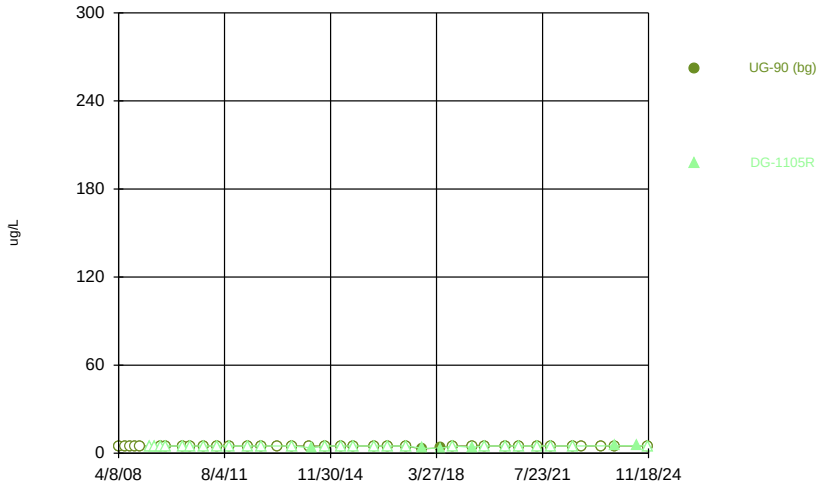
Time Series



Constituent: Acetone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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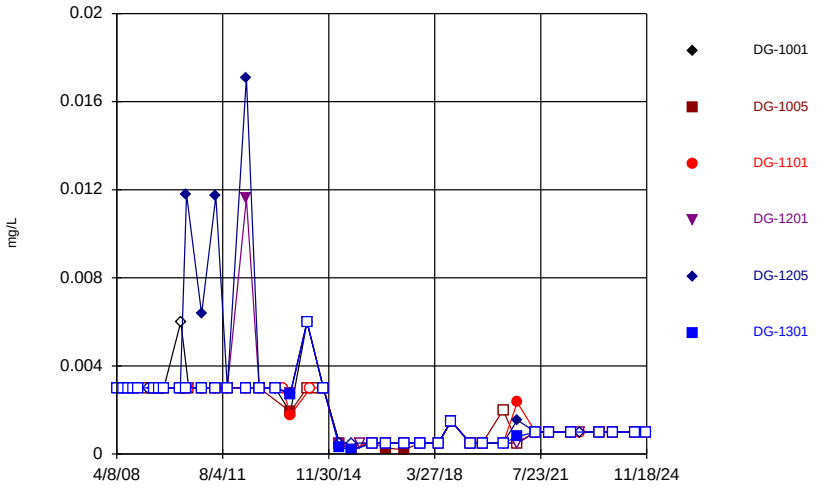
Time Series



Constituent: Acetone Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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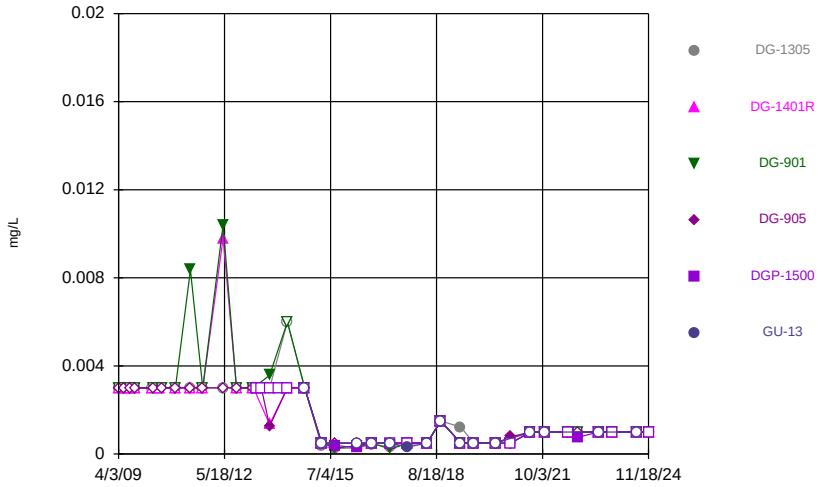
Time Series



Constituent: Antimony Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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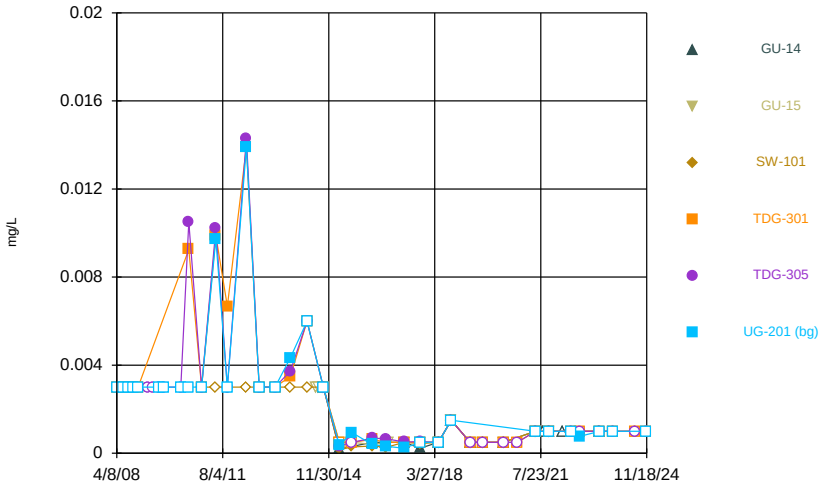
Time Series



Constituent: Antimony Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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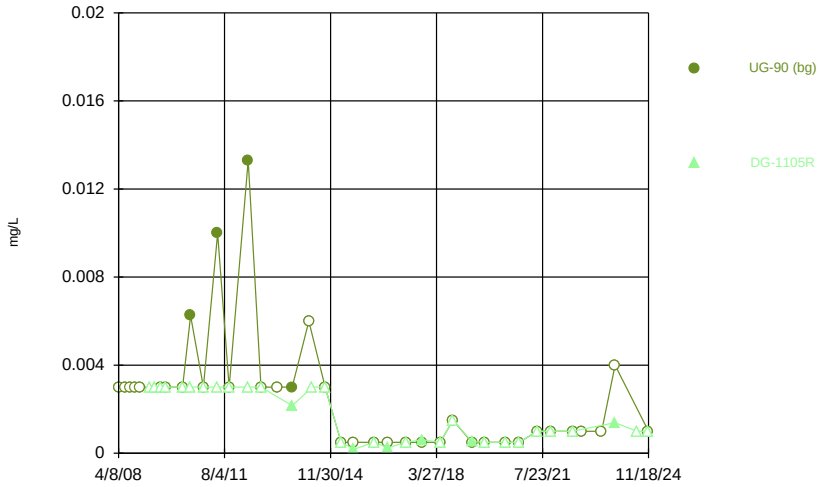
Time Series



Constituent: Antimony Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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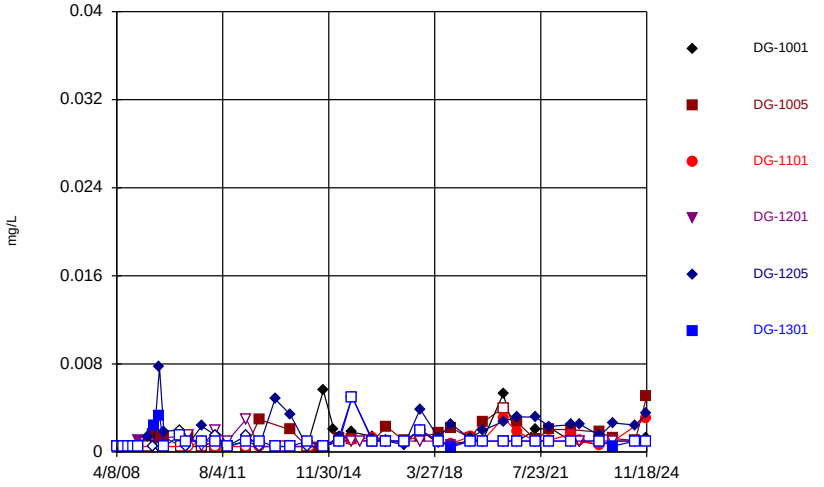
Time Series



Constituent: Antimony Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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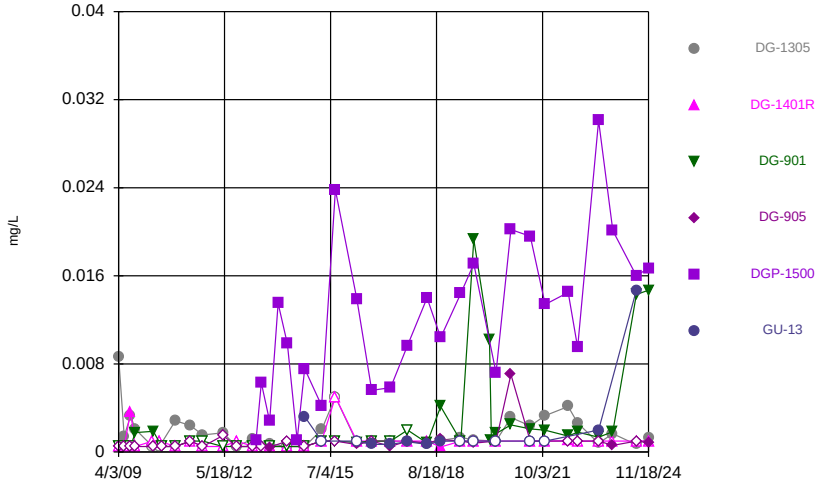
Time Series



Constituent: Arsenic Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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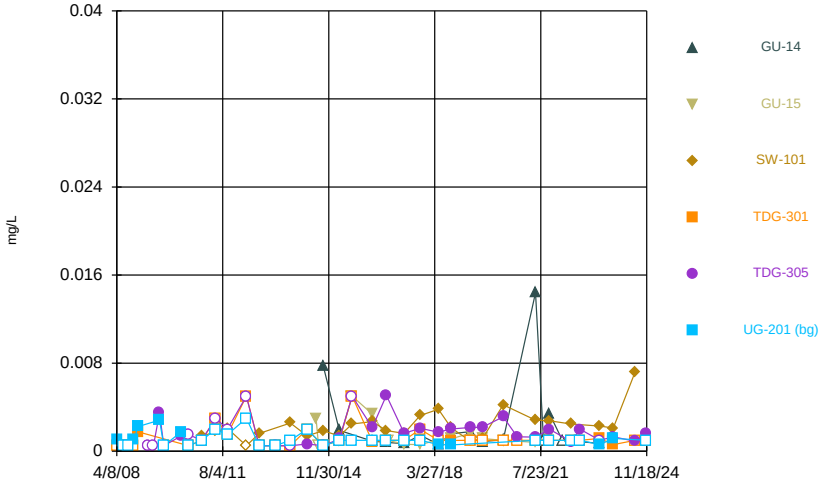
Time Series



Constituent: Arsenic Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

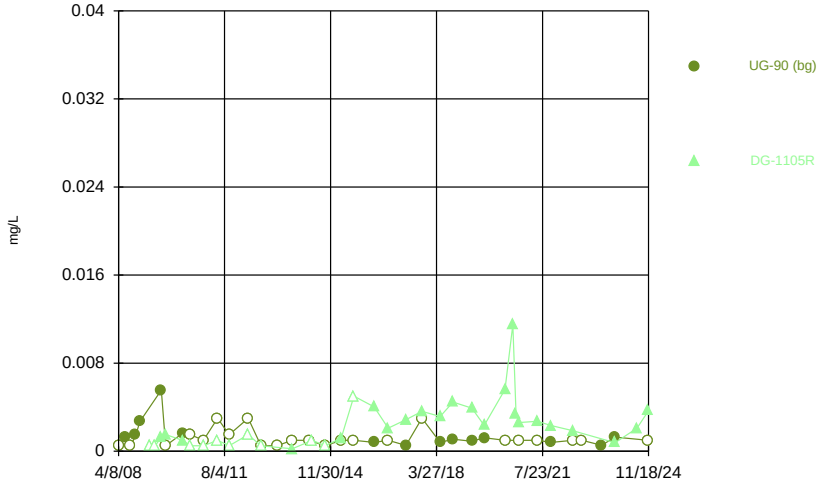
Time Series



Constituent: Arsenic Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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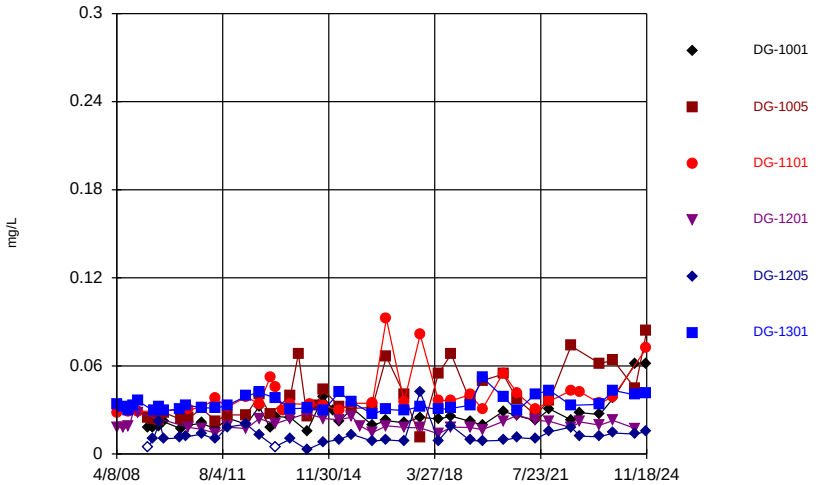
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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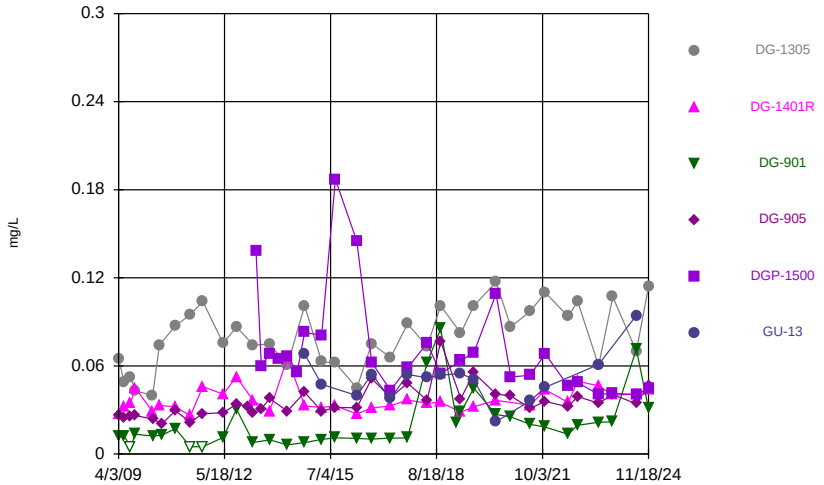
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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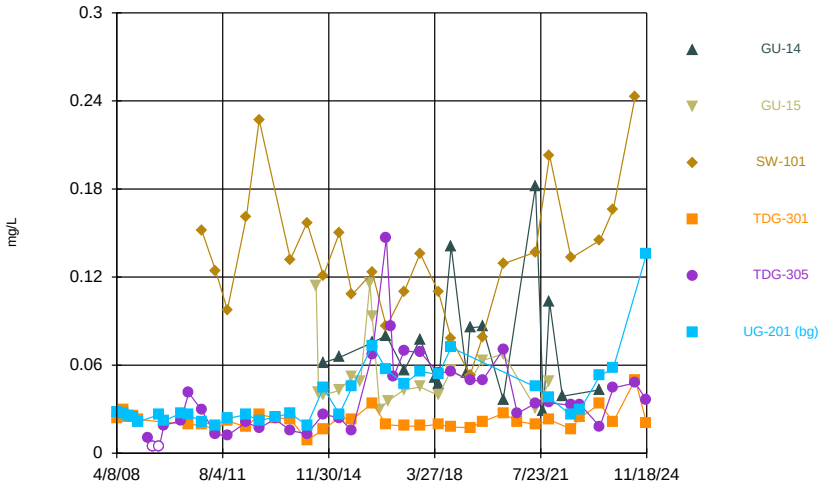
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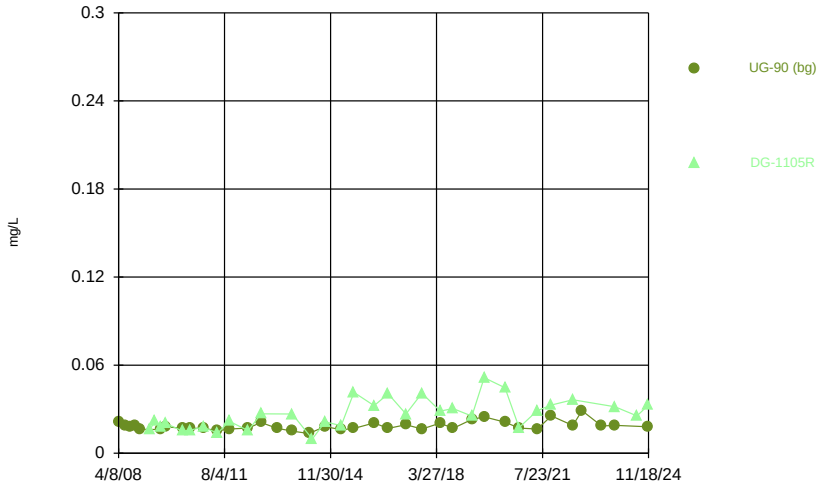
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Constituent: Barium Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

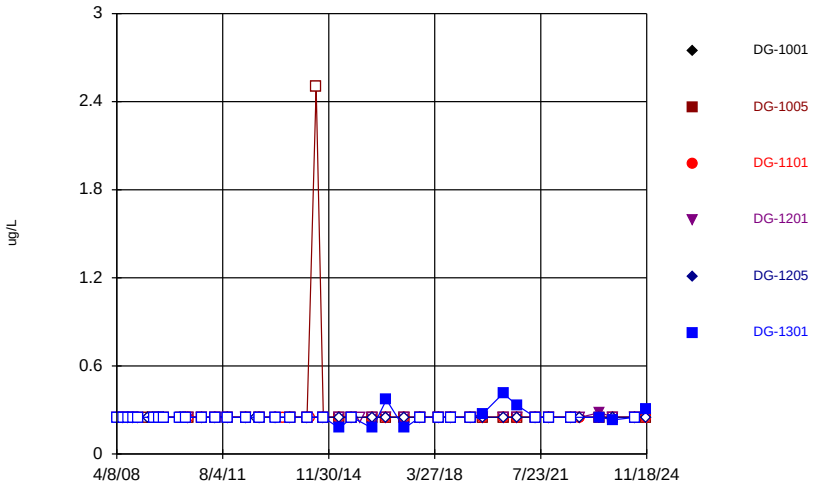
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Constituent: Barium Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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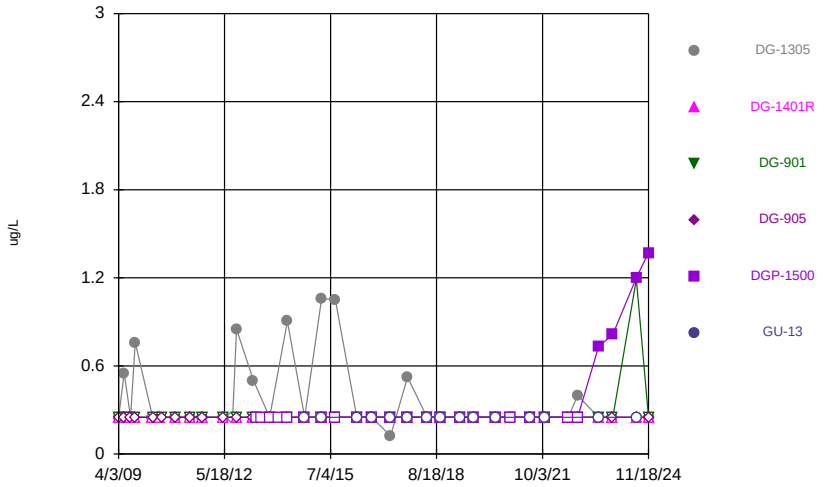
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Constituent: Benzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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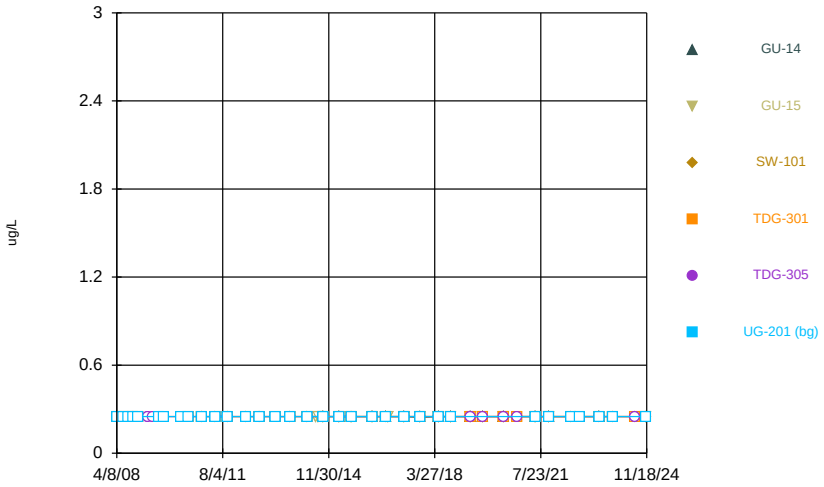
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Constituent: Benzene Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
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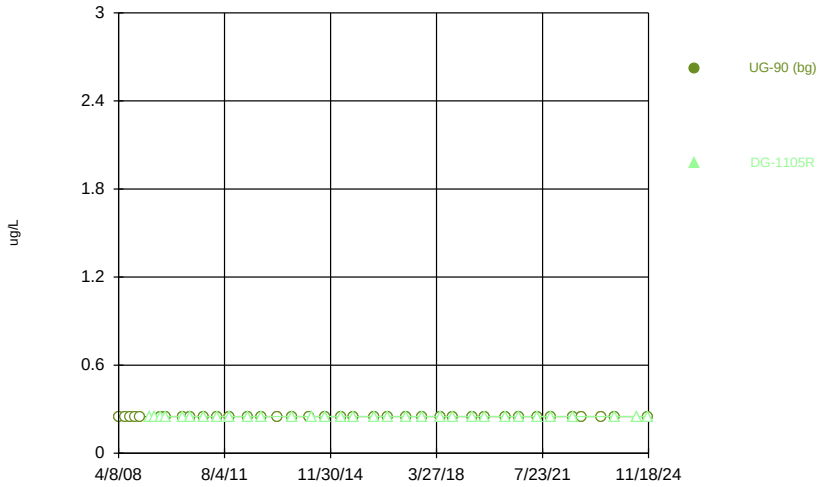
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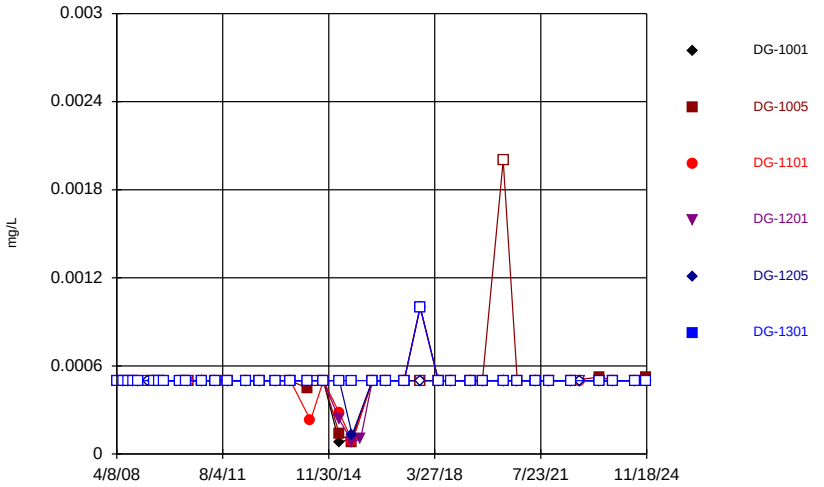
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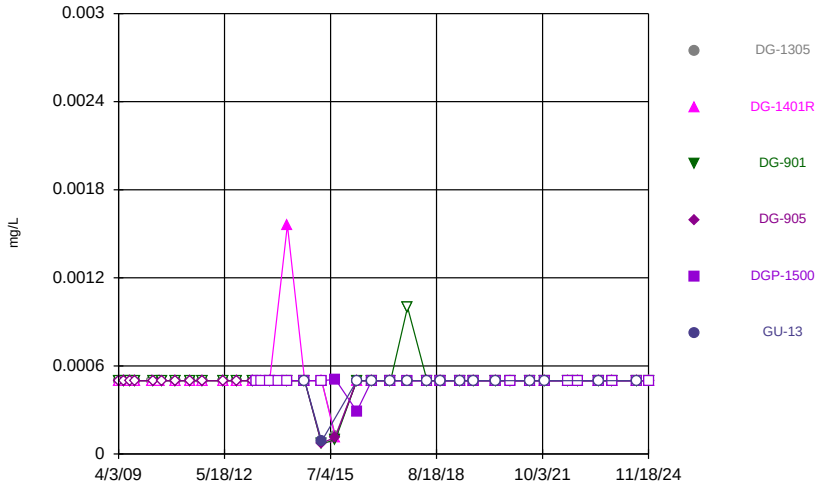
Time Series



Constituent: Beryllium Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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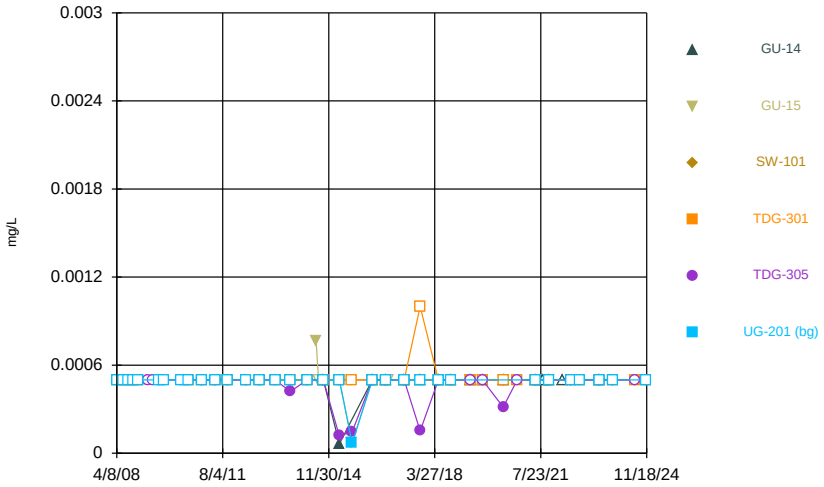
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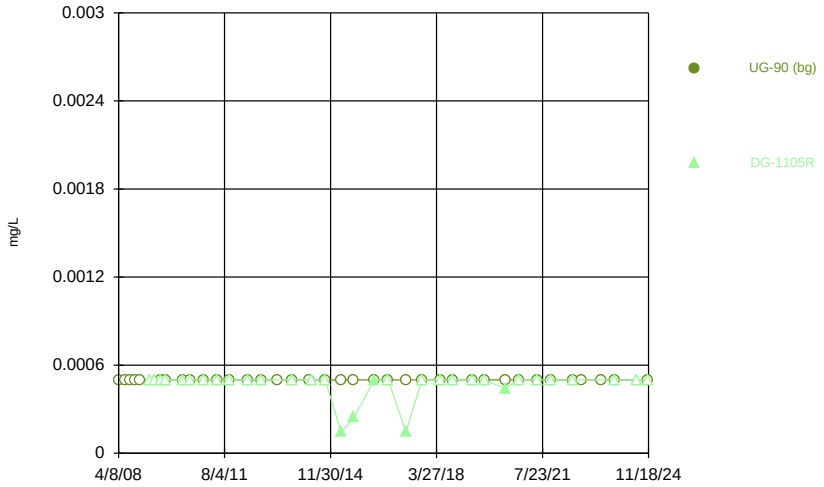
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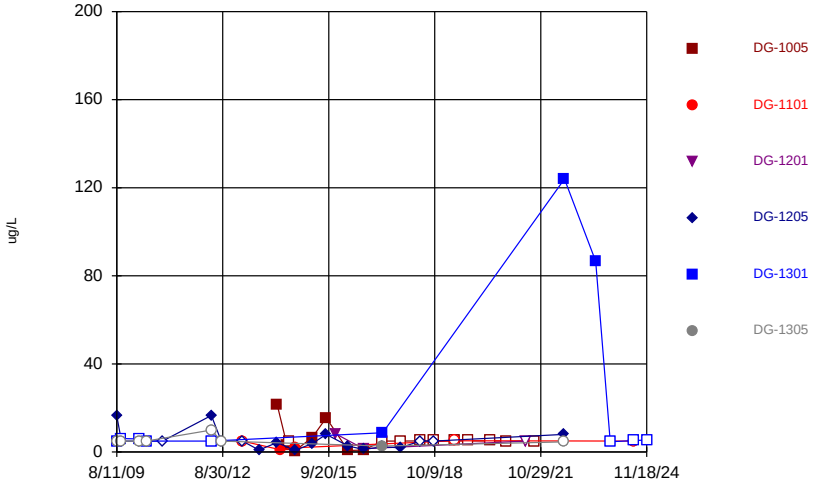
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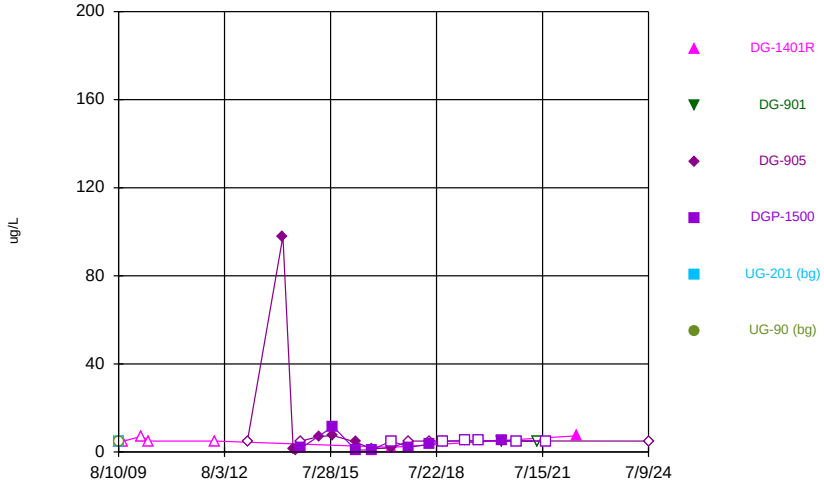
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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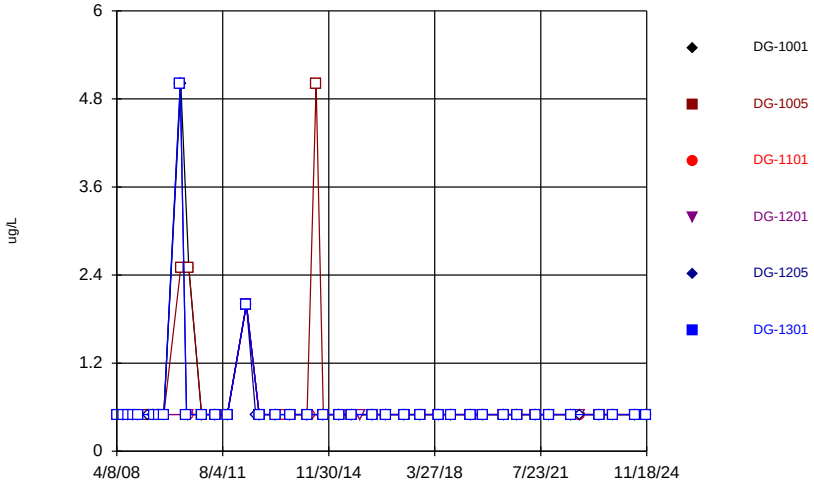
Time Series



Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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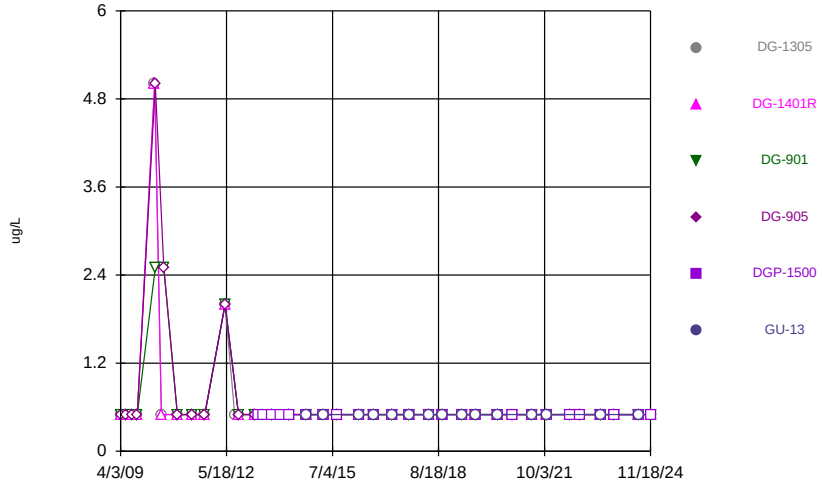
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Constituent: Bromodichloromethane Analysis Run 3/3/2025 10:11 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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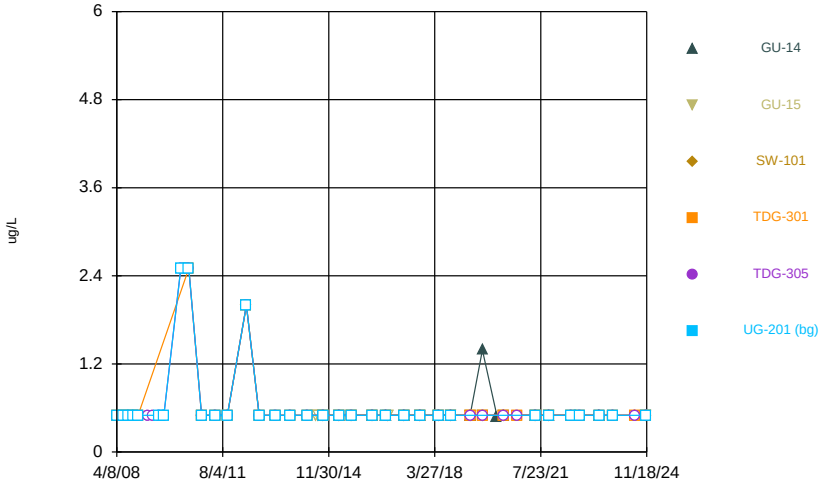
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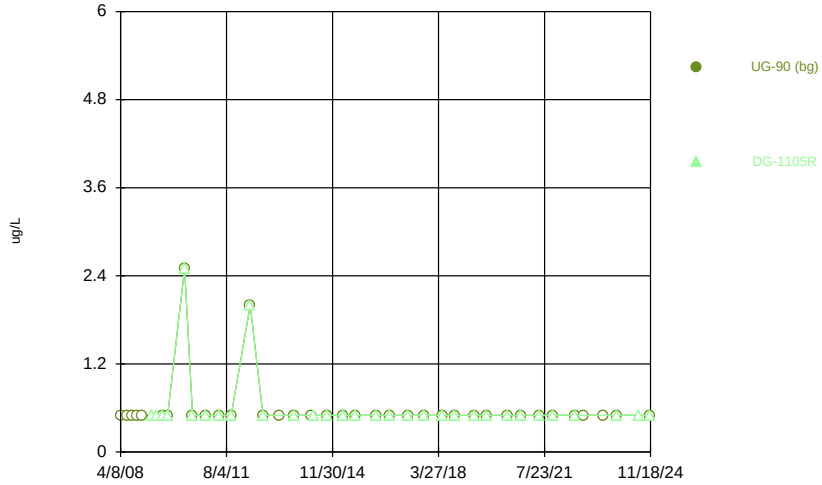
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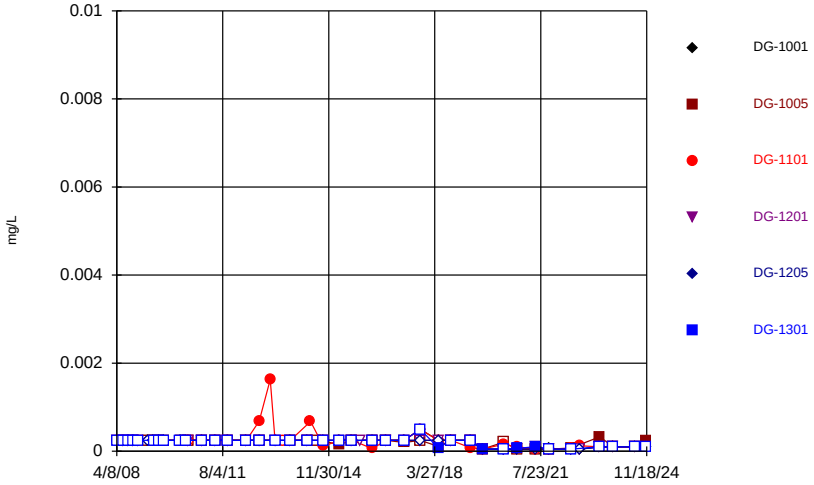
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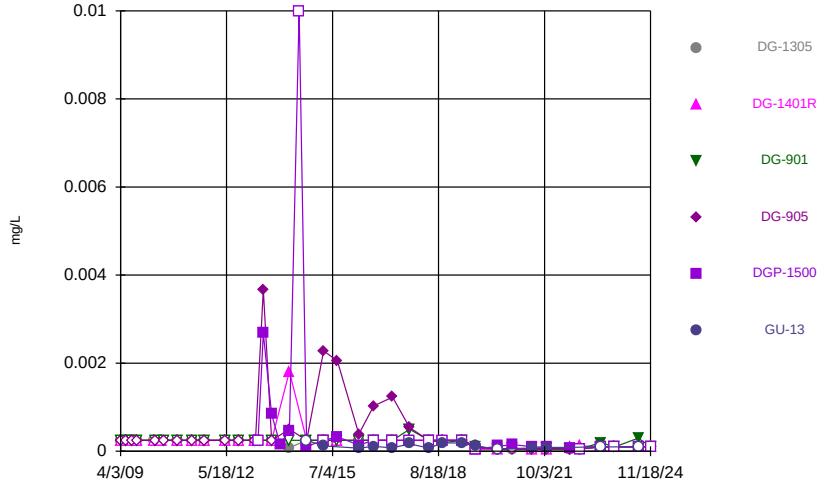
Time Series



Constituent: Cadmium Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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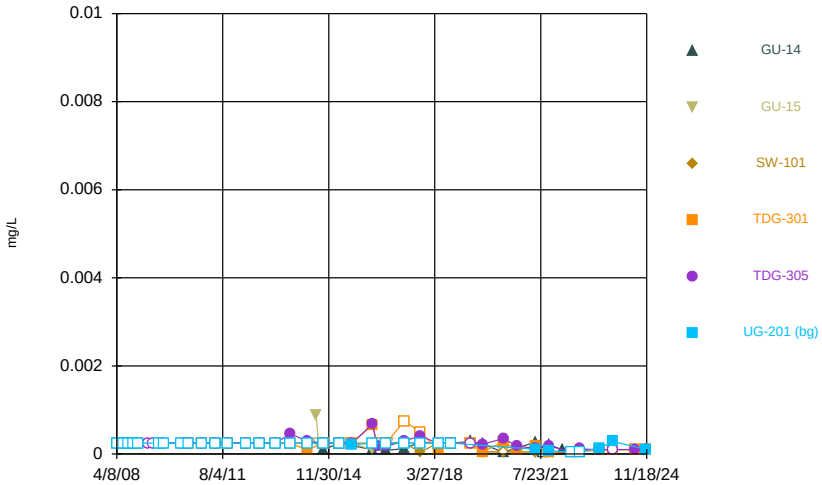
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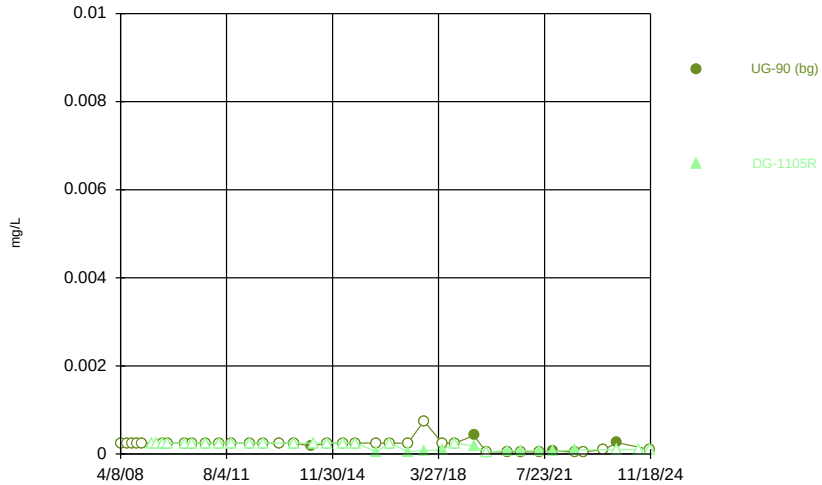
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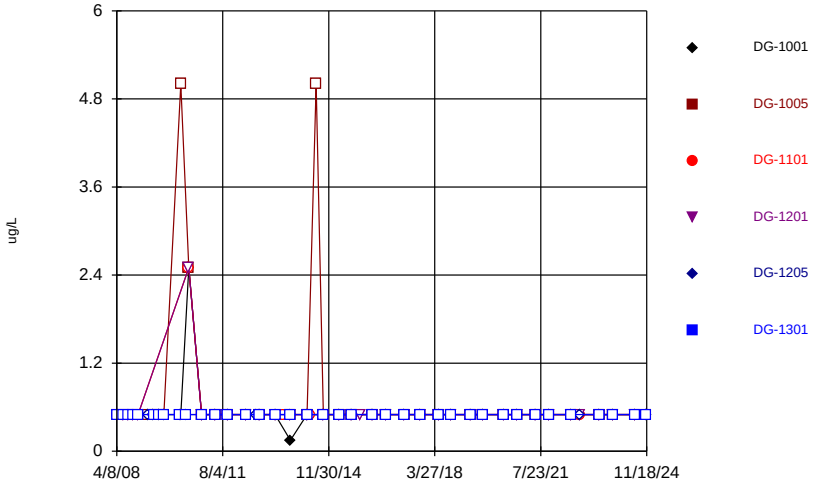
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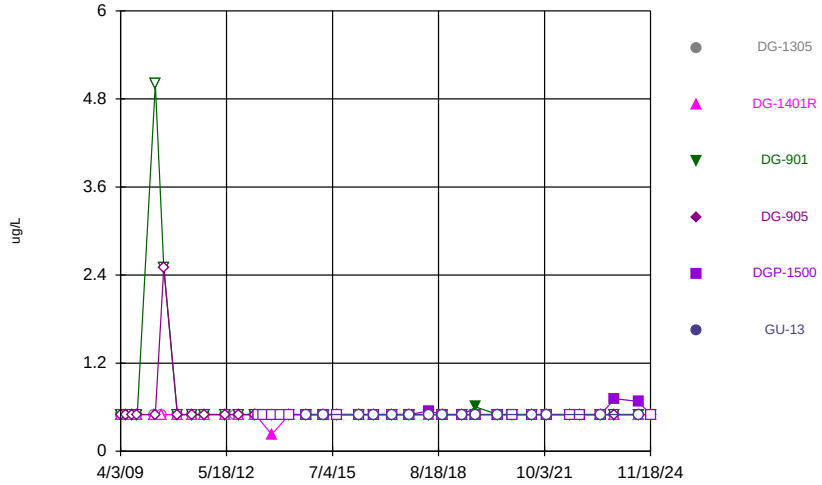
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Constituent: Carbon disulfide Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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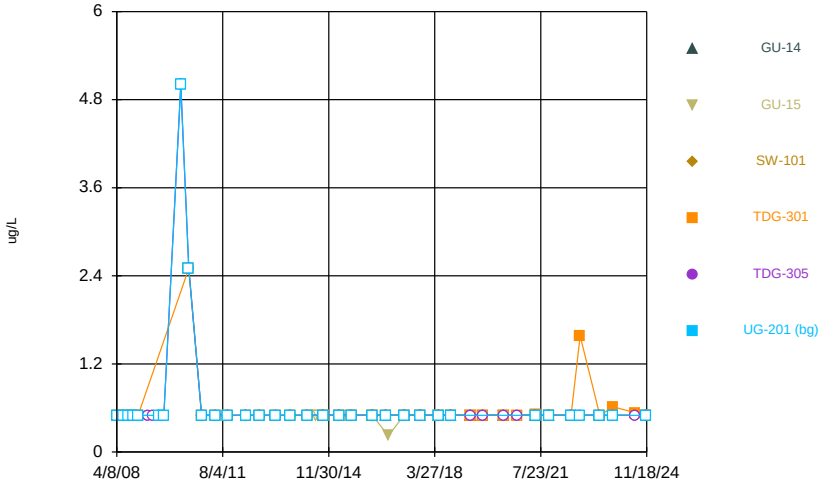
Time Series



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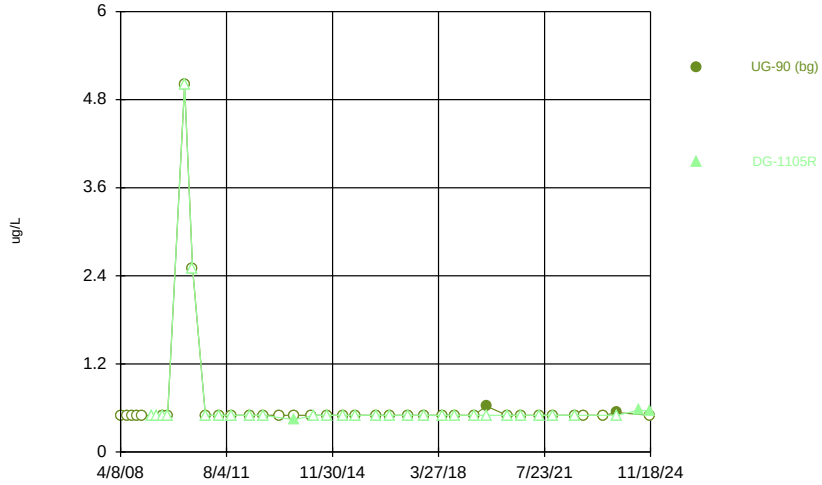
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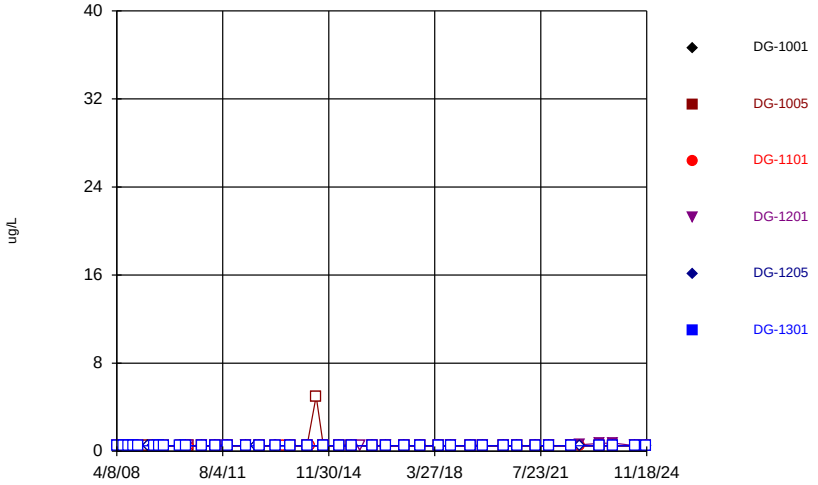
Time Series



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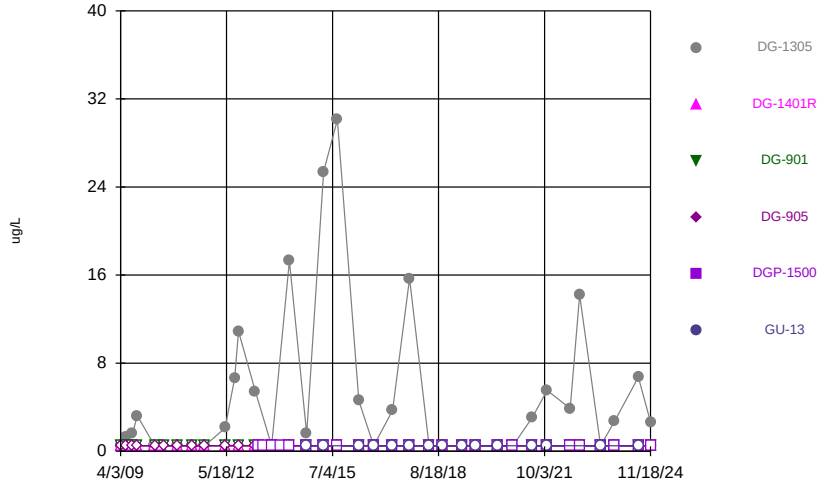
Time Series



Constituent: Chlorobenzene Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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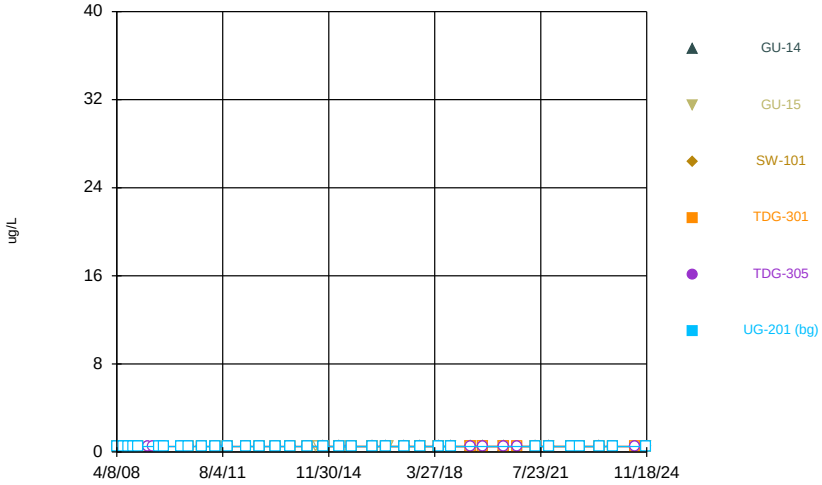
Time Series



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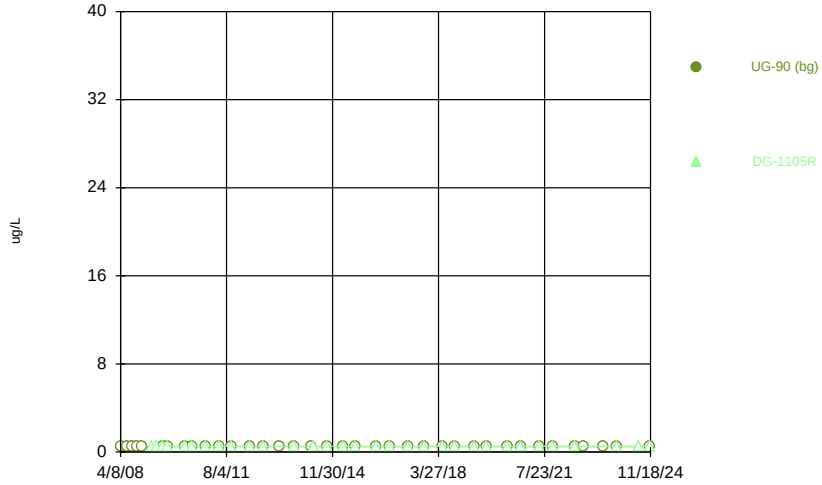
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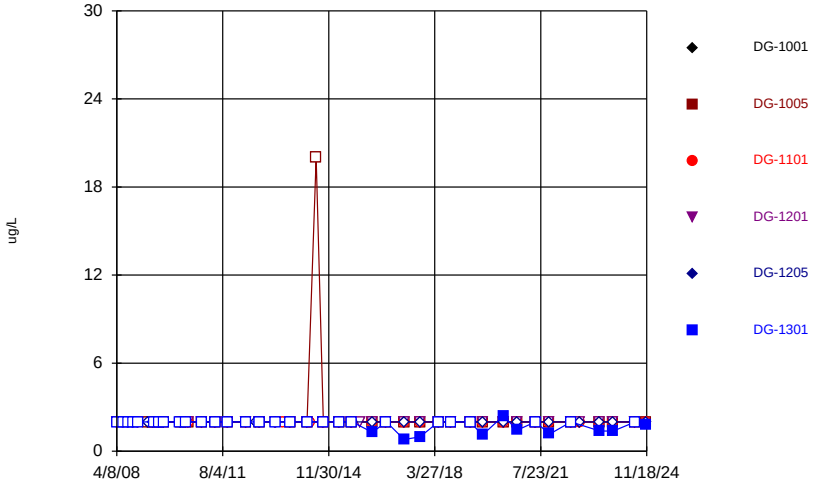
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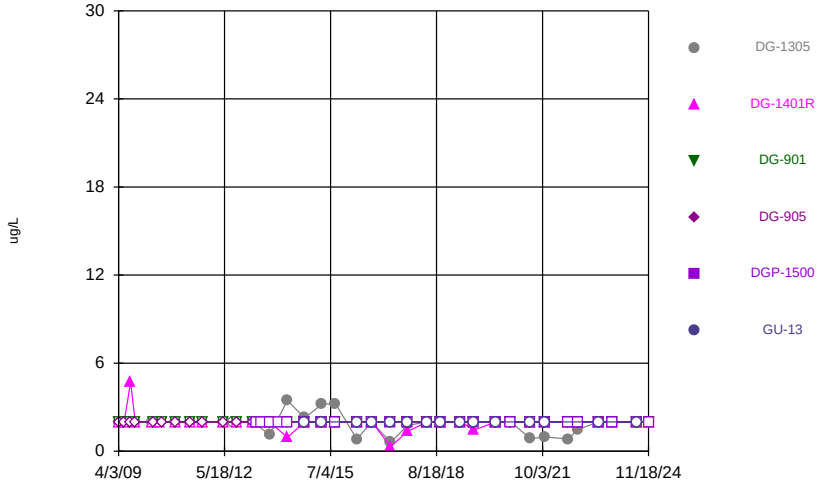
Time Series



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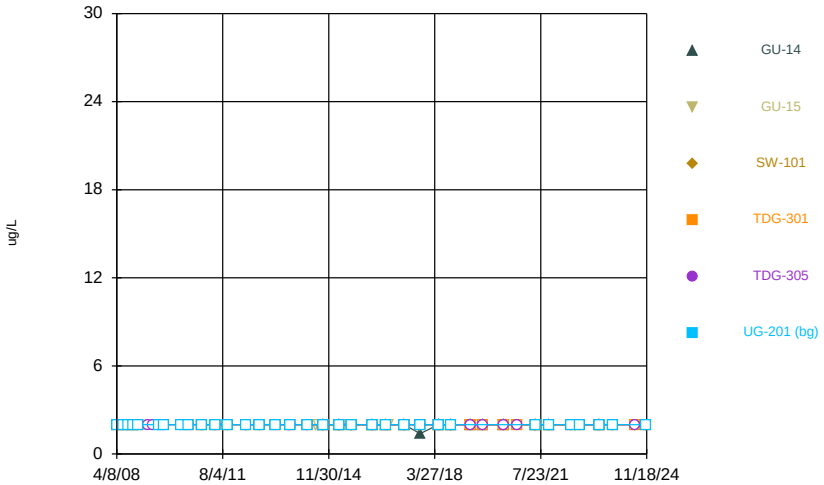
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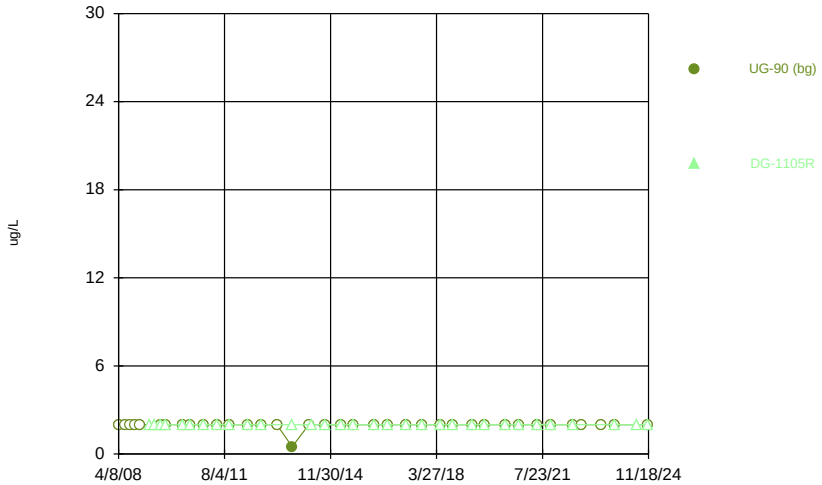
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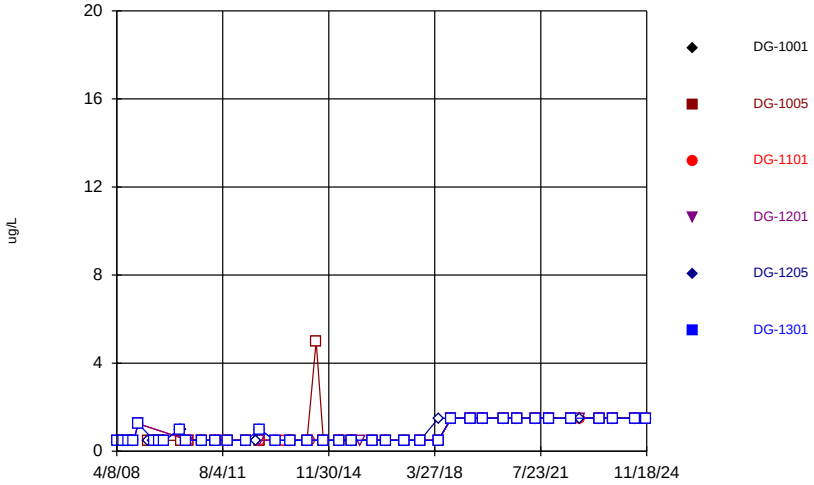
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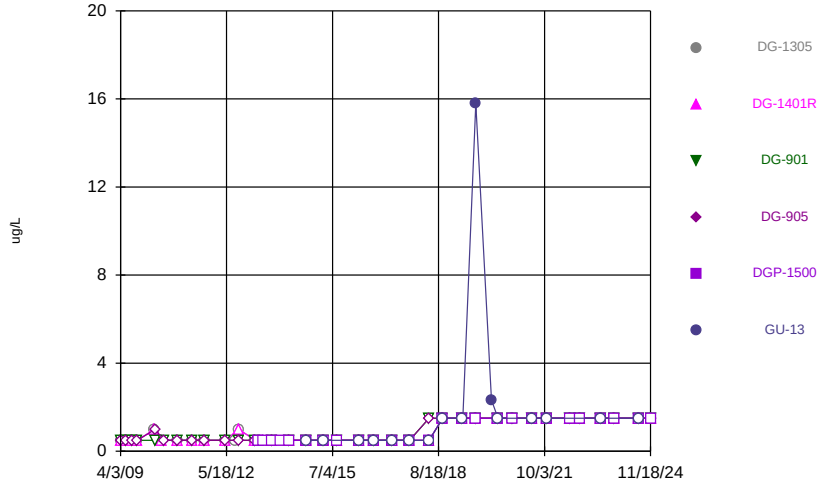
Time Series



Constituent: Chloroform Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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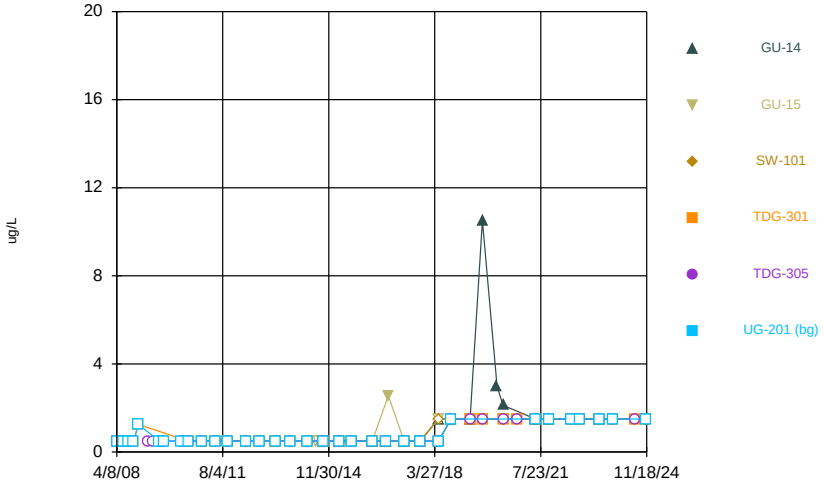
Time Series



Constituent: Chloroform Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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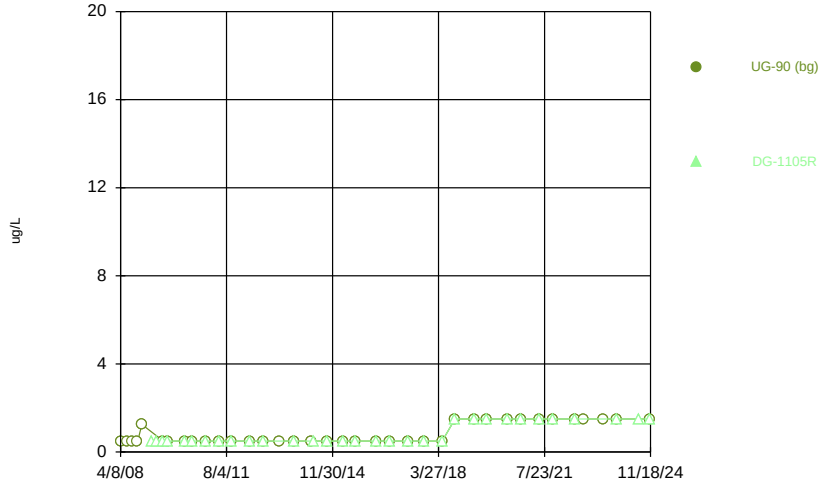
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Constituent: Chloroform Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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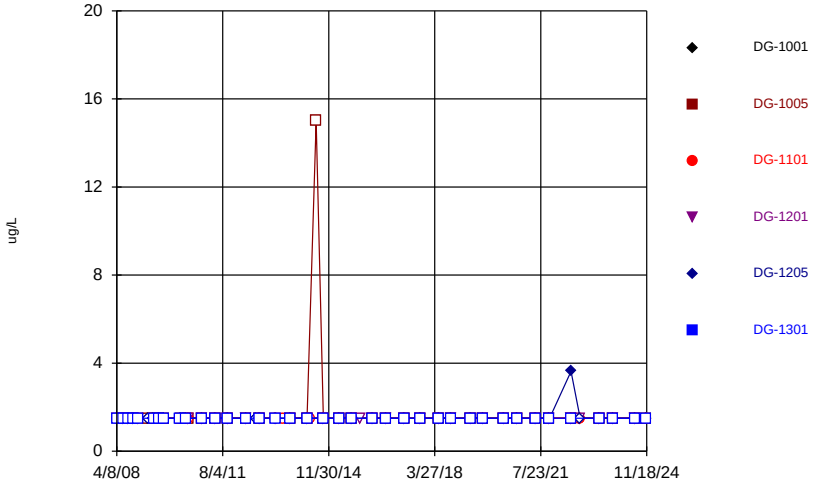
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Constituent: Chloroform Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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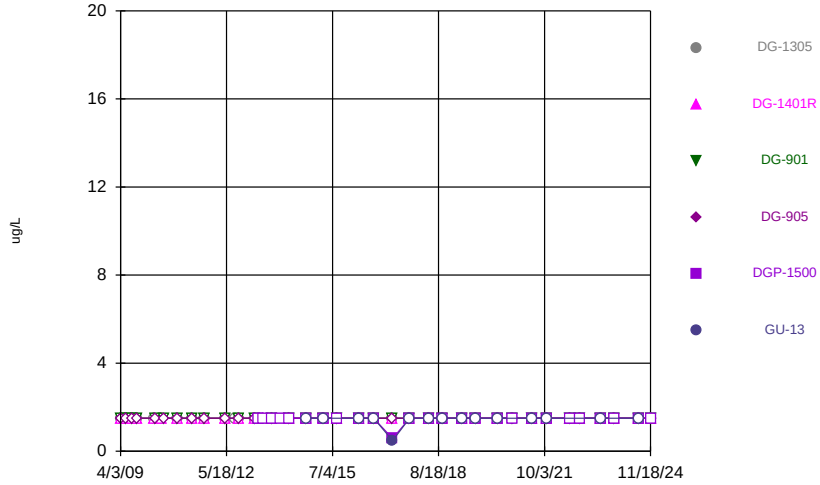
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Constituent: Chloromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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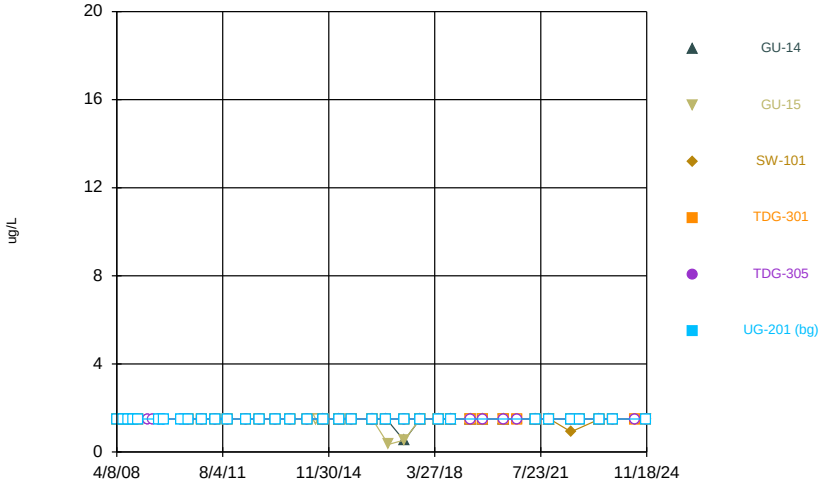
Time Series



Constituent: Chloromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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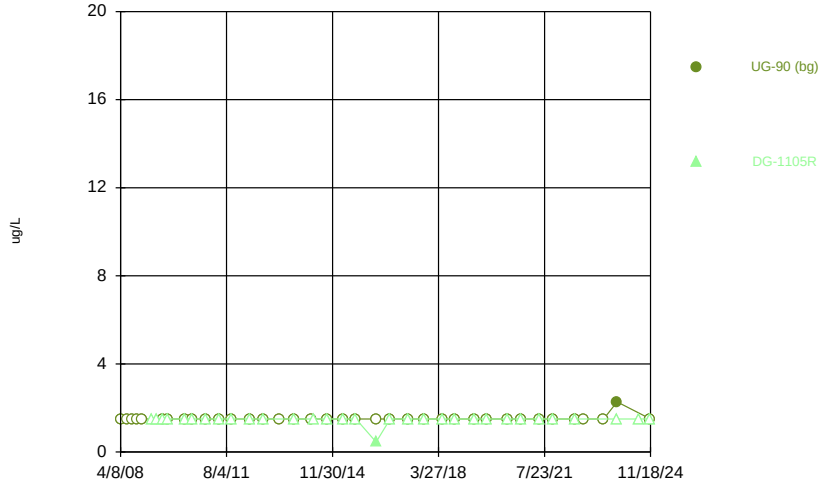
Time Series



Constituent: Chloromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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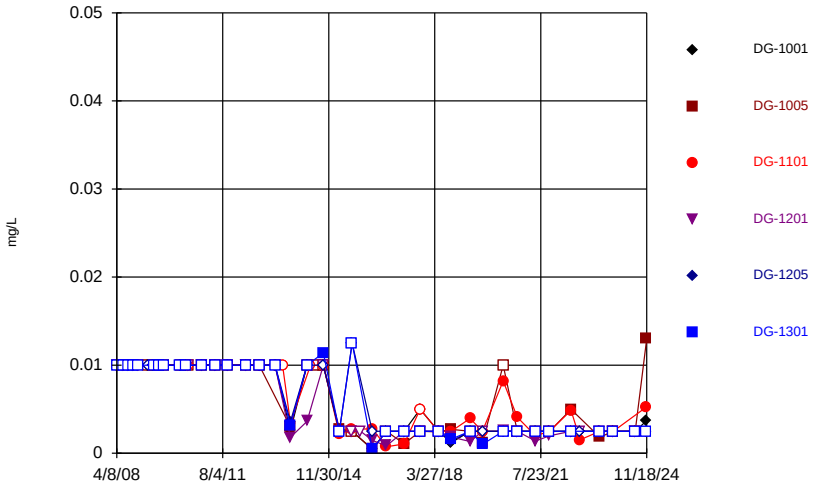
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Constituent: Chloromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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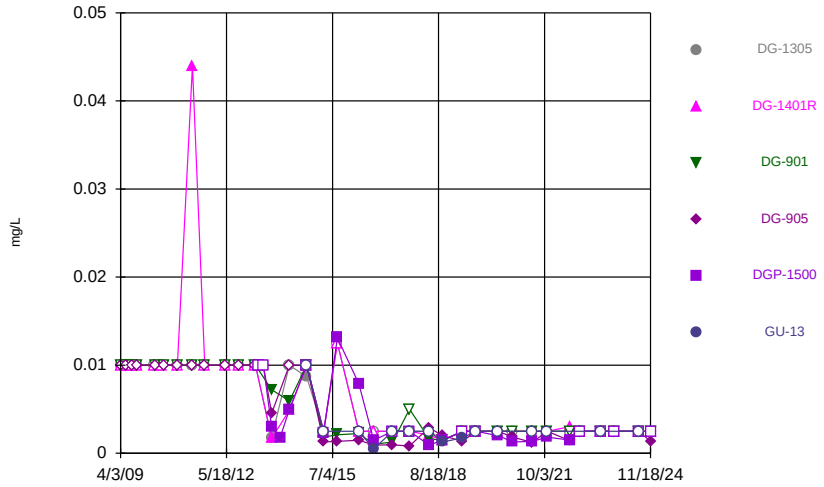
Time Series



Constituent: Chromium Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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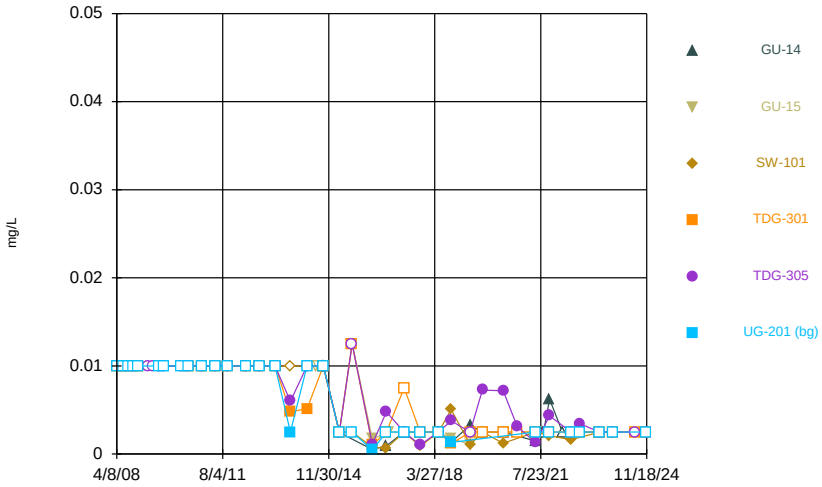
Time Series



Constituent: Chromium Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

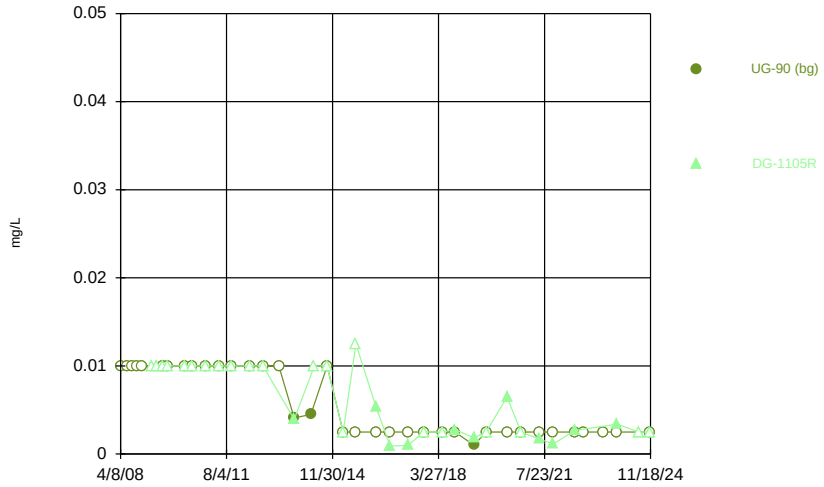
Time Series



Constituent: Chromium Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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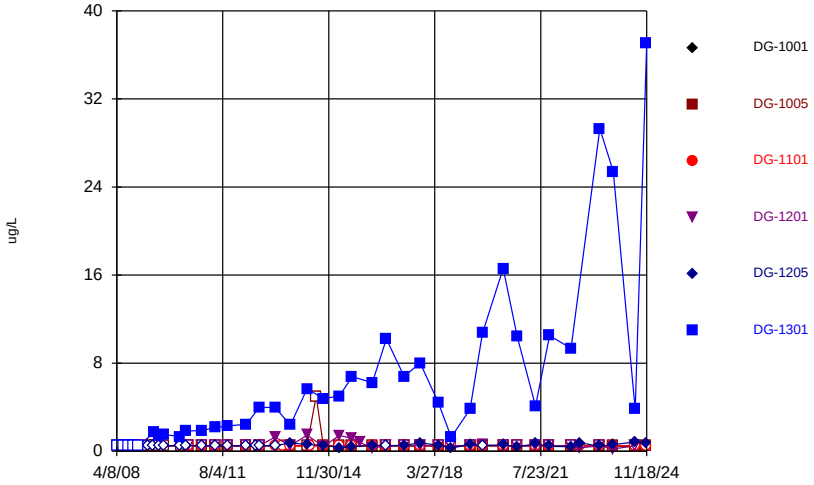
Time Series



Constituent: Chromium Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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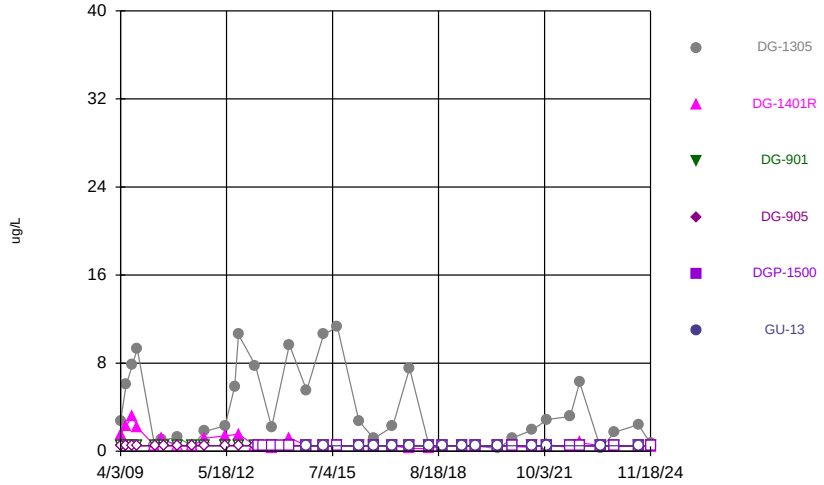
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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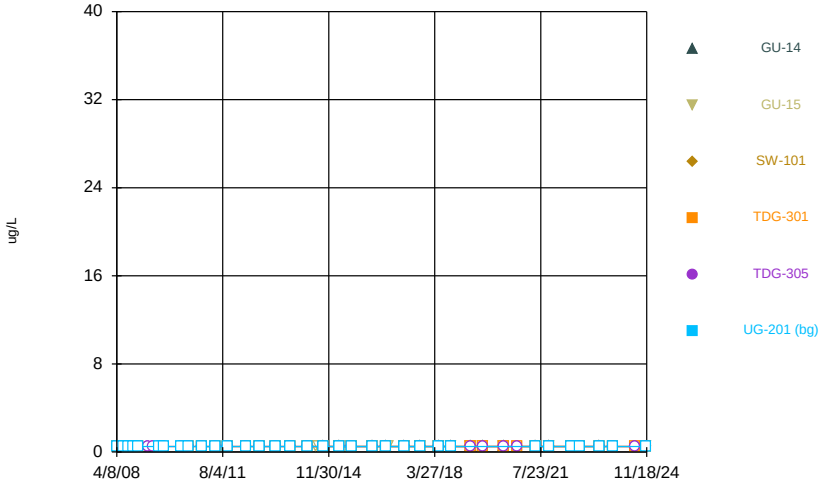
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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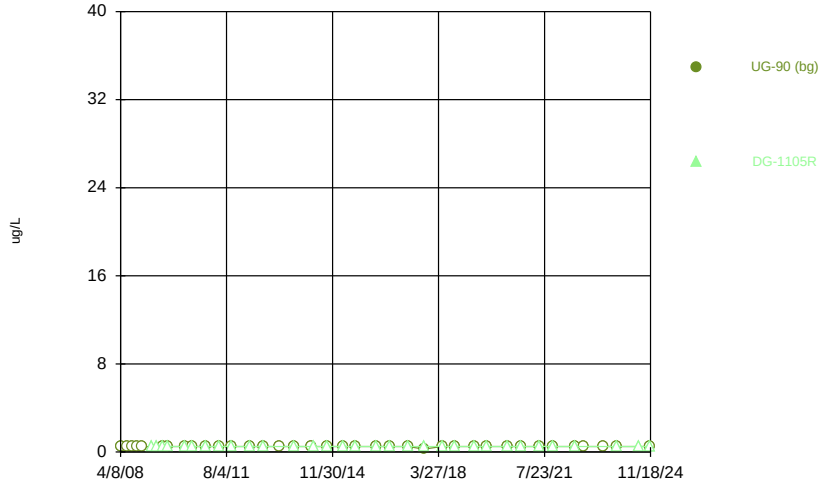
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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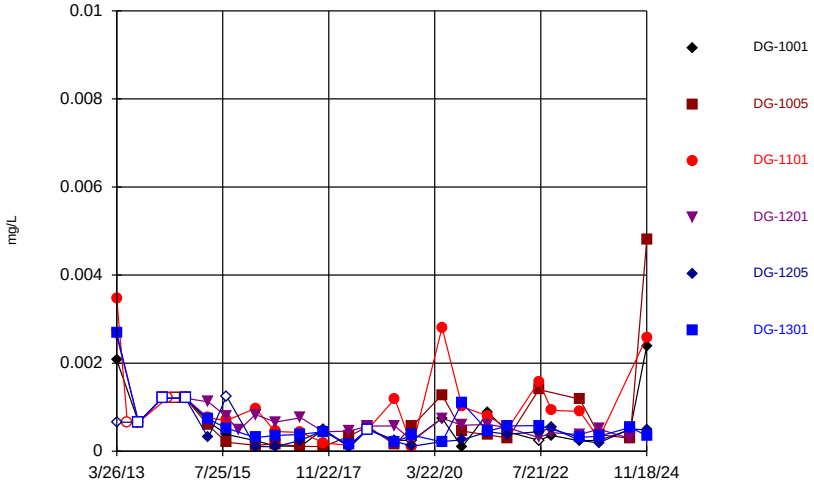
Time Series



Constituent: cis-1,2-Dichloroethene Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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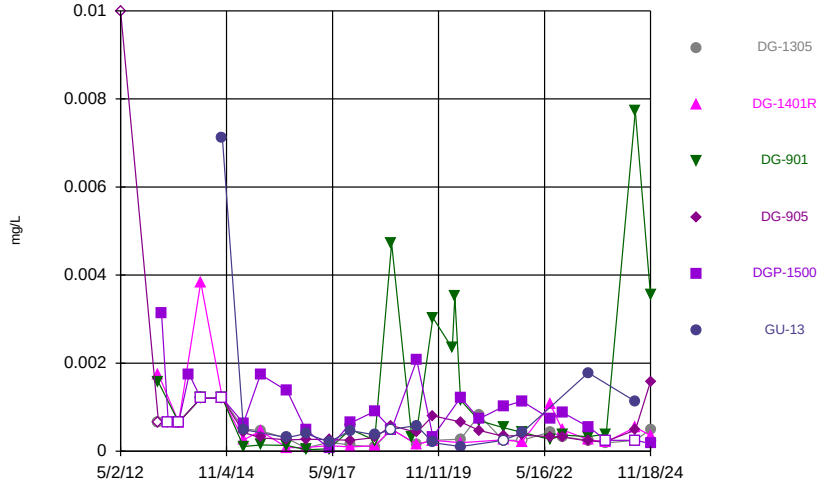
Time Series



Constituent: Cobalt Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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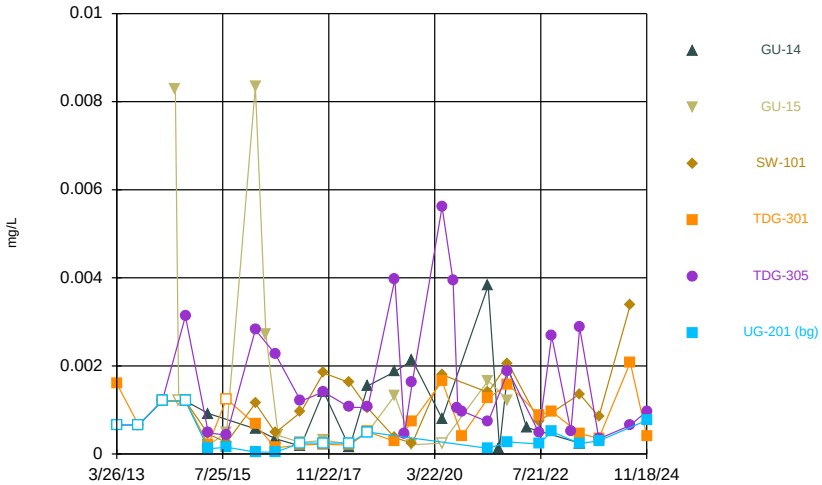
Time Series



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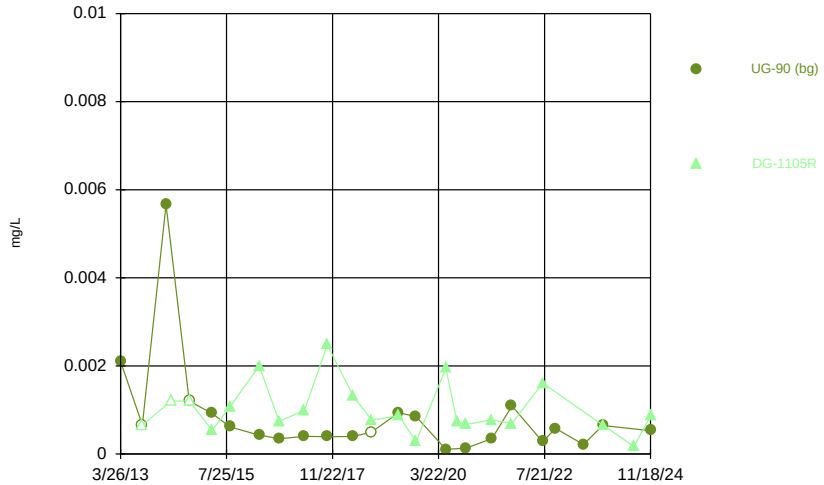
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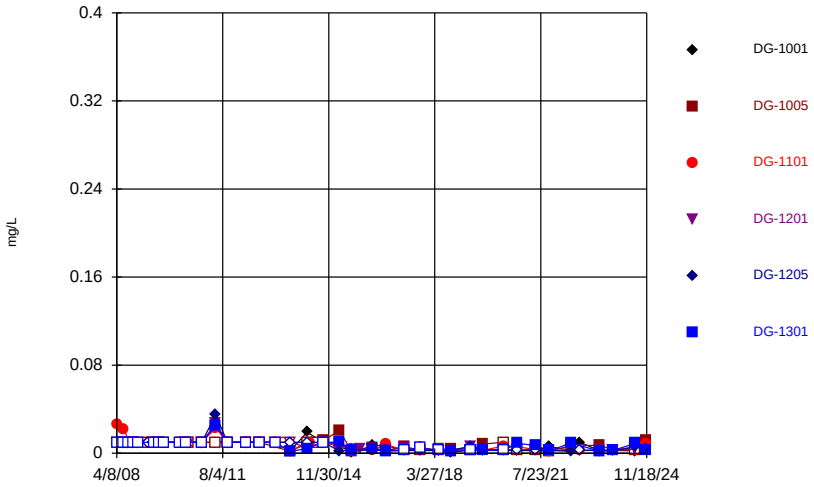
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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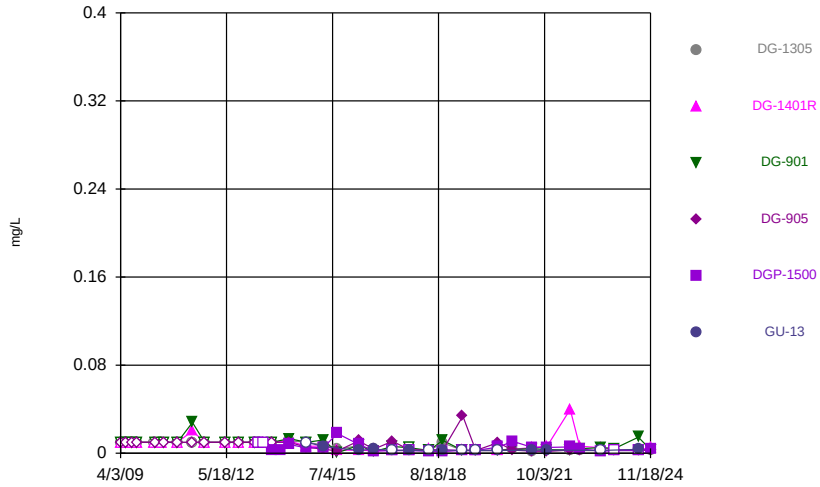
Time Series



Constituent: Copper Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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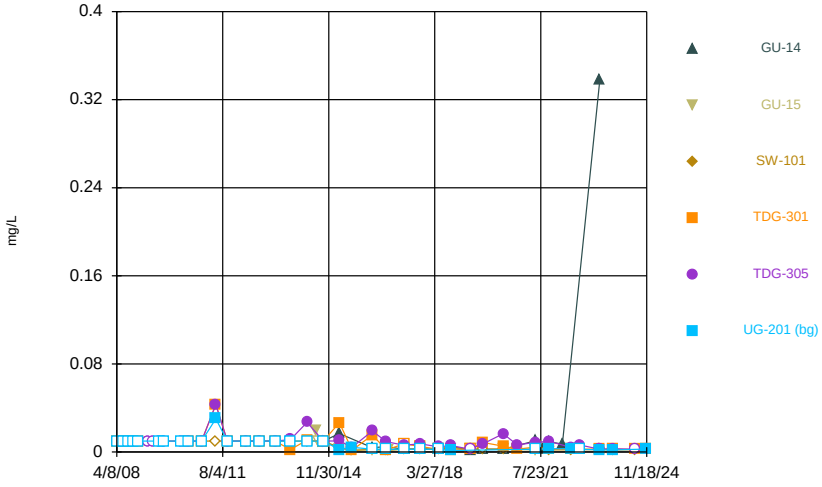
Time Series



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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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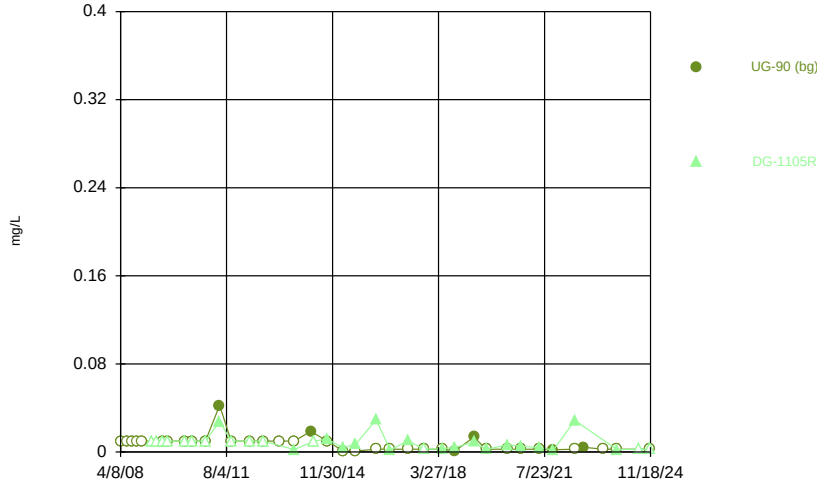
Time Series



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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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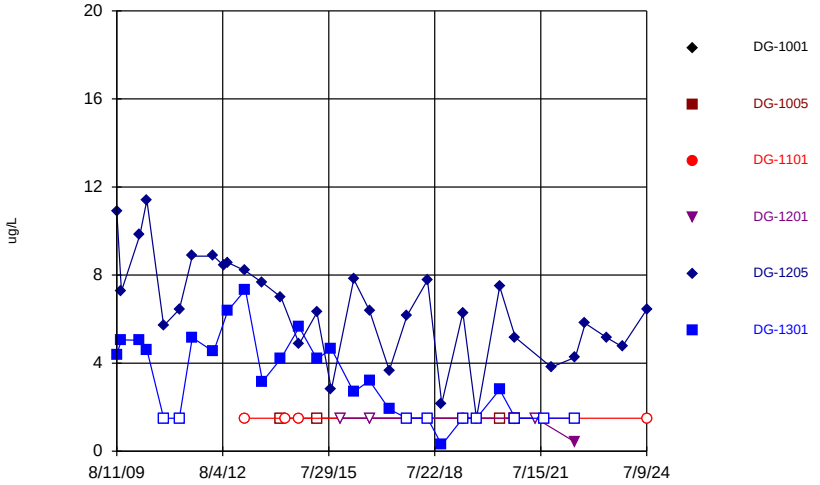
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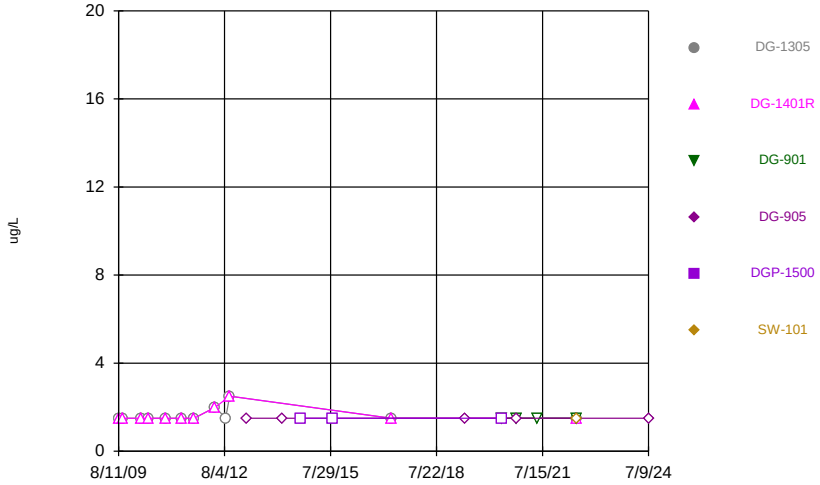
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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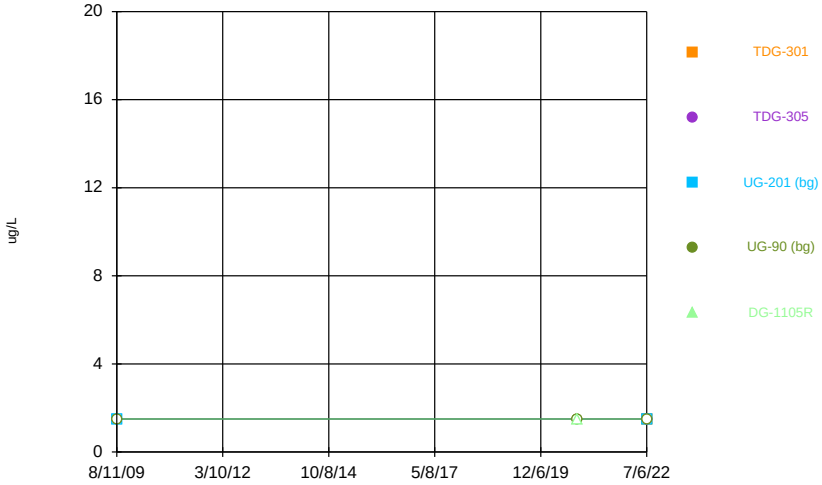
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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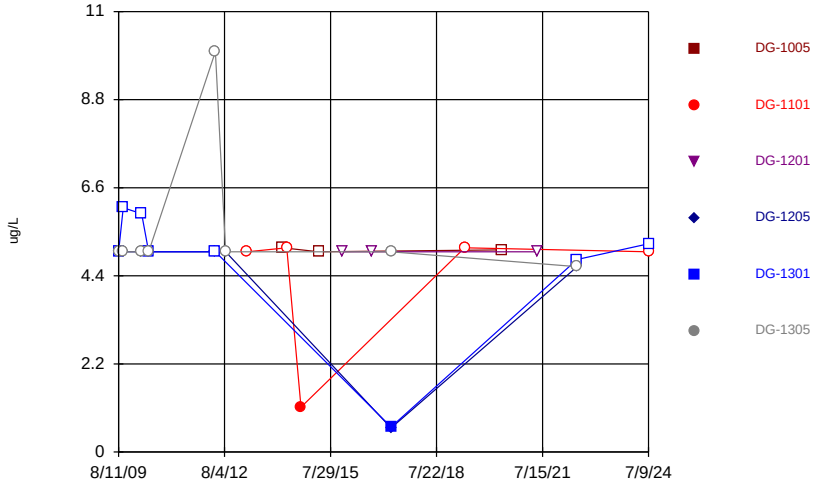
Time Series



Constituent: Dichlorodifluoromethane Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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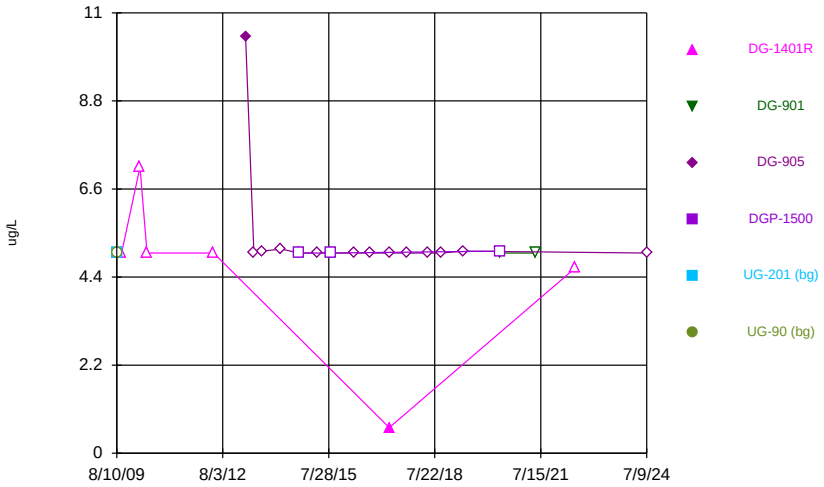
Time Series



Constituent: Di-n-butyl phthalate Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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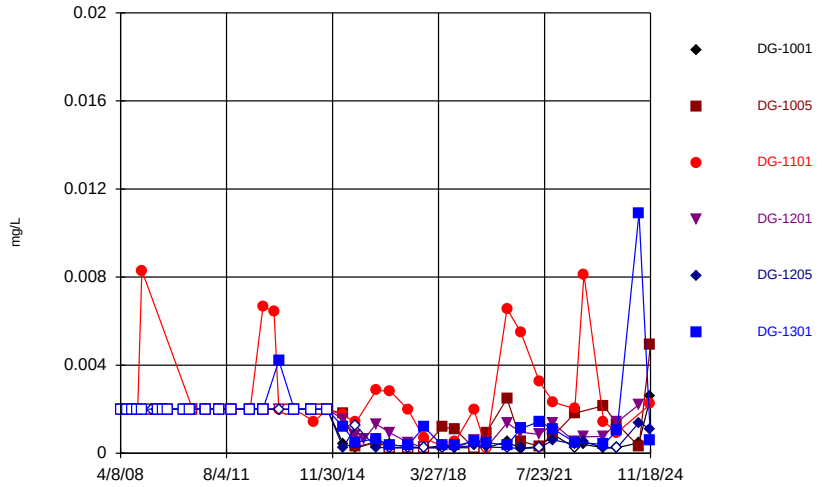
Time Series



Constituent: Di-n-butyl phthalate Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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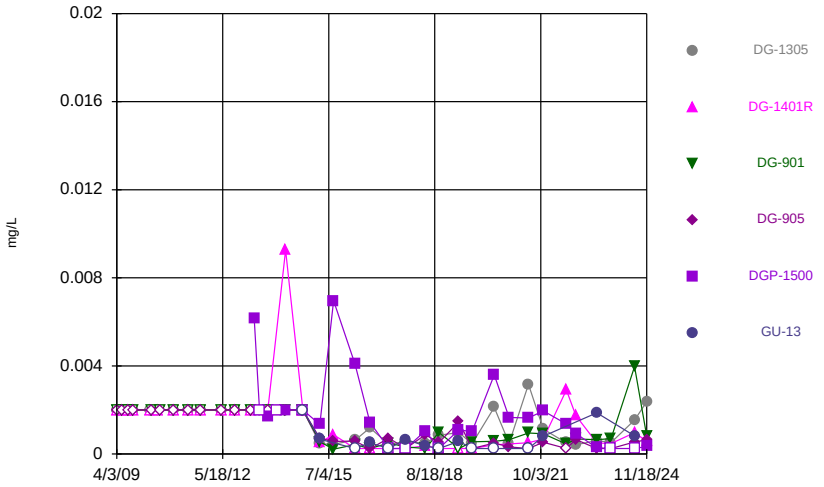
Time Series



Constituent: Lead Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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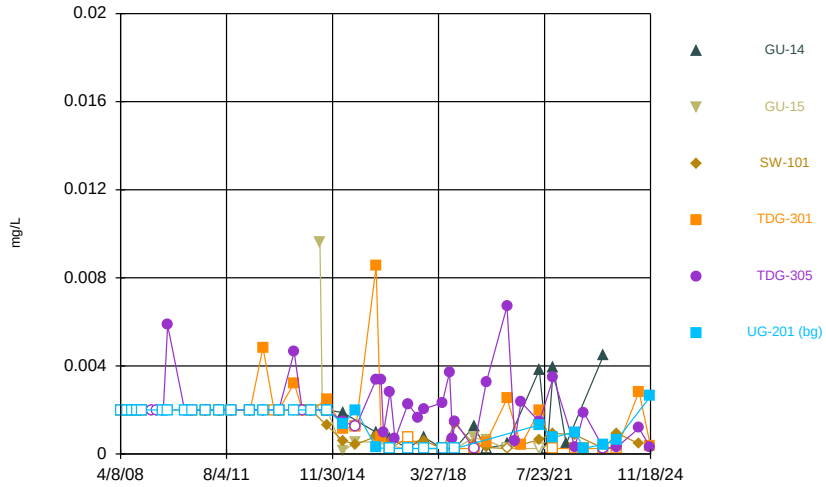
Time Series



Constituent: Lead Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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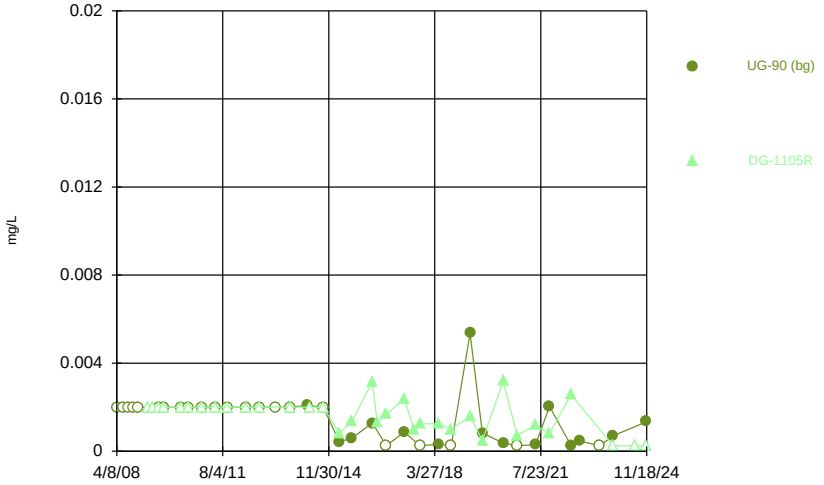
Time Series



Constituent: Lead Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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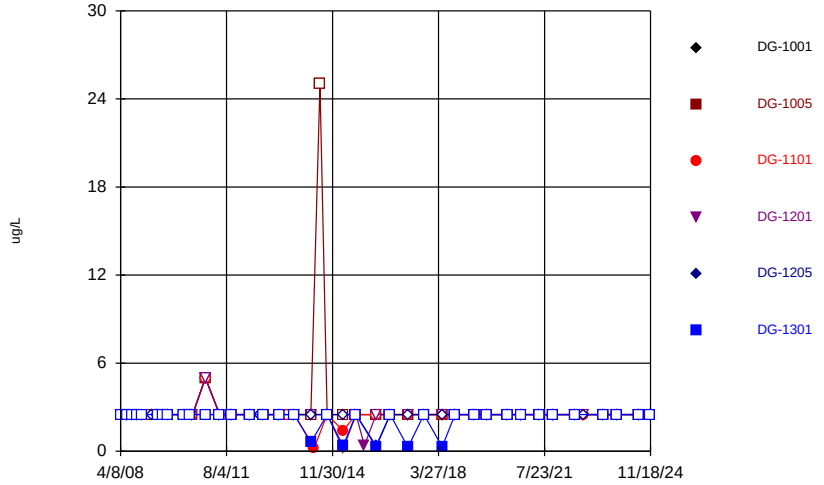
Time Series



Constituent: Lead Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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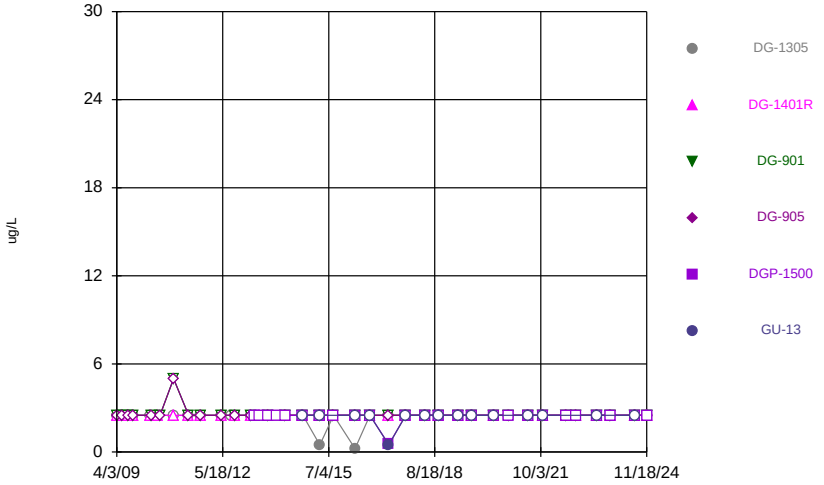
Time Series



Constituent: Methylene Chloride Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

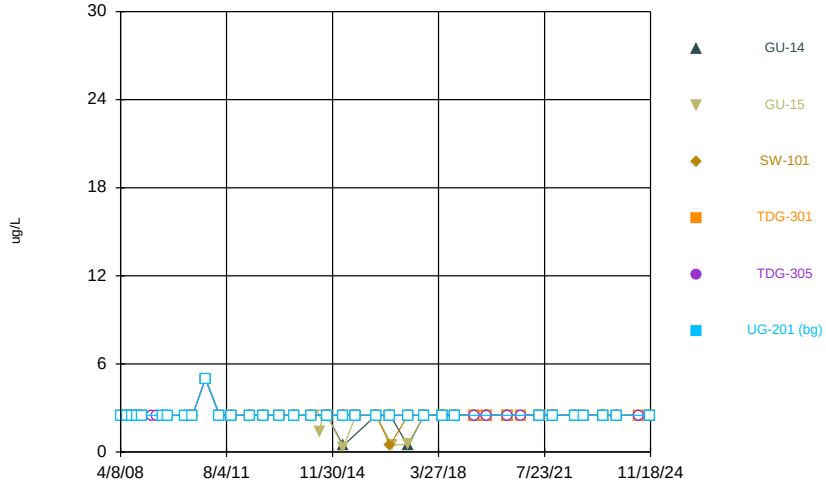
Time Series



Constituent: Methylene Chloride Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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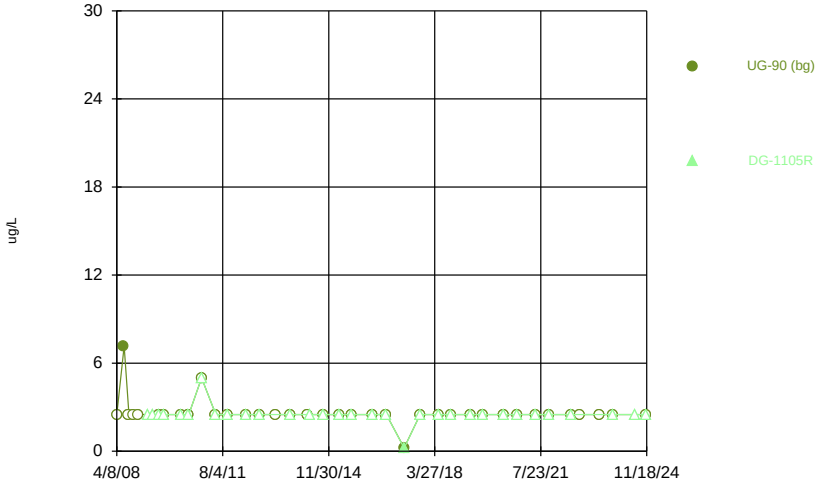
Time Series



Constituent: Methylene Chloride Analysis Run 3/3/2025 10:12 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

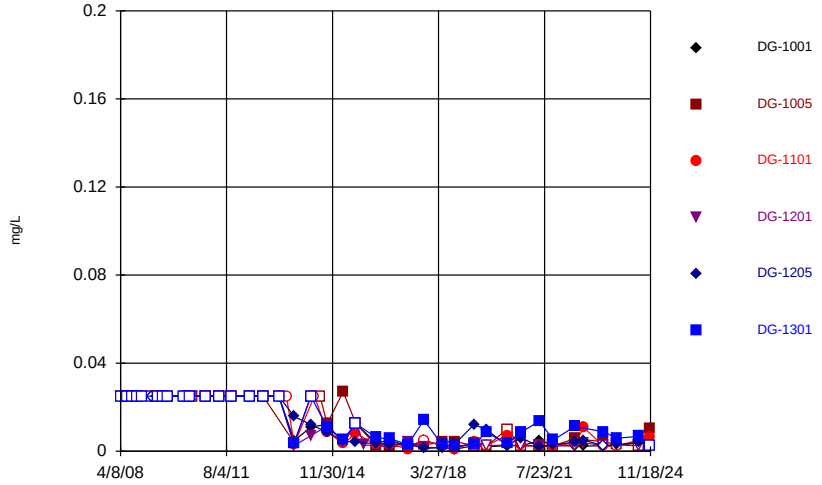
Time Series



Constituent: Methylene Chloride Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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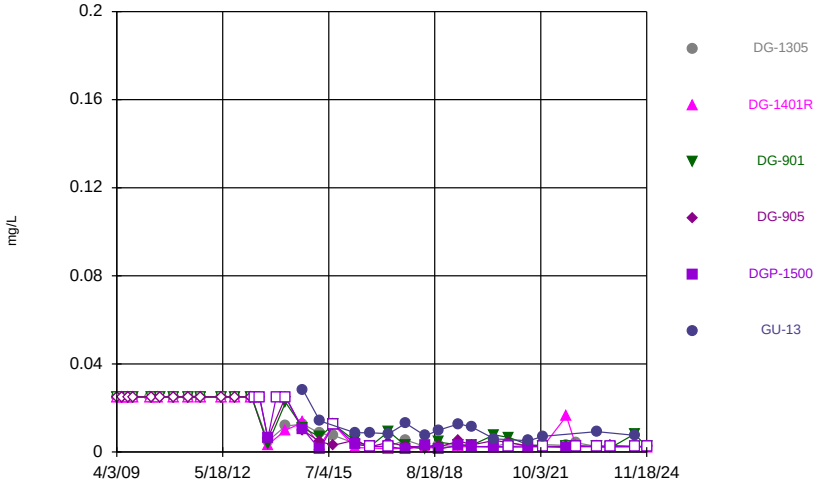
Time Series



Constituent: Nickel Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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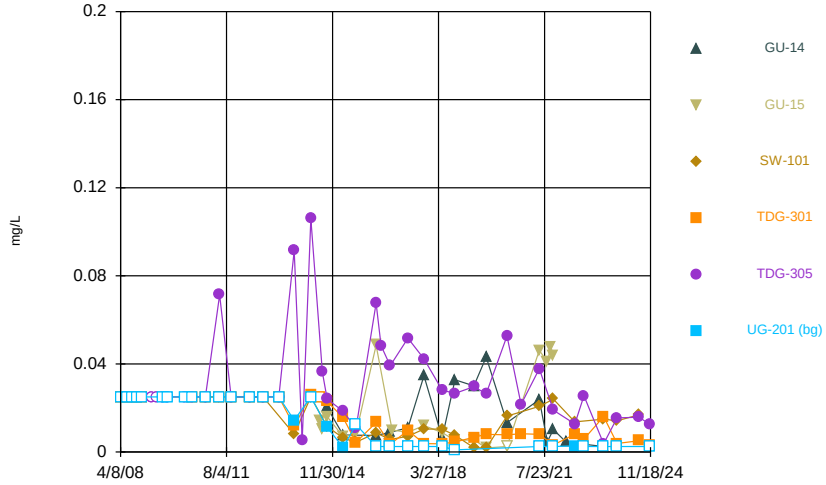
Time Series



Constituent: Nickel Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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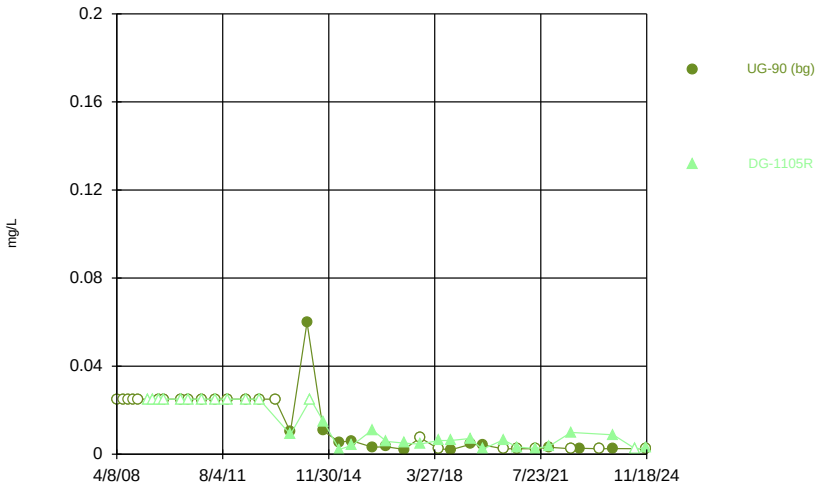
Time Series



Constituent: Nickel Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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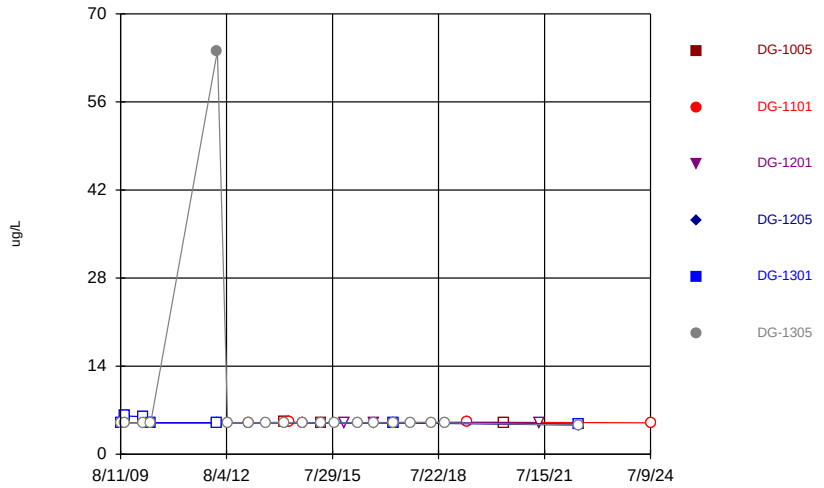
Time Series



Constituent: Nickel Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

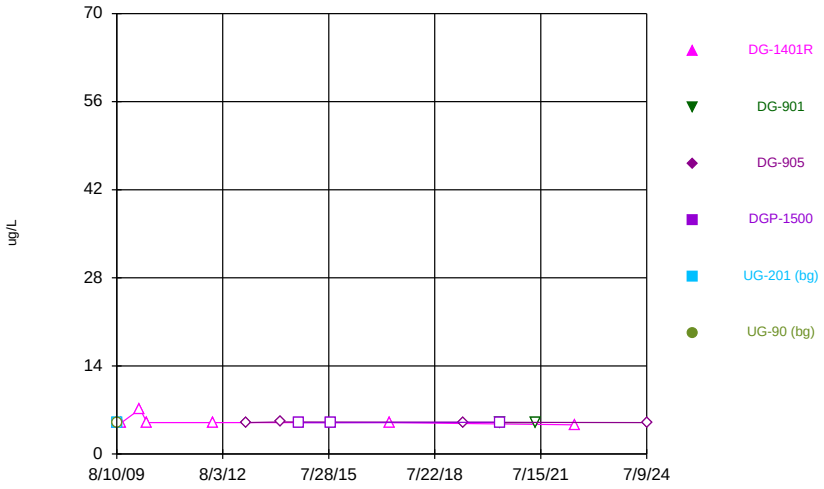
Time Series



Constituent: Parathion-ethyl Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

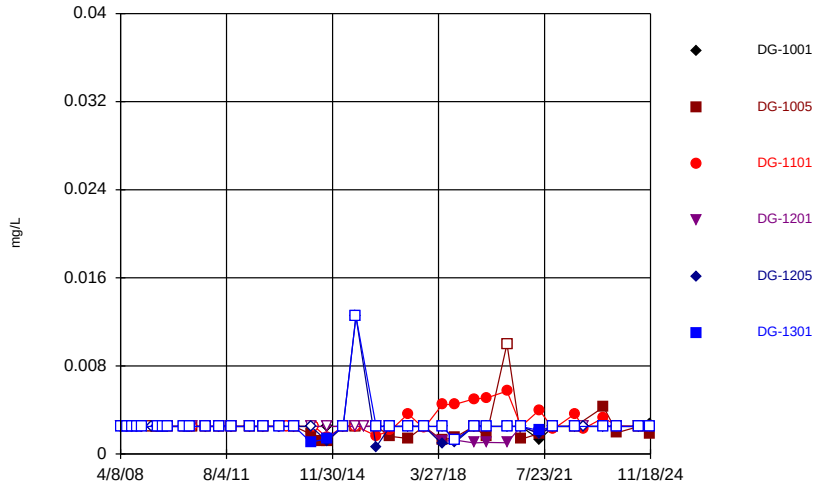
Time Series



Constituent: Parathion-ethyl Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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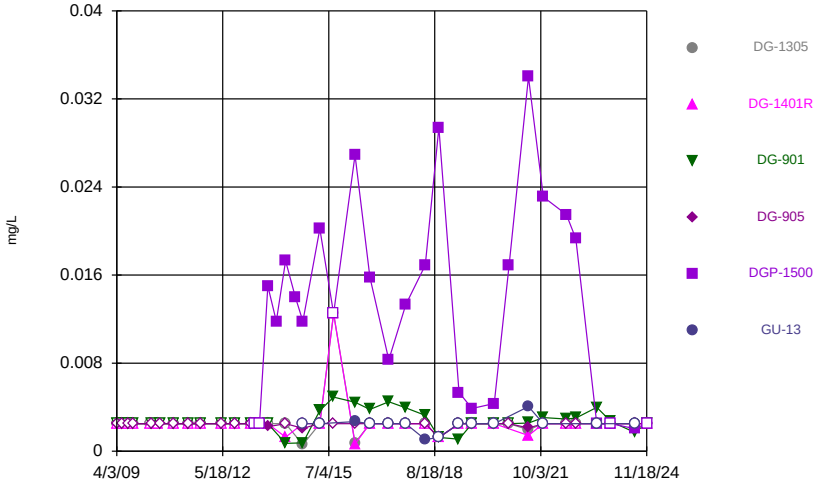
Time Series



Constituent: Selenium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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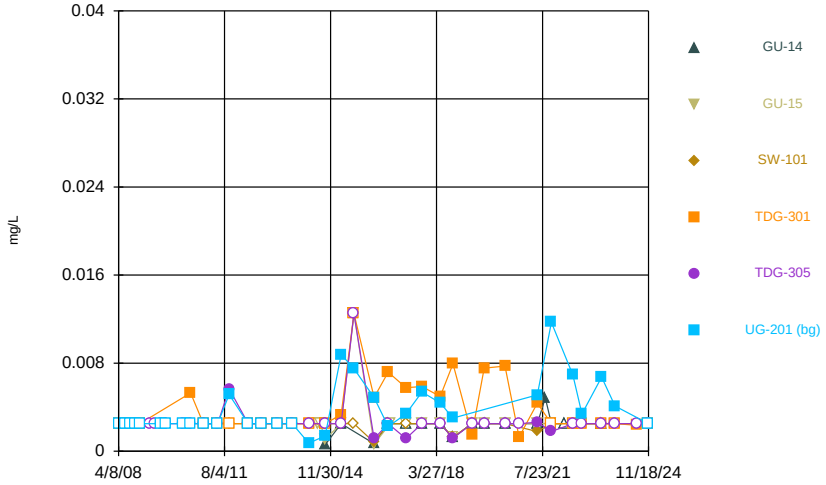
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Constituent: Selenium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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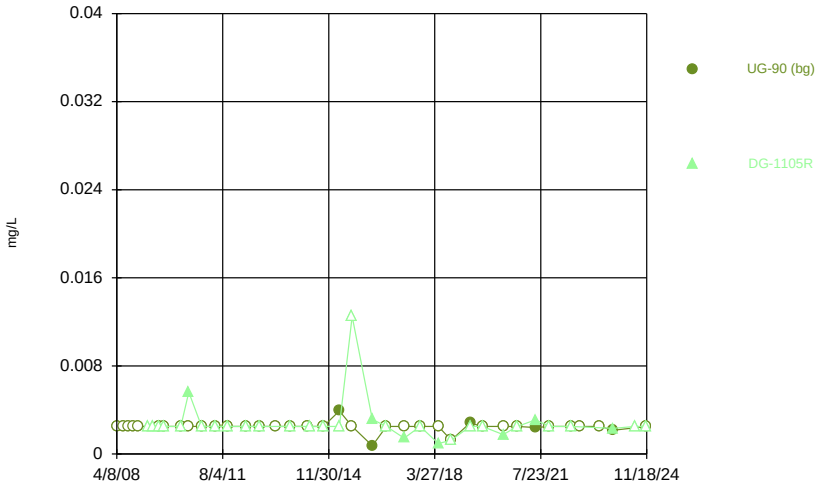
Time Series



Constituent: Selenium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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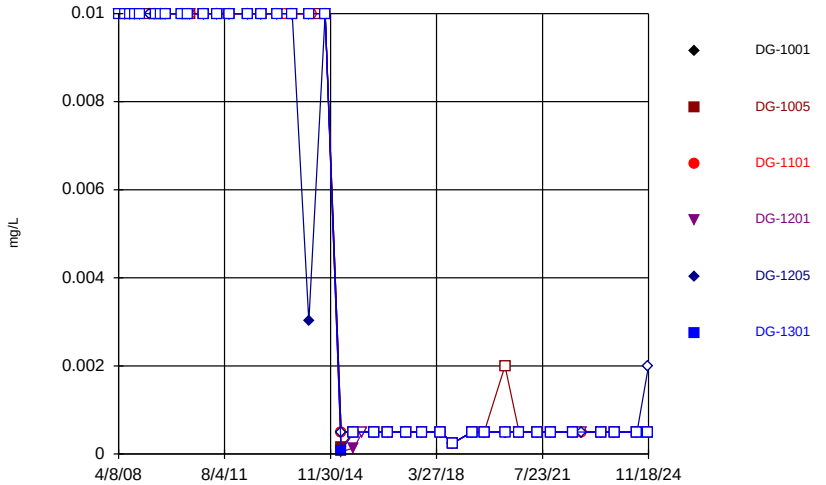
Time Series



Constituent: Selenium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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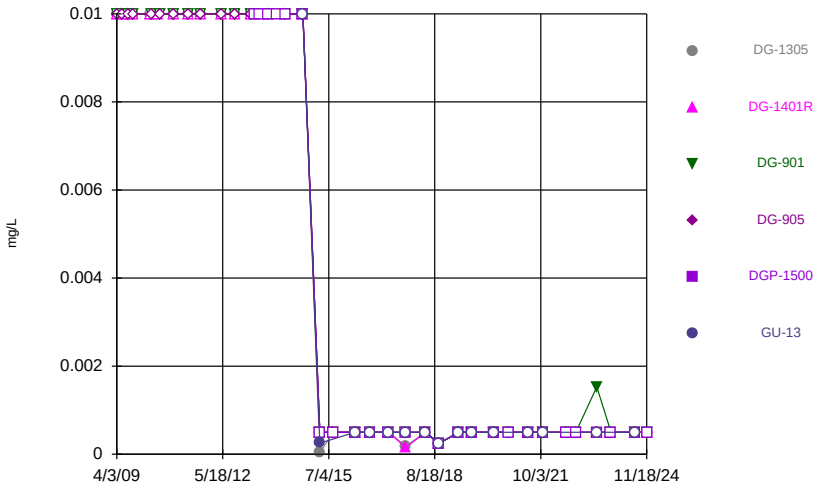
Time Series



Constituent: Silver Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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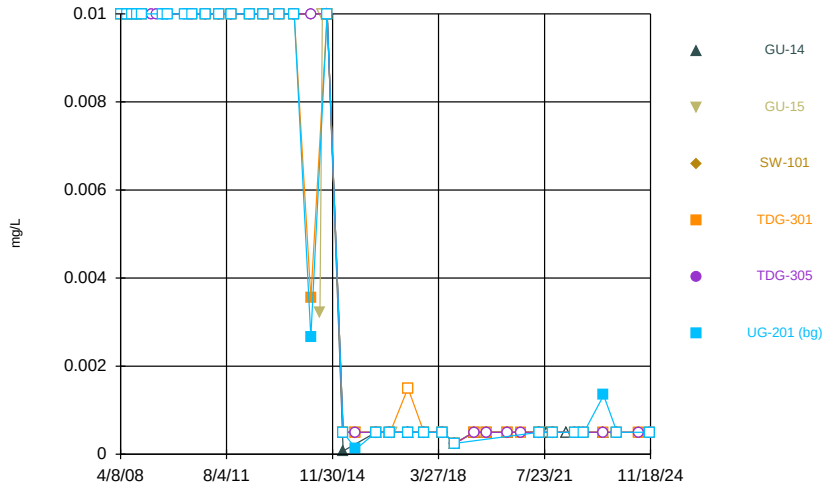
Time Series



Constituent: Silver Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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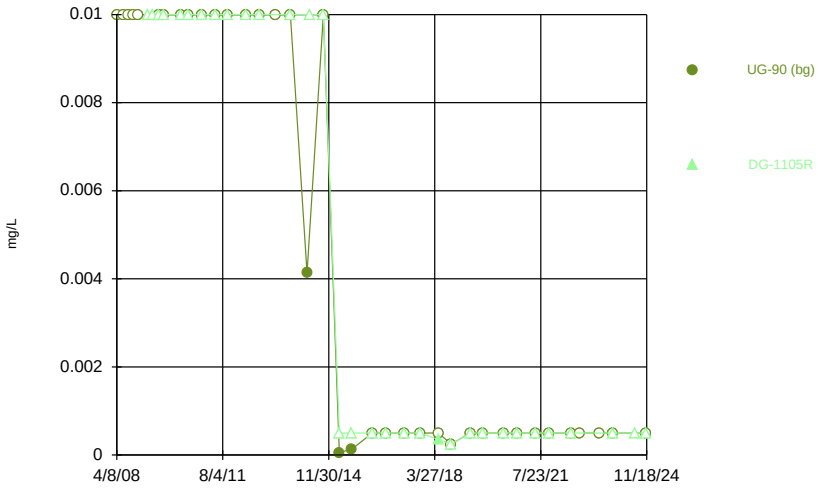
Time Series



Constituent: Silver Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
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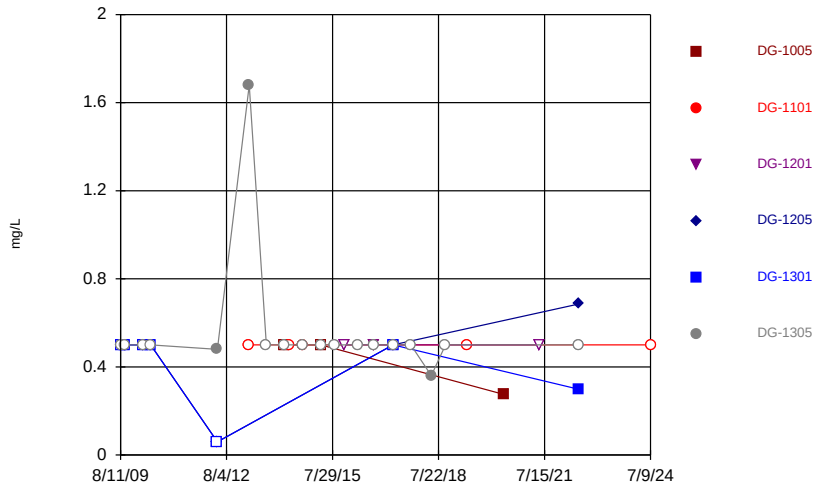
Time Series



Constituent: Silver Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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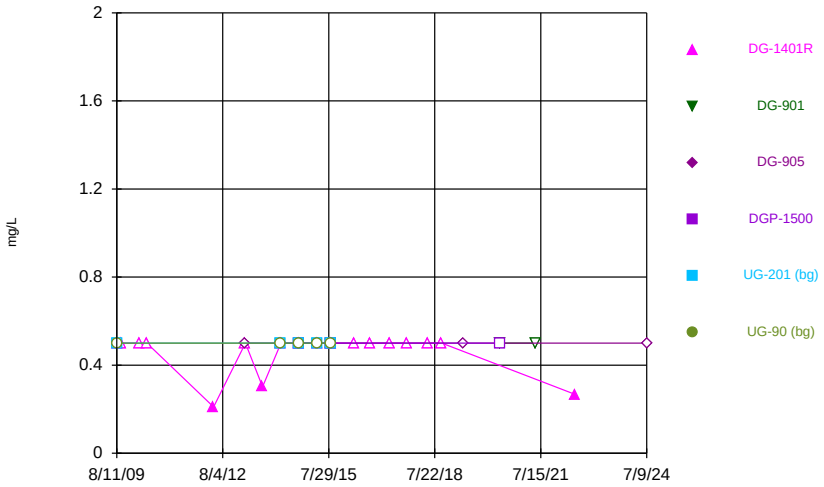
Time Series



Constituent: Sulfide Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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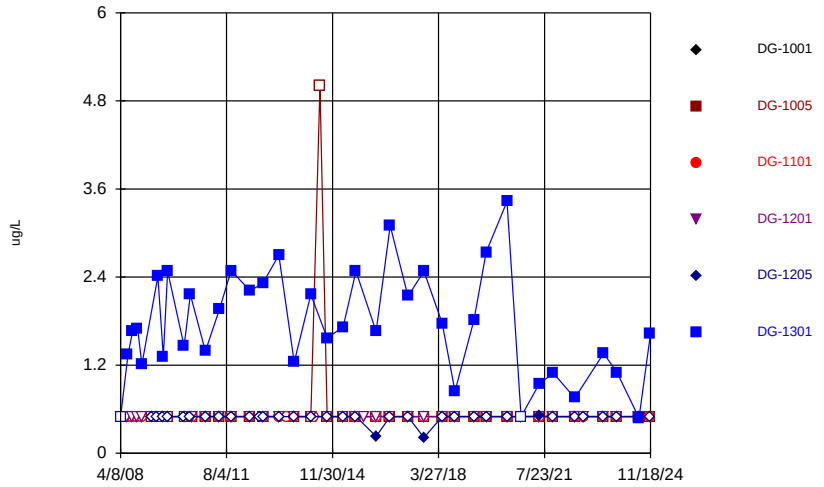
Time Series



Constituent: Sulfide Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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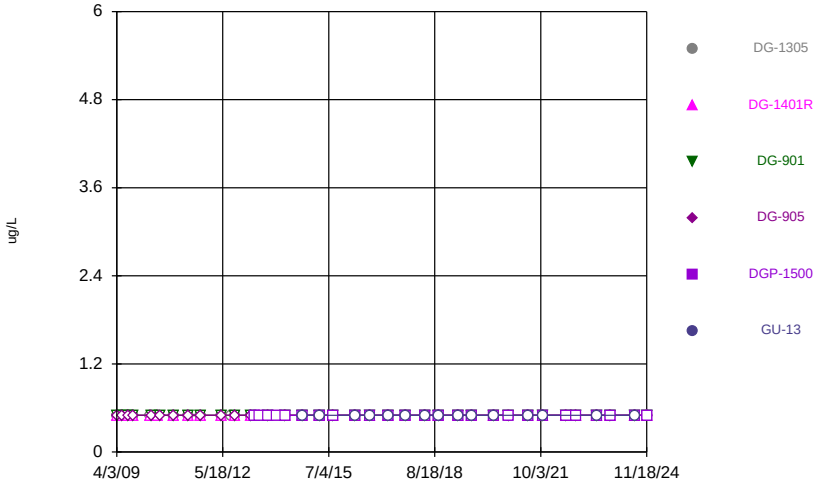
Time Series



Constituent: Tetrachloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

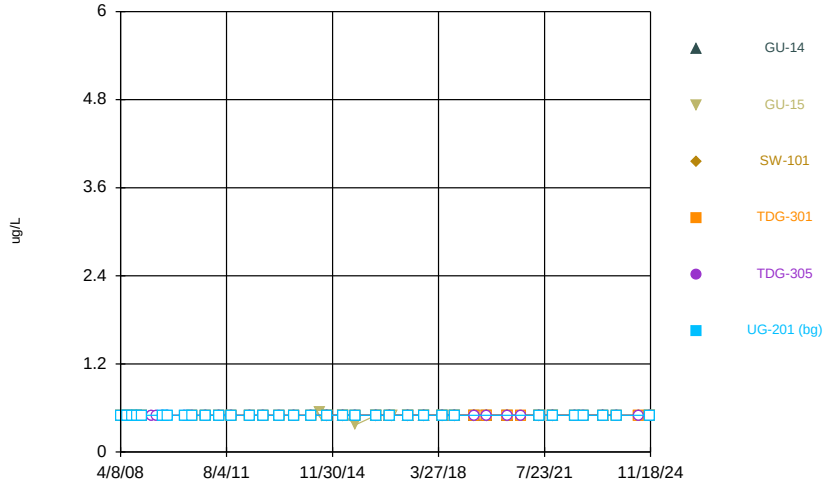
Time Series



Constituent: Tetrachloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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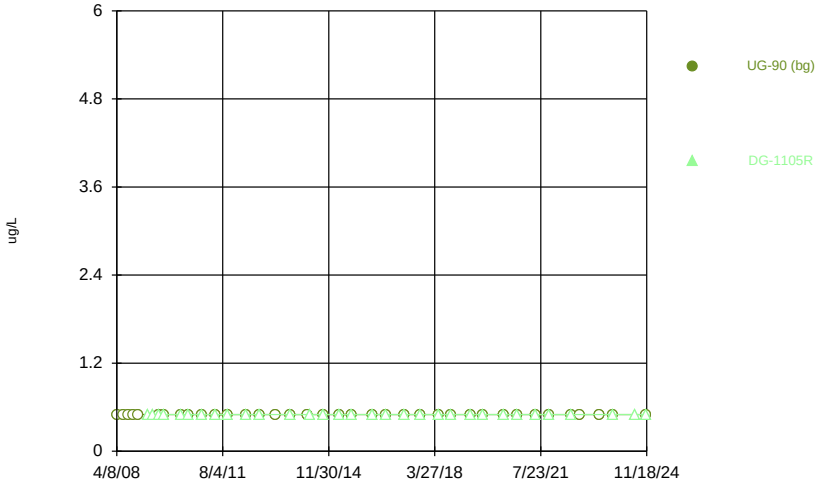
Time Series



Constituent: Tetrachloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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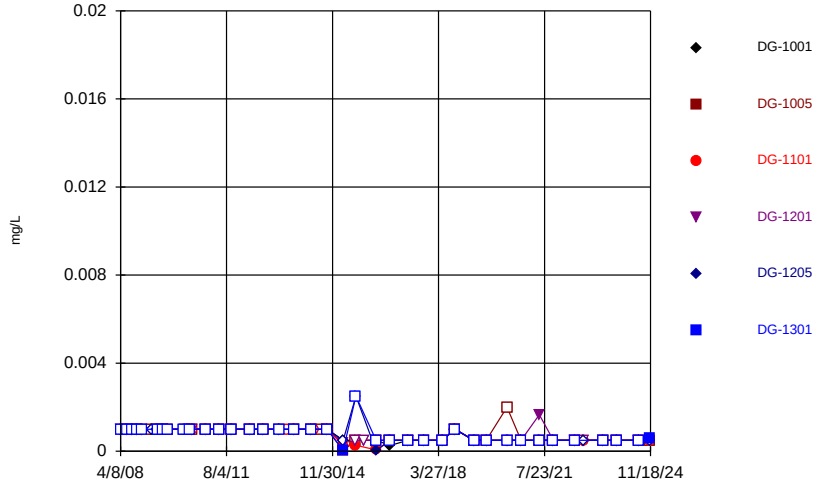
Time Series



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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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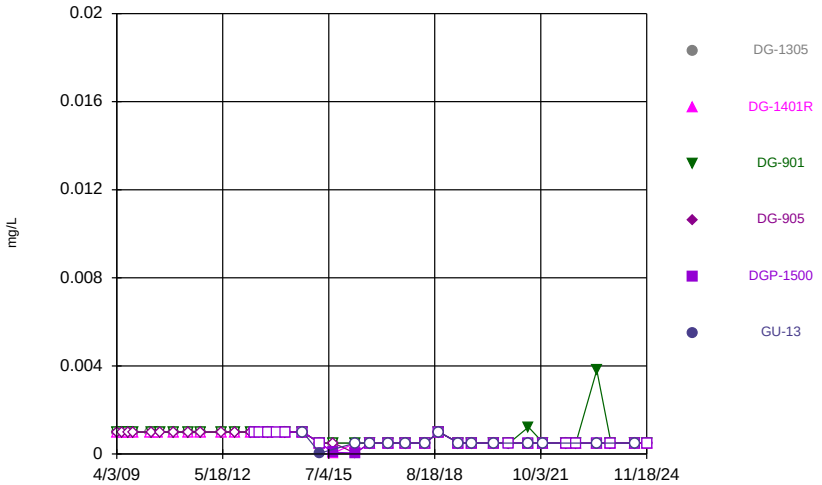
Time Series



Constituent: Thallium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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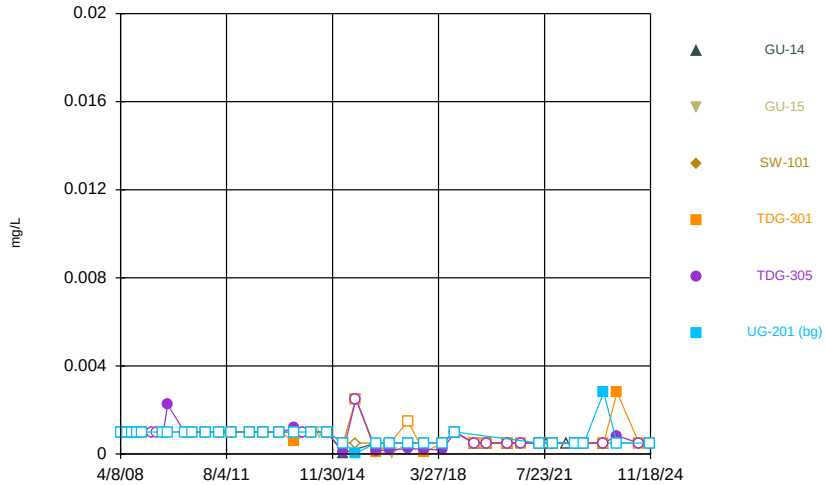
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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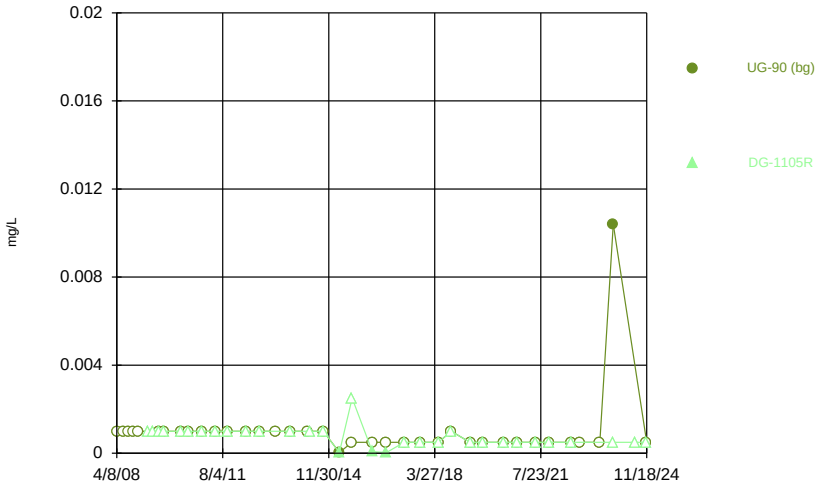
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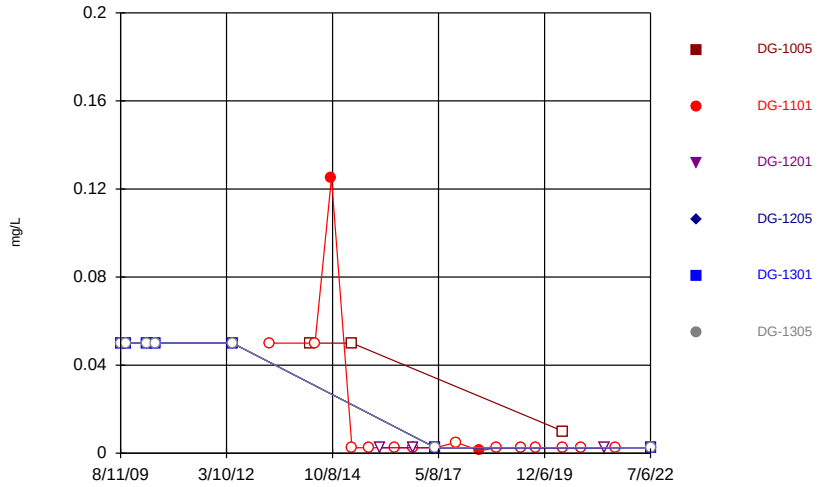
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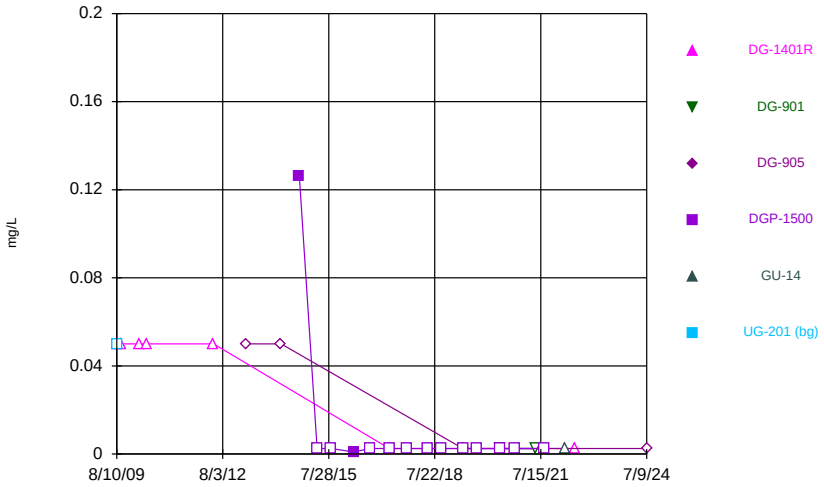
Time Series



Constituent: Tin Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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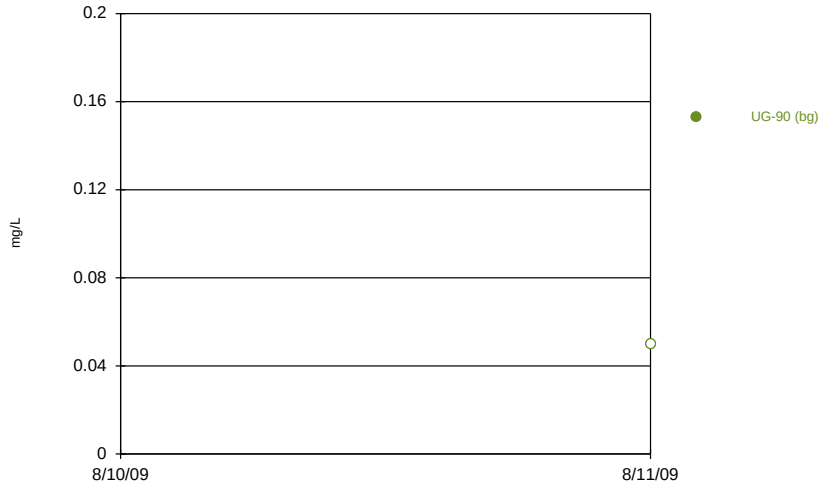
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Constituent: Tin Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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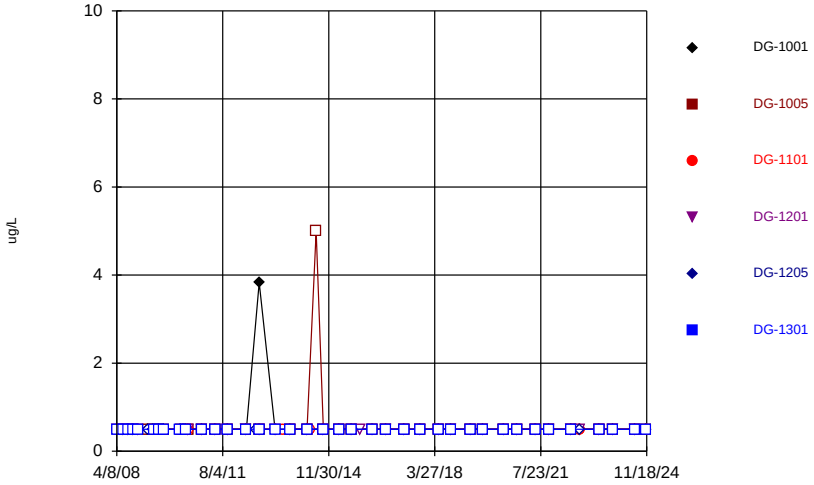
Time Series



Constituent: Tin Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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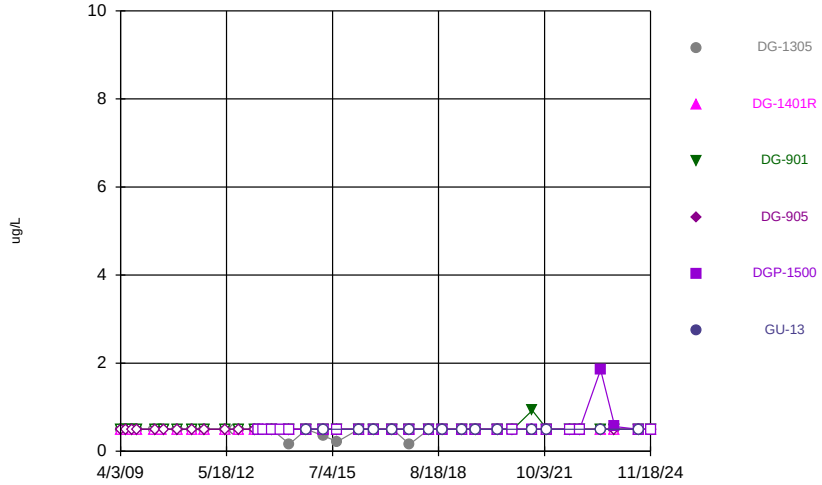
Time Series



Constituent: Toluene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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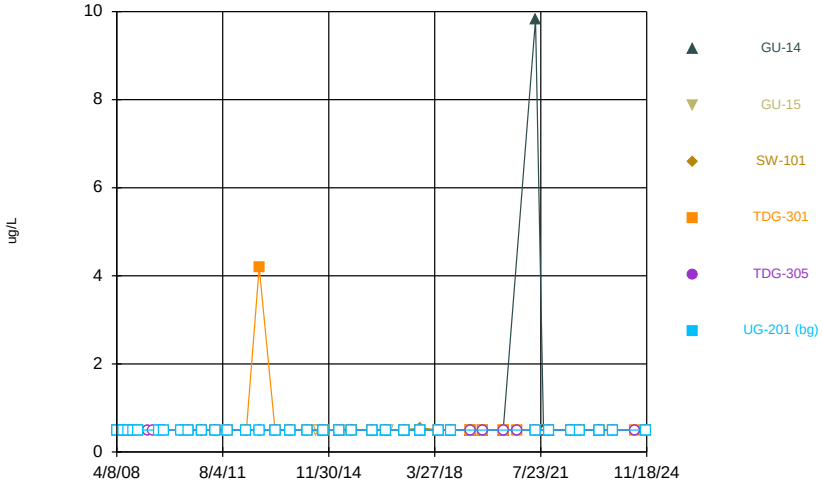
Time Series



Constituent: Toluene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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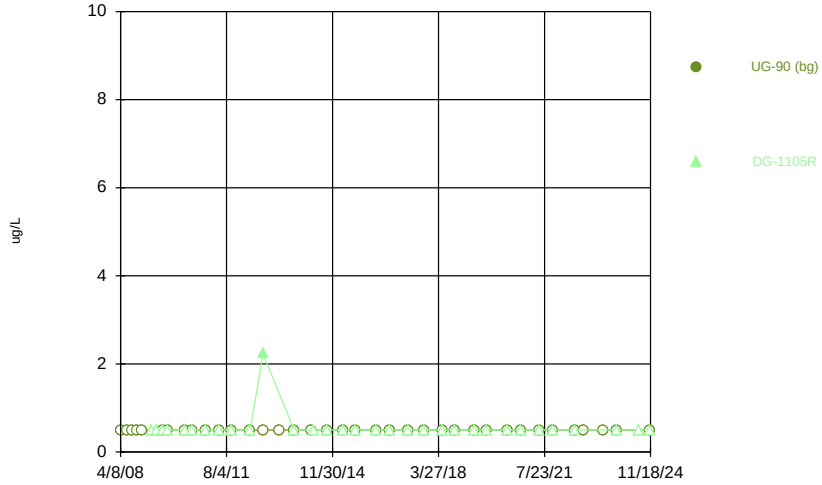
Time Series



Constituent: Toluene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
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Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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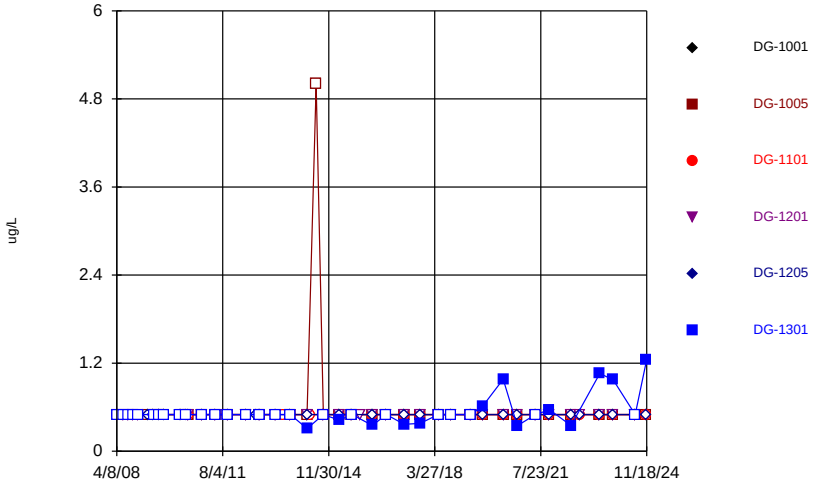
Time Series



Constituent: Toluene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
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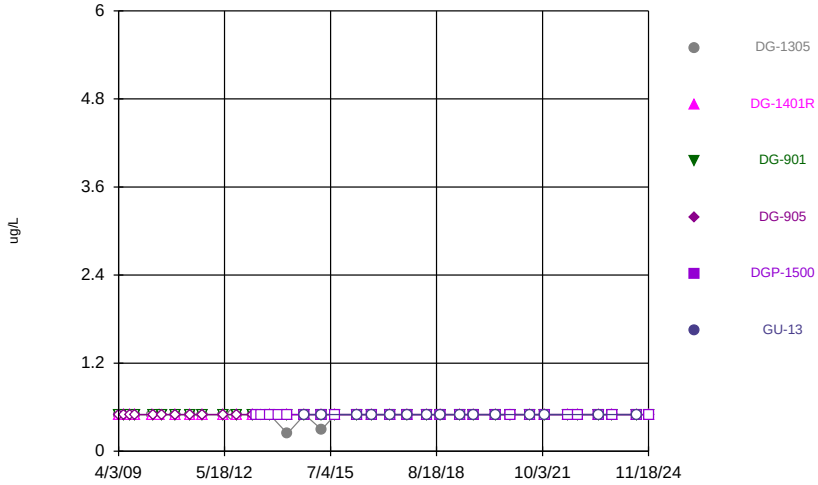
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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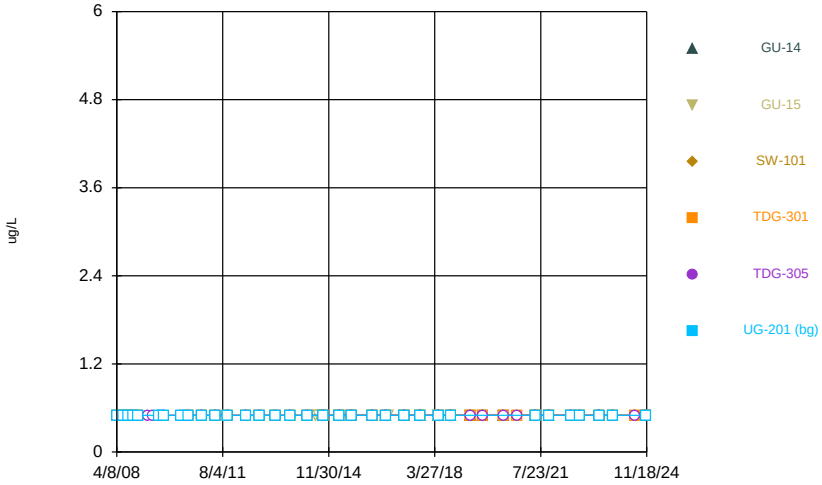
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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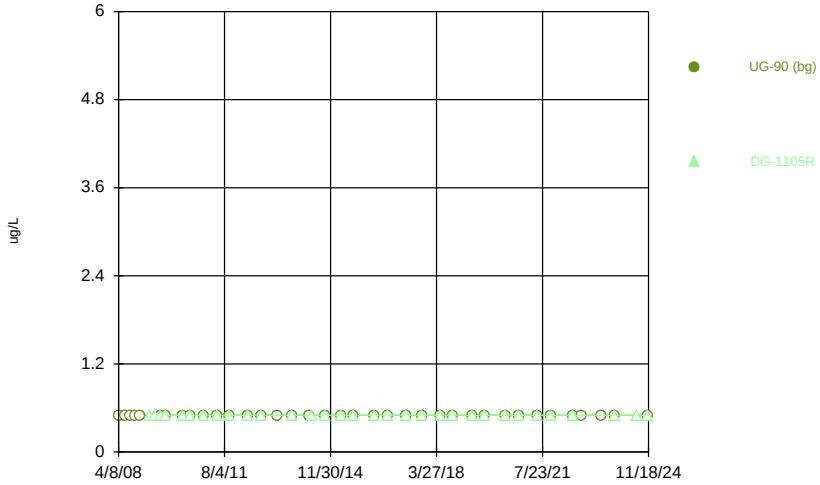
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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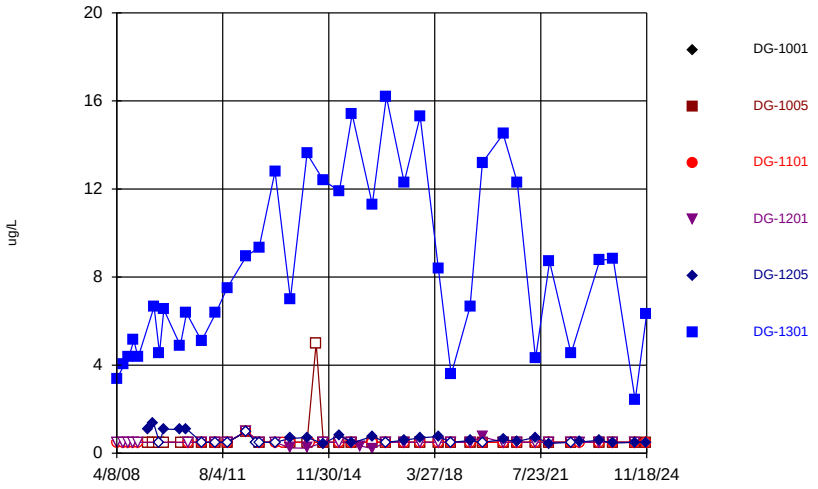
Time Series



Constituent: trans-1,2-Dichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

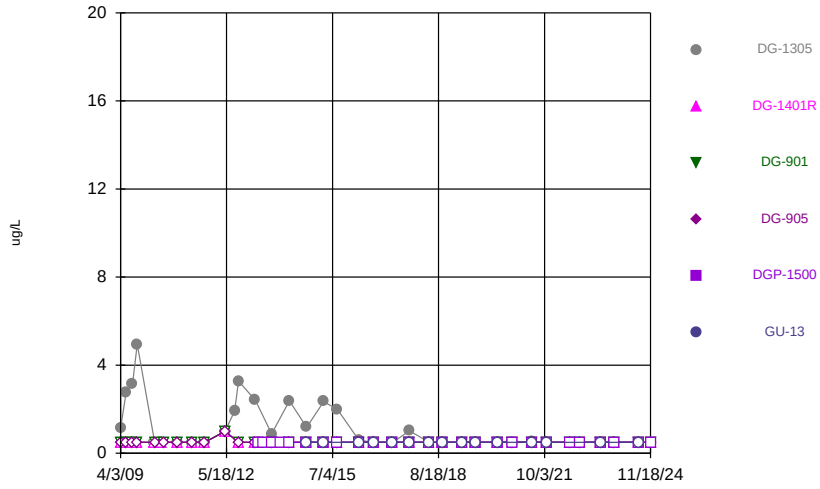
Time Series



Constituent: Trichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

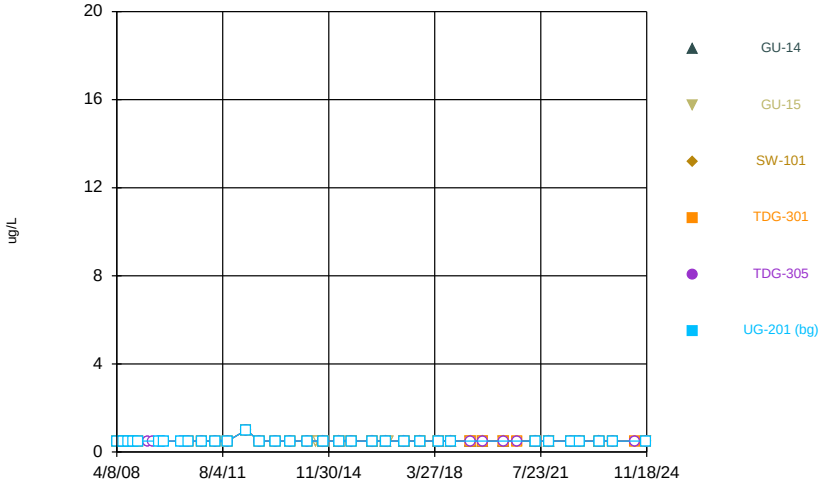
Time Series



Constituent: Trichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

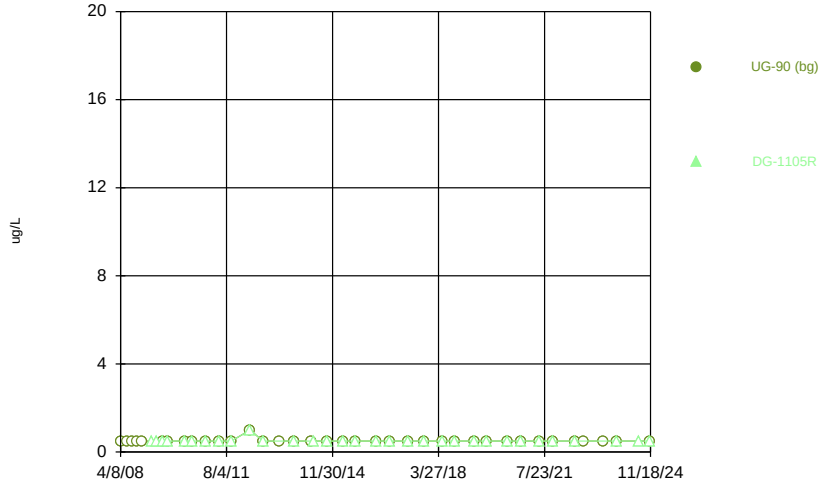
Time Series



Constituent: Trichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

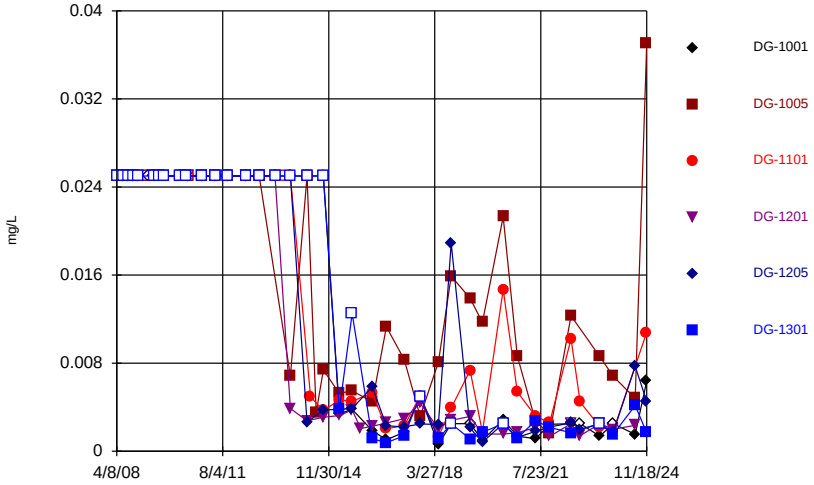
Time Series



Constituent: Trichloroethene Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

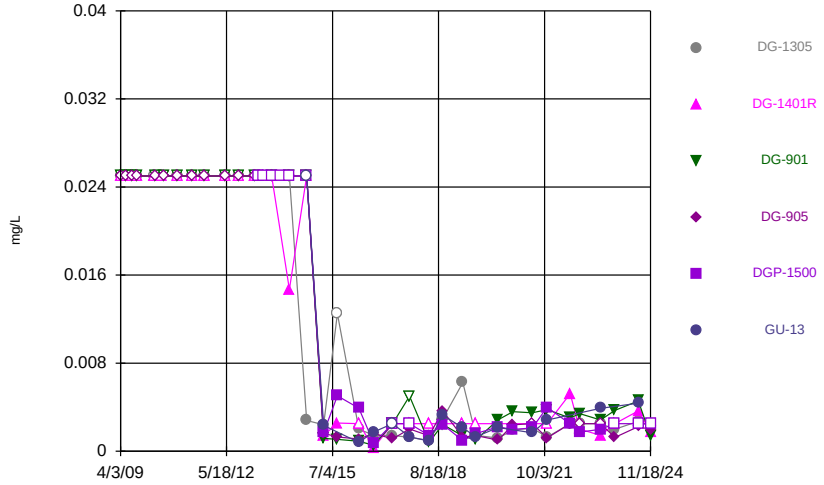
Time Series



Constituent: Vanadium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

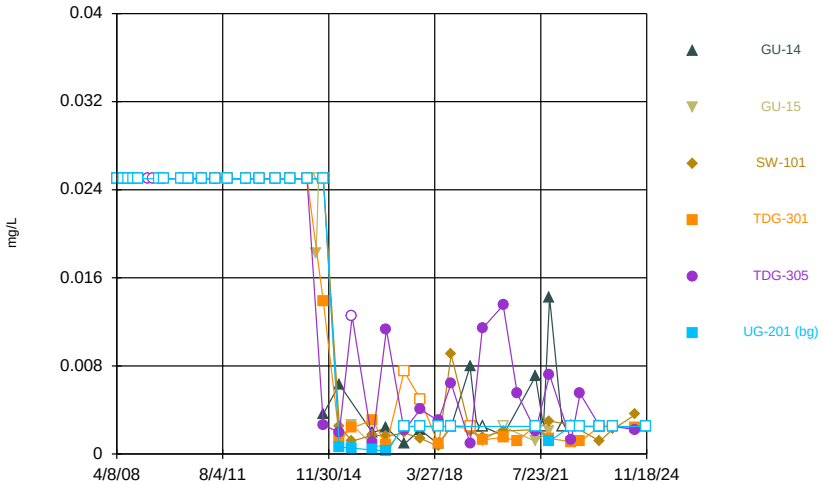
Time Series



Constituent: Vanadium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

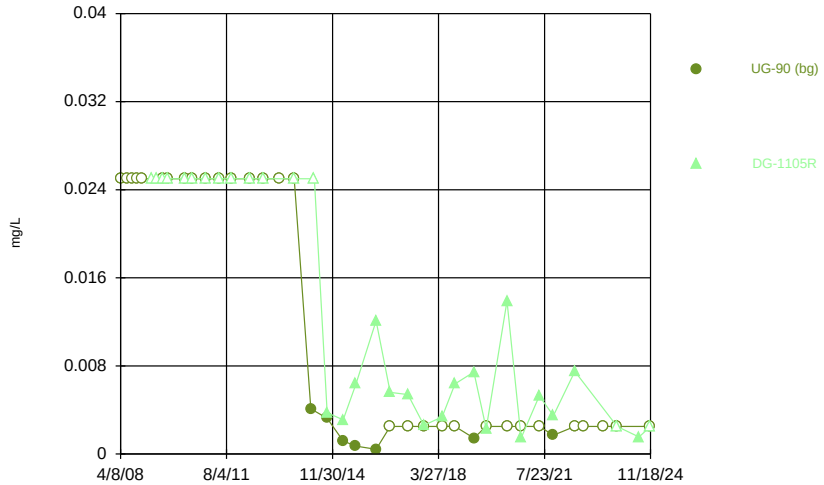
Time Series



Constituent: Vanadium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

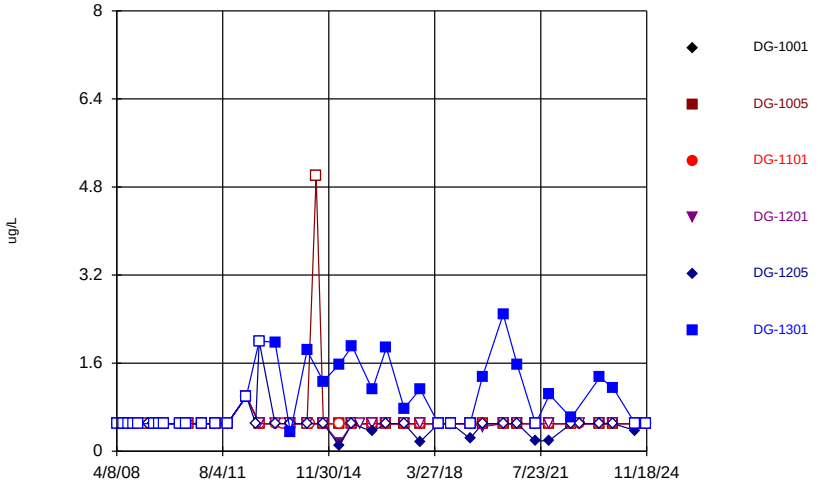
Time Series



Constituent: Vanadium Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

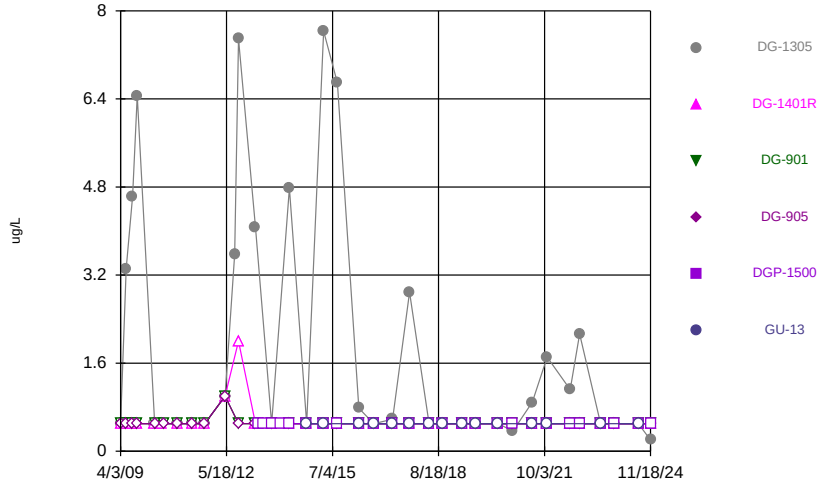
Time Series



Constituent: Vinyl chloride Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

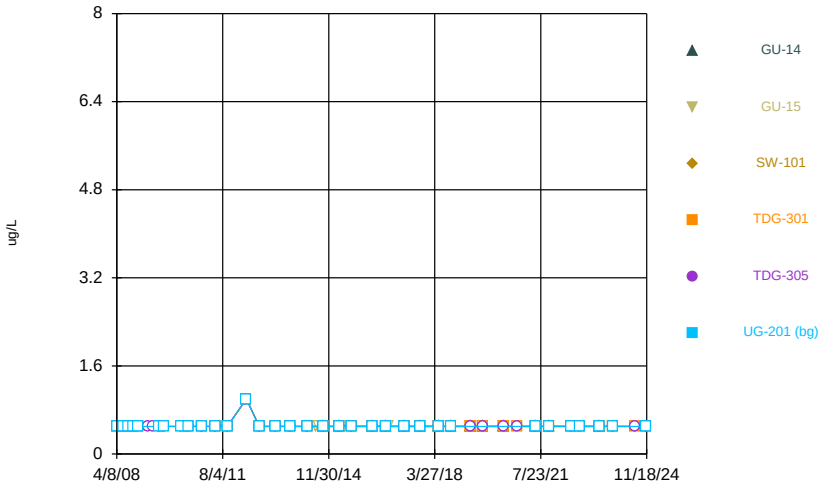
Time Series



Constituent: Vinyl chloride Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

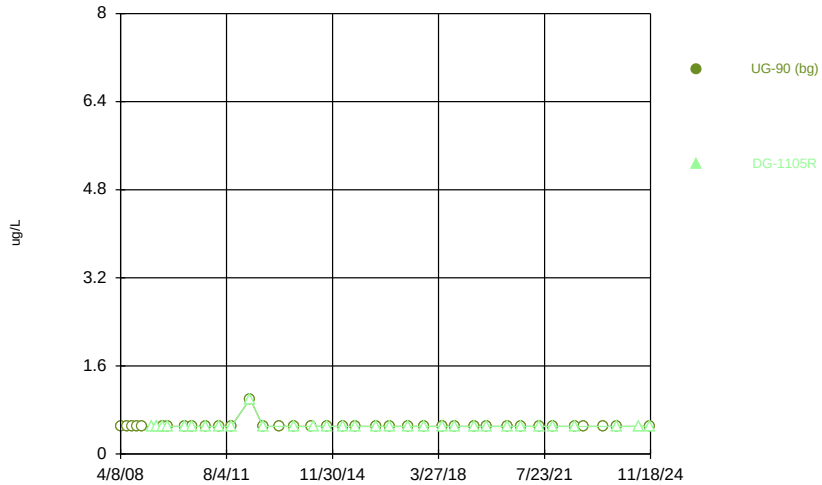
Time Series



Constituent: Vinyl chloride Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
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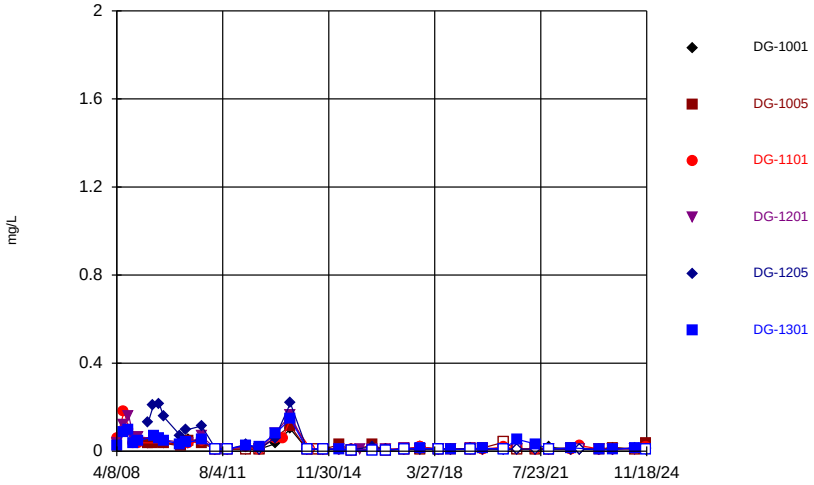
Time Series



Constituent: Vinyl chloride Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

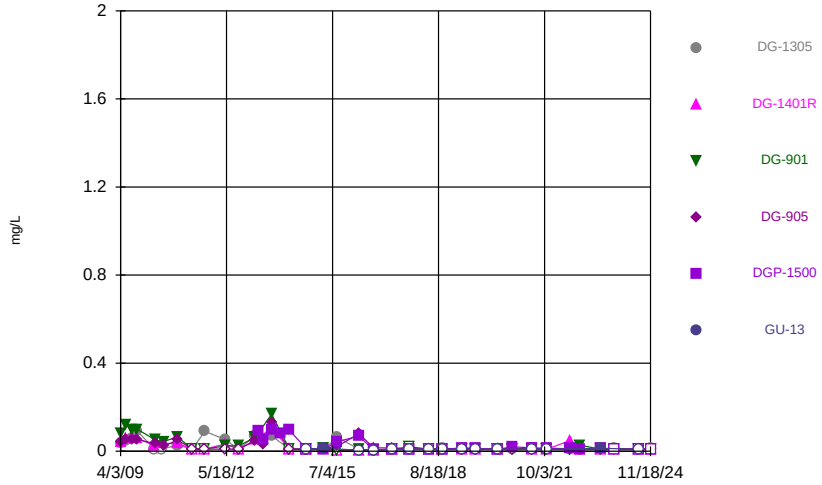
Time Series



Constituent: Zinc Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

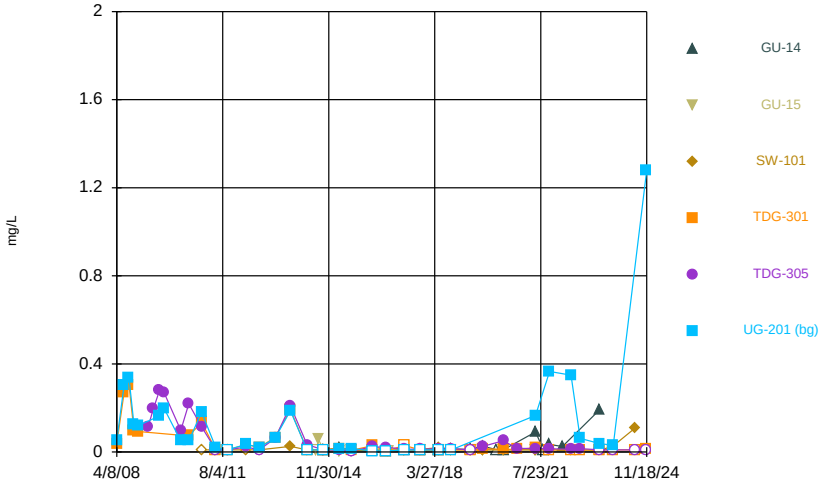
Time Series



Constituent: Zinc Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

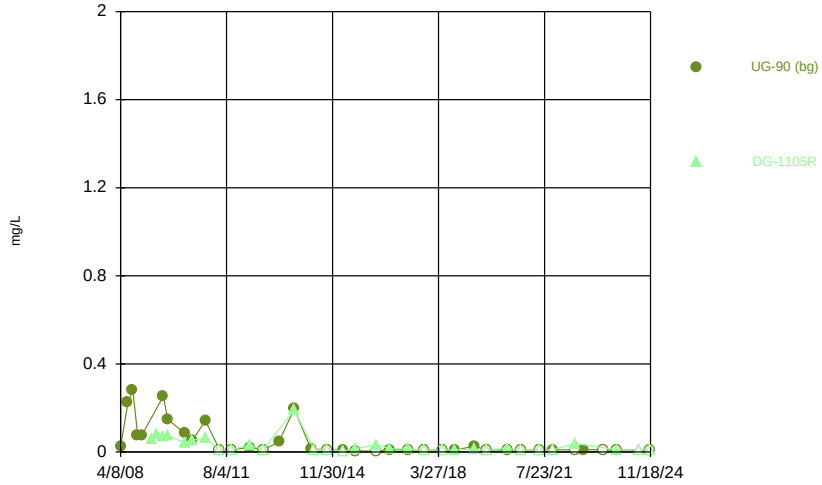
Time Series



Constituent: Zinc Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 3/3/2025 10:13 AM View: 2024 AWQR Timeseries
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Outlier Tests Summary Table and Graphs

Outlier Analysis

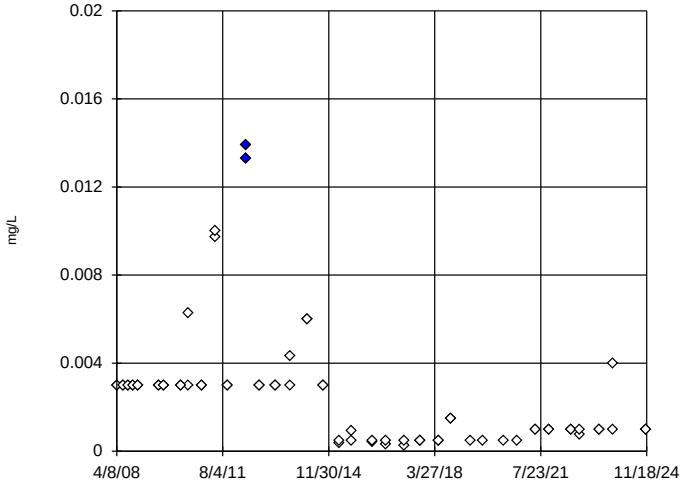
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master Printed 2/21/2025, 12:57 AM

Constituent	Well	Outlier	Value(s)	Date(s)	Method	Alpha	N	Mean	Normality Test
Antimony (mg/L)	**UG-201,UG-90**	**Yes**	**0.0139,0.0133**	**n/a w/combined bg**	**OH**	**NaN**	**70**	**0.0026**	**n/a**
Arsenic (mg/L)	**UG-201,UG-90**	**Yes**	**0.00555**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**70**	**0.001207**	**ShapiroFrancia**
Barium (mg/L)	**UG-201,UG-90**	**Yes**	**0.0733,0.0572,0.072,0.0579,0.136**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**70**	**0.02799**	**ShapiroFrancia**
Beryllium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	70	0.0004938	n/a
Cadmium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	70	0.0002205	n/a
Chromium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	70	0.006019	n/a
Cobalt (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	EPA/OH	0.05	42	0.0006459	ShapiroWilk
Copper (mg/L)	**UG-201,UG-90**	**Yes**	**0.0423**	**n/a w/combined bg**	**OH**	**NaN**	**70**	**0.007346**	**n/a**
Lead (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	70	0.001434	ShapiroFrancia
Nickel (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	70	0.01417	ShapiroFrancia
Selenium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	NP (nrm)/OH	NaN	70	0.003081	ShapiroFrancia
Silver (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	70	0.005185	n/a
Thallium (mg/L)	**UG-201,UG-90**	**Yes**	**0.0104**	**n/a w/combined bg**	**OH**	**NaN**	**70**	**0.0009325**	**n/a**
Vanadium (mg/L)	UG-201,UG-90	No	n/a	n/a w/combined bg	OH	NaN	70	0.01323	n/a
Zinc (mg/L)	**UG-201,UG-90**	**Yes**	**1.28**	**n/a w/combined bg**	**NP (nrm)/OH**	**NaN**	**70**	**0.08852**	**ShapiroFrancia**

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Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Statistical outliers are drawn as solid.
Outliers per Ohio method.

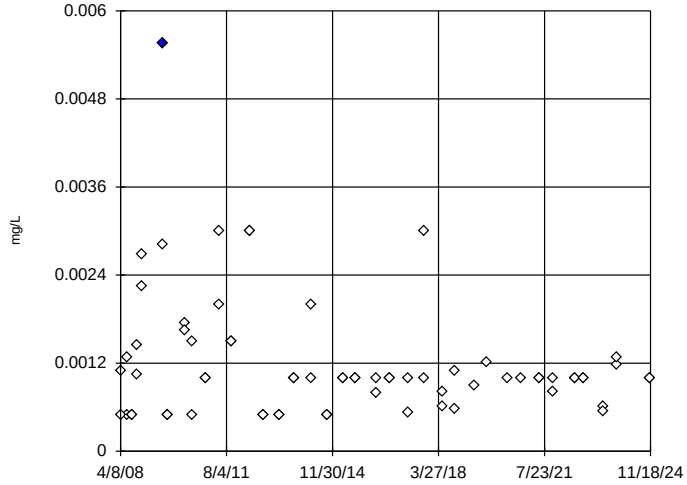
Constituent: Antimony Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.003296, low cutoff = -0.001408, based on IQR multiplier of 3.

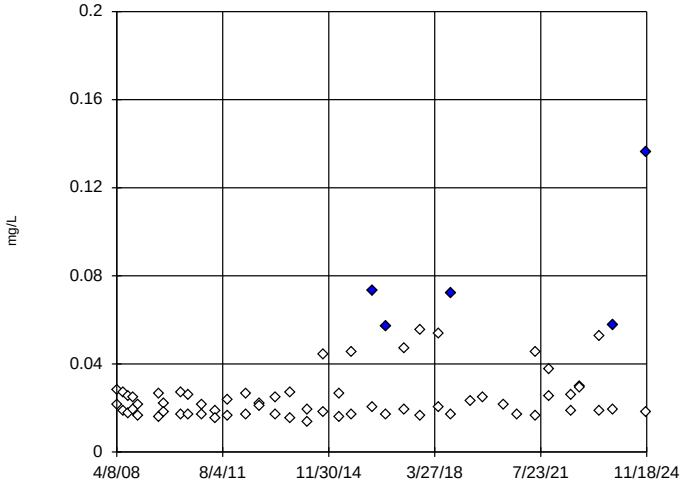
Constituent: Arsenic Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Outliers are drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.05705, low cutoff = -0.01278, based on IQR multiplier of 3.

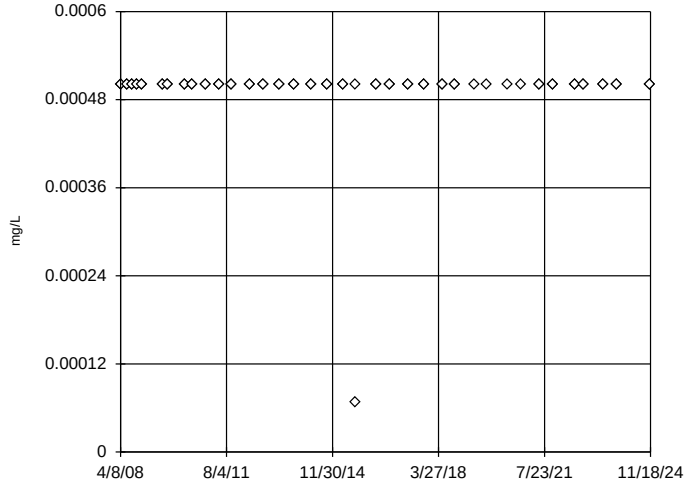
Constituent: Barium Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No statistical outliers.

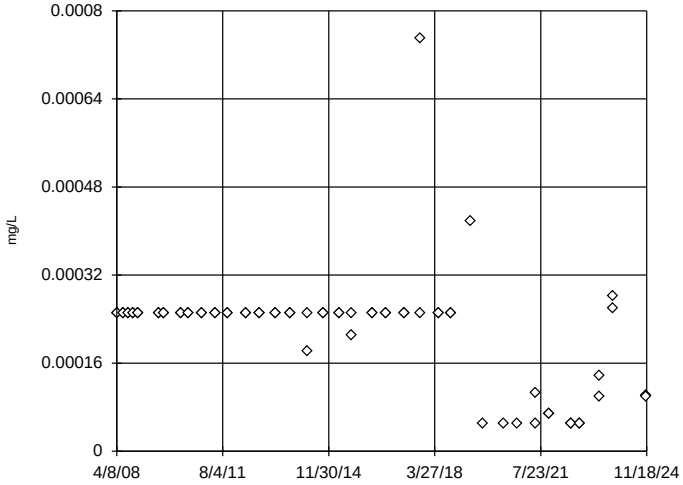
Constituent: Beryllium Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No statistical outliers.

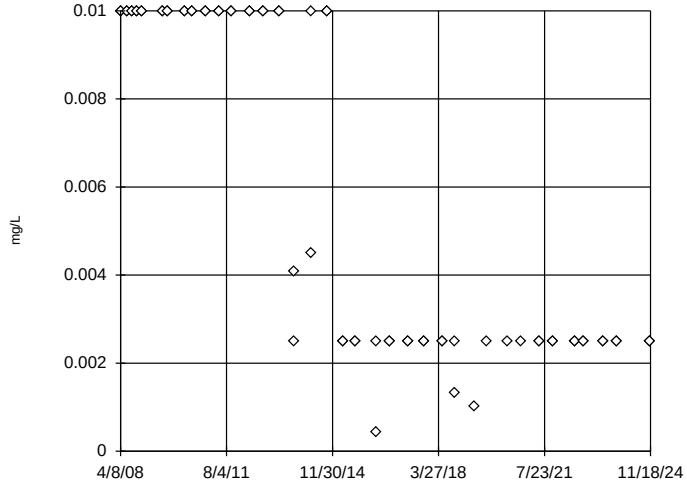
Constituent: Cadmium Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No statistical outliers.

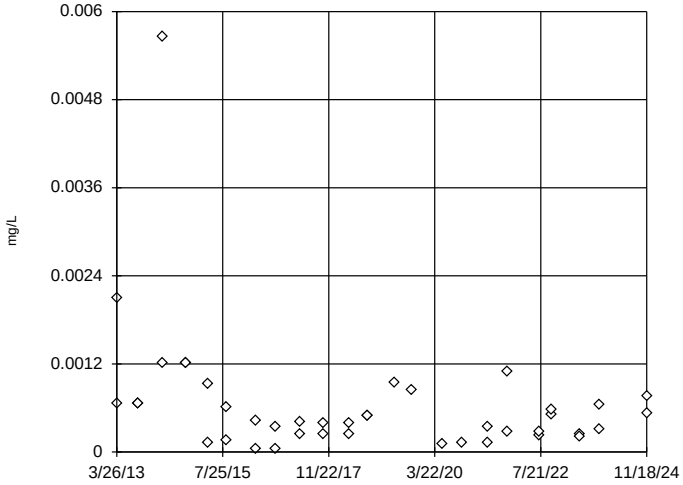
Constituent: Chromium Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

EPA Screening (suspected outliers for Rosner's Test)

UG-201,UG-90



n = 42

Rosner's will not be run.
No suspect values identified or unable to establish suspect values.
Ohio method in use.
Mean 0.0006459, std. dev. 0.0008911, critical Tn 2.887

Normality test used:
Shapiro Wilk@alpha = 0.01
Calculated = 0.9788
Critical = 0.922 (after natural log transformation)
The distribution was found to be log-normal.

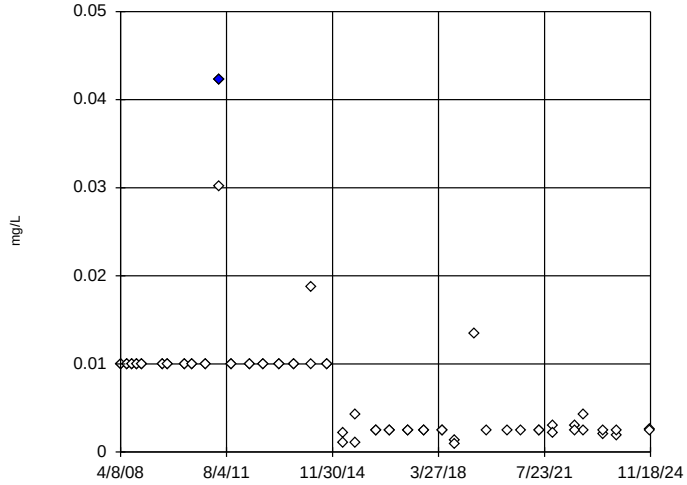
Constituent: Cobalt Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Statistical outlier is drawn as solid.
Outlier per Ohio method.

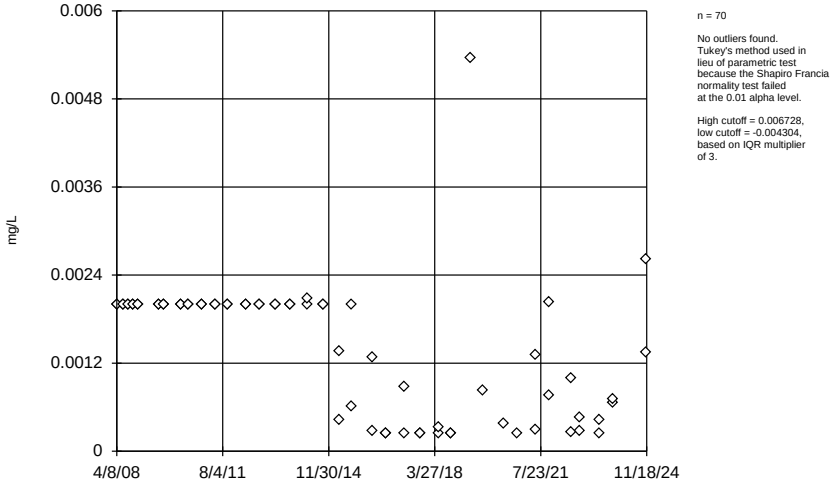
Constituent: Copper Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

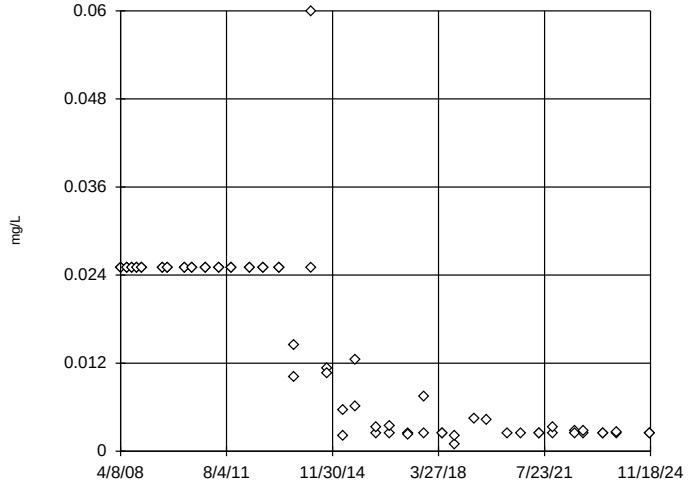
High cutoff = 0.006728, low cutoff = -0.004304, based on IQR multiplier of 3.

Constituent: Lead Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

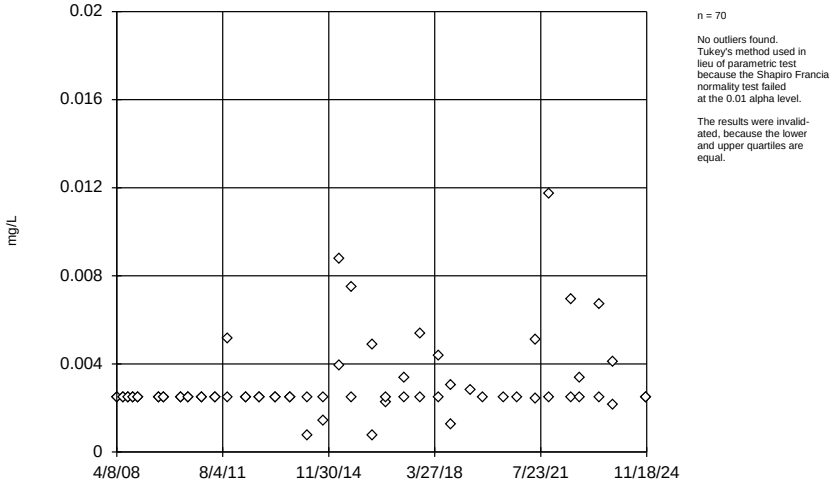
The results were invalidated, because both the lower and upper quartiles represent reporting limits.

Constituent: Nickel Analysis Run 2/21/2025 12:20 AM View: 2024 AWQR Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No outliers found.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

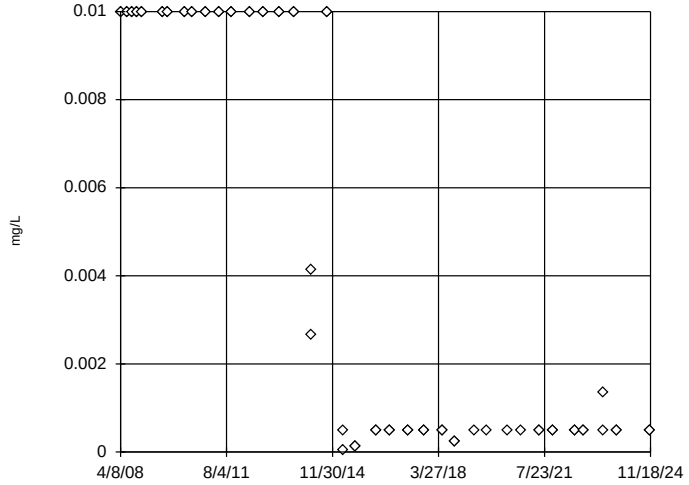
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 2/21/2025 12:21 AM View: 2024 AWQR Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

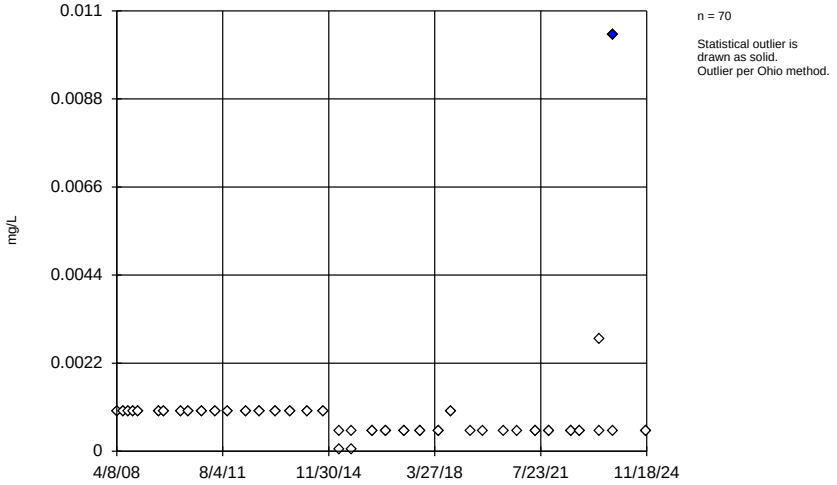
No statistical outliers.

Constituent: Silver Analysis Run 2/21/2025 12:21 AM View: 2024 AWQR Outliers
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Statistical outlier is drawn as solid.
Outlier per Ohio method.

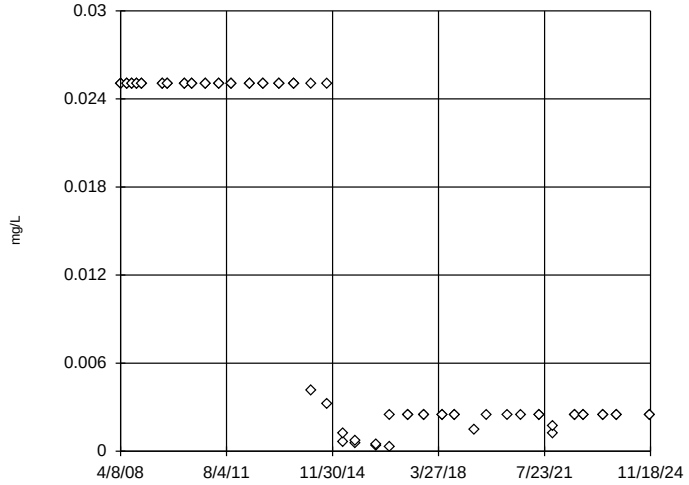
Constituent: Thallium Analysis Run 2/21/2025 12:21 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

No statistical outliers.

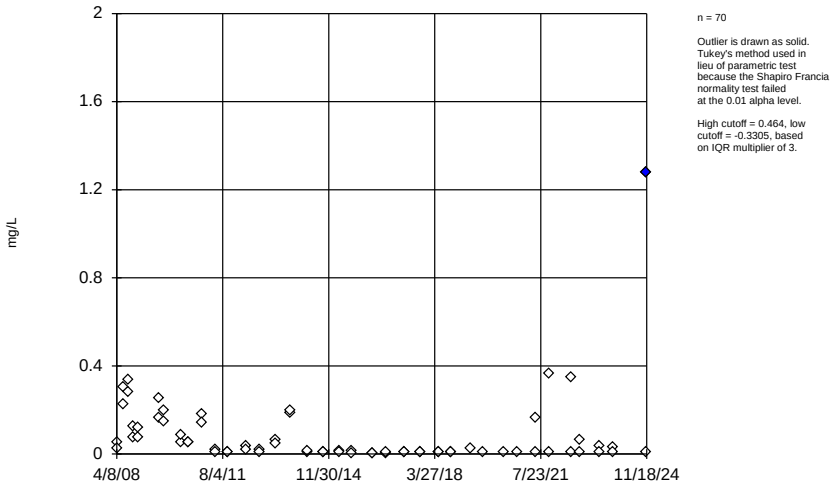
Constituent: Vanadium Analysis Run 2/21/2025 12:21 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Tukey's Outlier Screening / Ohio EPA 0715 Outlier Algorithm, Pooled Background

UG-201,UG-90



n = 70

Outlier is drawn as solid.
Tukey's method used in lieu of parametric test because the Shapiro Francia normality test failed at the 0.01 alpha level.

High cutoff = 0.464, low cutoff = -0.3305, based on IQR multiplier of 3.

Constituent: Zinc Analysis Run 2/21/2025 12:21 AM View: 2024 AWQR Outliers

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Interwell Prediction Limit Summary Table and Graphs

Prediction Limit

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master Printed 3/3/2025, 10:03 AM

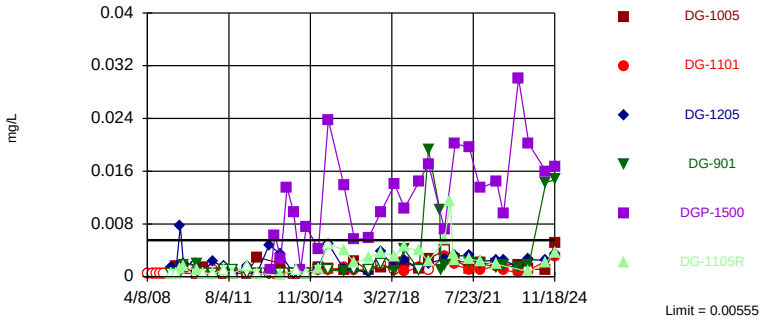
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	DG-1005	0.00555	n/a	11/18/2024	0.00506	No	70	67.14	n/a	0.000016	NP Inter (NDs) 1 of 3
Arsenic (mg/L)	DG-1101	0.00555	n/a	11/18/2024	0.00308	No	70	67.14	n/a	0.000016	NP Inter (NDs) 1 of 3
Arsenic (mg/L)	DG-1205	0.00555	n/a	11/18/2024	0.0035	No	70	67.14	n/a	0.000016	NP Inter (NDs) 1 of 3
Arsenic (mg/L)	**DG-901**	**0.00555**	**n/a**	**11/18/2024**	**0.0147**	**Yes**	**70**	**67.14**	**n/a**	**0.000016**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	**DGP-1500**	**0.00555**	**n/a**	**11/18/2024**	**0.0167**	**Yes**	**70**	**67.14**	**n/a**	**0.000016**	**NP Inter (NDs) 1 of 3**
Arsenic (mg/L)	DG-1105R	0.00555	n/a	11/18/2024	0.00368	No	70	67.14	n/a	0.000016	NP Inter (NDs) 1 of 3
Barium (mg/L)	DG-1001	0.136	n/a	11/18/2024	0.0615	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1005	0.136	n/a	11/18/2024	0.0838	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1101	0.136	n/a	11/18/2024	0.0723	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1205	0.136	n/a	11/18/2024	0.0154	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1301	0.136	n/a	11/18/2024	0.0413	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1305	0.136	n/a	11/18/2024	0.114	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1401R	0.136	n/a	11/18/2024	0.0435	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-901	0.136	n/a	11/18/2024	0.031	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-905	0.136	n/a	11/18/2024	0.0466	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DGP-1500	0.136	n/a	11/18/2024	0.0448	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	TDG-301	0.136	n/a	11/18/2024	0.0203	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	TDG-305	0.136	n/a	11/18/2024	0.0361	No	70	0	n/a	0.000016	NP Inter (normality) ...
Barium (mg/L)	DG-1105R	0.136	n/a	11/18/2024	0.033	No	70	0	n/a	0.000016	NP Inter (normality) ...
Cadmium (mg/L)	DG-1005	0.00075	n/a	11/18/2024	0.000223	No	70	85.71	n/a	0.000016	NP Inter (NDs) 1 of 3
Chromium (mg/L)	**DG-1005**	**0.01**	**n/a**	**11/18/2024**	**0.013**	**Yes**	**70**	**91.43**	**n/a**	**0.000016**	**NP Inter (NDs) 1 of 3**
Chromium (mg/L)	DG-1101	0.01	n/a	11/18/2024	0.00528	No	70	91.43	n/a	0.000016	NP Inter (NDs) 1 of 3
Cobalt (mg/L)	**DG-1001**	**0.001813**	**n/a**	**11/18/2024**	**0.00239**	**Yes**	**42**	**26.19**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	**DG-1005**	**0.001813**	**n/a**	**11/18/2024**	**0.0048**	**Yes**	**42**	**26.19**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	**DG-1101**	**0.001813**	**n/a**	**11/18/2024**	**0.00259**	**Yes**	**42**	**26.19**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	**DG-901**	**0.001813**	**n/a**	**11/18/2024**	**0.003545**	**Yes**	**42**	**26.19**	**ln(x)**	**0.0001951**	**Param Inter 1 of 3**
Cobalt (mg/L)	DG-905	0.001813	n/a	11/18/2024	0.00158	No	42	26.19	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	TDG-305	0.001813	n/a	11/18/2024	0.000971	No	42	26.19	ln(x)	0.0001951	Param Inter 1 of 3
Cobalt (mg/L)	DG-1105R	0.001813	n/a	11/18/2024	0.000866	No	42	26.19	ln(x)	0.0001951	Param Inter 1 of 3
Copper (mg/L)	DG-1001	0.0423	n/a	11/18/2024	0.005965J	No	70	78.57	n/a	0.000016	NP Inter (NDs) 1 of 3
Copper (mg/L)	DG-1005	0.0423	n/a	11/18/2024	0.0115	No	70	78.57	n/a	0.000016	NP Inter (NDs) 1 of 3
Copper (mg/L)	DG-1101	0.0423	n/a	11/18/2024	0.00789	No	70	78.57	n/a	0.000016	NP Inter (NDs) 1 of 3
Copper (mg/L)	DG-1401R	0.0423	n/a	11/18/2024	0.0051	No	70	78.57	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1001	0.00535	n/a	11/18/2024	0.002565	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1005	0.00535	n/a	11/18/2024	0.00494	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1101	0.00535	n/a	11/18/2024	0.00223	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1205	0.00535	n/a	11/18/2024	0.00111	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1301	0.00535	n/a	11/18/2024	0.000605	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1305	0.00535	n/a	11/18/2024	0.00237	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-1401R	0.00535	n/a	11/18/2024	0.000583	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-901	0.00535	n/a	11/18/2024	0.0008185	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Lead (mg/L)	DG-905	0.00535	n/a	11/18/2024	0.000639	No	70	64.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Nickel (mg/L)	DG-1005	0.0599	n/a	11/18/2024	0.0102	No	70	74.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Nickel (mg/L)	DG-1101	0.0599	n/a	11/18/2024	0.0064	No	70	74.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Nickel (mg/L)	TDG-305	0.0599	n/a	11/18/2024	0.0124	No	70	74.29	n/a	0.000016	NP Inter (NDs) 1 of 3
Vanadium (mg/L)	DG-1001	0.025	n/a	11/18/2024	0.00637J	No	70	82.86	n/a	0.000016	NP Inter (NDs) 1 of 3
Vanadium (mg/L)	**DG-1005**	**0.025**	**n/a**	**11/18/2024**	**0.037**	**Yes**	**70**	**82.86**	**n/a**	**0.000016**	**NP Inter (NDs) 1 of 3**
Vanadium (mg/L)	DG-1101	0.025	n/a	11/18/2024	0.0108	No	70	82.86	n/a	0.000016	NP Inter (NDs) 1 of 3
Zinc (mg/L)	DG-1005	1.28	n/a	11/18/2024	0.0385	No	70	37.14	n/a	0.000016	NP Inter (normality) ...

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Hollow symbols indicate censored values.

Exceeds Limit: DG-901, DGP-1500

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 67.14% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 6 points to limit. Assumes 12 future values.

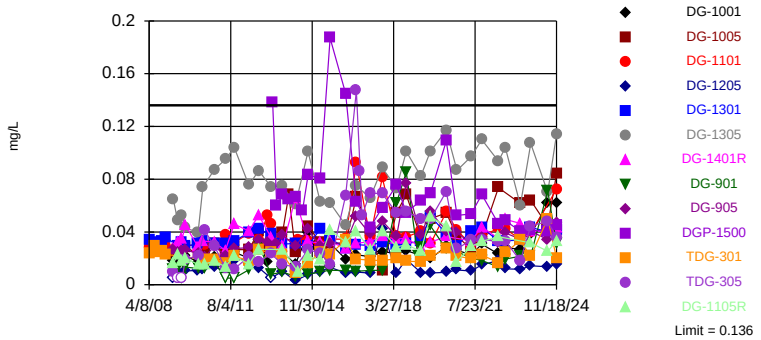
Constituent: Arsenic Analysis Run 3/3/2025 10:01 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 70 background values. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 13 points to limit. Assumes 5 future values.

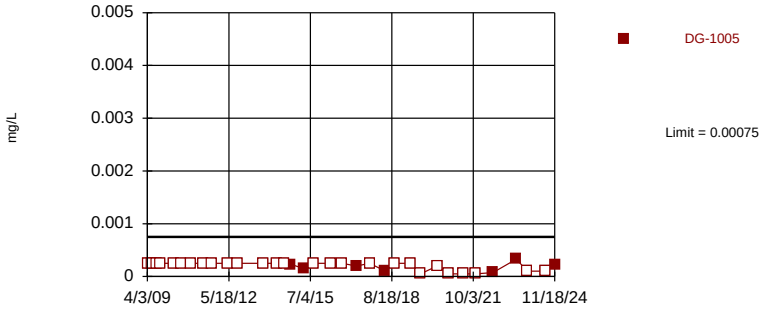
Constituent: Barium Analysis Run 3/3/2025 10:01 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 70 background values. 85.71% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Assumes 17 future values.

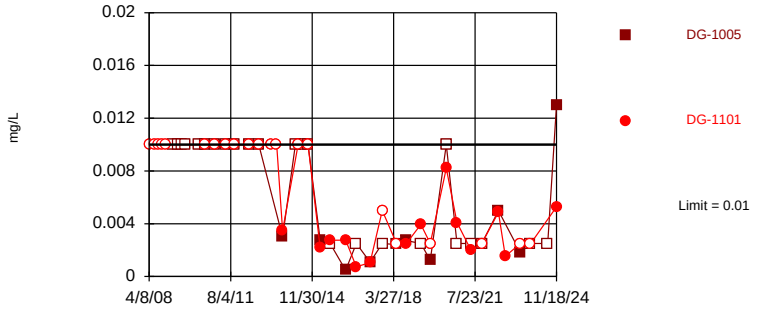
Constituent: Cadmium Analysis Run 3/3/2025 10:01 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

Exceeds Limit: DG-1005

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 91.43% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 2 points to limit. Assumes 16 future values.

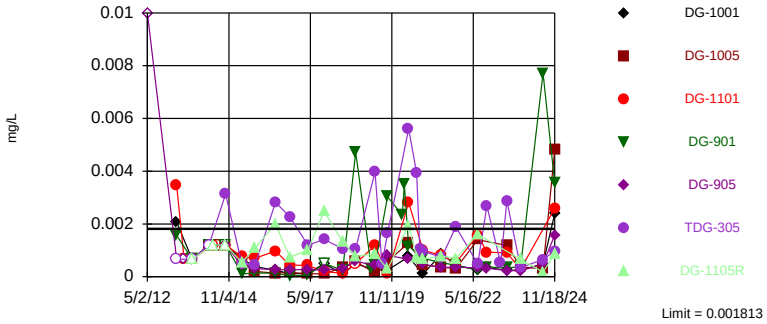
Constituent: Chromium Analysis Run 3/3/2025 10:01 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

Exceeds Limit: DG-1001, DG-1005, DG-1101, DG-901

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-8, Std. Dev.=0.9774, n=42, 26.19% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9788, critical = 0.922. Kappa = 1.726 (c=15, w=18, 1 of 3, event alpha = 0.05132). Report alpha = 0.003506. Individual comparison alpha = 0.0001951. Comparing 7 points to limit. Assumes 11 future values.

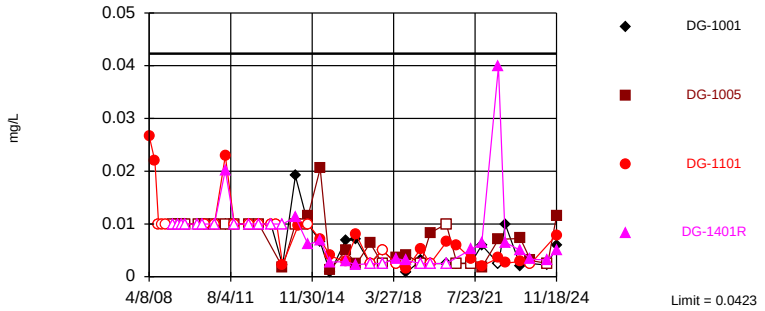
Constituent: Cobalt Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 70 background values. 78.57% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 4 points to limit. Assumes 14 future values.

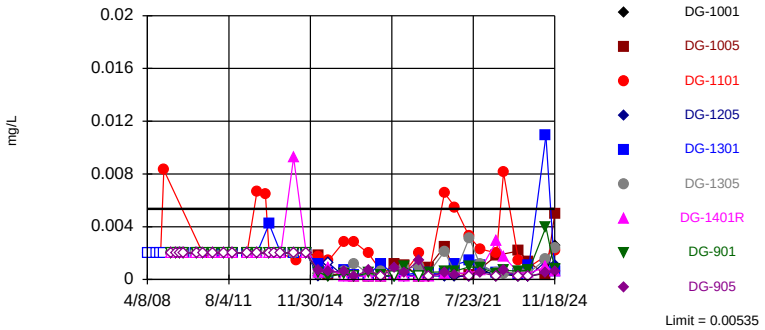
Constituent: Copper Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 70 background values. 64.29% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 9 points to limit. Assumes 9 future values.

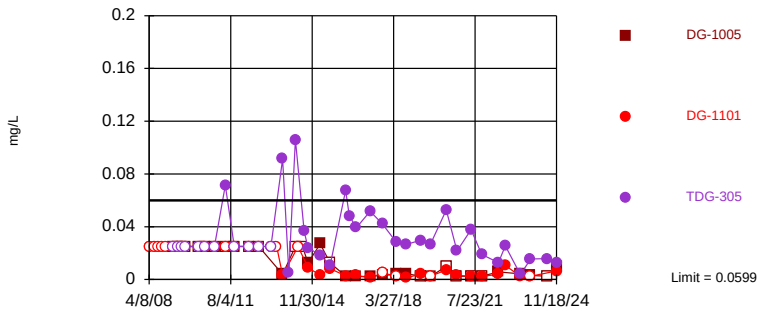
Constituent: Lead Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 70 background values. 74.29% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 3 points to limit. Assumes 15 future values.

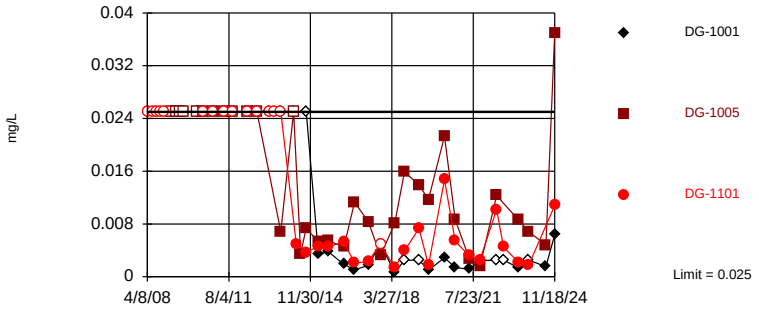
Constituent: Nickel Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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Hollow symbols indicate censored values.

Exceeds Limit: DG-1005

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 82.86% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Comparing 3 points to limit. Assumes 15 future values.

Constituent: Vanadium Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits

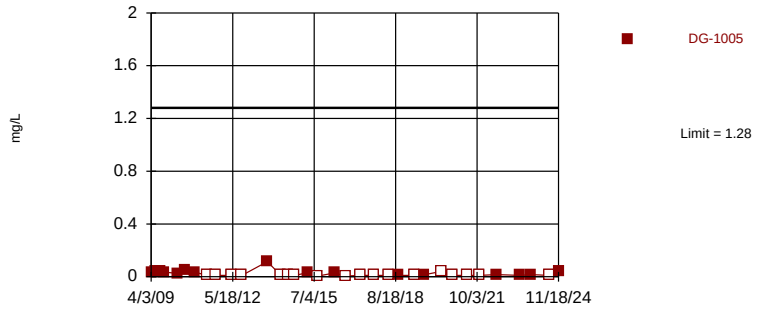
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

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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 Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 70 background values. 37.14% NDs. Annual per-constituent alpha = 0.0005759. Individual comparison alpha = 0.000016 (1 of 3). Assumes 17 future values.

Constituent: Zinc Analysis Run 3/3/2025 10:02 AM View: 2024 AWQR Prediction Limits

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL Sanitas master

Mann-Kendall/Sen’s Slope Trend Test Summary Table and Graphs

Trend Test

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM Printed 2/21/2025, 10:10 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
1,1-Dichloroethane (ug/L)	DG-1205	0.2469	14	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1301	0.4254	4	21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1305	-0.4926	-6	-21	No	8	0	0.01	NP
1,1-Dichloroethane (ug/L)	DG-1401R	-0.07394	0	21	No	8	0	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1205	0.06219	12	21	No	8	0	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1301	0.01561	5	21	No	8	25	0.01	NP
1,2-Dichloropropane (ug/L)	DG-1305	0.04767	11	21	No	8	25	0.01	NP
1,4-Dichlorobenzene (ug/L)	DG-1305	-0.04068	-5	-21	No	8	25	0.01	NP
Acetone (ug/L)	DG-901	0	5	21	No	8	87.5	0.01	NP
Arsenic (mg/L)	DG-901	0.001157	6	21	No	8	0	0.01	NP
Arsenic (mg/L)	DG-1005	-0.000203	-6	-21	No	8	0	0.01	NP
Arsenic (mg/L)	DG-1101	-0.00002985	-4	-21	No	8	12.5	0.01	NP
Arsenic (mg/L)	DG-1205	0.0001005	4	21	No	8	0	0.01	NP
Arsenic (mg/L)	DG-1305	-0.0006858	-14	-21	No	8	0	0.01	NP
Arsenic (mg/L)	DGP-1500	0.0008366	4	21	No	8	0	0.01	NP
Barium (mg/L)	DG-901	0.003769	18	21	No	8	0	0.01	NP
Barium (mg/L)	DG-905	0.003105	14	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1005	0.01053	14	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1101	0.002825	4	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1205	0.0009566	6	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1301	0.001976	9	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1305	0.0021	2	21	No	8	0	0.01	NP
Barium (mg/L)	DG-1401R	0.002088	6	21	No	8	0	0.01	NP
Barium (mg/L)	DGP-1500	-0.003936	-16	-21	No	8	0	0.01	NP
Benzene (ug/L)	DG-901	0	5	21	No	8	87.5	0.01	NP
Benzene (ug/L)	**DGP-1500**	**0.3604**	**22**	**21**	**Yes**	**8**	**50**	**0.01**	**NP**
Bis[2-ethylhexyl]phthalate (ug/L)	DG-1301	0.01531	3	21	No	8	62.5	0.01	NP
Cadmium (mg/L)	DG-901	0.00001955	12	21	No	8	50	0.01	NP
Cadmium (mg/L)	DG-1005	0.00001973	18	21	No	8	62.5	0.01	NP
Cadmium (mg/L)	DG-1101	0.000006726	4	21	No	8	50	0.01	NP
Cadmium (mg/L)	DG-1301	0	5	21	No	8	75	0.01	NP
Cadmium (mg/L)	DG-1401R	0.00001285	13	21	No	8	75	0.01	NP
Cadmium (mg/L)	DGP-1500	0	2	21	No	8	62.5	0.01	NP
Chlorobenzene (ug/L)	DG-1305	-0.121	-4	-21	No	8	12.5	0.01	NP
Chloromethane (ug/L)	DG-1205	0	-3	-21	No	8	87.5	0.01	NP
Chromium (mg/L)	DG-1005	0	6	21	No	8	62.5	0.01	NP
Chromium (mg/L)	DG-1101	0	1	21	No	8	37.5	0.01	NP
cis-1,2-Dichloroethene (ug/L)	DG-1301	5.934	8	21	No	8	0	0.01	NP
cis-1,2-Dichloroethene (ug/L)	DG-1305	-0.3572	-6	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-901	0.0001165	6	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-905	0.00001754	0	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1005	0.00001967	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1101	-0.00008352	-4	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1205	0.000007653	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1301	-0.00007232	-10	-21	No	8	0	0.01	NP
Cobalt (mg/L)	DG-1401R	0.00001412	2	21	No	8	0	0.01	NP
Cobalt (mg/L)	**DGP-1500**	**-0.0002638**	**-23**	**-21**	**Yes**	**8**	**25**	**0.01**	**NP**
Copper (mg/L)	DG-901	0.0003229	8	21	No	8	0	0.01	NP
Copper (mg/L)	DG-1005	0.0004631	11	21	No	8	37.5	0.01	NP
Copper (mg/L)	DG-1101	-0.0001603	-2	-21	No	8	12.5	0.01	NP

Trend Test

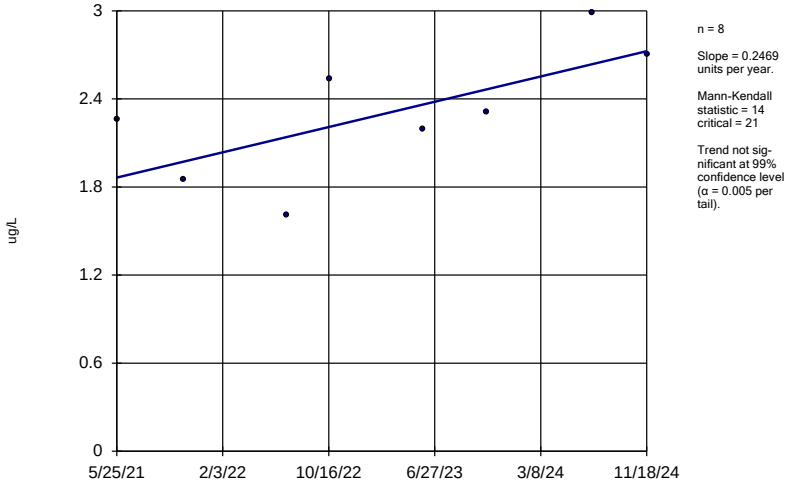
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM Printed 2/21/2025, 10:10 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Copper (mg/L)	DG-1205	0.000295	12	21	No	8	62.5	0.01	NP
Copper (mg/L)	DG-1301	-0.0002271	-4	-21	No	8	0	0.01	NP
Copper (mg/L)	DG-1401R	-0.000717	-12	-21	No	8	0	0.01	NP
Copper (mg/L)	DGP-1500	-0.0008502	-12	-21	No	8	25	0.01	NP
Dichlorodifluoromethane (ug/L)	DG-1205	0.1586	0	21	No	8	0	0.01	NP
Lead (mg/L)	DG-901	0.00003699	2	21	No	8	0	0.01	NP
Lead (mg/L)	DG-905	0.00002108	8	21	No	8	50	0.01	NP
Lead (mg/L)	DG-1005	0.0005207	10	21	No	8	0	0.01	NP
Lead (mg/L)	DG-1101	-0.0008604	-14	-21	No	8	0	0.01	NP
Lead (mg/L)	DG-1205	0.0001841	7	21	No	8	25	0.01	NP
Lead (mg/L)	DG-1301	-0.00006899	-6	-21	No	8	0	0.01	NP
Lead (mg/L)	DG-1305	0.00005624	2	21	No	8	0	0.01	NP
Lead (mg/L)	DG-1401R	-0.00002354	-4	-21	No	8	0	0.01	NP
Lead (mg/L)	DGP-1500	-0.0005166	-19	-21	No	8	25	0.01	NP
Nickel (mg/L)	DG-901	-0.00005104	-7	-21	No	8	37.5	0.01	NP
Nickel (mg/L)	DG-1005	0.0002734	10	21	No	8	50	0.01	NP
Nickel (mg/L)	DG-1101	0.00009022	3	21	No	8	12.5	0.01	NP
Nickel (mg/L)	DG-1205	0.00007483	4	21	No	8	12.5	0.01	NP
Nickel (mg/L)	DG-1301	-0.002181	-12	-21	No	8	12.5	0.01	NP
Nickel (mg/L)	DG-1401R	-0.0001449	-11	-21	No	8	25	0.01	NP
Selenium (mg/L)	DG-1005	0.00007471	5	21	No	8	37.5	0.01	NP
Selenium (mg/L)	DG-1101	-0.000515	-12	-21	No	8	12.5	0.01	NP
Selenium (mg/L)	DGP-1500	-0.009352	-21	-21	No	8	25	0.01	NP
Silver (mg/L)	DG-901	0	1	21	No	8	87.5	0.01	NP
Tetrachloroethene (ug/L)	DG-1301	0.1801	10	21	No	8	12.5	0.01	NP
Thallium (mg/L)	DG-901	0	-5	-21	No	8	75	0.01	NP
Toluene (ug/L)	DGP-1500	0	3	21	No	8	75	0.01	NP
trans-1,2-Dichloroethene (ug/L)	DG-1301	0.2049	15	21	No	8	25	0.01	NP
Trichloroethene (ug/L)	DG-1301	-0.9157	-4	-21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1005	0.001437	4	21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1101	-0.0007083	-8	-21	No	8	0	0.01	NP
Vanadium (mg/L)	DG-1205	0.0007273	10	21	No	8	12.5	0.01	NP
Vanadium (mg/L)	DG-1401R	-0.0001621	-5	-21	No	8	37.5	0.01	NP
Vinyl chloride (ug/L)	DG-1301	-0.1143	-9	-21	No	8	37.5	0.01	NP
Vinyl chloride (ug/L)	DG-1305	-0.2939	-15	-21	No	8	37.5	0.01	NP
Zinc (mg/L)	DG-901	0	-2	-21	No	8	62.5	0.01	NP
Zinc (mg/L)	DG-1005	0.001176	12	21	No	8	50	0.01	NP
Zinc (mg/L)	DG-1101	0	0	21	No	8	62.5	0.01	NP
Zinc (mg/L)	DG-1301	-0.005986	-11	-21	No	8	25	0.01	NP
Zinc (mg/L)	DG-1401R	0	-5	-21	No	8	75	0.01	NP

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Sen's Slope Estimator

DG-1205

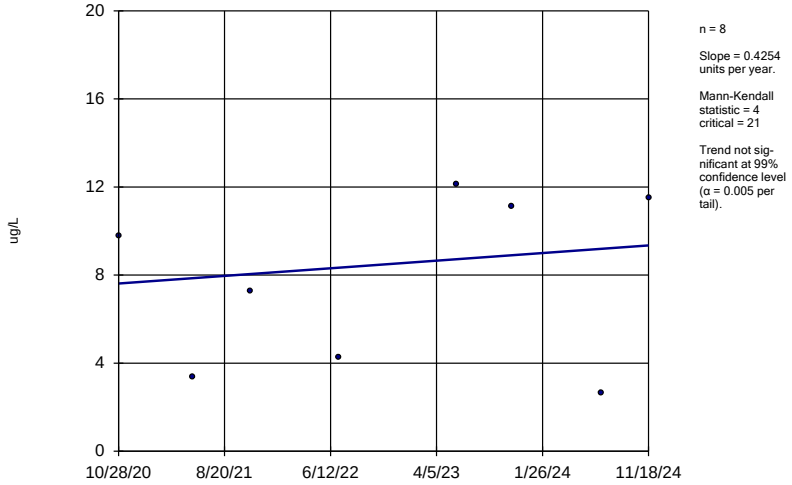


Constituent: 1,1-Dichloroethane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301

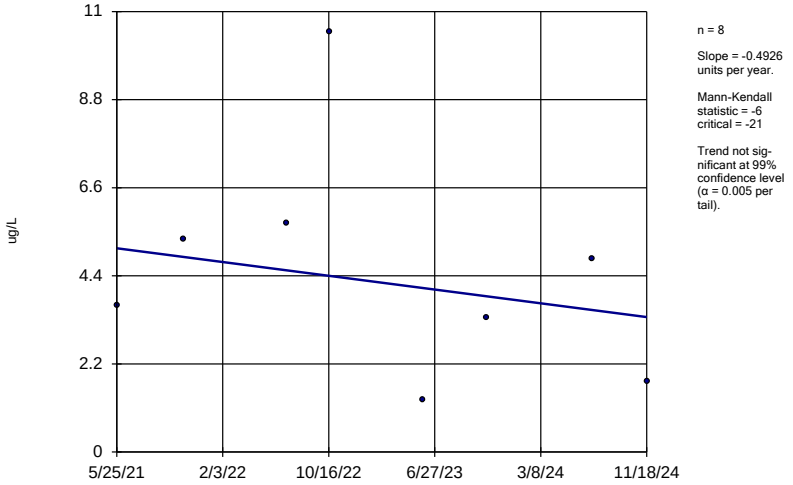


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1305

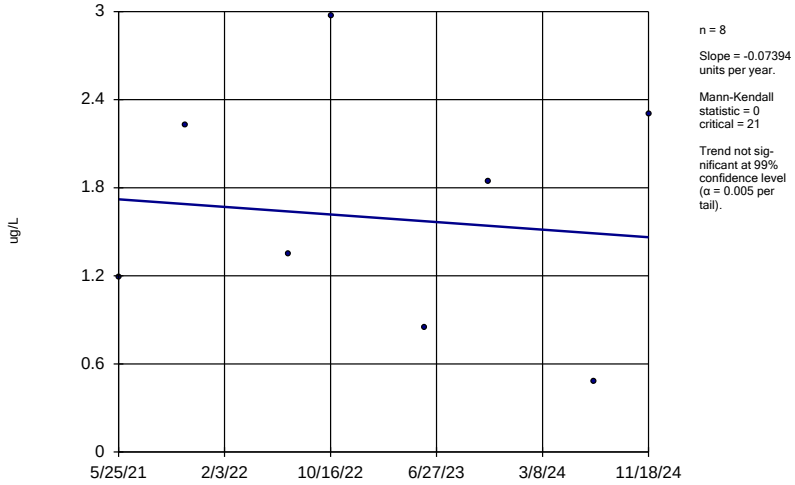


Constituent: 1,1-Dichloroethane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1401R

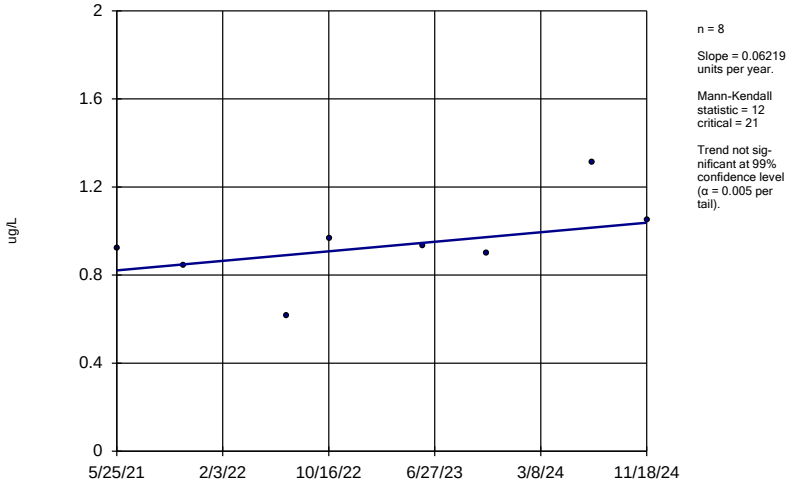


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.06219 units per year.

Mann-Kendall statistic = 12 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

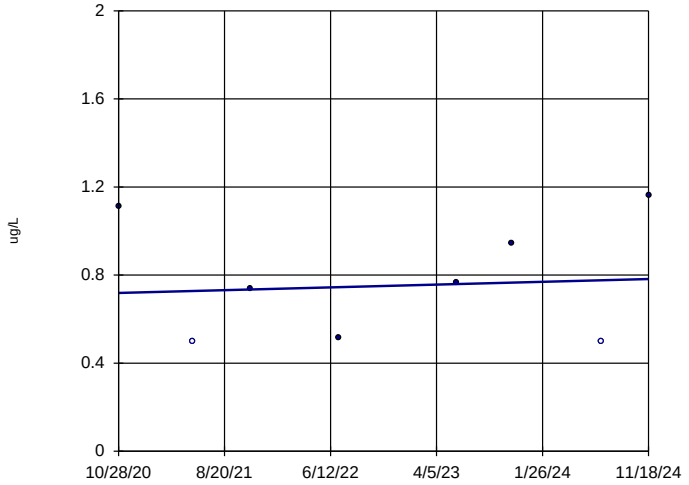
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.01561 units per year.

Mann-Kendall statistic = 5 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

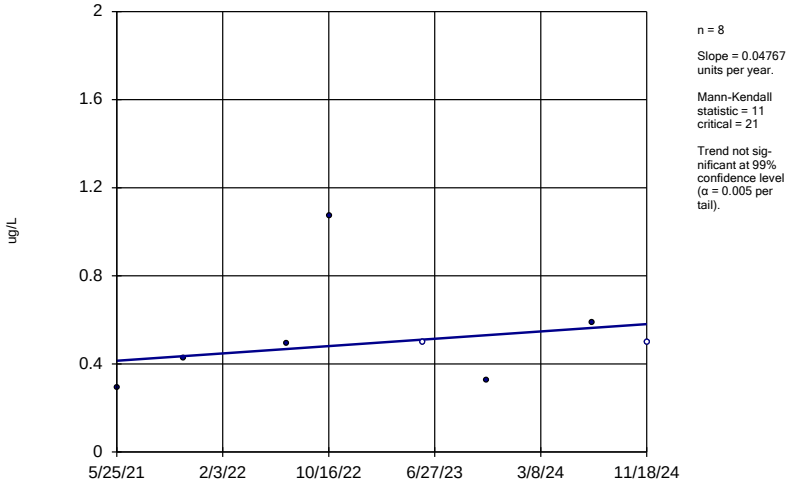
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.04767 units per year.

Mann-Kendall statistic = 11 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: 1,2-Dichloropropane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

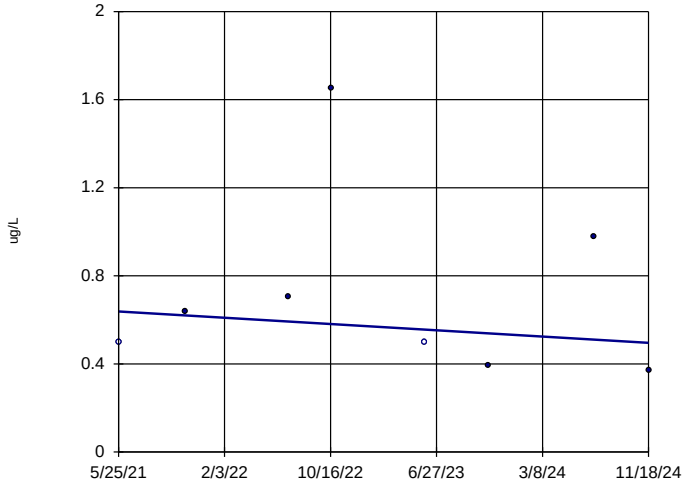
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305



n = 8

Slope = -0.04068 units per year.

Mann-Kendall statistic = -5 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

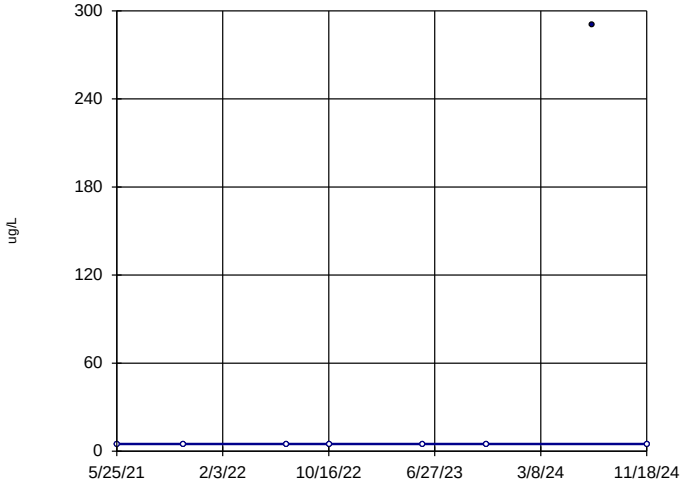
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 21

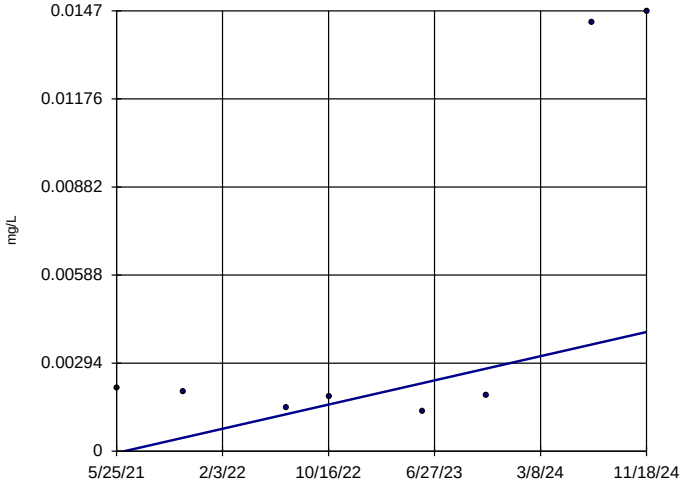
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Acetone Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-901



n = 8

Slope = 0.001157 units per year.

Mann-Kendall statistic = 6
critical = 21

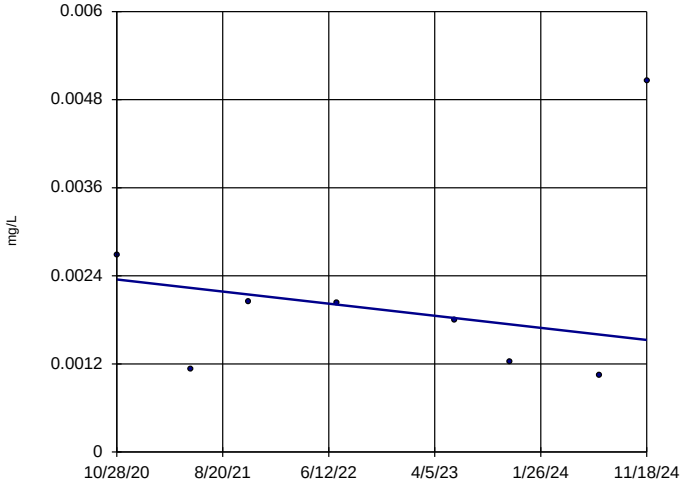
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1005



n = 8

Slope = -0.000203 units per year.

Mann-Kendall statistic = -6
critical = -21

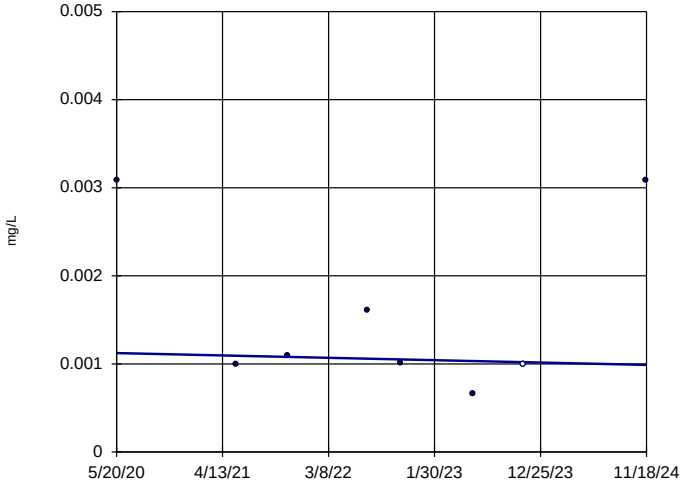
Trend not significant at 99% confidence level (α = 0.005 per tail).

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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.00002985 units per year.

Mann-Kendall statistic = -4
critical = -21

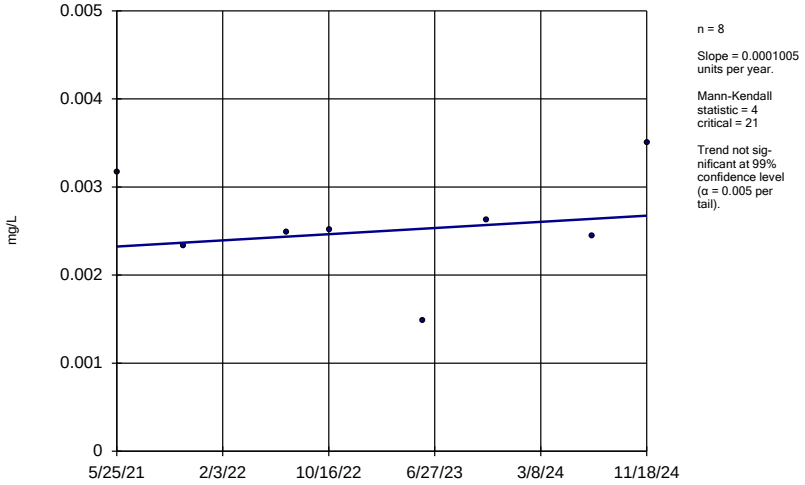
Trend not significant at 99% confidence level (α = 0.005 per tail).

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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1205



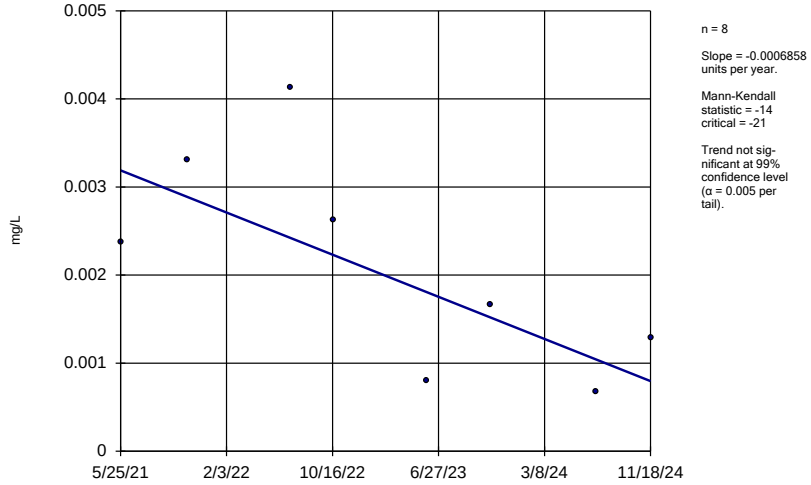
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1305



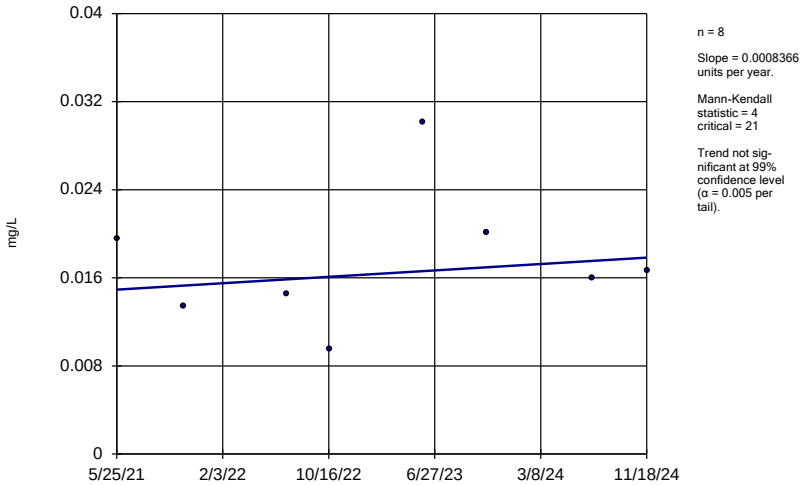
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DGP-1500



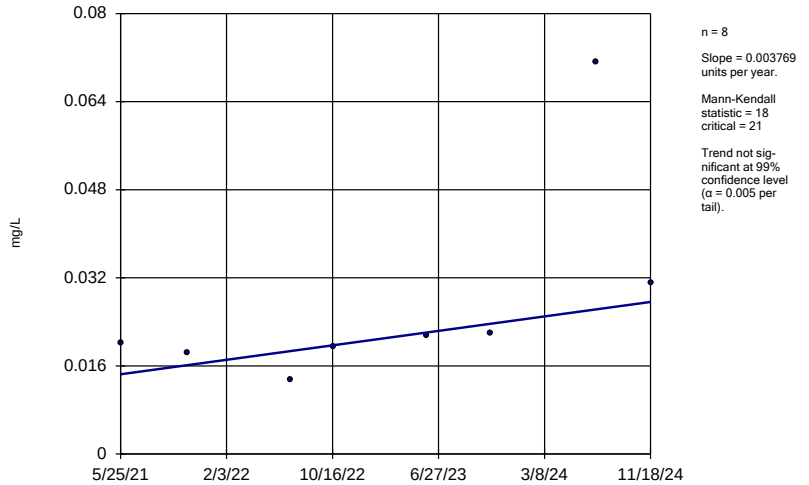
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-901



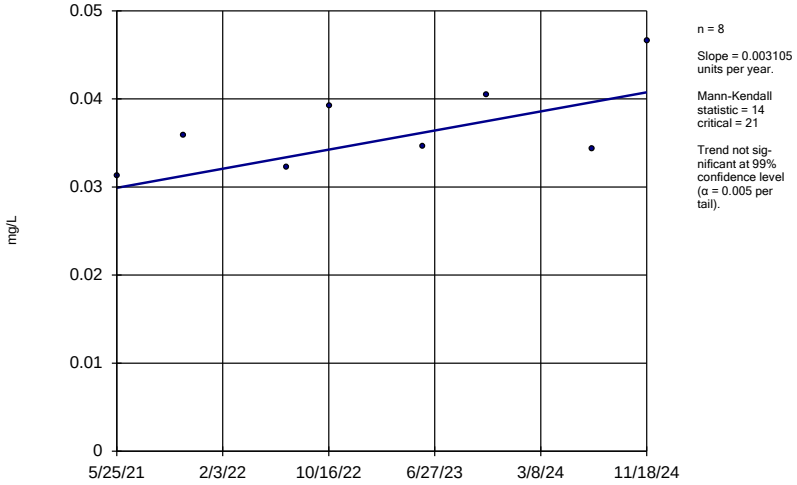
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-905



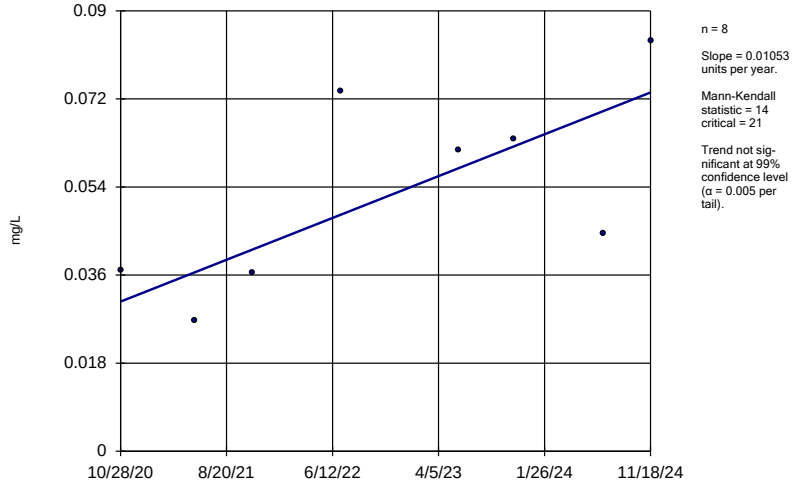
Constituent: Barium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1005



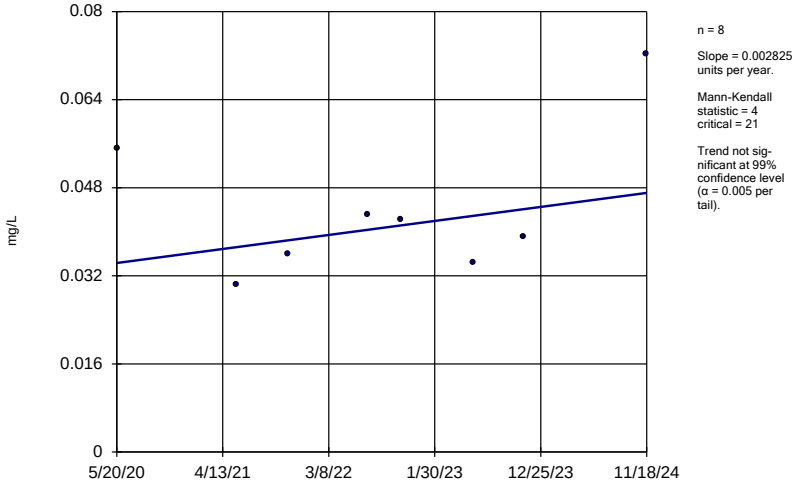
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1101



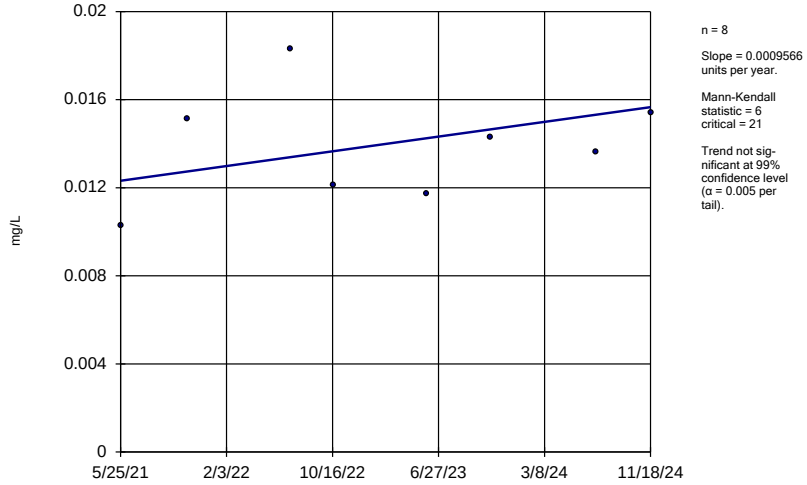
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1205



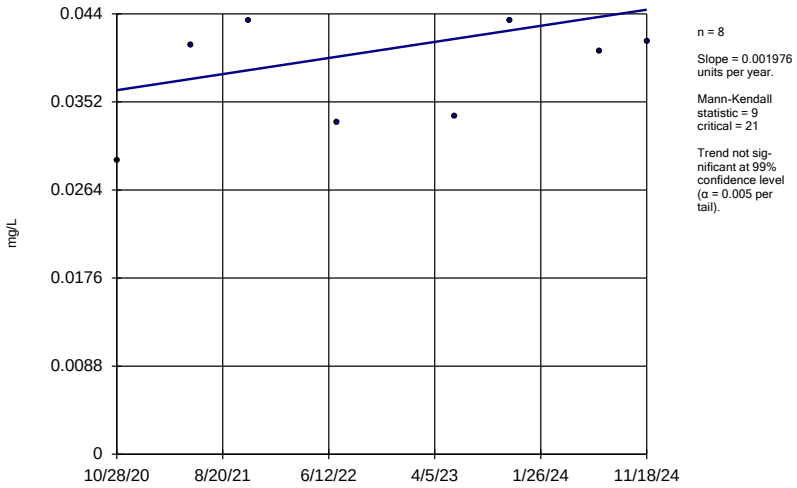
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.001976 units per year.

Mann-Kendall statistic = 9
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

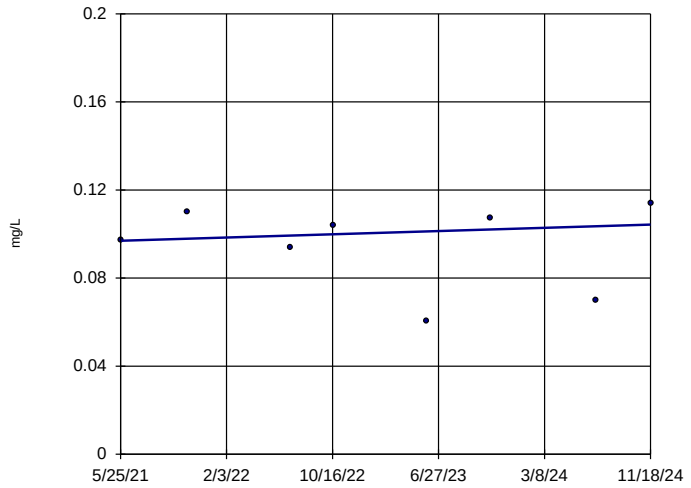
Constituent: Barium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1305



n = 8

Slope = 0.0021 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

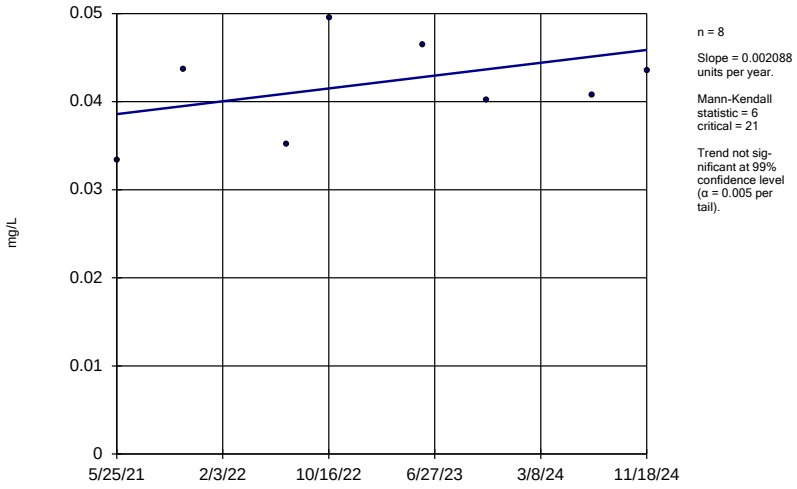
Constituent: Barium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.002088 units per year.

Mann-Kendall statistic = 6
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

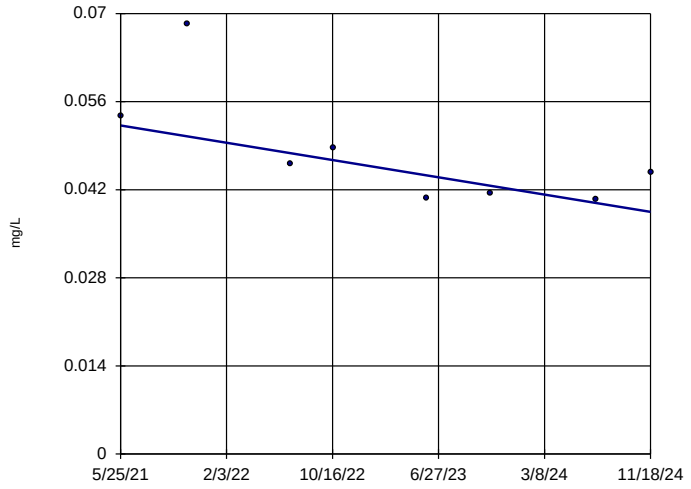
Constituent: Barium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.003936 units per year.

Mann-Kendall statistic = -16
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

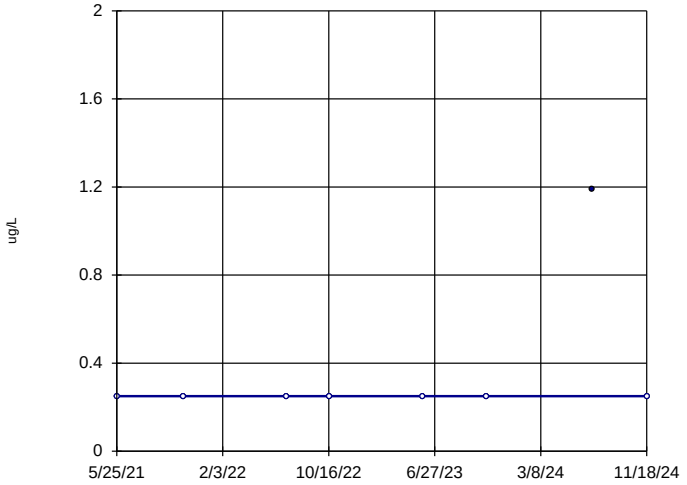
Constituent: Barium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0
units per year.

Mann-Kendall
statistic = 5
critical = 21

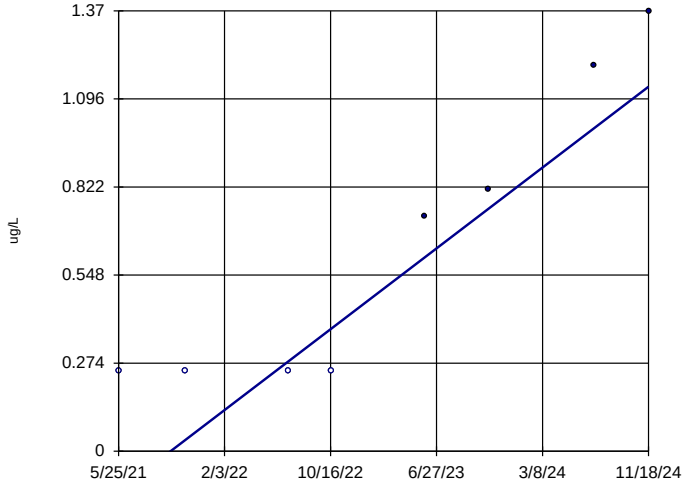
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Benzene Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = 0.3604
units per year.

Mann-Kendall
statistic = 22
critical = 21

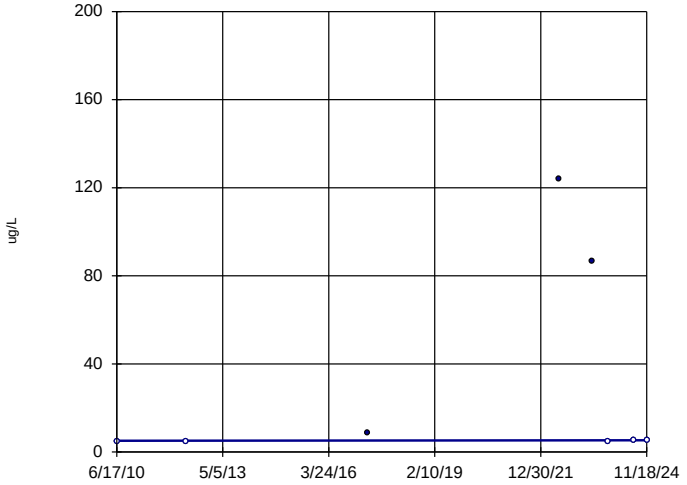
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Benzene Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.01531
units per year.

Mann-Kendall
statistic = 3
critical = 21

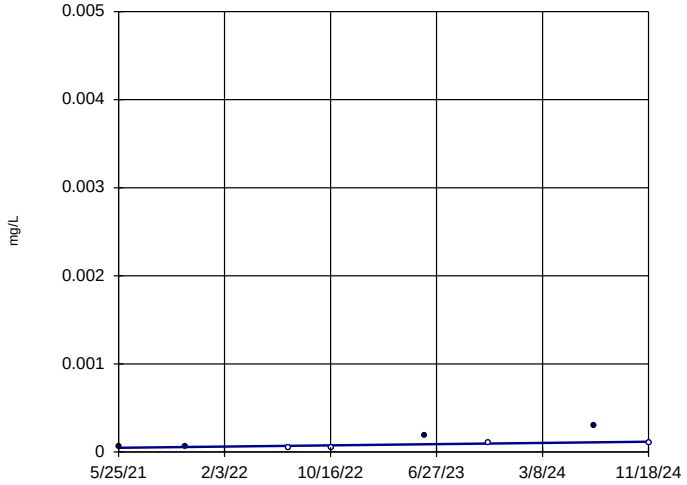
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0.00001955
units per year.

Mann-Kendall
statistic = 12
critical = 21

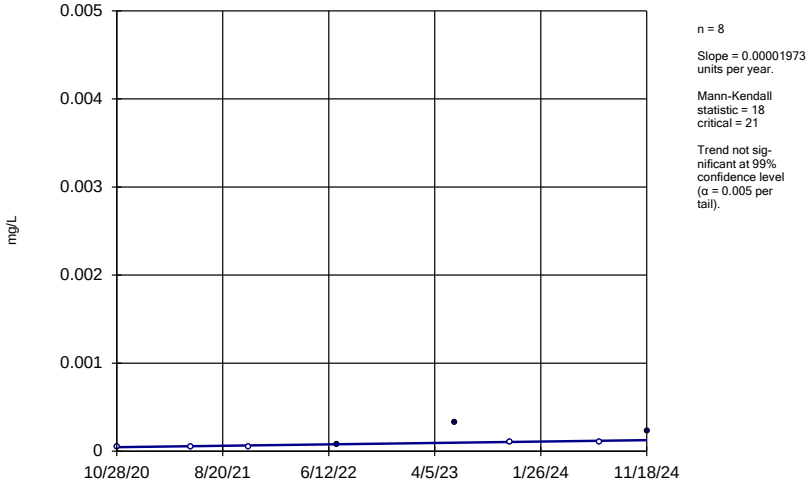
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.00001973 units per year.

Mann-Kendall statistic = 18
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

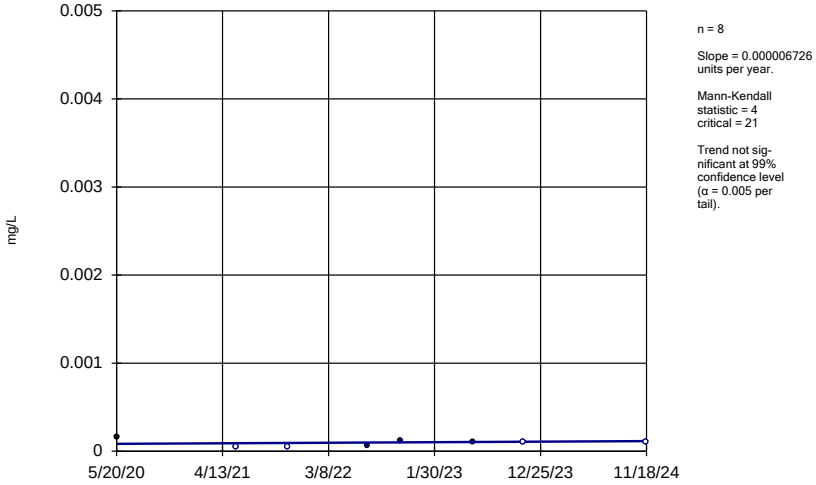
Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = 0.000006726 units per year.

Mann-Kendall statistic = 4
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

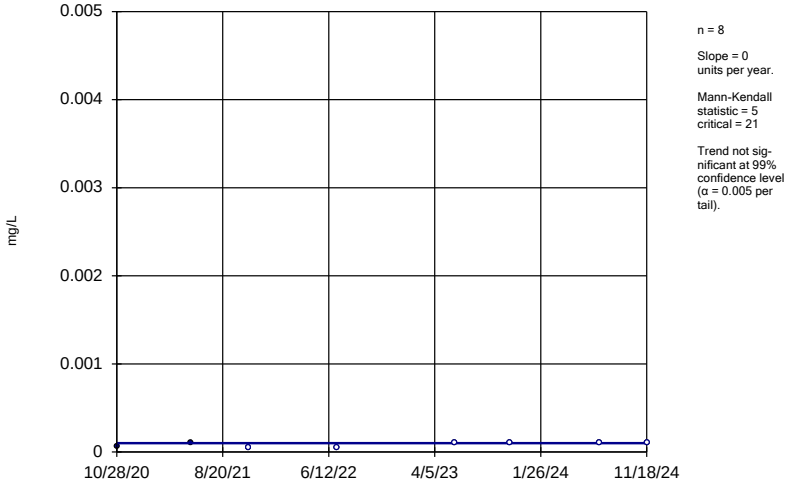
Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

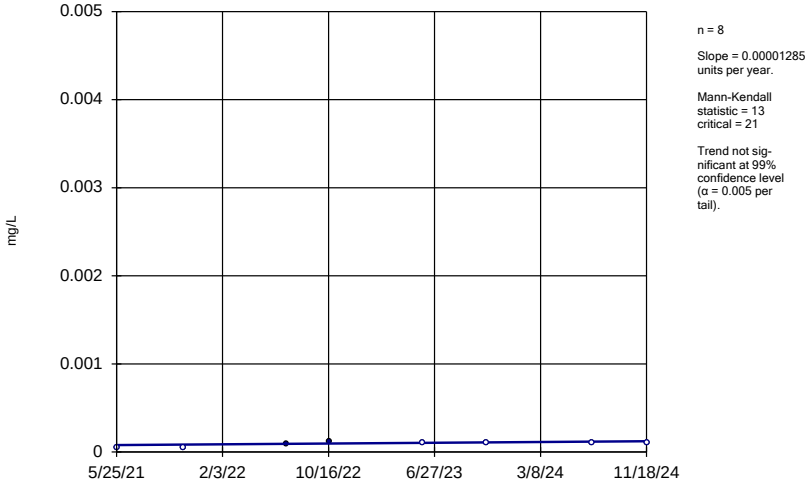
Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.00001285 units per year.

Mann-Kendall statistic = 13
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

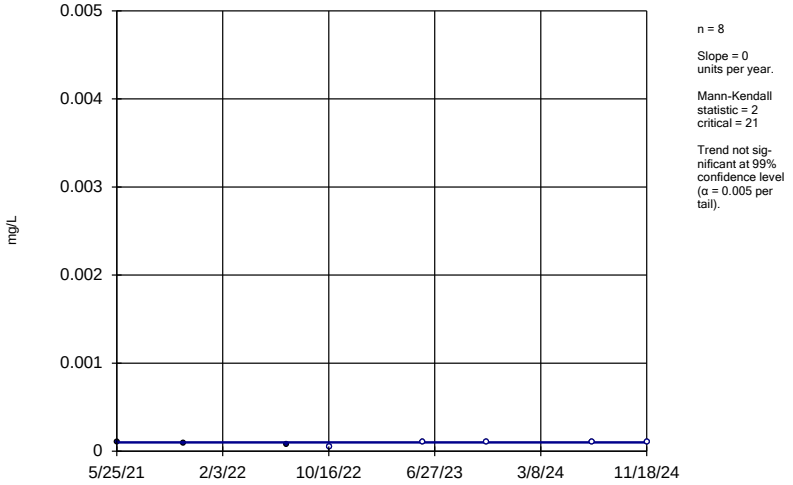
Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500

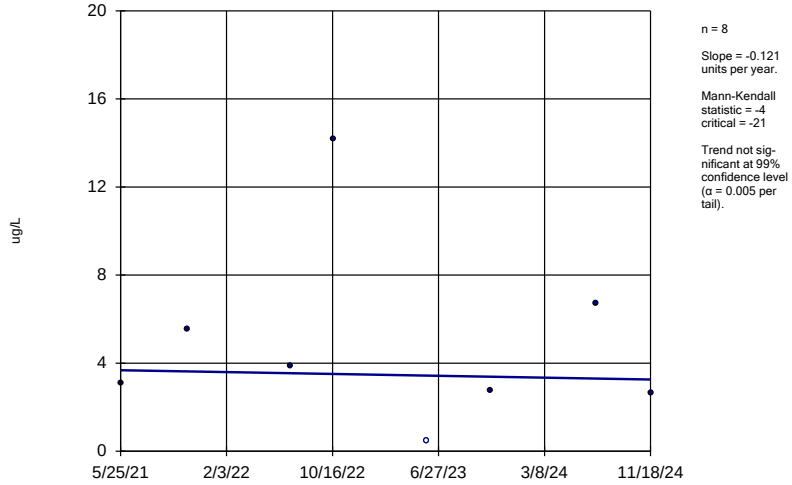


Constituent: Cadmium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305

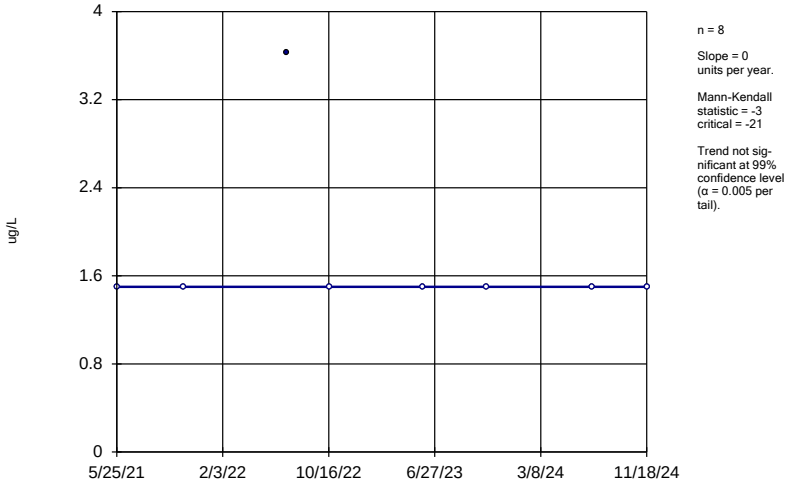


Constituent: Chlorobenzene Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205

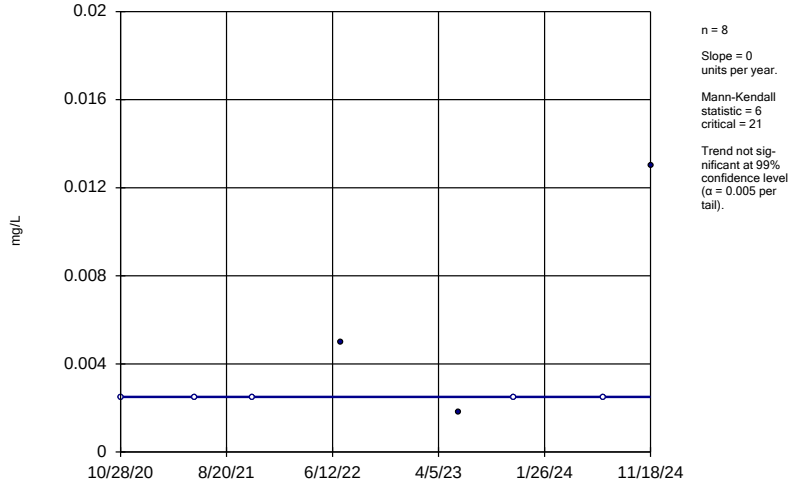


Constituent: Chloromethane Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005

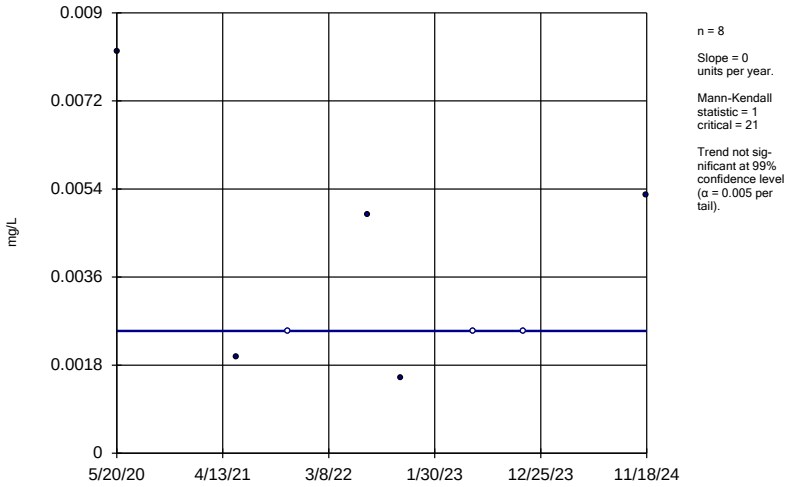


Constituent: Chromium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



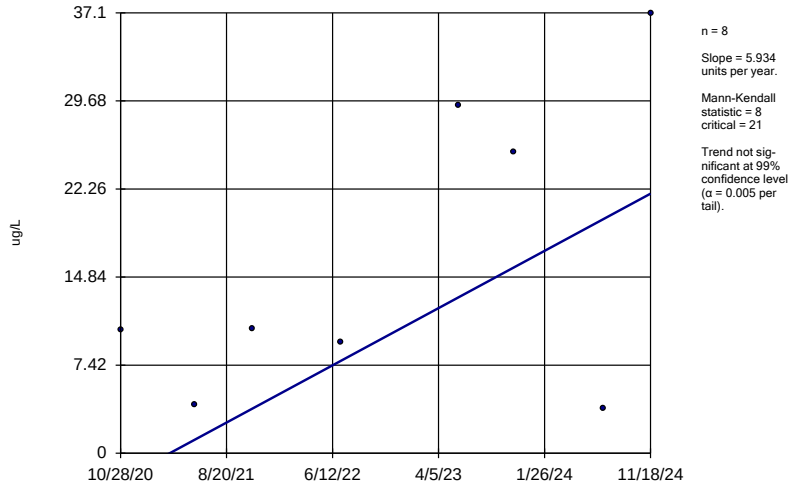
Constituent: Chromium Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301



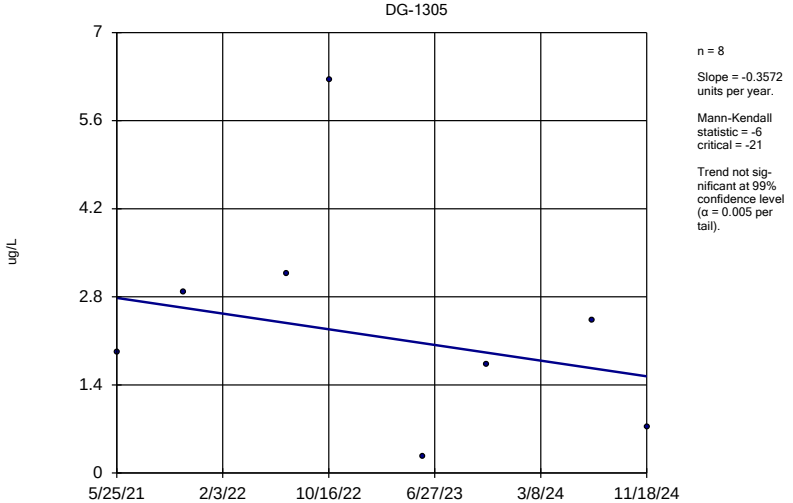
Constituent: cis-1,2-Dichloroethene Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1305



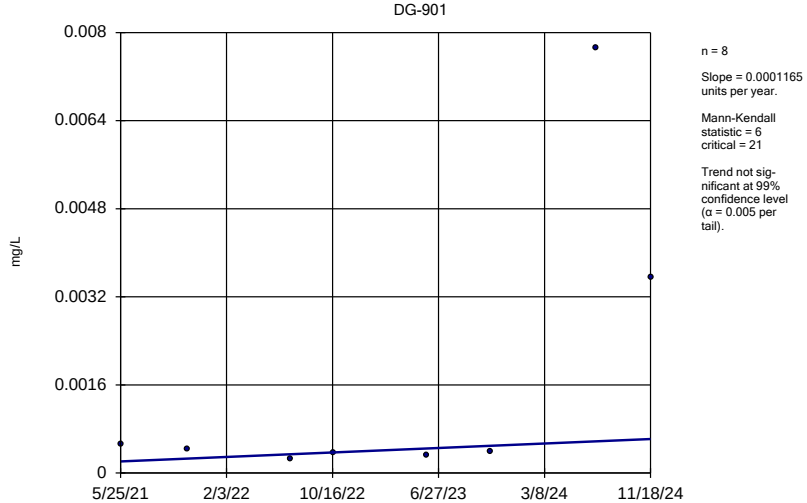
Constituent: cis-1,2-Dichloroethene Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-901



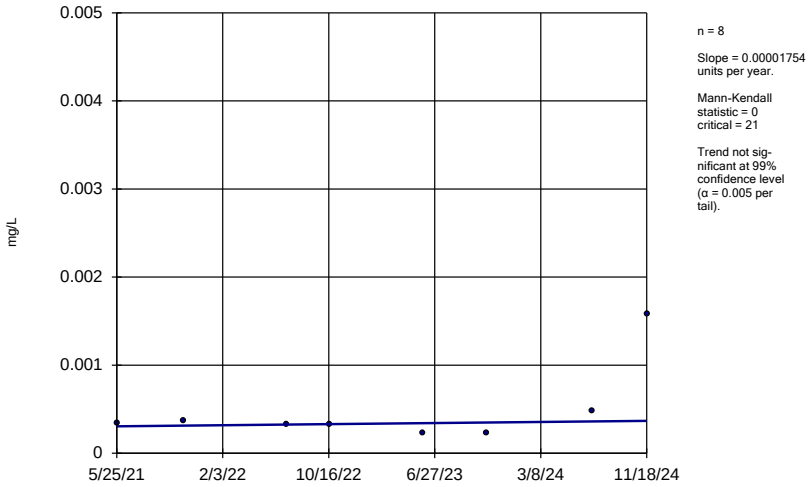
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-905



n = 8

Slope = 0.00001754 units per year.

Mann-Kendall statistic = 0
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

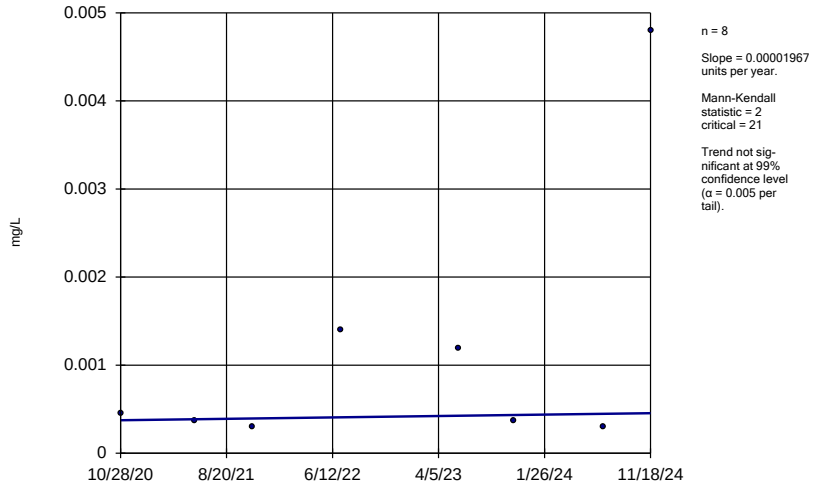
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.00001967 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

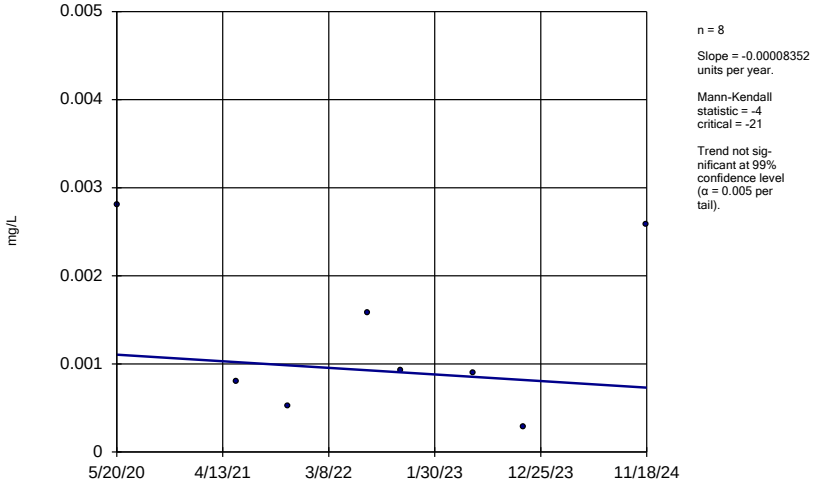
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.00008352 units per year.

Mann-Kendall statistic = -4
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

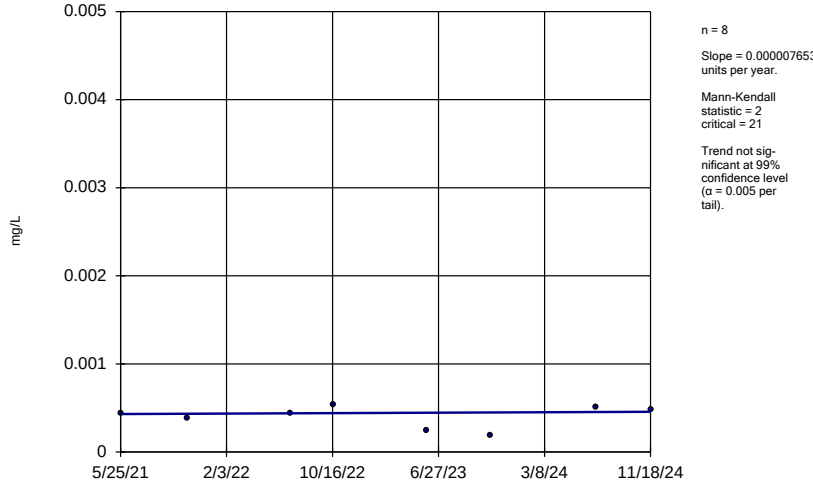
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.000007653 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

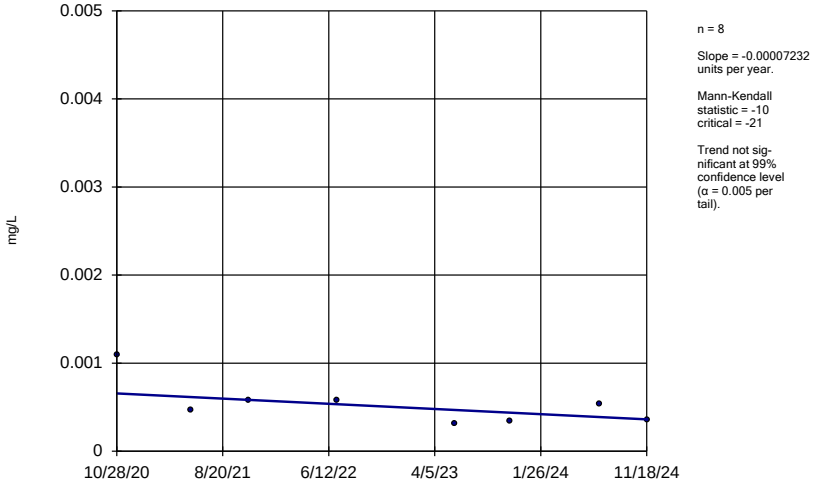
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.00007232 units per year.

Mann-Kendall statistic = -10
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

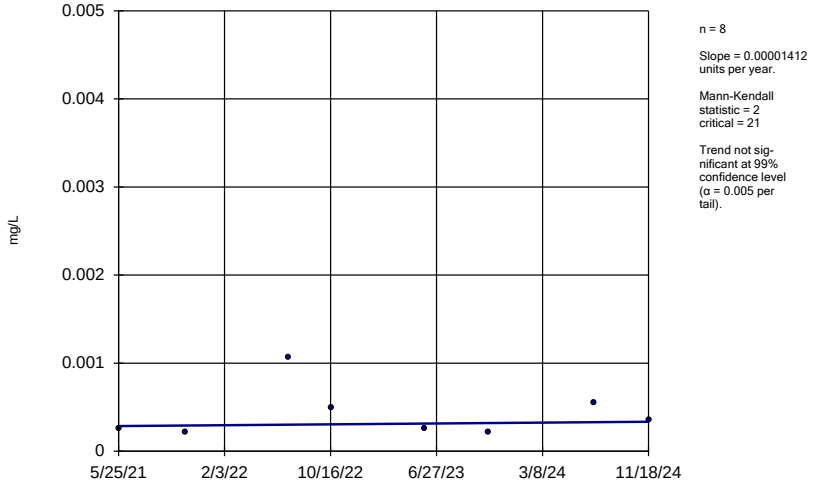
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0.00001412 units per year.

Mann-Kendall statistic = 2
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

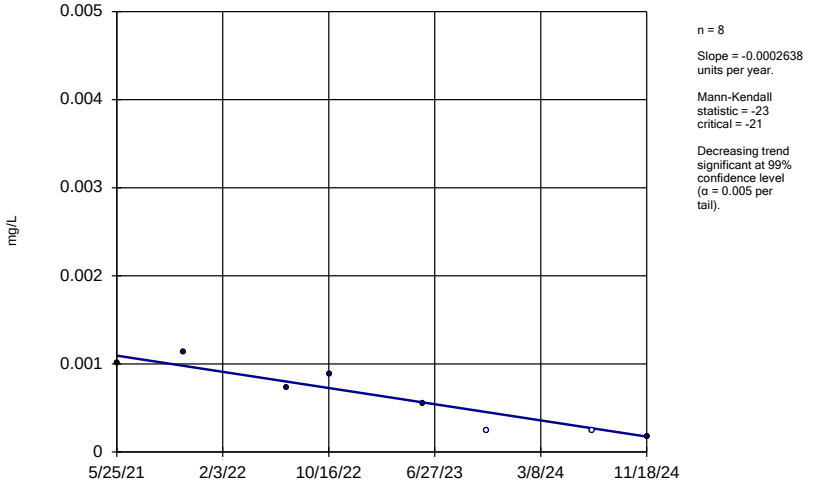
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.0002638 units per year.

Mann-Kendall statistic = -23
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

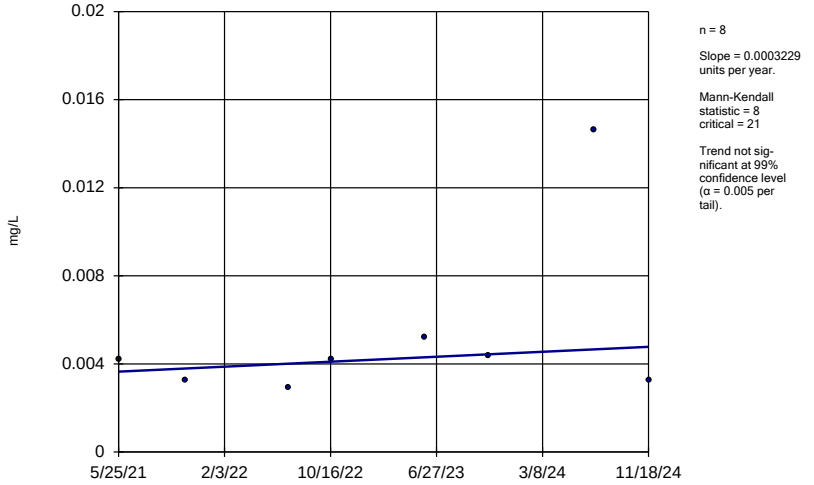
Constituent: Cobalt Analysis Run 2/21/2025 10:06 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-901



n = 8

Slope = 0.0003229 units per year.

Mann-Kendall statistic = 8
critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

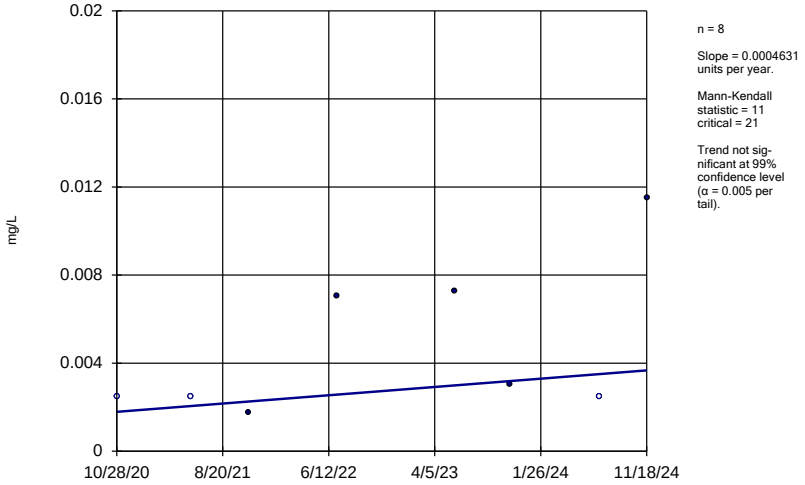
Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005

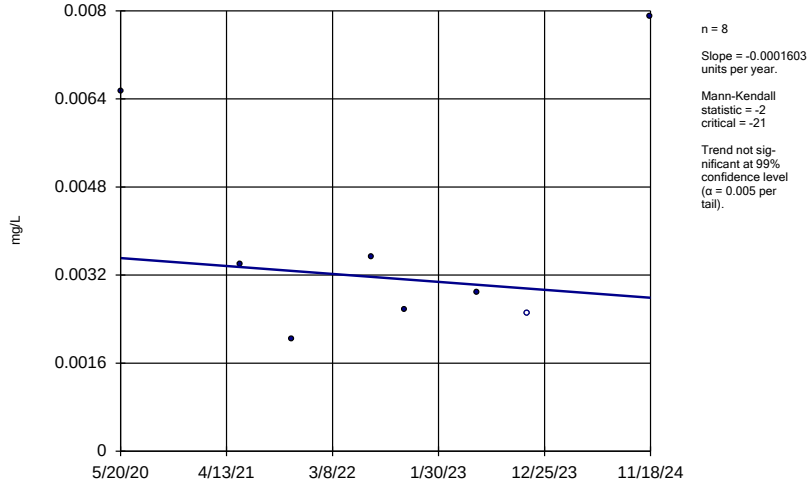


Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101

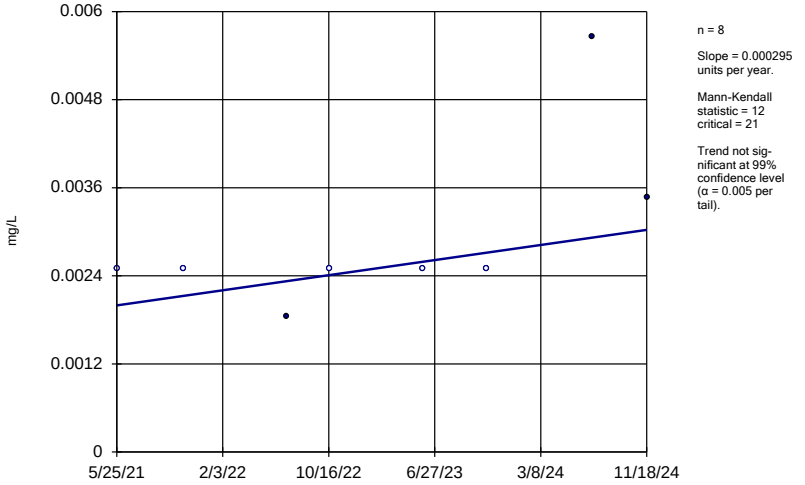


Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205

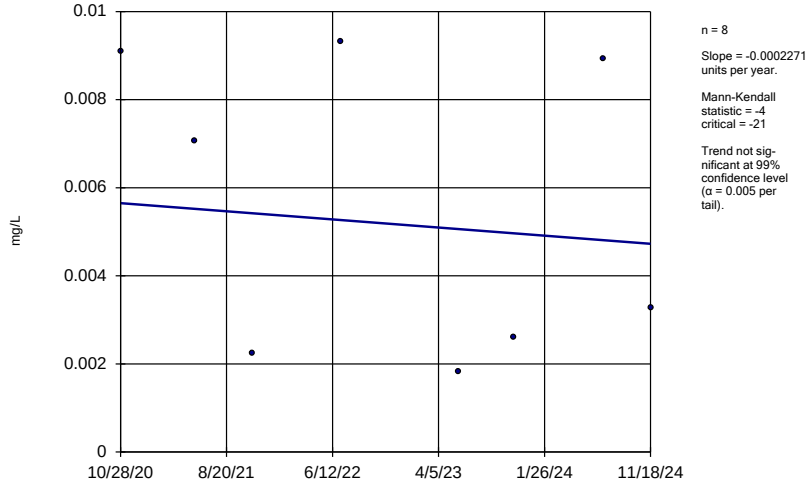


Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1301

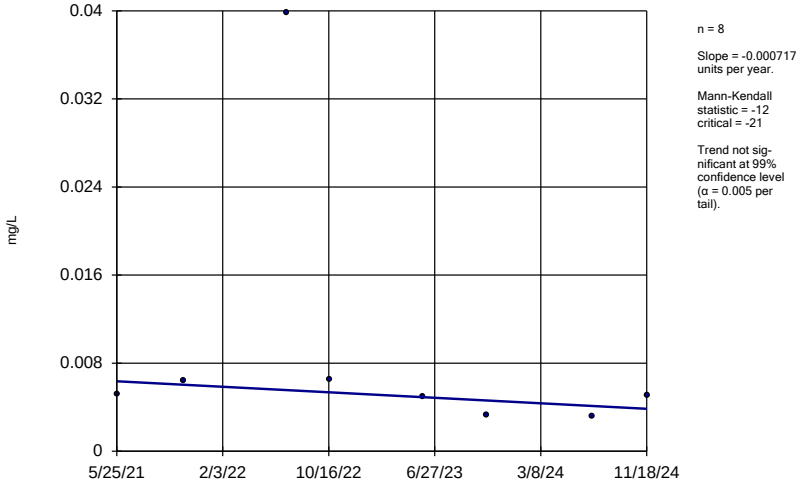


Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1401R



Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

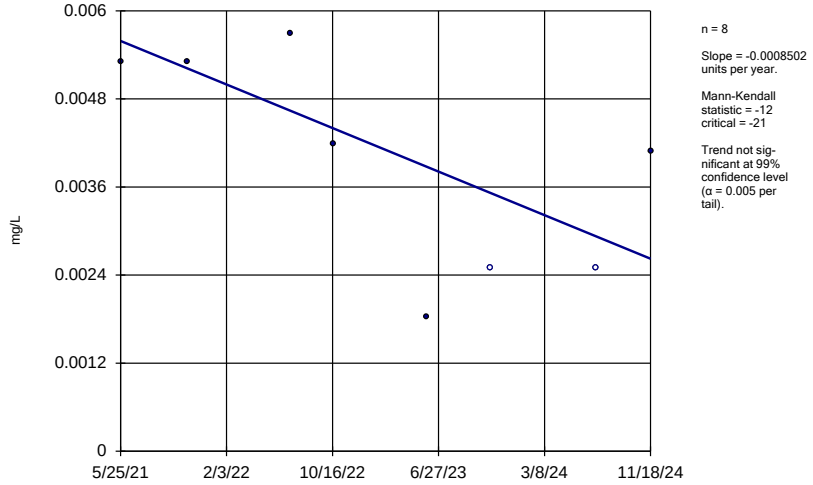
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



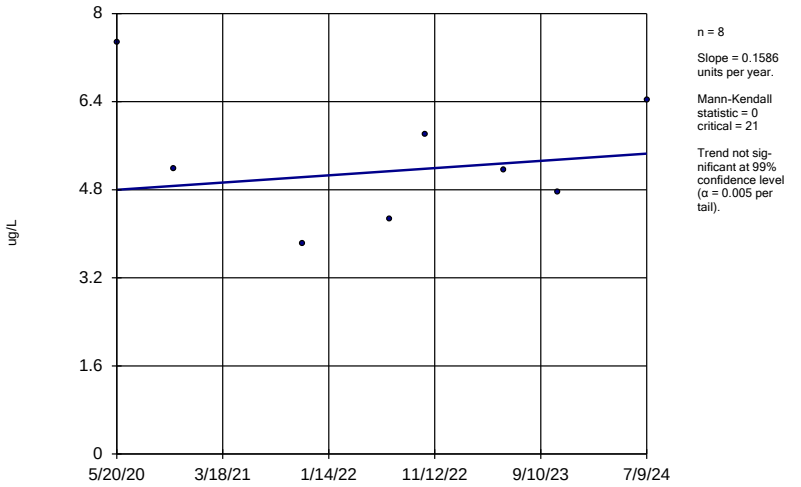
Constituent: Copper Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1205



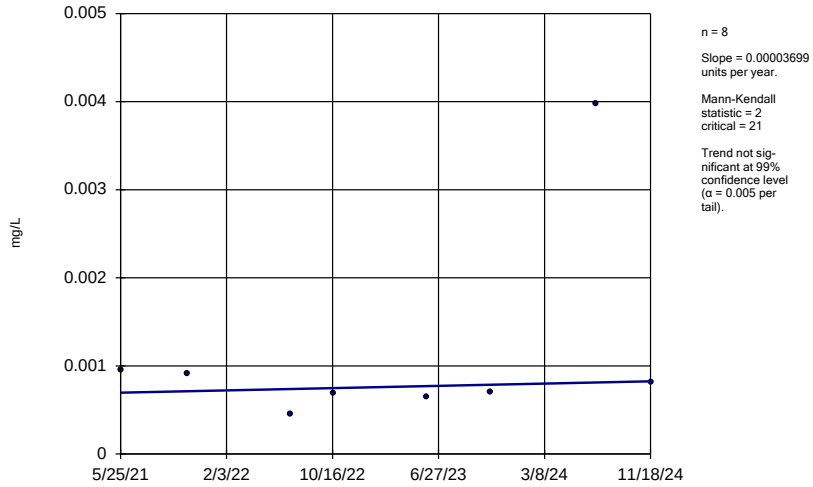
Constituent: Dichlorodifluoromethane Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-901



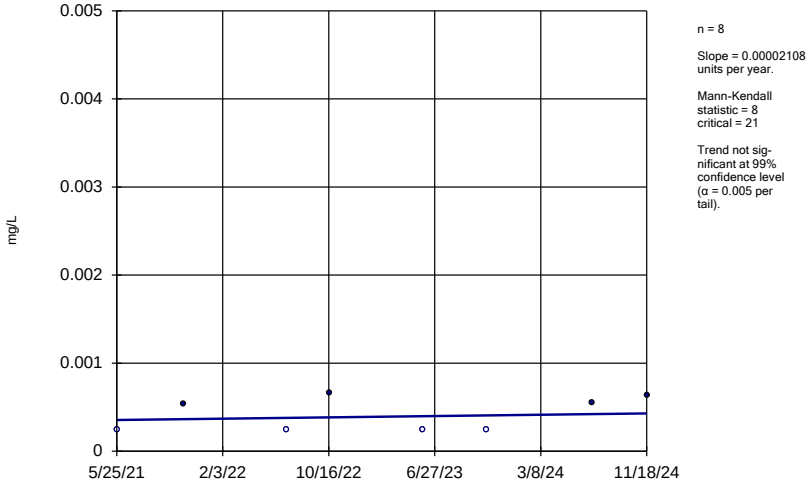
Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-905



n = 8

Slope = 0.00002108 units per year.

Mann-Kendall statistic = 8
critical = 21

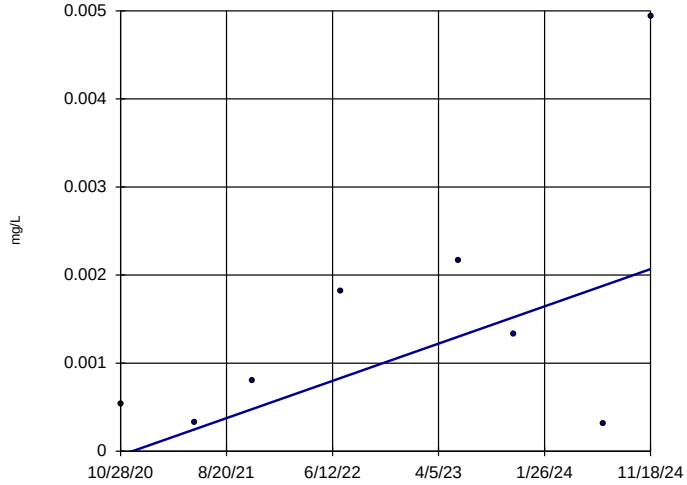
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.0005207 units per year.

Mann-Kendall statistic = 10
critical = 21

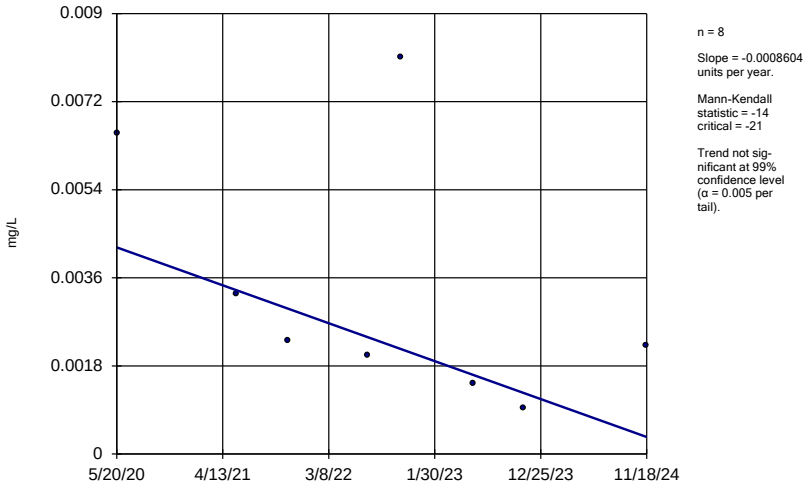
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.0008604 units per year.

Mann-Kendall statistic = -14
critical = -21

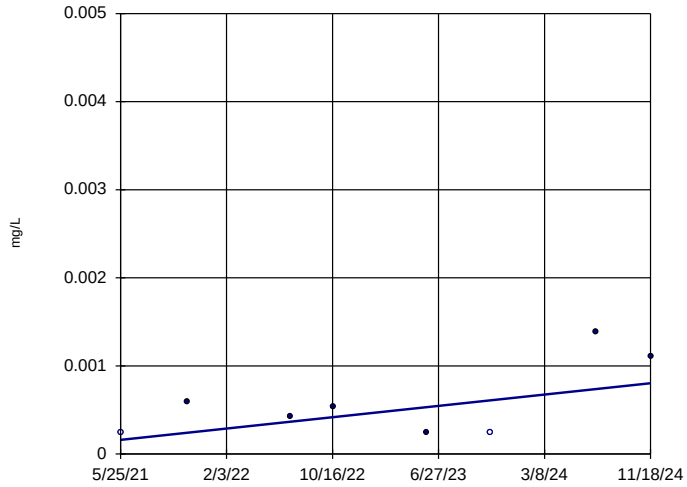
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.0001841 units per year.

Mann-Kendall statistic = 7
critical = 21

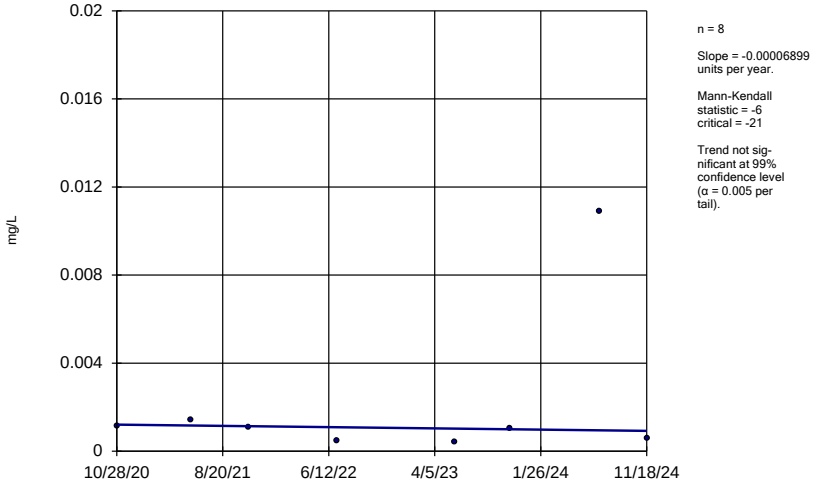
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301



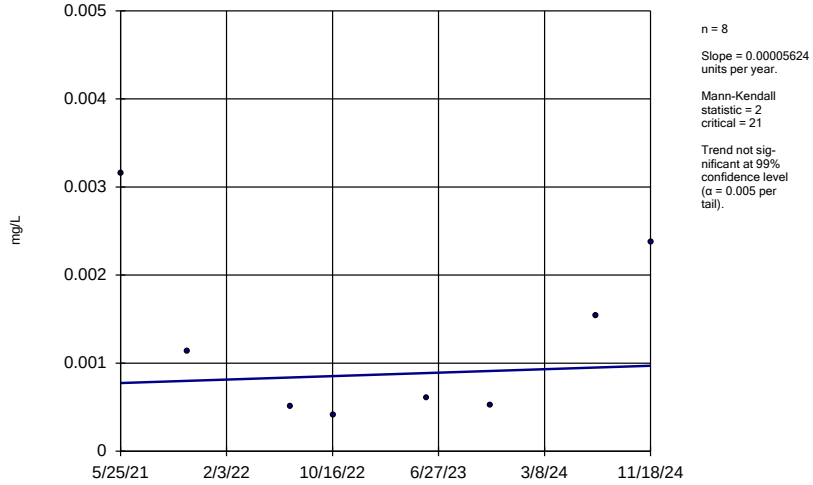
Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1305



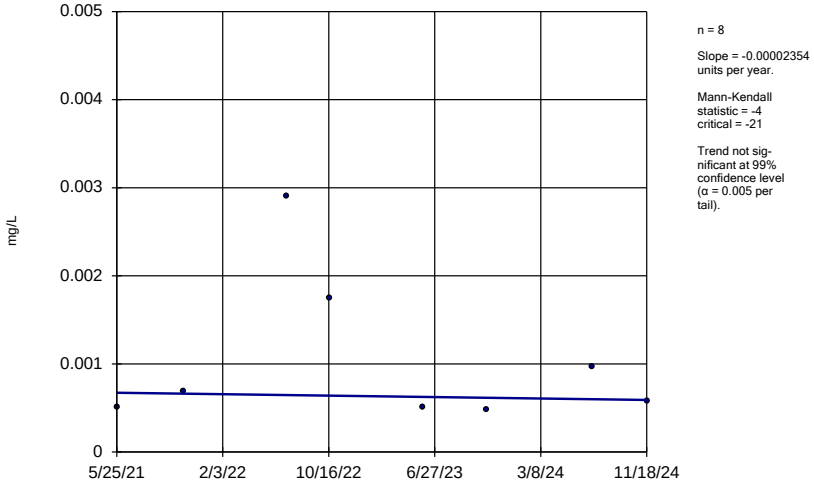
Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1401R



Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

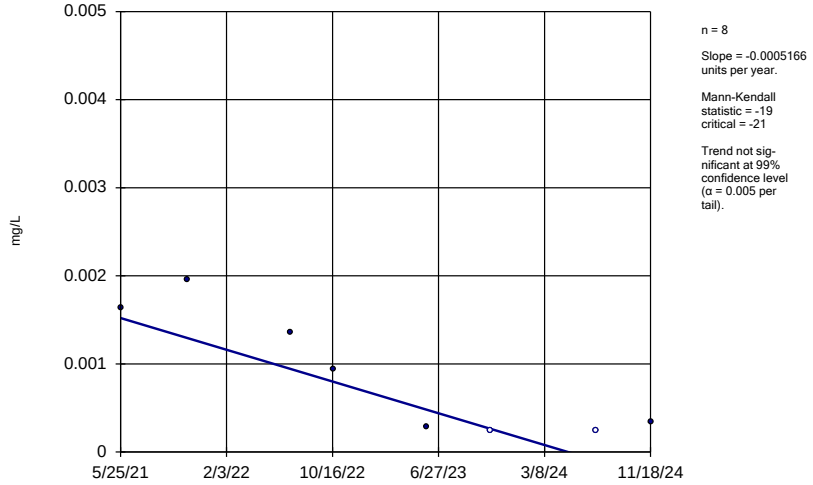
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



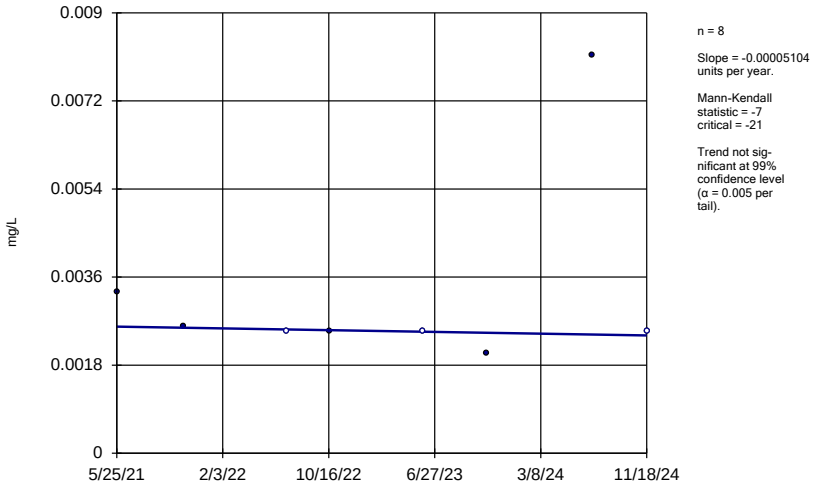
Constituent: Lead Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = -0.00005104 units per year.

Mann-Kendall statistic = -7
critical = -21

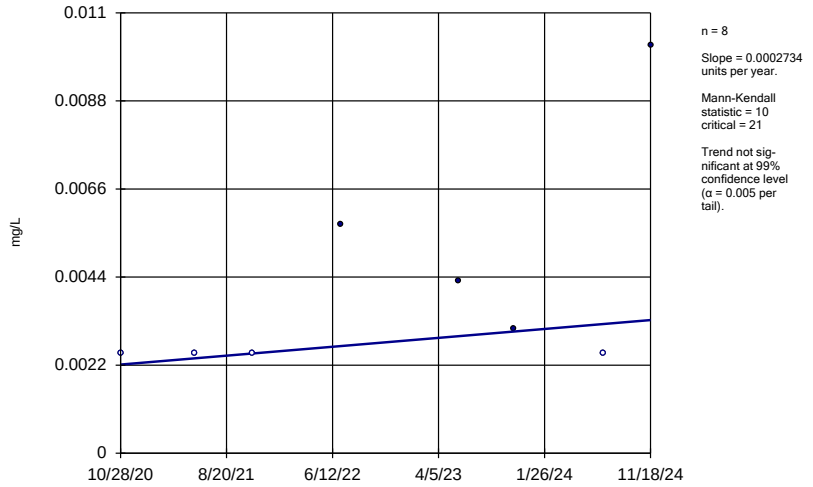
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.0002734 units per year.

Mann-Kendall statistic = 10
critical = 21

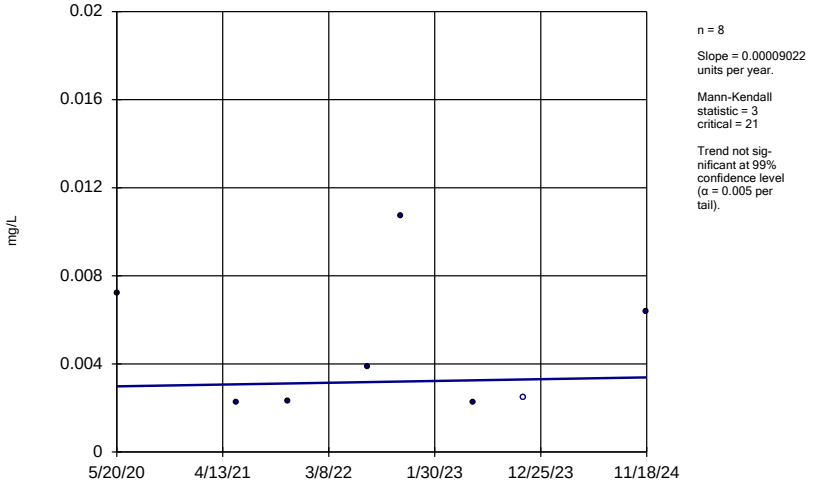
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = 0.00009022 units per year.

Mann-Kendall statistic = 3
critical = 21

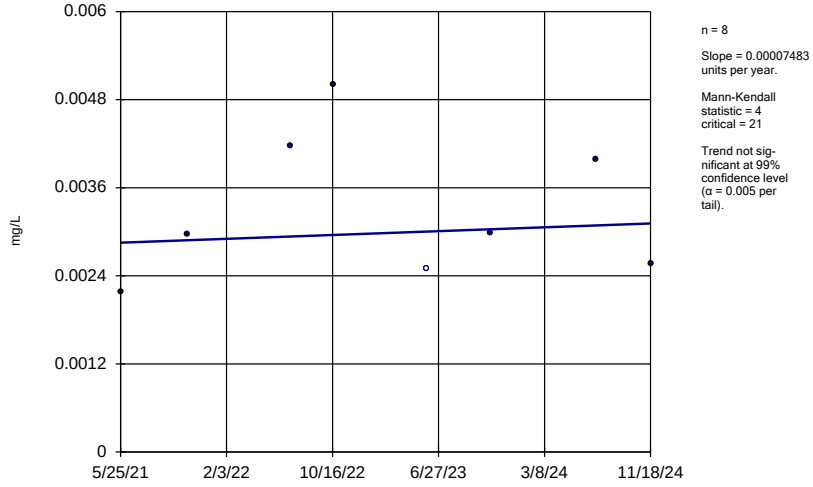
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



n = 8

Slope = 0.00007483 units per year.

Mann-Kendall statistic = 4
critical = 21

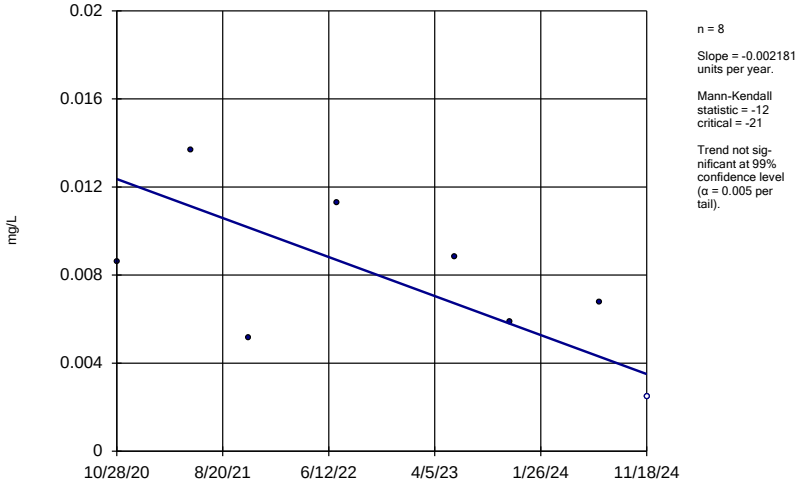
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.002181 units per year.

Mann-Kendall statistic = -12
critical = -21

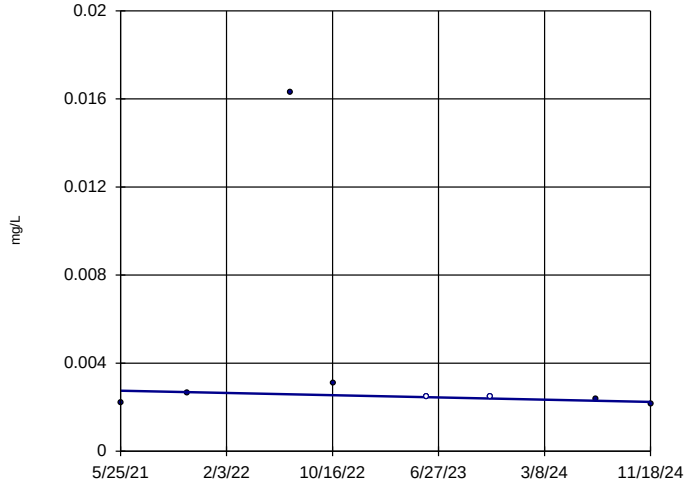
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = -0.0001449 units per year.

Mann-Kendall statistic = -11
critical = -21

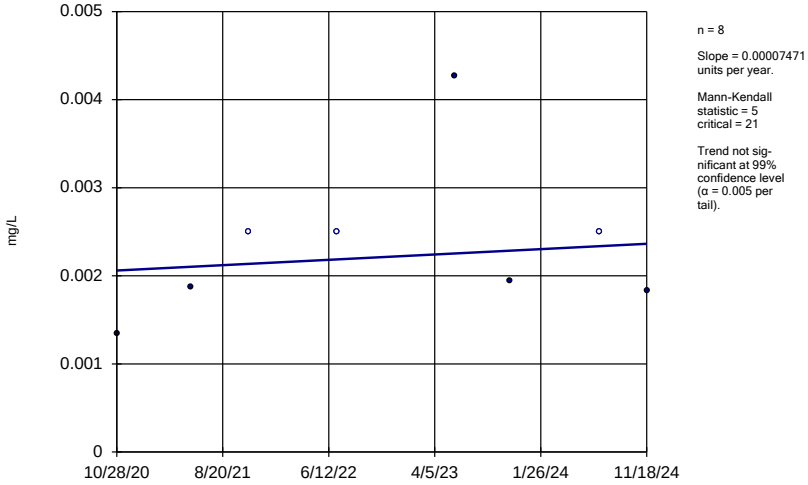
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.00007471 units per year.

Mann-Kendall statistic = 5
critical = 21

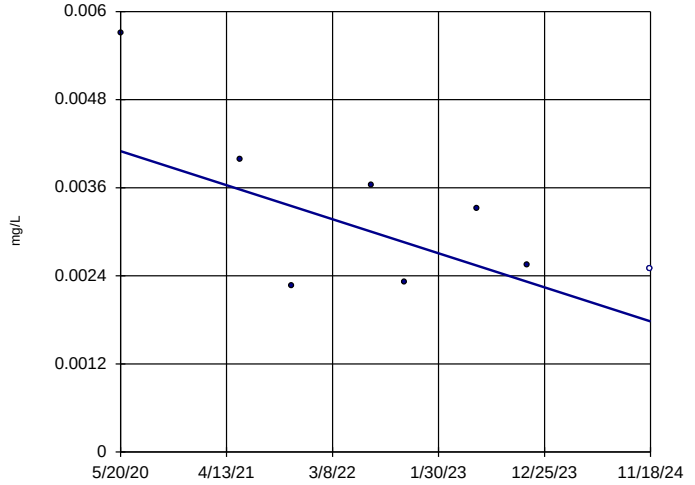
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101



n = 8

Slope = -0.000515 units per year.

Mann-Kendall statistic = -12
critical = -21

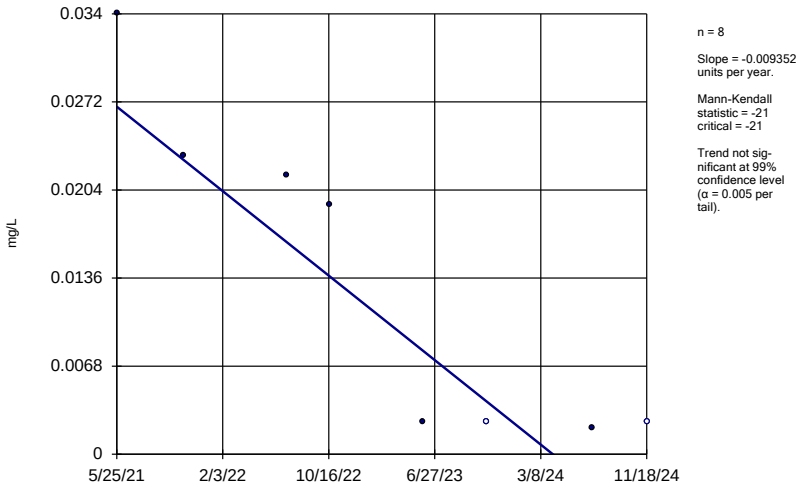
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = -0.009352 units per year.

Mann-Kendall statistic = -21
critical = -21

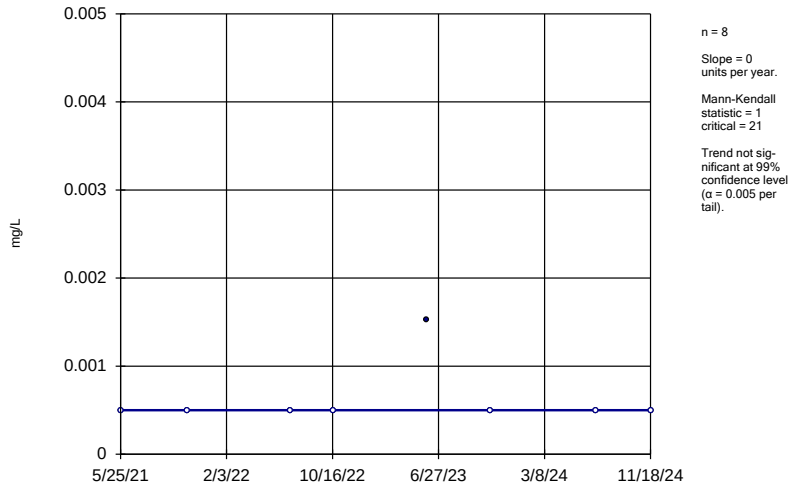
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 21

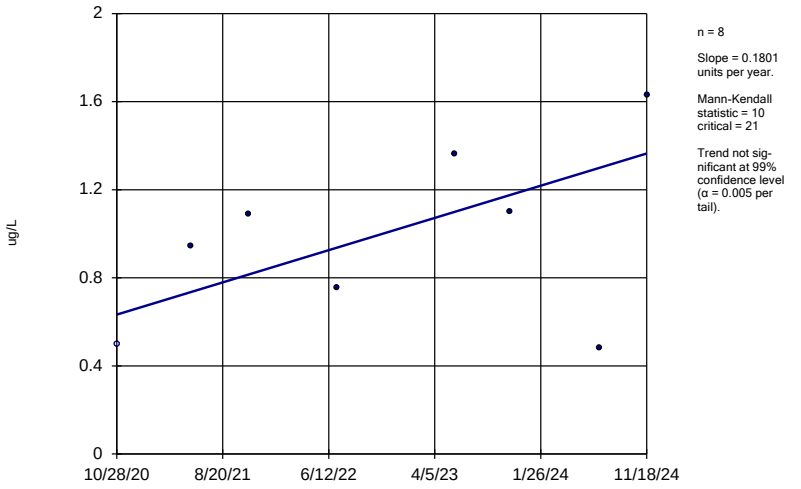
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Silver Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.1801 units per year.

Mann-Kendall statistic = 10
critical = 21

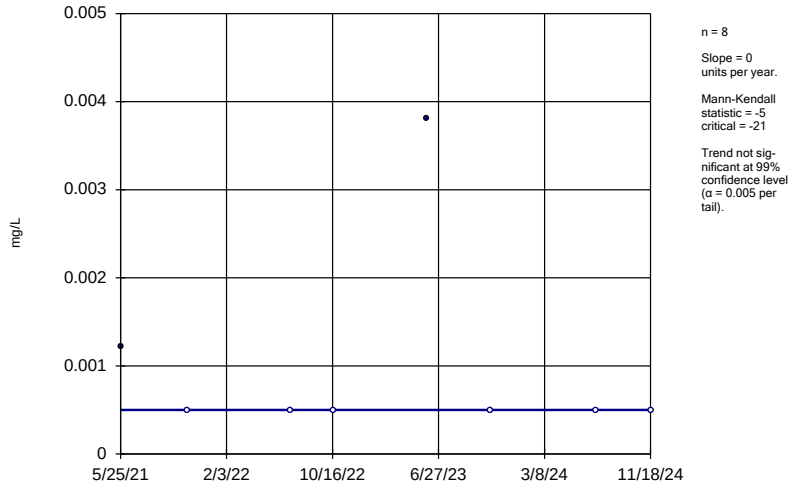
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Tetrachloroethene Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -21

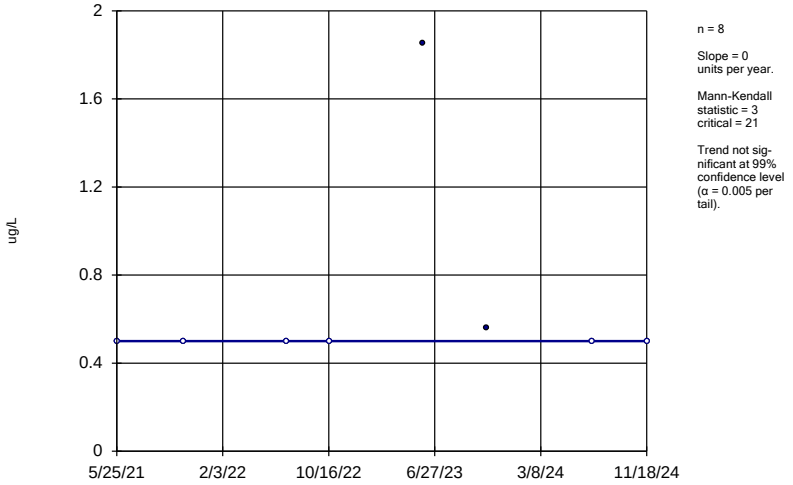
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Thallium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DGP-1500



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = 3 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

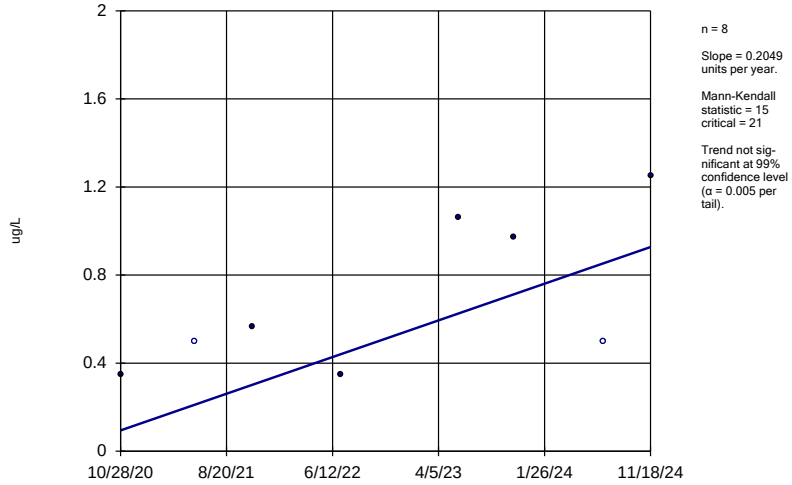
Constituent: Toluene Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = 0.2049 units per year.

Mann-Kendall statistic = 15 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

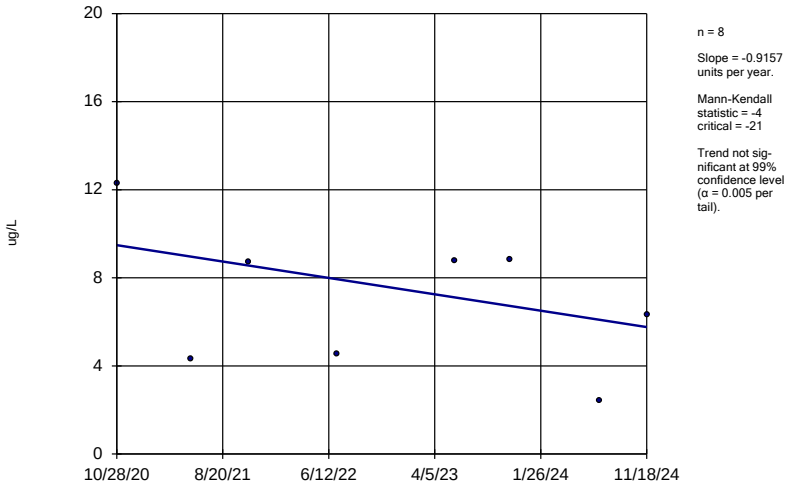
Constituent: trans-1,2-Dichloroethene Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.9157 units per year.

Mann-Kendall statistic = -4 critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

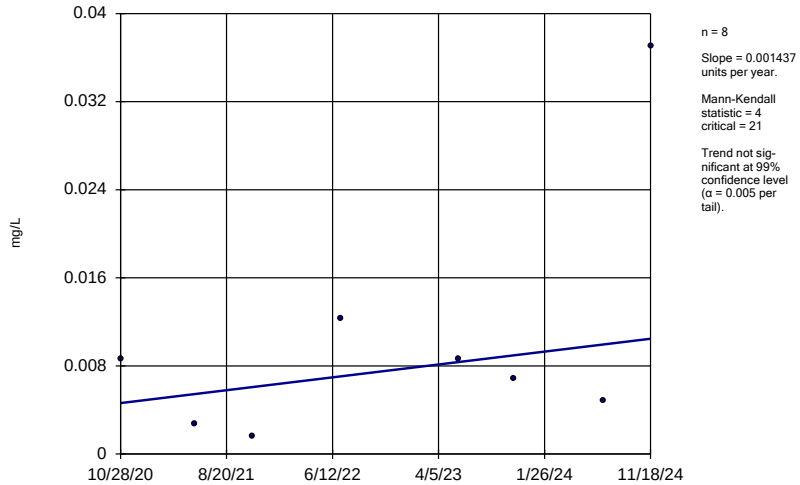
Constituent: Trichloroethene Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1005



n = 8

Slope = 0.001437 units per year.

Mann-Kendall statistic = 4 critical = 21

Trend not significant at 99% confidence level (α = 0.005 per tail).

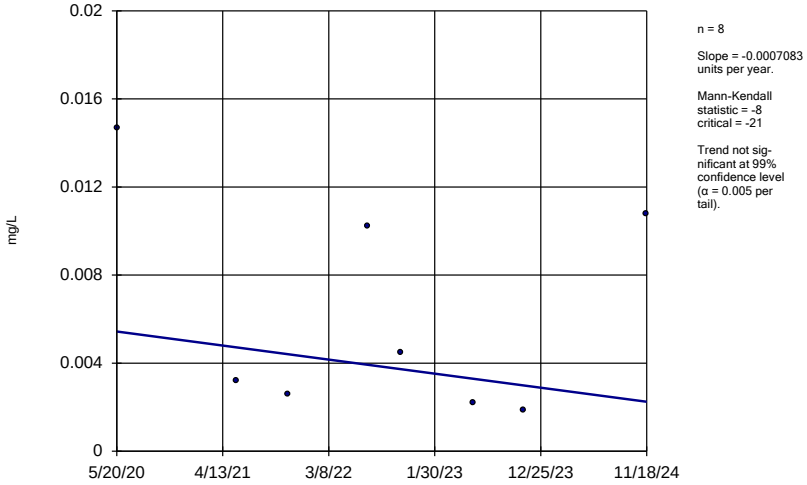
Constituent: Vanadium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Sen's Slope Estimator

DG-1101



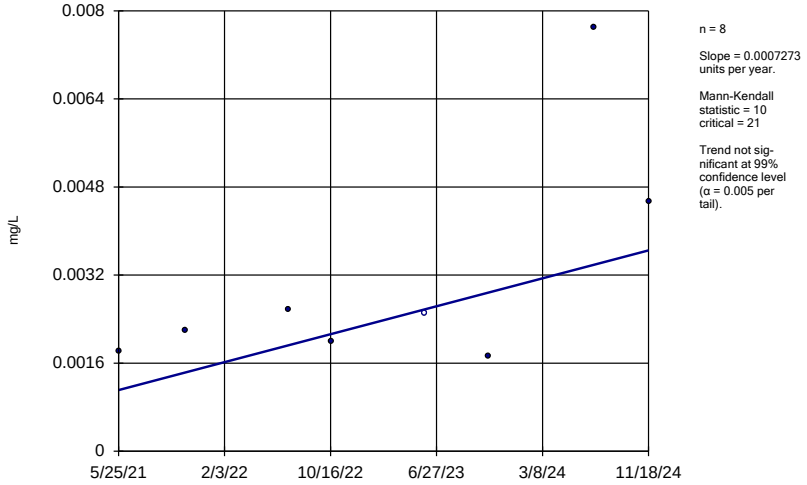
Constituent: Vanadium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1205



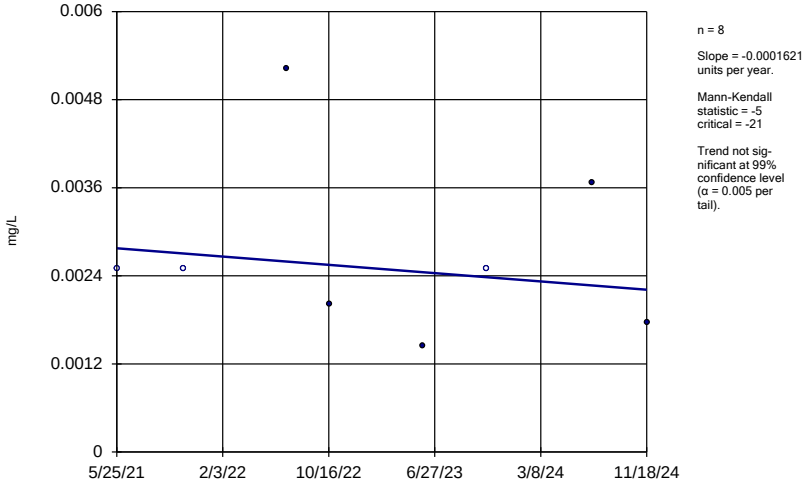
Constituent: Vanadium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



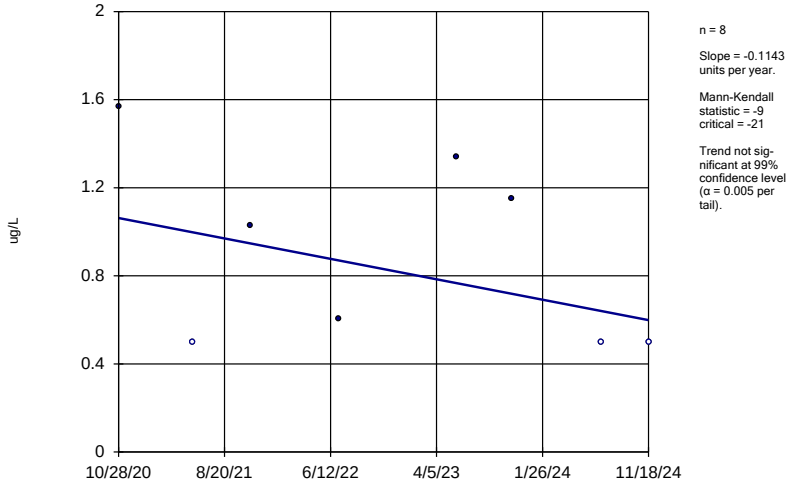
Constituent: Vanadium Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Sen's Slope Estimator

DG-1301



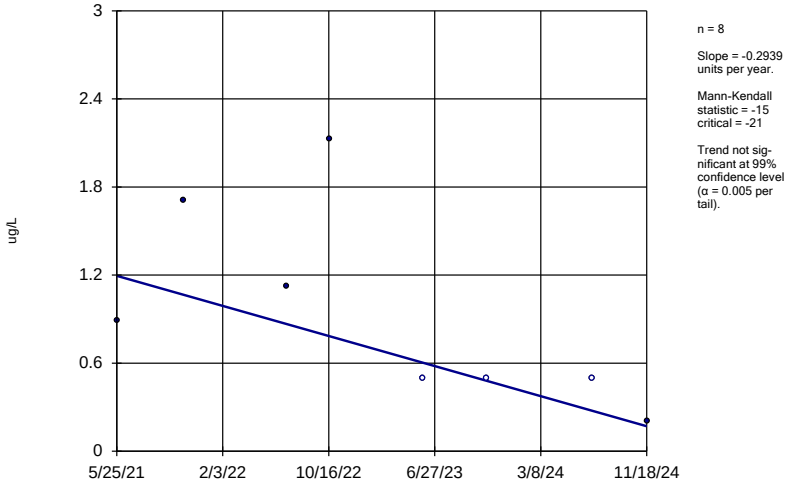
Constituent: Vinyl chloride Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1305

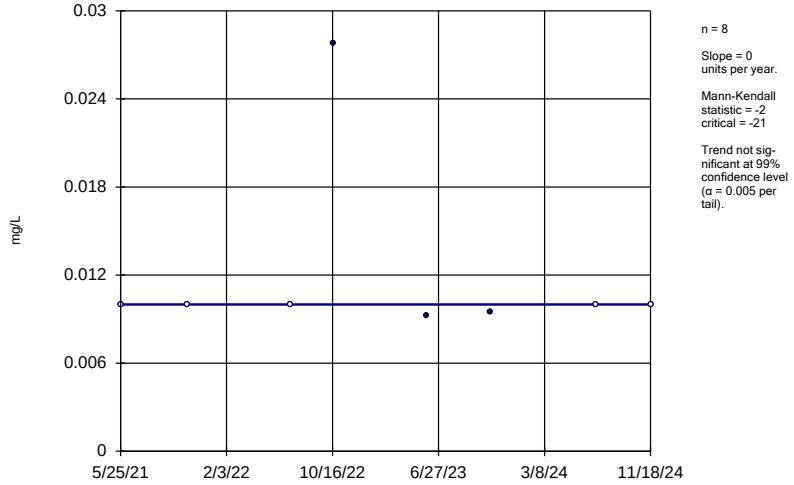


Constituent: Vinyl chloride Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-901

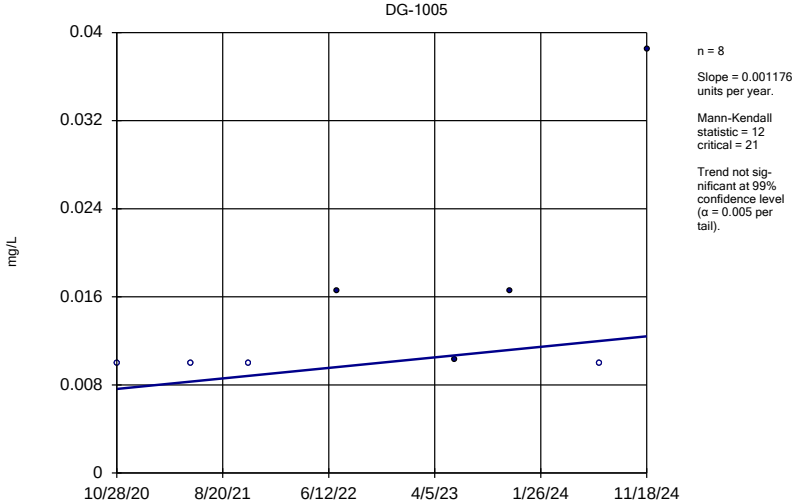


Constituent: Zinc Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1005

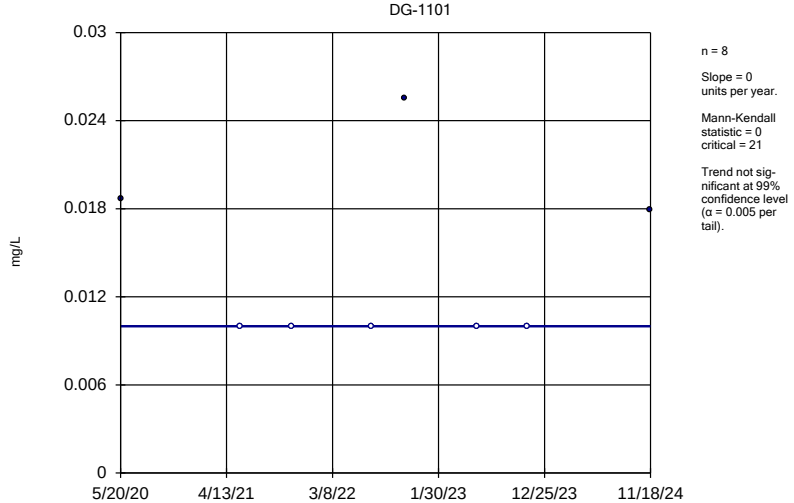


Constituent: Zinc Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1101

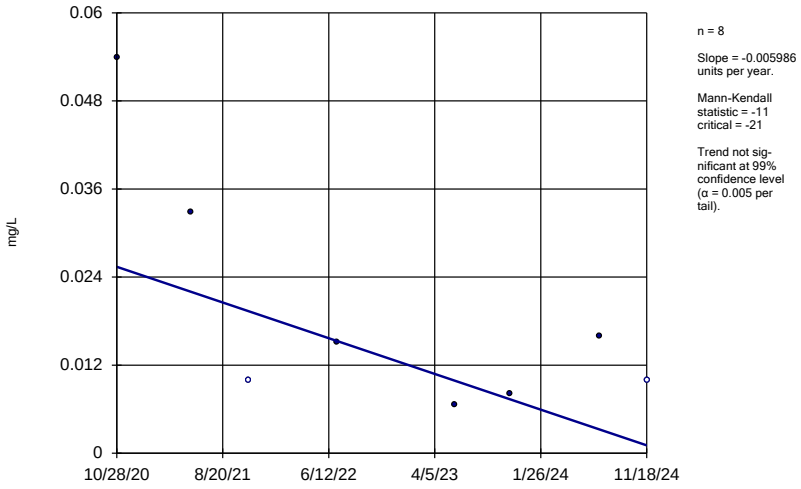


Constituent: Zinc Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1301



n = 8

Slope = -0.005986 units per year.

Mann-Kendall statistic = -11
critical = -21

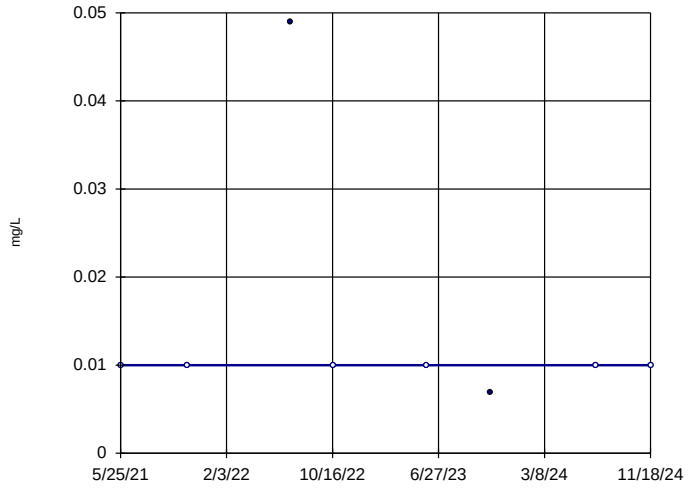
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

DG-1401R



n = 8

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 2/21/2025 10:07 AM View: 2024 AWQR MK
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Confidence Interval Summary Table and Graphs

Confidence Interval

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM Printed 3/3/2025, 11:12 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
1,1-Dichloroethane (ug/L)	DG-1205	2.778	1.835	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1301	11.88	3.628	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1305	7.605	1.507	140	No	8	0	No	0.01	Param.
1,1-Dichloroethane (ug/L)	DG-1401R	2.534	0.7674	140	No	8	0	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1205	1.149	0.7364	5	No	8	0	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1301	1.069	0.6103	5	No	8	25	No	0.01	Param.
1,2-Dichloropropane (ug/L)	DG-1305	0.7557	0.2545	5	No	8	25	No	0.01	Param.
1,4-Dichlorobenzene (ug/L)	DG-1305	1.17	0.3206	75	No	8	25	No	0.01	Param.
Acetone (ug/L)	DG-901	290	5	6300	No	8	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	DG-901	0.0147	0.00134	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	DG-1005	0.003516	0.0007375	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	DG-1101	0.002598	0.0005379	0.01	No	8	12.5	No	0.01	Param.
Arsenic (mg/L)	DG-1205	0.0032	0.001938	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	DG-1305	0.003409	0.0008092	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	**DGP-1500**	**0.02398**	**0.01099**	**0.01**	**Yes**	**8**	**0**	**No**	**0.01**	**Param.**
Barium (mg/L)	DG-901	0.0713	0.0135	2	No	8	0	No	0.004	NP (normality)
Barium (mg/L)	DG-905	0.04218	0.03142	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1005	0.07487	0.03207	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1101	0.05851	0.02974	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1205	0.01652	0.01118	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1301	0.04378	0.03259	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1305	0.1151	0.07391	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DG-1401R	0.04736	0.03579	2	No	8	0	No	0.01	Param.
Barium (mg/L)	DGP-1500	0.05793	0.03809	2	No	8	0	No	0.01	Param.
Benzene (ug/L)	DG-901	1.19	0.25	5	No	8	87.5	No	0.004	NP (NDs)
Bis[2-ethylhexyl]phthalate (ug/L)	DG-1301	124	4.715	6	No	8	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-901	0.0002055	0.0000227	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	DG-1005	0.000327	0.00005	0.005	No	8	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-1101	0.0001345	0.00005851	0.005	No	8	50	No	0.01	Param.
Cadmium (mg/L)	DG-1301	0.000104	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	DG-1401R	0.000125	0.00005	0.005	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	DGP-1500	0.000105	0.00005	0.005	No	8	62.5	No	0.004	NP (NDs)
Chlorobenzene (ug/L)	DG-1305	9.372	0.4654	100	No	8	12.5	No	0.01	Param.
Chloromethane (ug/L)	DG-1205	3.63	1.5	3	No	8	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	DG-1005	0.013	0.00182	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	DG-1101	0.006173	0.001387	0.1	No	8	37.5	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	DG-1301	29.57	2.916	70	No	8	0	No	0.01	Param.
cis-1,2-Dichloroethene (ug/L)	DG-1305	4.369	0.4696	70	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-901	0.00772	0.000265	0.0035	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	DG-905	0.00158	0.000225	0.0035	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	DG-1005	0.0048	0.000294	0.0035	No	8	0	No	0.004	NP (normality)
Cobalt (mg/L)	DG-1101	0.0023	0.0003058	0.0035	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1205	0.0005352	0.0002733	0.0035	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1301	0.000802	0.0002662	0.0035	No	8	0	No	0.01	Param.
Cobalt (mg/L)	DG-1401R	0.0007278	0.0001214	0.0035	No	8	0	No	0.01	Param.
Copper (mg/L)	DG-901	0.0146	0.00293	1.3	No	8	0	No	0.004	NP (normality)
Copper (mg/L)	DG-1005	0.008222	0.001245	1.3	No	8	37.5	No	0.01	Param.
Copper (mg/L)	DG-1101	0.006168	0.001675	1.3	No	8	12.5	No	0.01	Param.
Copper (mg/L)	DG-1205	0.00565	0.00184	1.3	No	8	62.5	No	0.004	NP (NDs)
Copper (mg/L)	DG-1301	0.009101	0.001982	1.3	No	8	0	No	0.01	Param.

Confidence Interval

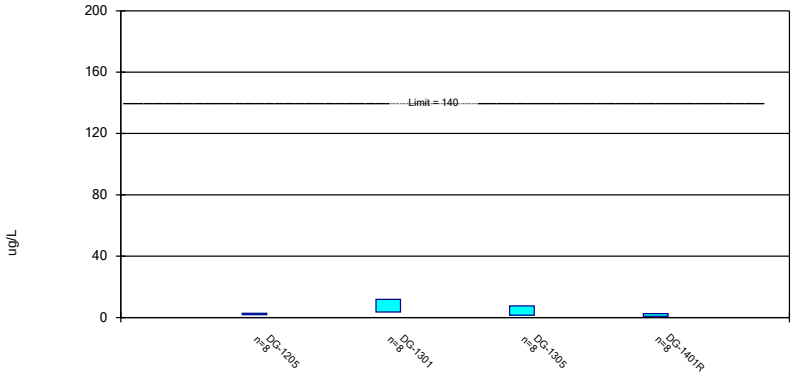
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM Printed 3/3/2025, 11:12 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Copper (mg/L)	DG-1401R	0.0398	0.00315	1.3	No	8	0	No	0.004	NP (normality)
Copper (mg/L)	DGP-1500	0.005305	0.0025	1.3	No	8	25	No	0.01	Param.
Dichlorodifluoromethane (ug/L)	DG-1205	6.618	4.102	1000	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-901	0.00397	0.000453	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DG-905	0.000613	0.0004825	0.015	No	8	50	No	0.01	Param.
Lead (mg/L)	DG-1005	0.003161	0	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1101	0.006096	0.0006247	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1205	0.001031	0.0002067	0.015	No	8	25	No	0.01	Param.
Lead (mg/L)	DG-1301	0.0109	0.000399	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DG-1305	0.002355	0.0002076	0.015	No	8	0	No	0.01	Param.
Lead (mg/L)	DG-1401R	0.00291	0.000475	0.015	No	8	0	No	0.004	NP (normality)
Lead (mg/L)	DGP-1500	0.001571	0.0002165	0.015	No	8	25	No	0.01	Param.
Nickel (mg/L)	DG-901	0.00814	0.00204	0.1	No	8	37.5	No	0.004	NP (normality)
Nickel (mg/L)	DG-1005	0.0102	0.0025	0.1	No	8	50	No	0.004	NP (normality)
Nickel (mg/L)	DG-1101	0.008007	0.001391	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	DG-1205	0.004339	0.002251	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	DG-1301	0.01162	0.004077	0.1	No	8	12.5	No	0.01	Param.
Nickel (mg/L)	DG-1401R	0.0163	0.00216	0.1	No	8	25	No	0.004	NP (normality)
Selenium (mg/L)	DG-1005	0.003344	0.001156	0.05	No	8	37.5	No	0.01	Param.
Selenium (mg/L)	DG-1101	0.004529	0.002044	0.05	No	8	12.5	No	0.01	Param.
Selenium (mg/L)	DGP-1500	0.02588	0.0008567	0.05	No	8	25	No	0.01	Param.
Silver (mg/L)	DG-901	0.00153	0.0005	0.1	No	8	87.5	No	0.004	NP (NDs)
Tetrachloroethene (ug/L)	DG-1301	1.408	0.5572	5	No	8	12.5	No	0.01	Param.
Thallium (mg/L)	DG-901	0.00381	0.0005	0.0104	No	8	75	No	0.004	NP (NDs)
Toluene (ug/L)	DGP-1500	1.85	0.5	1000	No	8	75	No	0.004	NP (NDs)
trans-1,2-Dichloroethene (ug/L)	DG-1301	1.071	0.3448	100	No	8	25	No	0.01	Param.
Trichloroethene (ug/L)	DG-1301	10.43	3.614	5	No	8	0	No	0.01	Param.
Vanadium (mg/L)	DG-1005	0.037	0.00158	0.035	No	8	0	No	0.004	NP (normality)
Vanadium (mg/L)	DG-1101	0.01146	0.001038	0.035	No	8	0	No	0.01	Param.
Vanadium (mg/L)	DG-1205	0.00771	0.00173	0.035	No	8	12.5	No	0.004	NP (normality)
Vanadium (mg/L)	DG-1401R	0.00395	0.001244	0.035	No	8	37.5	No	0.01	Param.
Vinyl chloride (ug/L)	DG-1301	1.324	0.5553	2	No	8	37.5	No	0.01	Param.
Vinyl chloride (ug/L)	DG-1305	1.652	0.2721	2	No	8	37.5	No	0.01	Param.
Zinc (mg/L)	DG-901	0.0278	0.0092	2	No	8	62.5	No	0.004	NP (NDs)
Zinc (mg/L)	DG-1005	0.0385	0.01	2	No	8	50	No	0.004	NP (normality)
Zinc (mg/L)	DG-1101	0.0255	0.01	2	No	8	62.5	No	0.004	NP (NDs)
Zinc (mg/L)	DG-1301	0.03559	0.003357	2	No	8	25	No	0.01	Param.
Zinc (mg/L)	DG-1401R	0.0489	0.00696	2	No	8	75	No	0.004	NP (NDs)

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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.

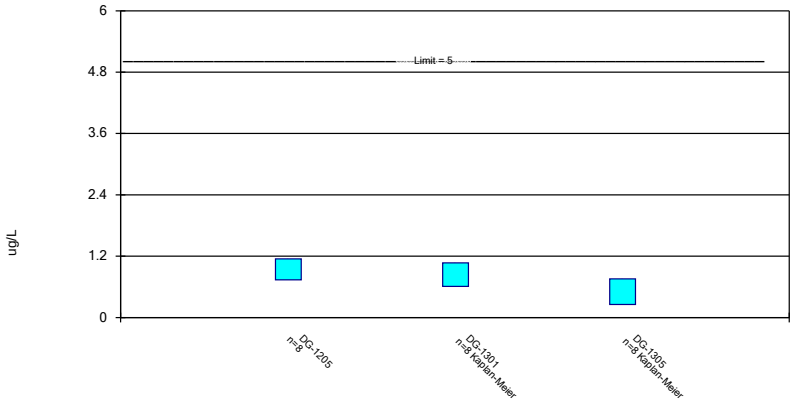


Constituent: 1,1-Dichloroethane Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

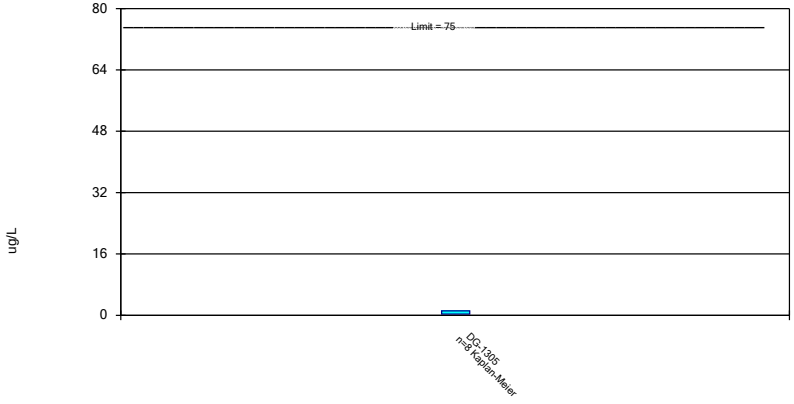


Constituent: 1,2-Dichloropropane Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

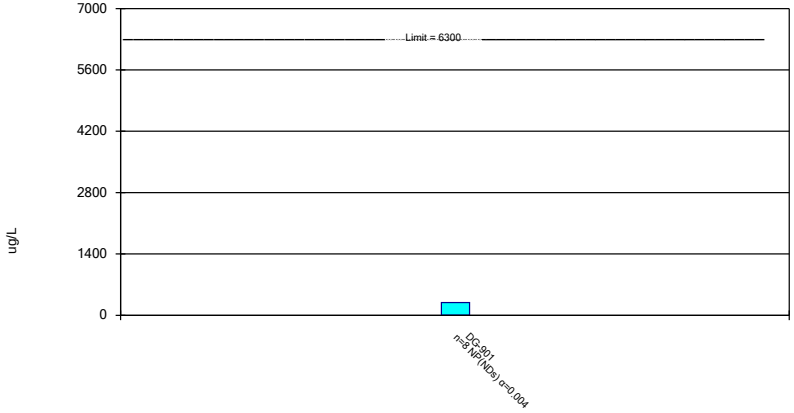


Constituent: 1,4-Dichlorobenzene Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

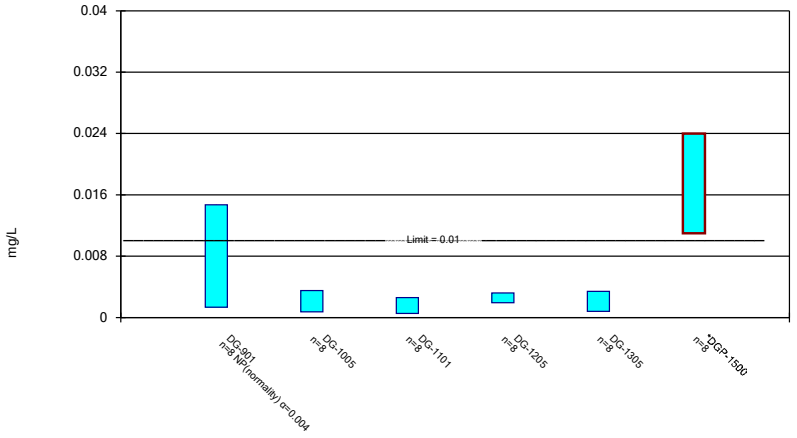


Constituent: Acetone Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk at Alpha = 0.01.

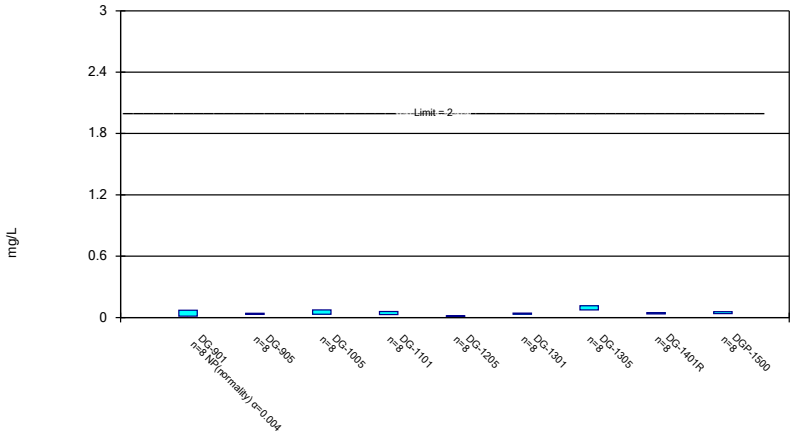


Constituent: Arsenic Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

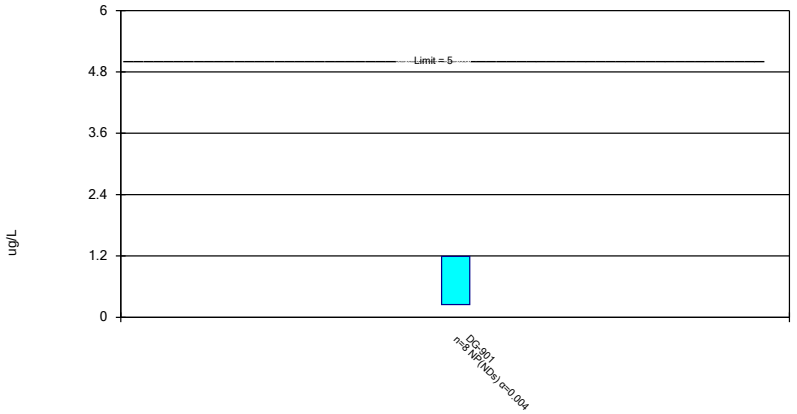


Constituent: Barium Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

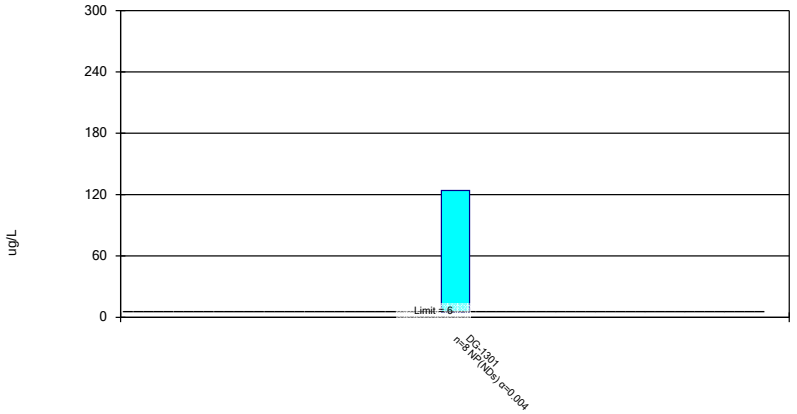


Constituent: Benzene Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

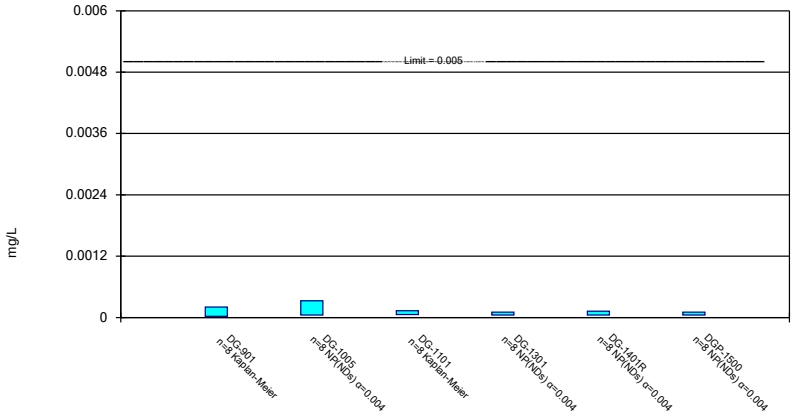


Constituent: Bis[2-ethylhexyl]phthalate Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



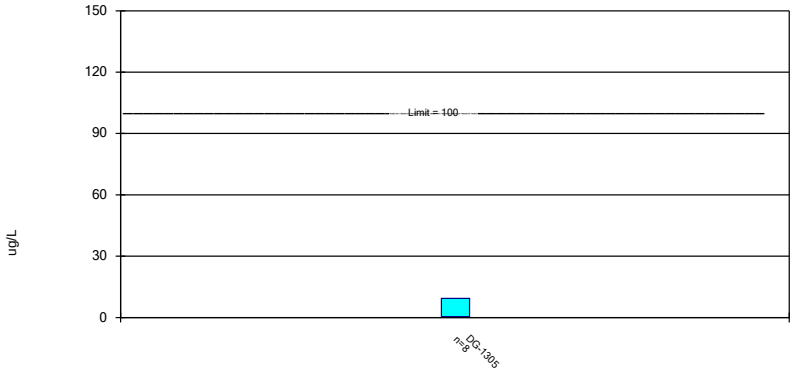
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



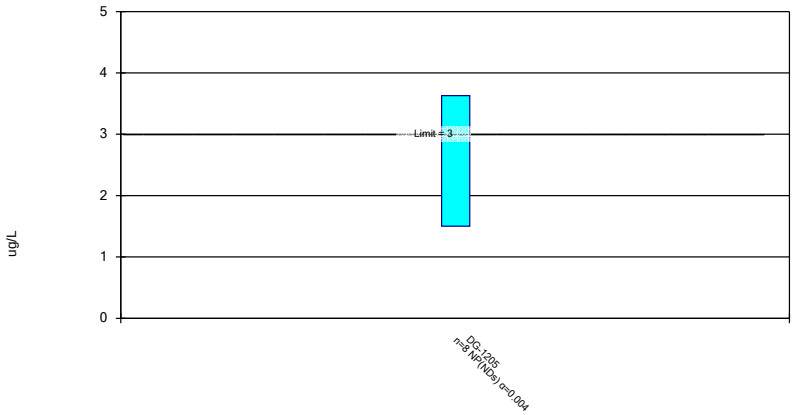
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



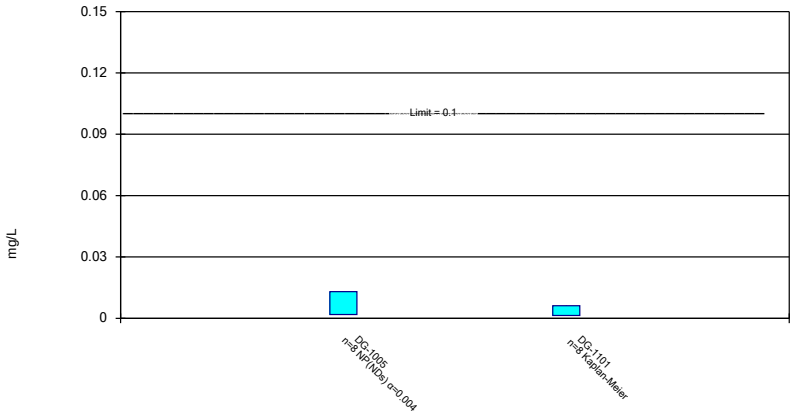
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



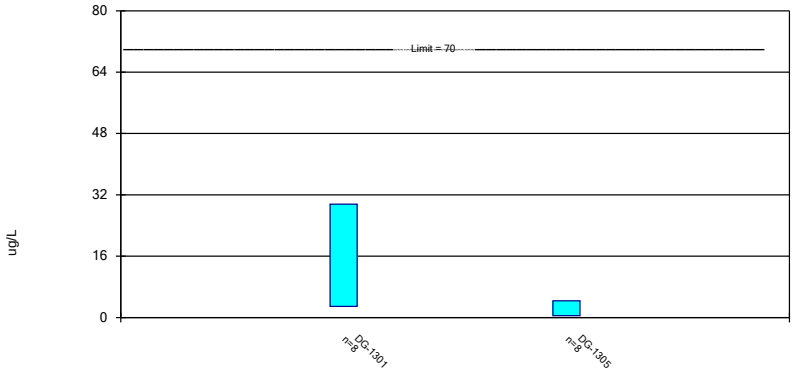
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Parametric Confidence Interval

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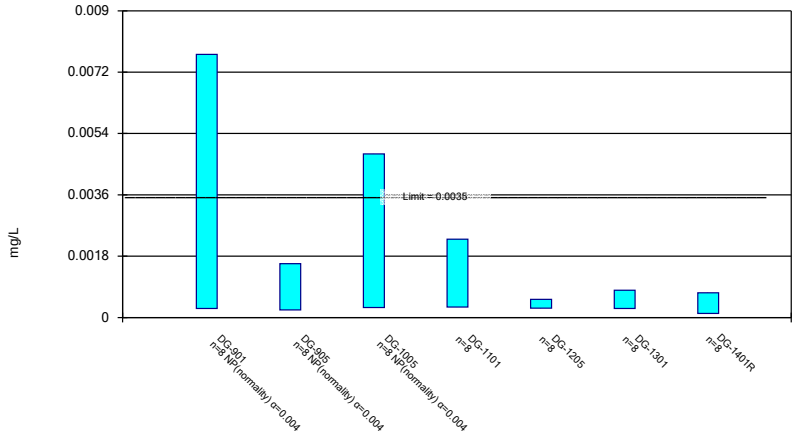


Constituent: cis-1,2-Dichloroethene Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Parametric and Non-Parametric (NP) Confidence Interval

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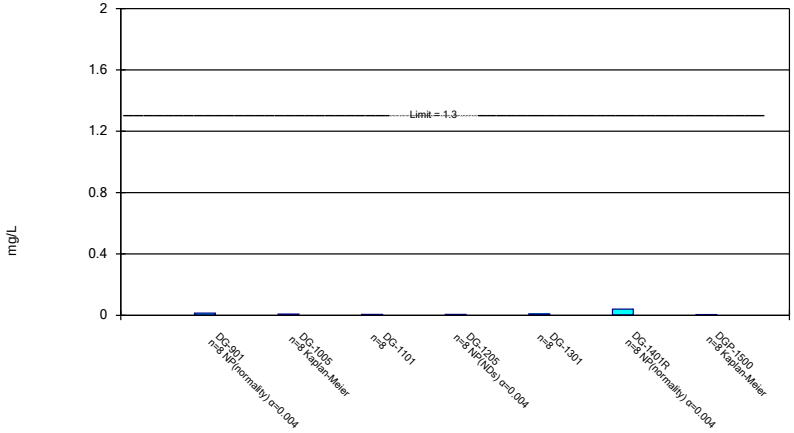


Constituent: Cobalt Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

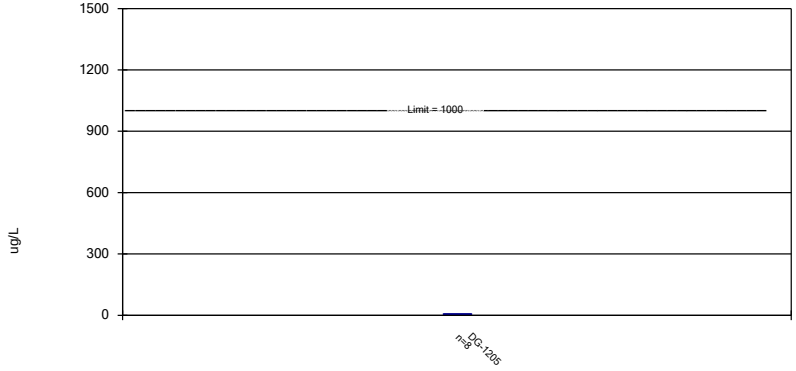


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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Parametric Confidence Interval

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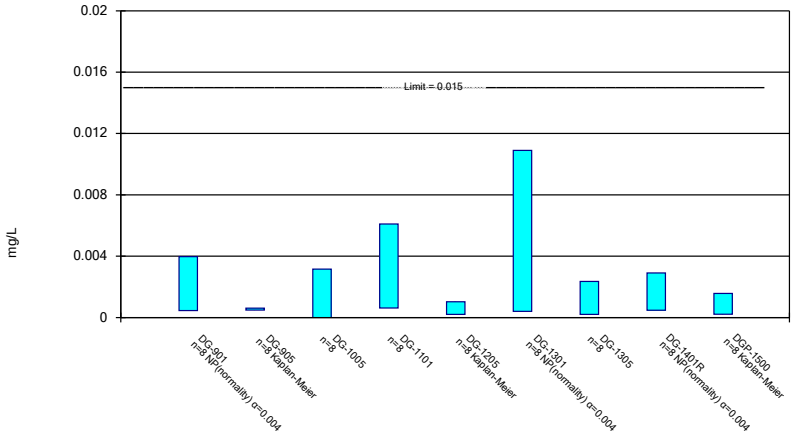


Constituent: Dichlorodifluoromethane Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



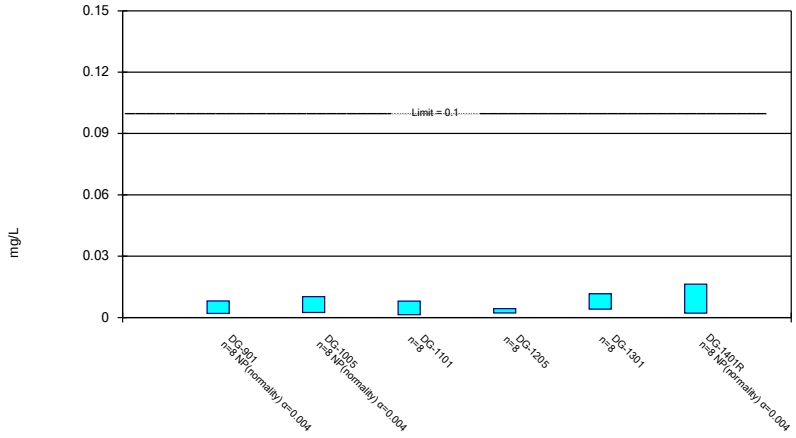
Constituent: Lead Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

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.



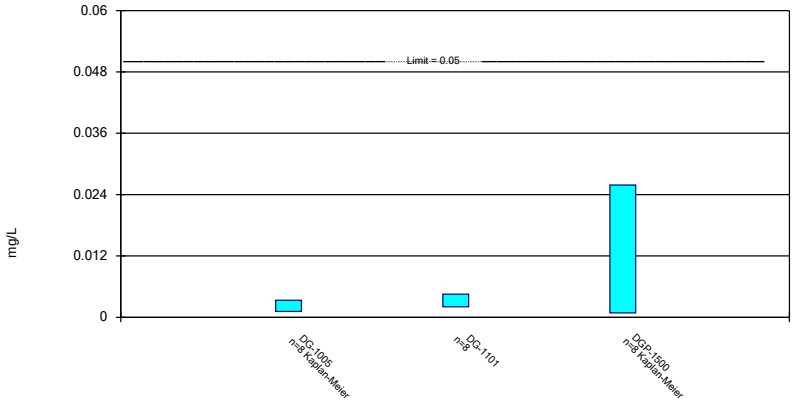
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



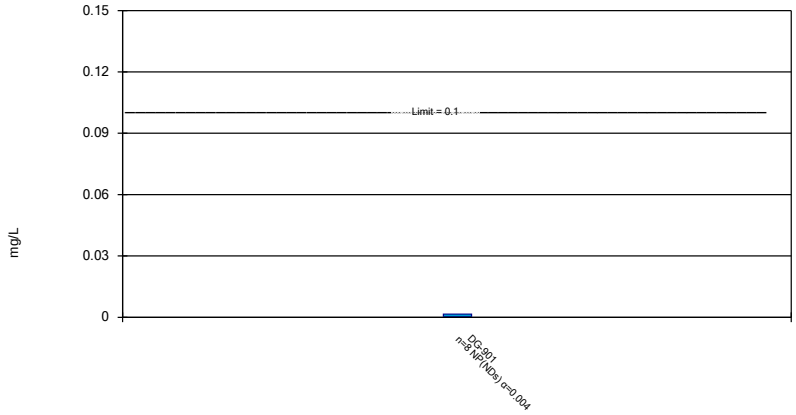
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



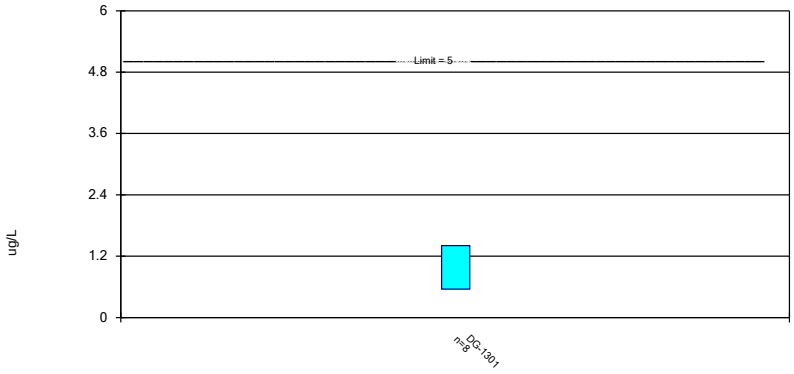
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Parametric Confidence Interval

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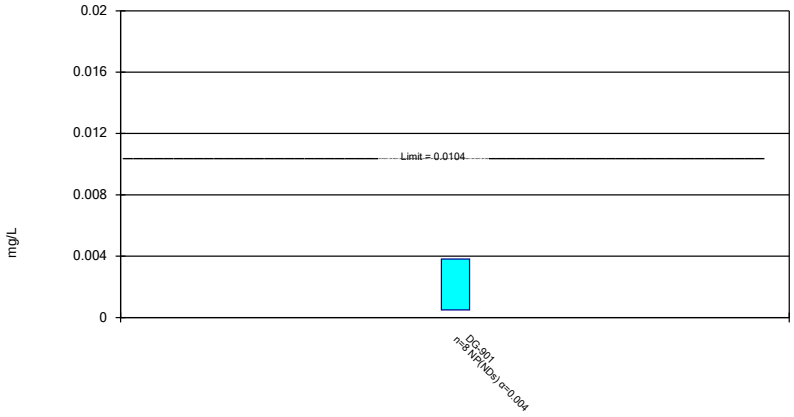
Constituent: Tetrachloroethene Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Non-Parametric Confidence Interval

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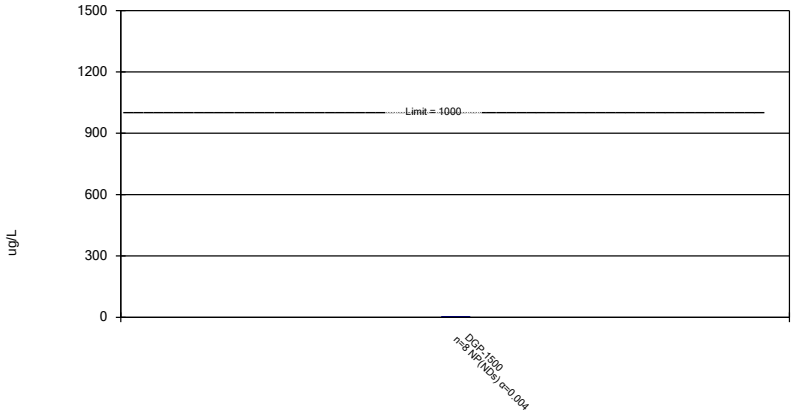
Constituent: Thallium Analysis Run 3/3/2025 11:08 AM View: 2024 AWQR CI

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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Non-Parametric Confidence Interval

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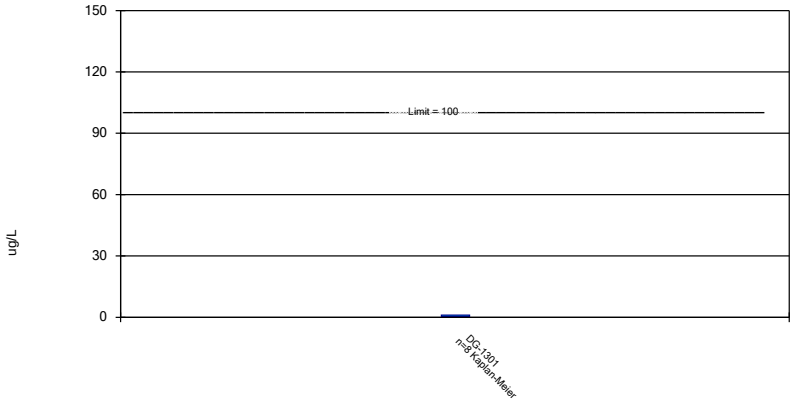
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Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.



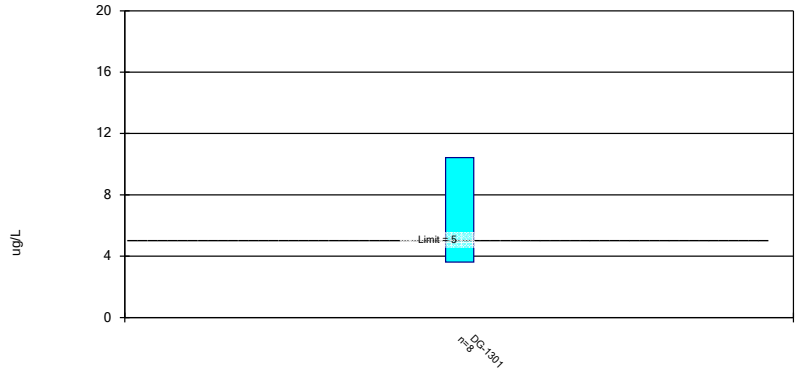
Constituent: trans-1,2-Dichloroethene Analysis Run 3/3/2025 11:09 AM View: 2024 AWQR CI

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

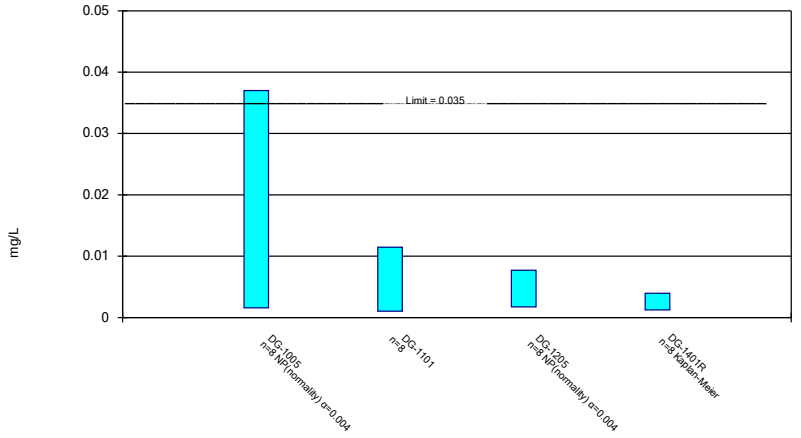


Constituent: Trichloroethene Analysis Run 3/3/2025 11:09 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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.

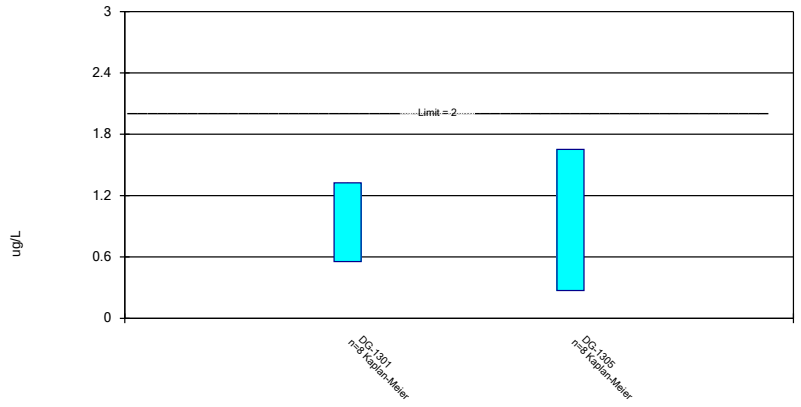


Constituent: Vanadium Analysis Run 3/3/2025 11:09 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG

Parametric Confidence Interval

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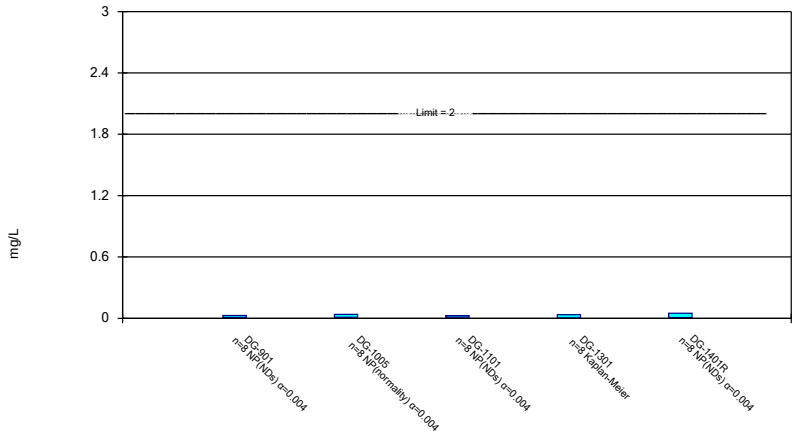


Constituent: Vinyl chloride Analysis Run 3/3/2025 11:09 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

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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: Zinc Analysis Run 3/3/2025 11:09 AM View: 2024 AWQR CI
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Theil-Sen Confidence Bands Summary Table and Graphs

Trend Test

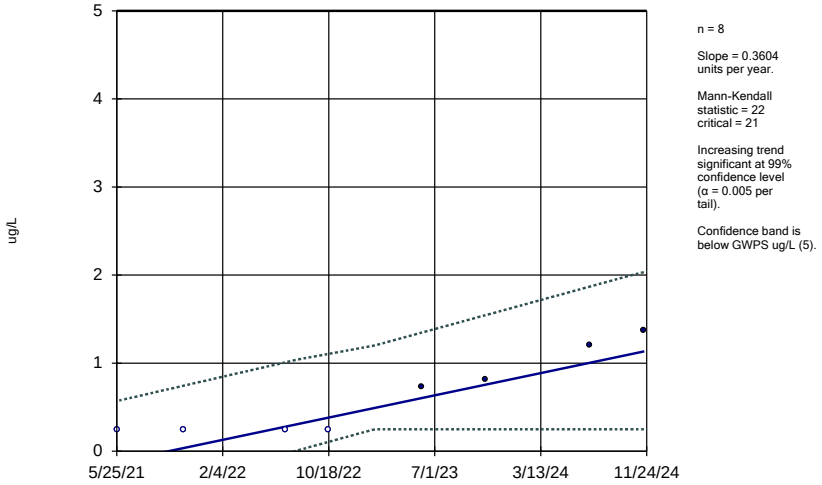
Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM Printed 3/3/2025, 11:20 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Alpha	Method
Benzene (ug/L)	**DGP-1500**	**0.3604**	**22**	**21**	**Yes**	**8**	**50**	**0.01**	**NP**
Cobalt (mg/L)	**DGP-1500**	**-0.0002638**	**-23**	**-21**	**Yes**	**8**	**25**	**0.01**	**NP**

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Hollow symbols indicate censored values.

Sen's Slope and 99% Confidence Band

DGP-1500



n = 8

Slope = 0.3604 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 ug/L (5).

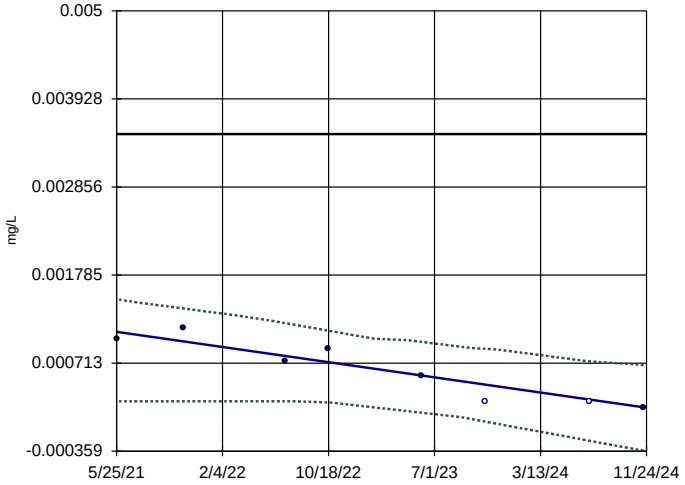
Constituent: Benzene Analysis Run 3/3/2025 11:18 AM View: 2024 AWQR TS

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Sanitas™ v.10.0.24 Software licensed to SCS Engineers. UG
Hollow symbols indicate censored values.

Sen's Slope and 99% Confidence Band

DGP-1500



n = 8

Slope = -0.0002638 units per year.

Mann-Kendall statistic = -23
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Confidence band is below SSGWPS mg/L (0.0035).

Constituent: Cobalt Analysis Run 3/3/2025 11:18 AM View: 2024 AWQR TS

Northwest Iowa Area SLF Client: SCS Engineers Data: NIASL-2024-AWQR-MasterAM-NoDM

Appendix E
2024 Leachate Control System Performance Evaluation Report

2024 Leachate Control System Performance Evaluation Report

Prepared for:
Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa

SCS ENGINEERS

27223095.25 | March 2025

1690 All-State Court, Suite 100
West Des Moines, IA 50265
515-631-6160

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1.2 Location of Control System 1
1.3 Effectiveness of the Leachate System 2
1.4 Approved Changes/Modifications to System 3
1.5 Proposed Changes to System 3

Figures

Figure 1 Leachate Control System

Attachments

Attachment A Table 12 – Leachate Management Summary
Attachment B Historical Leachate Column Thickness Tables and Graphs

1.0 LEACHATE CONTROL SYSTEM

SCS Engineers (SCS), on behalf of the Northwest Iowa Area Solid Waste Agency (Agency), has prepared this Leachate Control System Performance Evaluation Report (LCSPER) for the Northwest Iowa Area 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, most recently renewed on March 5, 2025 (Doc #112451). This LCSPER describes the leachate control system, discusses maintenance activities, provides an evaluation of the effectiveness of the system, and, if necessary, provides recommendations for additional control measures. The reporting period for this LCSPER is January through December 2024.

1.1 REPORT PRIORITY

In conjunction with the construction of the final cover over the area monitored by leachate piezometers LP-9R through LP-14R, the Agency had 2" HDPE air supply and leachate discharge lines installed in 2022 to facilitate pumping from the piezometers. The leachate discharge lines for the piezometers are connected directly to their respective manholes to the east. In the spring of 2024, the air compressor and six pumps were connected.

1.2 LOCATION OF CONTROL SYSTEM

The Landfill property is depicted in **Figure 1**, Leachate Control System. The Landfill is located at 4540 360th Street, west of Highway 60, and approximately 4.5 miles south of Sheldon, Iowa. The Landfill property is situated in the SW ¼ of Section 14, T96N, R43W, in Sioux County, Iowa.

Leachate piezometers LP-1 through LP-6 were installed along the northern perimeter of Cells 2 through 8 and leachate piezometers LP-7 through LP-14 were installed along the eastern perimeter of Cells 1, 16, and 17. In September 2019, leachate piezometers LP-9, LP-10, LP-11, LP-12, LP-13, and LP-14 were abandoned and replaced with LP-9R, LP-10R, LP-11R, LP-12R, LP-13R, and LP-14R, respectively. Electronic leachate head monitoring devices LHMD-1 and LHMD-2 were installed in conjunction with the construction of the Cell 19 & 20 Expansion and Cell 21, respectively.

Leachate piezometers C-2, C-5, and C-7 are located in Cells 2, 5, and 7, respectively. A series of interconnected manholes were constructed along the eastern boundaries of Cells 16 and 17 to allow for leachate collection. A leachate lagoon is located in the southeast corner of the site for leachate storage. A wet well lift station was constructed in 2012 to pump leachate from the collection system to the lagoon.

Cells 1-8 are unlined, Cells 9-14 are clay-lined without a leachate collection system, and Cells 15-18 are Subtitle D-compliant clay-only alternatively lined with a leachate drainage layer. Cells 19, 20, 21, and 22 along with an abutment over Cells 11, 12, 13, and 14, have a prescriptive composite Subtitle D-compliant liner.

The current IAC does not define the leachate level required in unlined areas. However, it is likely the unlined areas would have requirements similar to 2002 IAC 567-113.26(12)"b"(2), which states that the leachate system must be designed to "achieve the lowest possible leachate head above the landfill liner" as they are not over a Subtitle D-compliant liner and do not have a leachate drainage layer. The lined areas with a leachate drainage layer are required to maintain less than 12 inches of head over the liner.

1.3 EFFECTIVENESS OF THE LEACHATE SYSTEM

Table 12 in **Attachment A** provides monthly leachate column thicknesses for the Landfill. Table B-1 in **Attachment B** provides a table and graphs of the leachate measurements for the period of record. A general discussion of the leachate column thickness measurements in the leachate monitoring points is included below.

- The leachate thickness in leachate piezometer C-2 remained generally steady with leachate thicknesses from 0.7 feet to 1.5 feet during this reporting period.
- The leachate thickness in leachate piezometer C-5 was stable at approximately six feet throughout this reporting period.
- During this reporting period, the leachate thickness in leachate piezometer C-7 increased slightly with a new maximum of 1.6 feet in August 2024 before decreasing to below one foot by the end of the reporting period.
- The leachate thickness in leachate piezometer LP-1 was above the historical thicknesses from April through July 2024, with a new maximum over 7 feet measured in July 2024, before decreasing to within the historical range through the end of the reporting period.
- The leachate thickness in leachate piezometer LP-2 was above the historical thicknesses from April through August 2024, with a new maximum of 5.5 feet measured in July 2024, before decreasing to within the historical range through the end of the reporting period.
- Leachate thicknesses in leachate piezometer LP-3 continued a pattern that began in 2020, which is short-lived thickness increases during part of the reporting period with stable measurements of about 0.5 feet during the rest of the reporting period.
- Leachate piezometer LP-4 remained within the range of historical thickness measurements generally between 1 and 2 feet during this reporting period.
- The leachate thickness in leachate piezometer LP-5 was slightly decreasing and below 0.5 feet throughout this reporting period.
- The leachate thickness in leachate piezometer LP-6 was above the historical thicknesses from April through July 2024, with a new maximum of approximately 3.4 feet measured in May 2024, before decreasing to within the historical range through the end of the reporting period.
- Leachate thicknesses in leachate piezometer LP-7 decreased from about 2.5 feet at the beginning of the reporting period to nearly dry at the end of this reporting period.
- The leachate thickness in leachate piezometer LP-8 continued a pattern that began in 2020, which increased through July 2024 and then decreased to approximately 1.2 feet by the end of the reporting period.

As stated above, replacement leachate piezometers LP-9R, LP-10R, LP-11R, LP-12R, LP-13R, and LP-14R were installed in September 2019 and extended in August 2022 in conjunction with the installation of final cover over this area. Extraction pumps were connected to the leachate discharge lines in spring 2024. Since the compressor and pumps were installed, an apparent air leak in the pressure piping developed. Attempts to diagnose the apparent leak were made in the fall of 2024; however, the apparent leak was not able to be located. Further attempts to repair the system will be made in early spring 2025.

- The leachate thickness in replacement well LP-9R was below 2.1 feet during this reporting period except for a spike in July 2024.
- The leachate thicknesses in replacement well LP-10R started the reporting period at about 2.3 feet, with an increase to 3.5 feet in July 2024 followed by a decrease to 2.2 feet by the end of the reporting period.
- The leachate thicknesses in replacement well LP-11R rose from approximately 2.5 feet at the beginning of the reporting period to about 4.6 feet in March before decreasing to below 2 feet at the end of the reporting period.
- The leachate thickness in replacement well LP-12R began the reporting period at 3.5 feet and increased to a new maximum in July 2024 before decreasing to about two feet by the end of the reporting period.
- As reported above, leachate piezometer LP-13R was damaged, so measurements could not be attained until May 2024 after the repair of the piezometer. The thickness decreased to about 5 feet in November 2024 before ending the reporting period at 7.5 feet.
- The leachate thicknesses in replacement well LP-14R ranged from approximately 8.7 to 11.1 feet during this reporting period.
- The leachate thickness at leachate head monitoring point LHMD-1 remained below the compliance level throughout the reporting period.
- The leachate thickness at leachate head monitoring point LHMD-2 remained below the compliance level throughout the reporting period.

1.4 APPROVED CHANGES/MODIFICATIONS TO SYSTEM

In conjunction with the construction of the final cover over the area monitored by piezometers LP-9R through LP-14R, the Agency had 2" HDPE air supply and leachate discharge lines installed to facilitate pumping from the six replacement piezometers LP-9R, LP-10R, LP-11R, LP-12R, LP-13R, and LP-14R. The leachate discharge lines for the piezometers are connected directly to their respective manholes to the east. In the spring of 2024, the air compressor and six pumps were connected.

The Landfill Manager reported that leachate piezometer LP-13R was damaged as the electronic water level indicator did not go deeper than a depth of 5-6 feet below the top of casing. It is suspected the piezometer was damaged during the final cover construction activities. The leachate piezometer was able to be repaired in May 2024.

1.5 PROPOSED CHANGES TO SYSTEM

SCS recommends continuing to perform the following items to maintain the effectiveness of the leachate control system:

- Locate and repair the apparent air line leak and resume pumping as needed based on leachate accumulation.
- Continue monthly monitoring of the leachate levels as required in the facility permit. Contact SCS with the monthly results so compliance concerns are promptly identified and addressed.
- 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.
- The top of casing of the extended leachate piezometers LP-9R through LP-14R should be reviewed for accuracy during the next reporting period. This will likely occur in conjunction with survey activities associated with the anticipated cell construction during the 2025 reporting period.
- Continue recording the volume of leachate disposed of at the City of Orange City and other approved publicly-owned treatment works. 570,000 gallons of leachate were hauled for disposal during this reporting period.
- Continue cleaning the leachate collection system once every three years or more frequently if leachate head or the volume of leachate collected indicates cleaning is necessary. The leachate control system was cleaned in November 2023 and will be cleaned next in 2026.



Leachate Control System

Legend

- Leachate valve
- Leachate Manhole
- Leachate Lift Station
- Leachate Cleanout
- Leachate Piezometers
- Leachate Pipe - Solid
- Leachate Pipe - Perforated
- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Gas Vent
- Approximate FML Boundary
- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

N W E S

0 265 530 1,060 Feet

Figure 1

SCS ENGINEERS
environmental consultants and contractors

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

Path: C:\Users\lmadison\OneDrive - SCS Engineers\Desktop\GIS\Maps\Site Maps\NIASL\2023 AWOR\NWIA-2023-AWOR.aprx
User: lmadison
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Attachment A

Table 12 – Leachate Management Summary

Table 12
Leachate Management Summary
2024 Leachate Control System Performance Evaluation Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

	Unlined Cells - Column Thickness (ft)											Lined Cells - Column Thickness (ft)								Hauled to	Precipitation
Month	**C-2**	**C-5**	**C-7**	**LP-1**	**LP-2**	**LP-3**	**LP-4**	**LP-5**	**LP-6**	**LP-7**	**LP-8**	**LP-9R**	**LP-10R**	**LP-11R**	**LP-12R**	**LP-13R**	**LP-14R**	**LHMD-1**	**LHMD-2**	**POTW (gal)**	**(in)**
January 2024	1.15	5.92	1.02	4.92	3.33	4.05	1.06	0.37	1.05	2.21	2.47	1.92	2.33	2.52	3.50	Damaged	9.14	0.05	0.13		0.03
February 2024	1.45	5.92	1.12	4.97	2.50	4.11	1.38	0.40	1.48	2.48	2.44	2.05	3.25	3.45	3.35	Damaged	8.74	0.31	0.13		0.05
March 2024	1.08	5.92	0.69	5.02	2.20	4.12	1.25	0.47	1.67	2.37	2.91	1.55	3.31	4.57	3.20	Damaged	8.77	0.40	0.13		1.73
April 2024	1.29	5.92	1.02	7.22	5.12	2.95	1.71	0.42	2.64	2.21	3.40	1.31	3.35	3.71	3.44	Damaged	9.28	0.19	0.13		4.79
May 2024	1.05	5.58	0.67	6.93	5.33	2.81	1.75	0.35	3.35	1.89	3.21	1.34	3.33	3.92	7.23	11.18	9.96	0.48	0.13		6.93
June 2024	0.92	6.31	0.89	7.39	5.45	3.71	1.95	0.35	3.13	2.19	3.58	4.85	3.49	4.51	8.88	7.29	11.06	0.01	0.13		3.31
July 2024	1.06	5.92	1.39	6.56	5.52	1.17	1.57	0.34	1.49	0.84	2.91	6.62	3.18	2.79	2.51	7.78	10.91	0.03	0.13	570,000	1.71
August 2024	1.03	5.92	1.55	5.63	4.91	0.32	1.32	0.30	1.47	0.60	2.39	1.02	3.19	2.55	3.22	6.35	10.69	0.17	0.13		1.95
September 2024	0.71	5.92	1.32	5.23	4.81	0.34	1.38	0.04	1.35	0.33	2.31	1.08	3.19	2.21	2.53	5.58	10.35	0.11	0.13		0.17
October 2024	0.97	5.92	1.25	4.09	4.12	0.37	1.15	0.32	1.41	0.25	1.87	0.94	2.97	2.08	2.23	5.35	10.79	0.38	0.13		0.49
November 2024	0.96	5.92	0.95	4.13	3.68	0.41	1.14	0.26	1.31	0.18	1.71	1.01	2.64	2.05	2.41	5.18	10.12	0.21	0.13		2.29
December 2024	1.03	5.92	0.91	3.93	3.18	0.43	0.97	0.20	1.18	0.09	1.25	1.33	2.21	1.79	2.09	7.49	9.79	0.50	0.13		0.44
																	Reporting Period Total Gallons			**570,000**	**23.89**

Measurements collected by Landfill staff.

Comments:

1. Reporting Period: January 2024 - December 2024.
2. Recommended Changes to Leachate Collection System: None.
3. Maintenance Performed on Leachate Collection System: Leachate extraction pumps were installed in the replacement piezometers in May 2024. Attempts to diagnose and repair an apparent air leak were made during this reporting period. Further attempts will be made in spring 2025.
4. Last Date of Cleaning and Inspection: November 2023.
5. Date for Next Cleaning and Inspection: Leachate line cleaning and inspection will be performed next in 2026.
6. Volume of Leachate Recirculated: 0 gallons.
7. Volume of Leachate Treated On-Site: 0 gallons.
8. Volume of Leachate Treated Off-Site: 570,00 gallons of leachate were transported to the Orange City POTW during this reporting period.
9. Storage Capacity: The wet well capacity is 10,000 gallons, the storage capacity of the lagoon is approximately 1,622,000 gallons.
10. Precipitation data for January 2024 - December 2024 from https://mesonet.agron.iastate.edu/ASOS/reports/mon_prec.php?year=2024 for Sheldon, Iowa.

Attachment B

Historical Leachate Column Thickness Tables and Graphs

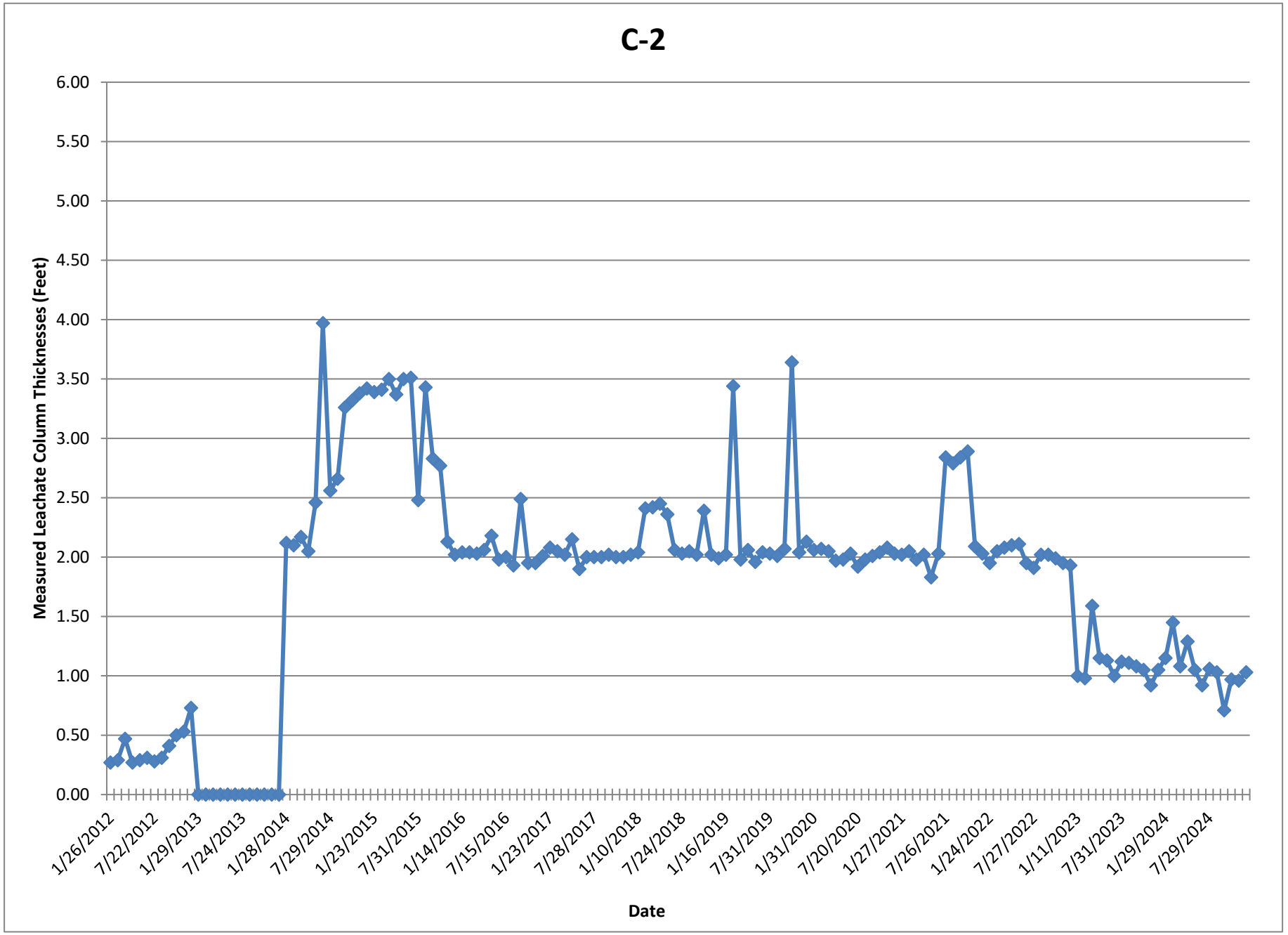
Attachment B
Table B-1
Historical Leachate Column Thicknesses
Northwest Iowa Area Sanitary Landfill

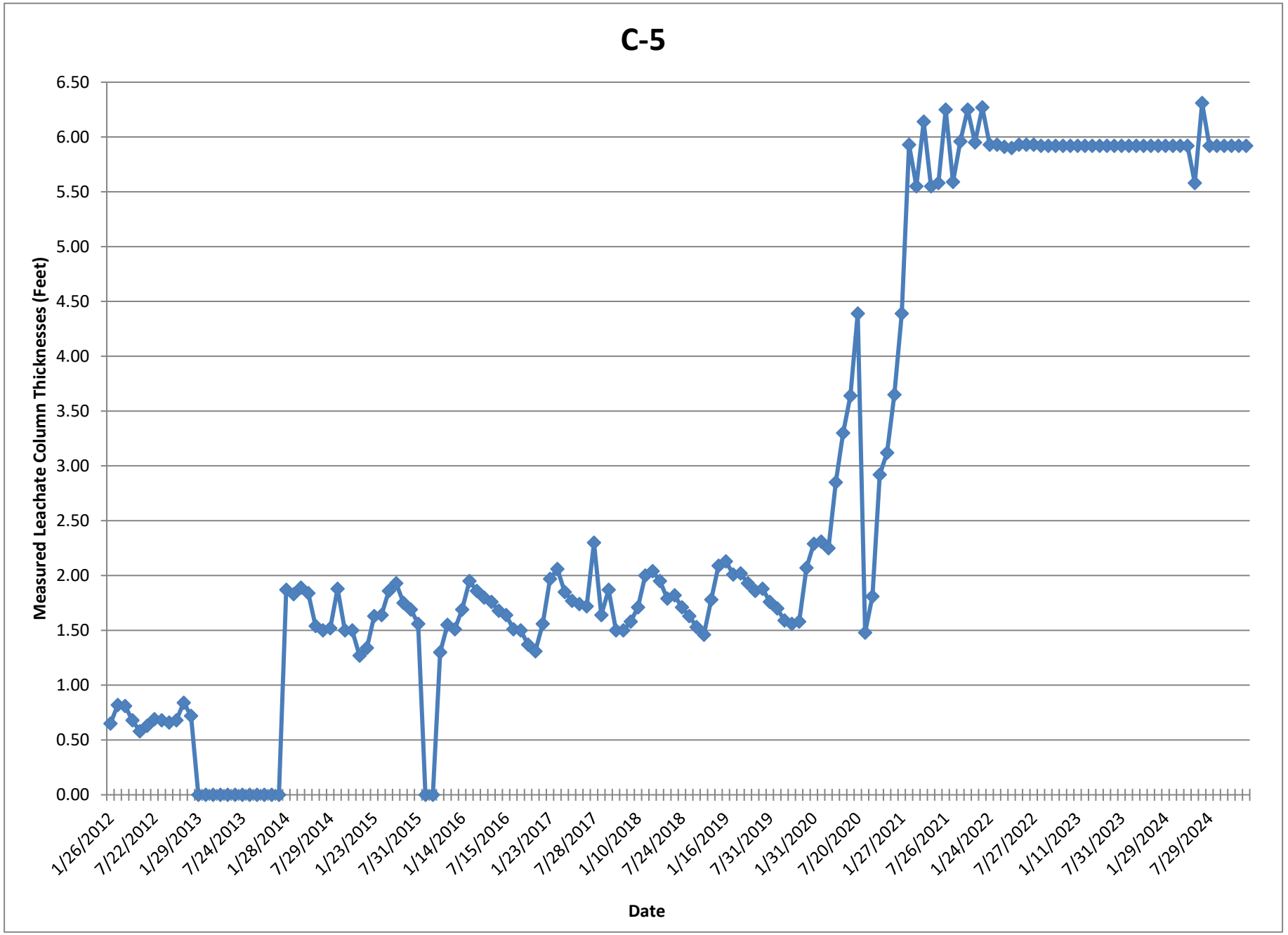
	C-2	C-5	C-7	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9/9R	LP-10/10R	LP-11/11R	LP-12/12R	LP-13/13R	LP-14/14R	LHMD-1	LHMD-2
Installed Depth (ft)	27.0	31.5	24.0	15.5	15.56	16.0	10.9	10.8	14.0	16.2	15.7	15.2	14.9	15.0	15.2	15.0	14.0		
	Replacement LP Depths →											22.5	22.3	22.9	27.3	27.9	15.6		
	Depth after August 2022 Extension →											27.5	27.3	27.9	32.3	32.9	20.6		
Date	**Leachate Column Thickness (ft)**																		
1/26/2012	0.27	0.65	0.24	2.90	0.10	0.23	0.24	0.25	0.37	0.25	0.19	0.49	1.66	0.33	0.45	14.31	1.12	NI	NI
2/16/2012	0.29	0.82	0.05	2.93	0.09	0.32	0.29	0.22	0.45	0.29	0.24	0.38	1.58	0.19	0.54	14.26	1.06	NI	NI
3/16/2012	0.47	0.81	0.16	2.91	0.17	0.65	0.35	0.25	0.47	0.34	0.23	0.41	1.65	0.25	0.52	14.34	1.03	NI	NI
4/20/2012	0.27	0.68	0.13	2.88	0.29	0.72	0.37	0.17	0.71	0.27	0.28	0.36	1.52	0.24	0.46	14.61	0.36	NI	NI
5/23/2012	0.29	0.58	0.11	1.99	0.17	0.77	0.27	0.15	0.48	0.42	0.43	0.65	1.57	0.19	0.39	14.21	0.15	NI	NI
6/15/2012	0.31	0.63	0.14	2.18	0.07	0.69	0.34	0.16	0.21	0.24	0.38	0.56	1.68	0.23	0.32	14.53	0.07	NI	NI
7/22/2012	0.28	0.69	0.08	2.21	0.27	0.57	0.32	0.10	0.09	0.36	0.17	0.59	1.65	0.17	0.37	14.48	0.22	NI	NI
8/13/2012	0.31	0.68	0.13	2.28	0.13	0.61	0.17	0.09	0.58	0.24	0.74	0.65	1.68	0.23	0.44	14.47	0.35	NI	NI
9/16/2012	0.41	0.66	0.08	2.69	0.08	0.58	0.45	0.20	0.63	0.30	0.69	0.75	2.20	0.26	0.39	14.82	0.37	NI	NI
10/23/2012	0.50	0.68	0.17	2.78	0.18	0.56	0.17	0.13	0.70	0.31	0.90	0.65	0.55	0.44	0.41	14.73	0.35	NI	NI
11/30/2012	0.53	0.84	0.09	2.76	0.22	0.34	0.18	0.16	0.77	1.20	0.71	0.88	0.73	0.37	0.52	14.76	0.19	NI	NI
12/18/2012	0.73	0.72	0.24	2.95	0.32	0.16	0.29	0.10	0.59	0.20	0.34	0.77	2.52	1.01	0.07	13.59	1.26	NI	NI
1/29/2013	0.00	0.00	0.00	2.76	0.00	0.00	1.71	0.00	0.00	0.00	0.00	0.60	2.07	1.10	0.39	13.54	1.61	NI	NI
2/25/2013	0.00	0.00	0.00	2.83	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.81	1.47	1.17	0.33	13.71	2.14	NI	NI
3/27/2013	0.00	0.00	0.00	3.49	0.00	1.40	0.00	0.00	0.00	0.00	0.00	1.33	3.19	1.38	0.00	13.55	2.60	NI	NI
4/30/2013	0.00	0.00	0.00	3.51	0.00	1.64	0.71	0.00	0.00	0.00	0.00	2.14	4.73	1.51	0.91	13.27	2.83	NI	NI
5/21/2013	0.00	0.00	0.00	5.08	0.00	1.64	1.52	0.00	0.00	0.00	0.77	1.77	4.57	1.86	1.02	11.35	3.39	NI	NI
6/20/2013	0.00	0.00	0.00	4.67	0.00	1.14	1.36	0.00	0.00	0.00	0.32	1.60	4.38	1.83	0.95	11.48	3.32	NI	NI
7/24/2013	0.00	0.00	0.00	4.20	0.00	0.00	0.98	0.00	0.00	0.00	1.03	1.14	4.13	1.76	0.90	11.87	3.29	NI	NI
8/30/2013	0.00	0.00	0.00	1.01	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.36	1.08	0.66	0.00	12.82	3.22	NI	NI
9/20/2013	0.00	0.00	0.00	0.90	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.61	1.21	0.42	0.00	12.75	3.16	NI	NI
10/21/2013	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	2.24	1.31	0.00	13.34	3.56	NI	NI
11/14/2013	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	1.24	2.73	1.59	0.61	13.54	3.37	NI	NI
12/16/2013	0.00	0.00	0.00	0.98	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	2.50	1.19	0.00	13.49	3.25	NI	NI
1/28/2014	2.12	1.87	0.18	1.00	0.56	0.00	0.58	0.46	1.91	1.18	0.63	0.69	2.23	1.32	0.23	13.63	2.87	NI	NI
2/24/2014	2.10	1.83	0.12	0.97	0.56	0.00	0.58	0.46	1.95	1.12	0.55	0.61	2.29	0.75	0.23	13.74	2.94	NI	NI
3/26/2014	2.17	1.89	0.28	0.99	0.56	0.00	0.58	0.46	1.96	1.02	0.82	0.64	2.50	0.82	0.23	13.69	3.13	NI	NI
4/24/2014	2.05	1.84	0.26	0.93	0.56	0.00	0.58	0.46	1.92	1.18	0.69	1.00	2.50	0.91	0.40	13.29	3.06	NI	NI
5/21/2014	2.46	1.54	0.39	2.22	0.62	0.00	0.58	0.46	1.91	0.80	0.47	1.09	2.59	1.32	0.44	13.04	3.25	NI	NI
6/25/2014	3.97	1.50	0.00	1.36	1.70	0.36	0.78	0.54	1.91	1.38	2.20	1.71	3.31	1.26	0.80	10.38	3.68	NI	NI
7/29/2014	2.56	1.52	0.22	2.30	1.08	0.00	0.58	0.46	1.91	1.08	1.41	1.64	2.48	1.08	0.66	12.65	3.29	NI	NI
8/25/2014	2.66	1.88	0.12	2.07	0.70	0.22	0.68	0.46	1.96	0.82	1.69	0.98	1.27	1.52	0.49	11.57	2.76	NI	NI
9/30/2014	3.26	1.50	0.00	1.87	2.03	0.02	0.81	0.45	1.83	0.83	1.61	1.59	2.36	1.94	0.71	13.65	3.32	NI	NI
10/28/2014	3.32	1.50	0.00	1.43	1.50	0.00	0.76	0.46	1.83	0.80	1.54	1.25	1.99	1.91	0.55	13.27	3.39	NI	NI
11/25/2014	3.38	1.27	0.00	3.27	1.32	0.00	0.65	0.46	1.83	0.80	1.50	1.09	2.33	1.93	0.60	13.80	3.47	NI	NI
12/5/2014	3.42	1.34	0.00	3.20	1.17	0.04	0.61	0.46	1.83	0.82	1.24	1.17	2.31	1.81	0.60	13.96	3.46	NI	NI
1/23/2015	3.39	1.63	0.00	2.00	0.82	0.06	0.77	0.00	0.00	0.80	1.10	1.05	2.27	1.73	0.50	13.49	3.34	NI	NI
2/20/2015	3.41	1.64	0.00	1.88	0.68	0.08	0.67	0.00	0.00	0.92	1.24	1.07	2.43	1.70	0.49	13.75	3.42	NI	NI
3/18/2015	3.50	1.86	0.00	2.08	0.00	0.06	0.60	0.00	0.00	0.98	1.17	0.98	2.05	1.63	0.36	13.80	3.48	NI	NI
4/30/2015	3.37	1.93	0.00	2.42	0.00	0.36	0.61	0.00	0.00	1.10	2.10	1.06	2.43	1.20	0.28	13.97	3.35	NI	NI
5/27/2015	3.50	1.75	0.00	2.70	0.72	3.96	0.68	0.00	0.00	0.97	2.77	1.04	1.65	1.30	0.68	13.61	3.62	NI	NI
6/13/2015	3.51	1.69	0.00	2.62	0.92	3.74	0.61	0.00	0.00	1.10	2.62	1.07	1.65	1.33	0.66	13.57	3.63	NI	NI
7/31/2015	2.48	1.56	0.00	3.10	1.02	0.05	0.81	0.00	0.00	0.00	2.72	1.02	1.08	1.28	0.50	12.84	3.62	NI	NI
8/26/2015	3.43	0.00	0.00	3.20	1.30	0.05	0.95	0.00	0.00	0.00	2.66	1.10	1.93	2.05	0.56	12.27	3.38	NI	NI
9/28/2015	2.83	0.00	0.39	3.45	1.30	0.04	0.13	0.00	0.00	0.00	2.72	1.13	1.87	2.00	0.50	12.64	3.47	NI	NI
10/30/2015	2.77	1.30	0.42	3.57	1.23	0.20	0.56	0.44	1.84	0.75	2.79	1.15	1.91	2.00	0.54	12.49	3.93	NI	NI
11/23/2015	2.13	1.55	0.41	3.38	1.19	0.00	0.61	0.45	1.85	0.77	2.77	1.11	1.79	2.22	0.64	12.55	3.77	NI	NI
12/30/2015	2.02	1.51	0.45	3.13	1.21	0.00	0.66	0.44	1.83	0.80	2.77	1.06	1.86	2.34	0.80	12.60	3.86	NI	NI
1/14/2016	2.04	1.69	0.44	2.90	1.36	0.01	0.60	0.45	1.84	0.88	3.15	1.24	2.13	2.34	0.81	12.28	4.11	NI	NI
2/29/2016	2.04	1.95	0.44	3.57	1.71	0.76	0.59	0.47	1.84	0.88	3.15	1.81	2.39	2.55	0.88	12.20	4.44	NI	NI
3/21/2016	2.03	1.86	0.47	3.83	1.98	0.73	1.25	0.46	1.83	1.58	3.47	1.54	2.36	2.22	1.36	12.20	4.32	NI	NI
4/20/2016	2.06	1.80	0.51	3.33	2.32	0.66	0.63	0.48	2.00	1.41	3.32	1.51	2.40	4.51	1.36	12.26	4.23	NI	NI
5/16/2016	2.18	1.76	0.48	3.03	2.14	0.11	0.60	0.47	1.90	0.86	3.01	1.18	2.18	4.27	1.46	11.98	4.02	NI	NI
6/30/2016	1.98	1.68	0.46	2.91	2.26	0.67	0.64	0.47	1.83	1.04	1.97	1.28	2.61	3.33	1.44	11.24	3.61	NI	NI
7/15/2016	2.00	1.64	0.51	2.47	2.32	0.19	0.83	0.48	1.86	0.87	1.79	1.61	2.41	2.10	1.37	11.17	3.71	NI	NI
8/30/2016	1.93	1.51	0.44	2.60	2.42	0.04	0.58	0.51	1.83	0.22	2.19	1.29	2.07	2.61	1.03	11.03	4.03	Dry	NI
9/21/2016	2.49	1.50	0.06	2.95	2.58	0.00	1.20	0.47	1.83	1.33	2.24	1.41	2.71	2.51	1.06	11.08	4.09	0.01	NI
10/21/2016	1.95	1.37	0.44	2.77	2.82	0.55	0.66	0.48	1.83	0.96	2.24	1.45	2.50	2.62	0.95	11.32	4.90	Dry	NI
11/10/2016	1.95	1.31	0.46	2.87	2.63	0.65	0.69	0.46	1.83	0.64	2.70	1.27	2.19	2.40	0.74	11.52	4.41	Dry	NI
12/23/2016	2.01	1.56	0.44	3.46	3.41	1.16	0.83	0.45	1.83	0.62	2.89	1.23	2.54	2.63	0.86	11.33	3.73	Dry	NI
1/23/2017	2.08	1.97	0.38	3.27	3.25	1.20	0.65	0.46	1.83	0.83	2.36	1.11	2.34	2.45	0.72	11.87	3.38	Dry	NI
2/28/2017	2.05	2.06	0.39	4.03	3.31	0.90	1.16	0.46	1.83	1.25	2.63	1.38	2.55	2.76	1.10	11.58	4.43	Dry	NI
3/16/2017	2.02	1.85	0.40	4.31	3.02	1.29	1.45	0.46	2.56	1.69	2.06	1.94	2.23	2.42	1.16	11.03	4.73	Dry	NI
4/11/2017	2.15	1.77	0.38	4.27	2.79	0.98	1.25	0.46	2.07	1.40	2.85	2.03	2.46	2.73	1.07	11.10	4.71	Dry	NI
5/22/2017	1.90	1.74	0.45	4.29	2.63	0.73	1.13	0.46	1.83	0.82	3.10	1.97	2.84	3.23	1.00	11.05	4.65	Dry	NI
6/23/2017	2.00	1.72	0.42	3.75	3.21	0.00	1.05	0.46	1.83	0.52	2.89	1.82	2.62	3.05	0.93	11.10	4.73	Dry	NI
7/28/2017	2.00	2.30	0.42	3.94	2.74	0.07	0.89	0.46	1.83	0.27	2.58	1.46	2.44	3.64	0.83	11.27	4.24	Dry	NI
8/21/2017	2.00	1.64	0.54	3.79	2.82	0.14	1.06	0.51	1.83	0.89	2.30	1.59	2.78	3.73	0.95	11.12	3.65	Dry	NI
9/11/2017	2.02	1.87	0.37	3.59	2.72	0.00	0.71	0.46	1.85	0.84	2.30	1.26	2.33	3.31	0.52	11.68	3.77	Dry	NI
10/16/2017	2.00	1.50	0.49	4.05	2.69	0.92	1.46	0.46	1.83	1.16	2.26	1.82	3.04	4.02	0.89	11.32	3.65	0.03	NI
11/20/2017	2.00	1.50	0.42	3.58	2.67	1.36	0.82	0.46	1.83	0.85	2.33	1.24	3.35	4.17	0.72	11.82	3.71	Dry	NI
12/29/2017	2.02	1.58	0.43	4.21	2.98	0.27	0.81	0.46	1.83	0.50	1.58	1.03	2.94	3.18	0.98	12.63	3.50	0.18	NI
1/10/2018	2.04	1.71	0.42	4.35	3.13	0.00	0.86	0.46	1.83	0.39	1.56	1.08	2.95	3.13	0.67	12.35	3.22	0.11	NM
2/27/2018	2.41	2.00	0.06	3.80	3.02	0.00	0.19	0.46	1.83	0.68	1.23	0.98	3.67	2.70	0.58	12.76	3.61	0.12	NM
3/30/2018	2.42	2.04	0.02	4.45	3.68	0.11	1.30	0.46	1.83	0.75	1.21	1.11	3.48	2.71	0.94	12.14	3.17	0.16	NM
4/16/2018	2.45	1.95	0.14	4.47	4.26	0.55	2.10	0.46	1.93	1.25	1.56	0.97	3.42	2.14	1.23	12.39	3.04	0.01	NM
5/14/2018	2.36	1.79	0.12	4.39	4.08	0.58	2.00	0.46	1.88	1.22	1.34	0.75	3.22	2.02	0.89	12.52	2.97	0.05	NM
6/29/2018	2.06	1.82	0.59	3.83	3.67	1.16	2.15	0.46	1.82	1.57	1.04	1.48	3.49	2.86	1.22	11.56	3.47	0.02	NM
7/24/2018	2.03	1.71	0.20	3.80	3.12	2.10	1.53	0.46	1.83	1.01	0.73	1.92	3.39	2.26	0.91	11.25	3.37	Dry	NM
8/27/2018	2.05	1.63	0.41	4.54	3.69	2.00	1.92	0.46	1.83	1.20	0.89	1.99	3.14	2.59	0.93	11.24	3.02	0.24	NM
9/28/2018	2.02	1.53	0.41	5.33	4.76	2.32	1.73	0.46	1.83	1.06	0.69	1.72	3.32	2.66	1.33	11.16	3.34	0.19	NM
10/22/2018	2.39	1.46	0.37	4.91	4.72	1.84	1.47	0.46	1.83	1.14	1.04	1.71	3.10	2.60	1.38	11.69	3.25	0.15	NM
11/12/2018	2.02	1.78	0.38	4.86	4.71	1.71	1.07	0.46	1.84	0.89	0.76	1.61	3.21	2.60	1.21	11.90	3.02	0.13	NM
12/19/2018	1.99	2.09	0.40	4.65	4.86	1.57	1.06	0.46	1.86	1.74	0.74	1.55	4.30	4.07	1.18	10.65	3.73	0.11	NM

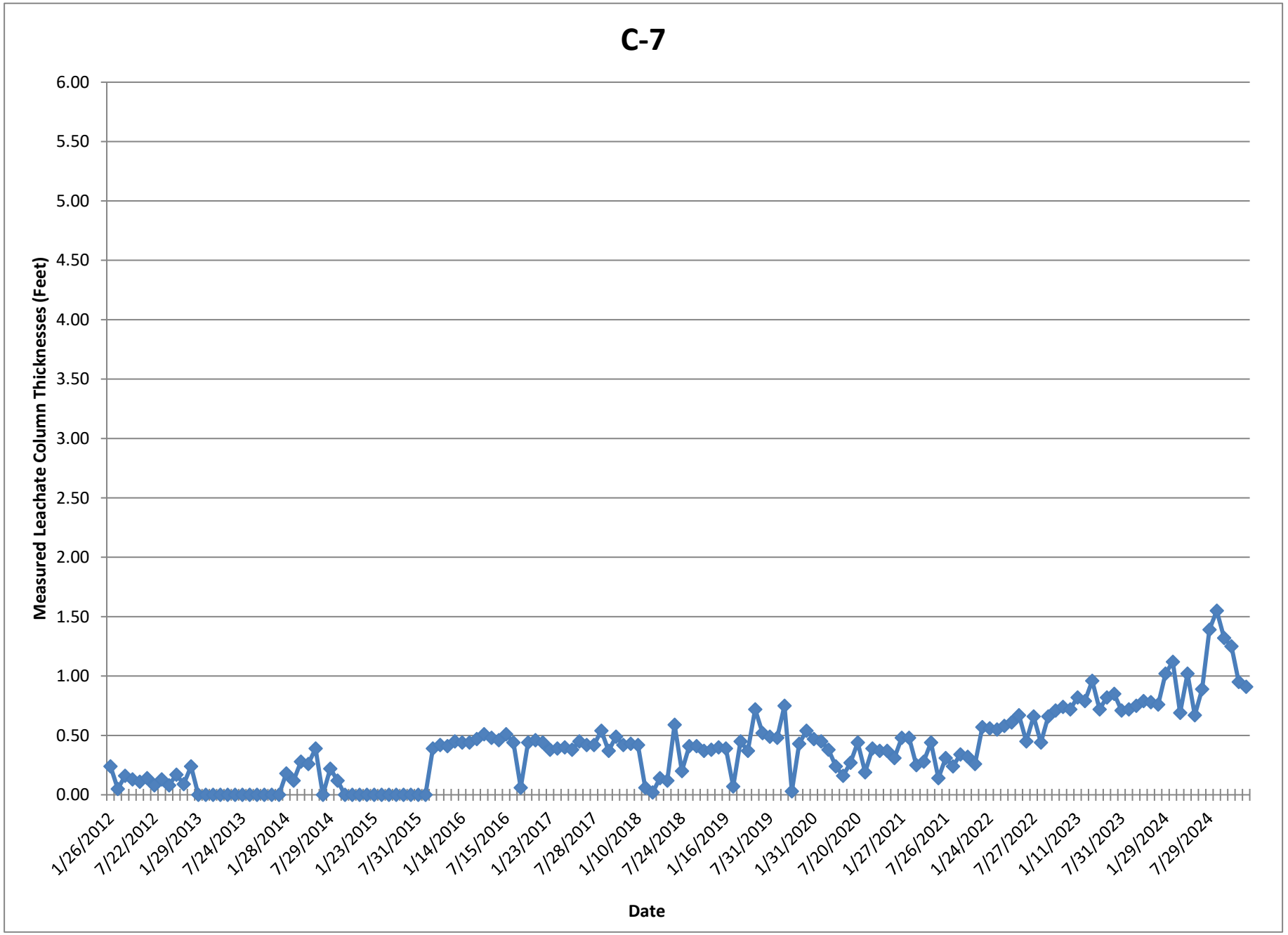
Attachment B
Table B-1
Historical Leachate Column Thicknesses
Northwest Iowa Area Sanitary Landfill

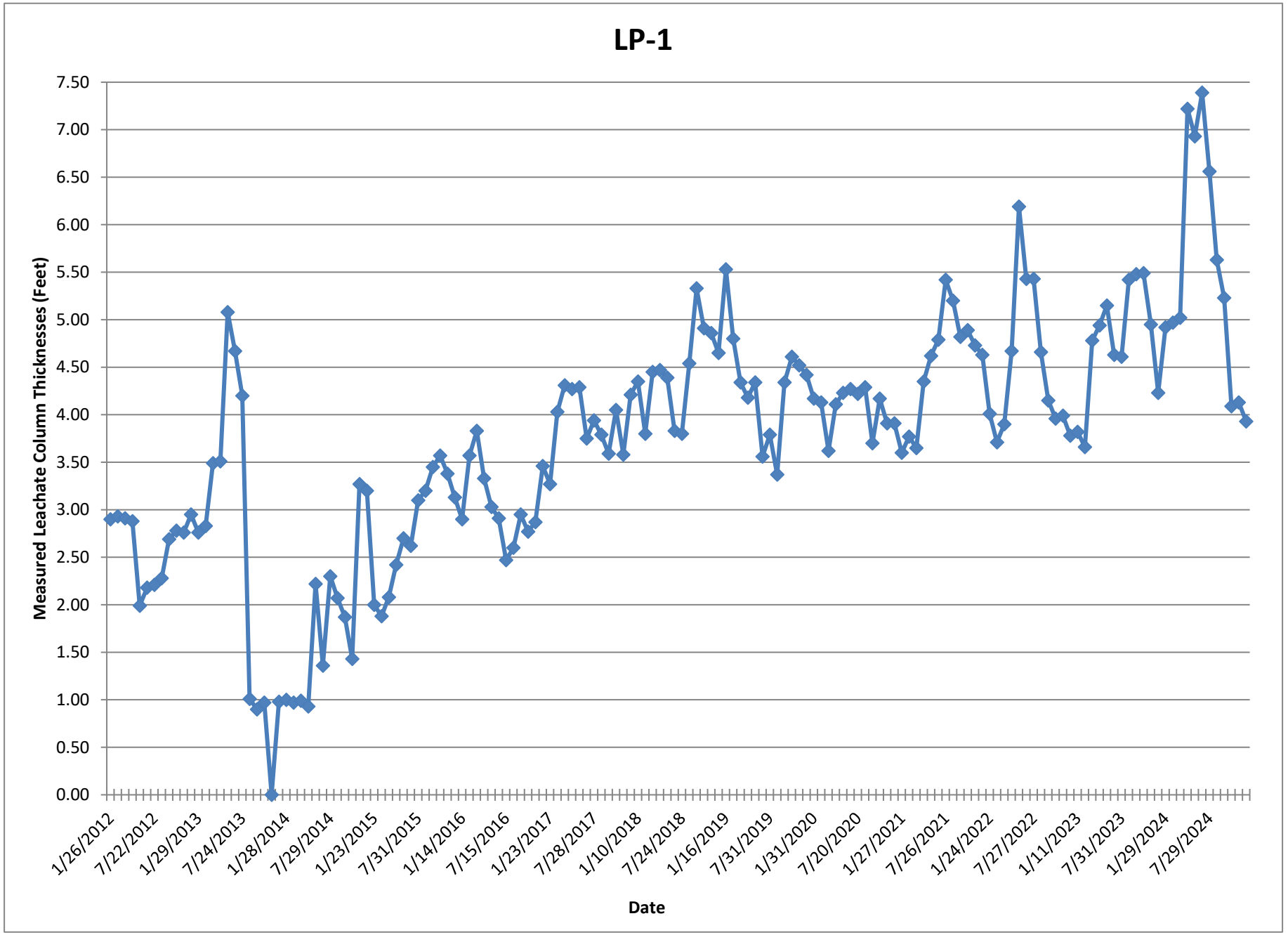
	C-2	C-5	C-7	LP-1	LP-2	LP-3	LP-4	LP-5	LP-6	LP-7	LP-8	LP-9/9R	LP-10/10R	LP-11/11R	LP-12/12R	LP-13/13R	LP-14/14R	LHMD-1	LHMD-2
Installed Depth (ft)	27.0	31.5	24.0	15.5	15.56	16.0	10.9	10.8	14.0	16.2	15.7	15.2	14.9	15.0	15.2	15.0	14.0		
	Replacement LP Depths →											22.5	22.3	22.9	27.3	27.9	15.6		
	Depth after August 2022 Extension →											27.5	27.3	27.9	32.3	32.9	20.6		
Date	Leachate Column Thickness (ft)																		
1/16/2019	2.02	2.13	0.39	5.53	4.80	1.95	1.53	0.46	1.88	1.04	1.53	1.63	4.47	4.68	1.49	10.94	3.51	0.58	NM
2/19/2019	3.44	2.01	0.07	4.80	4.33	1.28	1.17	0.46	1.21	0.59	1.99	1.12	4.20	4.88	1.70	11.08	3.50	0.68	NM
3/28/2019	1.98	2.02	0.45	4.34	2.84	2.30	1.06	0.46	1.81	1.18	1.59	2.01	4.45	4.83	1.80	11.13	3.03	0.55	NM
4/15/2019	2.06	1.93	0.37	4.18	2.97	2.89	1.14	0.49	1.89	1.32	1.74	2.60	4.32	4.77	2.47	10.87	3.37	1.03	NM
5/22/2019	1.96	1.86	0.72	4.34	3.08	3.30	1.17	0.53	1.79	2.03	1.89	3.30	4.43	4.88	3.68	10.51	3.65	1.56	NM
6/28/2019	2.04	1.88	0.52	3.56	3.22	1.07	1.63	0.54	2.24	1.31	2.15	2.82	4.44	4.68	2.03	10.51	4.80	0.72	NM
7/31/2019	2.03	1.76	0.49	3.79	2.51	3.45	1.57	0.46	1.84	1.23	2.96	2.10	4.10	4.68	1.88	10.20	4.63	0.89	NM
8/27/2019	2.01	1.70	0.48	3.37	2.60	1.47	1.54	0.45	1.83	1.07	2.61	1.59	4.75	4.16	1.72	10.65	4.77	0.28	NM
9/30/2019	2.07	1.59	0.75	4.34	3.78	3.25	2.50	0.53	2.57	1.96	3.37	0.31	2.46	1.64	0.18	20.20	11.66	0.33	NM
10/25/2019	3.64	1.56	0.03	4.61	4.37	4.18	1.61	0.46	1.83	1.43	2.90	0.27	2.03	1.57	0.50	23.21	11.00	0.10	NM
11/20/2019	2.04	1.58	0.43	4.52	2.42	4.23	1.42	0.47	1.83	1.32	2.82	0.29	2.46	2.27	0.49	23.30	10.83	0.36	NM
12/27/2019	2.13	2.07	0.54	4.42	2.58	4.03	1.54	0.47	2.21	1.65	2.78	1.03	2.25	2.50	0.50	23.53	10.55	0.06	NM
1/31/2020	2.06	2.29	0.47	4.17	3.20	4.75	1.41	0.46	2.33	1.18	2.59	0.45	2.34	1.75	0.63	23.60	10.33	0.05	NM
2/20/2020	2.07	2.31	0.45	4.13	3.04	4.81	1.37	0.47	2.50	0.84	2.45	0.13	2.03	1.58	0.58	23.45	8.44	1.05	NM
3/30/2020	2.05	2.25	0.38	3.62	2.67	4.35	1.34	0.45	2.69	0.76	2.77	0.00	1.81	1.49	0.38	23.81	7.36	1.28	NM
4/21/2020	1.97	2.85	0.24	4.11	2.82	4.63	1.26	0.48	2.50	0.83	2.90	0.08	1.94	1.46	0.58	23.93	8.96	0.61	0.47
5/20/2020	1.98	3.30	0.16	4.23	2.66	4.27	1.29	0.50	2.32	0.81	3.18	0.25	2.11	1.42	0.98	24.19	9.18	1.22	0.45
6/15/2020	2.03	3.64	0.27	4.27	3.19	4.25	0.86	0.52	2.16	1.34	3.08	0.47	1.95	1.61	0.53	23.74	9.31	0.68	0.43
7/20/2020	1.92	4.39	0.44	4.22	2.78	2.16	1.51	0.46	2.12	0.92	2.55	0.45	2.04	1.51	0.55	26.47	8.73	0.99	0.47
8/20/2020	1.98	1.48	0.19	4.29	2.65	1.03	1.27	0.44	1.83	1.16	2.41	0.38	2.02	1.38	0.31	25.72	8.69	0.48	0.45
9/23/2020	2.01	1.81	0.39	3.70	2.64	1.22	1.20	0.45	1.85	0.77	2.18	0.59	2.23	1.61	0.51	25.74	9.32	0.11	0.40
10/29/2020	2.04	2.92	0.37	4.17	2.58	0.87	1.08	0.47	1.87	0.80	1.75	0.31	2.08	1.66	0.54	25.52	8.81	0.01	0.15
11/30/2020	2.08	3.12	0.37	3.91	3.25	0.44	0.96	0.47	1.83	0.76	1.51	0.51	2.08	1.42	0.23	24.22	8.39	0.01	0.24
12/21/2020	2.03	3.65	0.31	3.91	2.98	0.47	0.89	0.44	1.40	0.59	1.45	0.42	2.03	1.48	0.61	24.46	8.29	0.01	0.03
1/27/2021	2.02	4.39	0.48	3.60	2.69	0.49	0.74	0.42	1.62	0.20	1.22	0.47	1.97	1.51	0.84	24.41	7.62	0.01	0.45
2/23/2021	2.05	5.93	0.48	3.77	2.73	0.51	0.68	0.50	1.19	0.20	1.07	0.28	2.08	1.51	0.87	24.41	7.91	0.01	0.06
3/26/2021	1.98	5.55	0.25	3.65	2.83	1.01	0.82	0.56	1.67	1.20	0.91	0.45	2.55	1.99	2.55	23.35	6.67	0.01	0.37
4/26/2021	2.02	6.14	0.28	4.35	3.63	1.29	1.57	0.48	1.58	1.70	1.17	1.35	2.25	1.72	1.91	23.19	7.39	0.01	0.36
5/24/2021	1.83	5.55	0.44	4.62	3.45	3.06	1.31	0.47	1.87	1.74	2.09	0.34	1.81	1.22	1.25	23.97	7.44	0.01	0.03
6/14/2021	2.03	5.58	0.14	4.79	3.00	2.03	0.67	0.49	1.84	1.56	1.82	0.19	1.78	1.28	1.13	23.89	6.74	0.03	0.01
7/26/2021	2.84	6.25	0.31	5.42	3.51	1.43	1.25	0.42	1.48	1.34	1.68	0.48	1.75	1.42	1.27	25.06	7.17	0.13	0.01
8/18/2021	2.79	5.59	0.24	5.20	3.53	1.14	1.20	0.44	1.54	1.23	1.61	0.38	1.85	1.32	1.28	24.52	7.11	0.07	0.01
9/13/2021	2.84	5.96	0.34	4.82	3.48	0.81	1.09	0.47	1.50	0.76	1.41	0.35	1.83	1.34	1.14	24.76	7.08	Dry	0.04
10/26/2021	2.89	6.25	0.32	4.89	3.45	0.43	0.98	0.45	1.47	0.83	1.35	0.46	1.88	1.28	1.09	24.96	7.01	Dry	0.05
11/29/2021	2.09	5.95	0.26	4.73	3.37	0.55	0.97	0.44	1.79	1.69	0.12	0.45	1.87	1.29	1.52	24.98	7.17	Dry	0.03
12/15/2021	2.03	6.27	0.57	4.63	3.27	0.52	0.97	0.49	1.48	1.47	1.10	0.38	2.01	1.34	1.78	24.39	7.28	Dry	0.05
1/24/2022	1.95	5.93	0.56	4.01	2.82	0.44	0.68	0.50	1.77	0.23	0.83	0.48	2.05	1.29	2.15	24.29	7.47	0.51	0.01
2/28/2022	2.05	5.93	0.55	3.71	2.67	0.42	0.58	0.44	1.82	0.24	0.71	0.49	1.92	1.31	2.13	24.85	7.32	0.00	0.03
3/21/2022	2.08	5.91	0.58	3.90	2.82	0.68	0.58	0.46	1.80	0.80	1.20	0.35	2.08	1.54	2.09	24.77	6.87	Dry	0.39
4/18/2022	2.10	5.90	0.61	4.67	3.29	2.85	1.07	0.48	1.78	1.34	1.43	0.42	2.23	2.05	2.04	24.53	6.19	0.04	0.43
5/18/2022	2.11	5.93	0.67	6.19	3.80	4.58	1.32	0.52	1.47	2.75	2.81	0.48	2.32	3.01	2.12	24.24	5.77	0.01	0.53
6/28/2022	1.95	5.93	0.45	5.43	4.05	1.98	0.58	0.52	1.47	1.75	2.25	0.04	2.20	2.36	1.71	22.81	6.03	0.05	0.70
7/27/2022	1.91	5.93	0.66	5.43	4.05	1.98	0.58	0.52	1.47	1.75	2.25	0.04	2.20	2.36	1.71	22.81	6.03	0.07	0.03
8/29/2022	2.02	5.92	0.44	4.66	3.77	0.48	0.98	0.48	1.47	1.45	1.81	1.75	2.91	1.75	1.32	Damaged	11.28	0.21	0.03
9/27/2022	2.02	5.92	0.66	4.15	3.44	0.55	0.97	0.46	1.47	1.32	1.69	1.63	2.55	1.72	1.31	Damaged	11.43	0.24	0.01
10/31/2022	1.99	5.92	0.71	3.96	3.00	0.55	0.78	0.44	1.47	1.13	1.52	1.29	2.68	1.62	1.47	Damaged	11.00	0.03	0.05
11/28/2022	1.95	5.92	0.74	3.99	2.80	0.54	0.68	0.47	1.47	0.85	1.31	1.03	2.77	1.56	1.32	Damaged	11.38	0.18	0.03
12/7/2022	1.93	5.92	0.72	3.78	2.57	0.51	0.64	0.45	1.47	0.81	1.21	0.99	2.36	1.55	1.32	Damaged	10.39	0.48	0.05
1/11/2023	1.00	5.92	0.82	3.82	2.35	0.42	0.91	0.46	1.47	0.73	1.08	1.28	2.97	2.16	2.41	Damaged	10.63	0.07	0.05
2/7/2023	0.98	5.92	0.79	3.66	2.09	0.44	0.68	0.46	1.47	0.75	0.88	1.04	3.32	2.32	2.32	Damaged	10.16	0.28	0.10
3/27/2023	1.59	5.92	0.96	4.78	2.48	3.61	1.87	0.58	1.47	7.26	2.40	0.99	3.12	1.92	2.42	Damaged	9.56	0.42	0.03
4/18/2023	1.15	5.92	0.72	4.94	3.62	2.67	1.64	0.53	1.47	3.18	2.71	1.04	2.81	1.97	2.47	Damaged	9.95	0.12	0.03
5/22/2023	1.13	5.92	0.82	5.15	4.11	2.95	1.76	0.45	1.69	3.38	2.89	1.21	3.17	3.68	3.55	Damaged	10.09	0.05	0.01
6/28/2023	1.00	5.92	0.85	4.63	4.23	0.53	1.38	0.43	1.81	1.53	2.35	1.12	2.49	2.63	3.39	Damaged	10.28	0.01	0.07
7/31/2023	1.12	5.92	0.71	4.61	4.01	0.52	1.29	0.44	1.80	1.78	1.95	1.08	2.20	2.21	3.09	Damaged	10.17	0.17	0.12
8/29/2023	1.11	5.92	0.72	5.42	3.92	0.51	1.43	0.47	1.87	1.07	1.79	1.13	2.41	2.45	2.97	Damaged	10.14	0.11	0.09
9/26/2023	1.08	5.92	0.75	5.48	3.83	0.52	1.37	0.35	1.60	0.70	1.52	1.14	2.78	2.41	5.43	Damaged	9.84	0.12	0.10
10/24/2023	1.05	5.92	0.79	5.49	3.64	0.49	1.24	0.35	1.47	0.53	1.37	1.12	3.09	2.97	5.65	Damaged	9.77	0.07	0.12
11/15/2023	0.92	5.92	0.78	4.95	3.56	0.43	1.15	0.34	1.49	0.43	1.29	1.05	2.55	2.44	3.11	Damaged	9.88	0.17	0.12
12/14/2023	1.05	5.92	0.76	4.23	3.08	0.49	1.00	0.40	1.48	0.28	1.12	1.35	2.22	2.15	2.71	Damaged	9.18	0.47	0.12
1/29/2024	1.15	5.92	1.02	4.92	3.33	4.05	1.06	0.37	1.05	2.21	2.47	1.92	2.33	2.52	3.50	Damaged	9.14	0.05	0.13
2/26/2024	1.45	5.92	1.12	4.97	2.50	4.11	1.38	0.40	1.48	2.48	2.44	2.05	3.25	3.45	3.35	Damaged	8.74	0.31	0.13
3/27/2024	1.08	5.92	0.69	5.02	2.20	4.12	1.25	0.47	1.67	2.37	2.91	1.55	3.31	4.57	3.20	Damaged	8.77	0.40	0.13
4/15/2024	1.29	5.92	1.02	7.22	5.12	2.95	1.71	0.42	2.64	2.21	3.40	1.31	3.35	3.71	3.44	Damaged	9.28	0.19	0.13
5/29/2024	1.05	5.58	0.67	6.93	5.33	2.81	1.75	0.35	3.35	1.89	3.21	1.34	3.33	3.92	7.23	11.18	9.96	0.48	0.13
7/2/2024	0.92	6.31	0.89	7.39	5.45	3.71	1.95	0.35	3.13	2.19	3.58	4.85	3.49	4.51	8.88	7.29	11.06	0.01	0.13
7/29/2024	1.06	5.92	1.39	6.56	5.52	1.17	1.57	0.34	1.49	0.84	2.91	6.62	3.18	2.79	2.51	7.78	10.91	0.03	0.13
8/27/2024	1.03	5.92	1.55	5.63	4.91	0.32	1.32	0.30	1.47	0.60	2.39	1.02	3.19	2.55	3.22	6.35	10.69	0.17	0.13
9/19/2024	0.71	5.92	1.32	5.23	4.81	0.34	1.38	0.04	1.35	0.33	2.31	1.08	3.19	2.21	2.53	5.58	10.35	0.11	0.13
10/29/2024	0.97	5.92	1.25	4.09	4.12	0.37	1.15	0.32	1.41	0.25	1.87	0.94	2.97	2.08	2.23	5.35	10.79	0.38	0.13
11/15/2024	0.96	5.92	0.95	4.13	3.68	0.41	1.14	0.26	1.31	0.18	1.71	1.01	2.64	2.05	2.41	5.18	10.12	0.21	0.13
12/18/2024	1.03	5.92	0.91	3.93	3.18	0.43	0.97	0.20	1.18	0.09	1.25	1.33	2.21	1.79	2.09	7.49	9.79	0.50	0.13

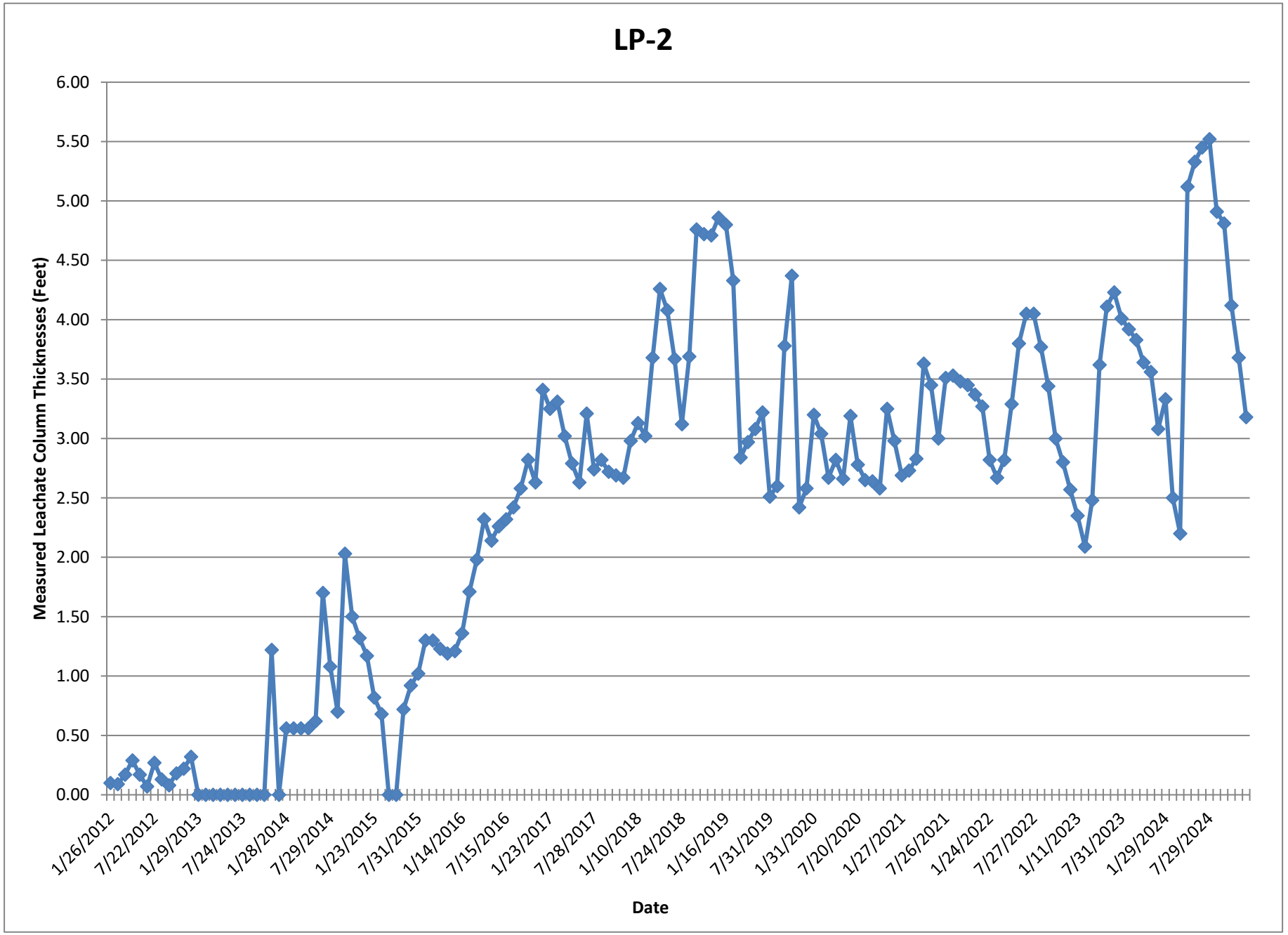
Notes:
NI = Not installed
NM = Not measured
1) Leachate piezometers LP-9R, LP-10R, LP-11R, LP-12R, LP-13R, and LP-14R were installed in September 2019 and extraction pumps were installed in spring 2024.
2) Leachate head measurements for LHLMD-1 and LHMD-2 were incorrectly reported through December 2022. The measurements have been corrected herein.
3) LP-13R was repaired in May 2024.

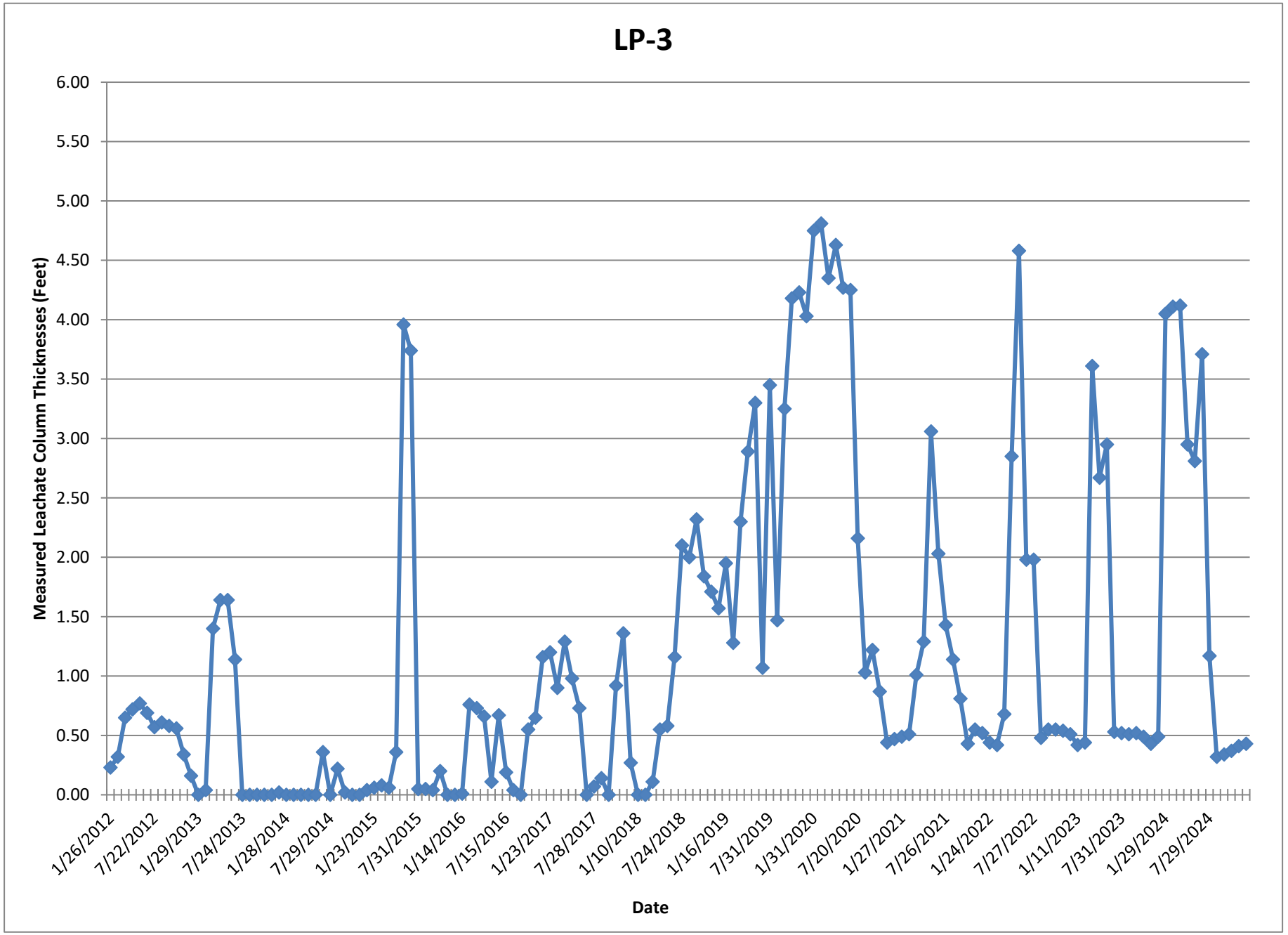

C-2
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

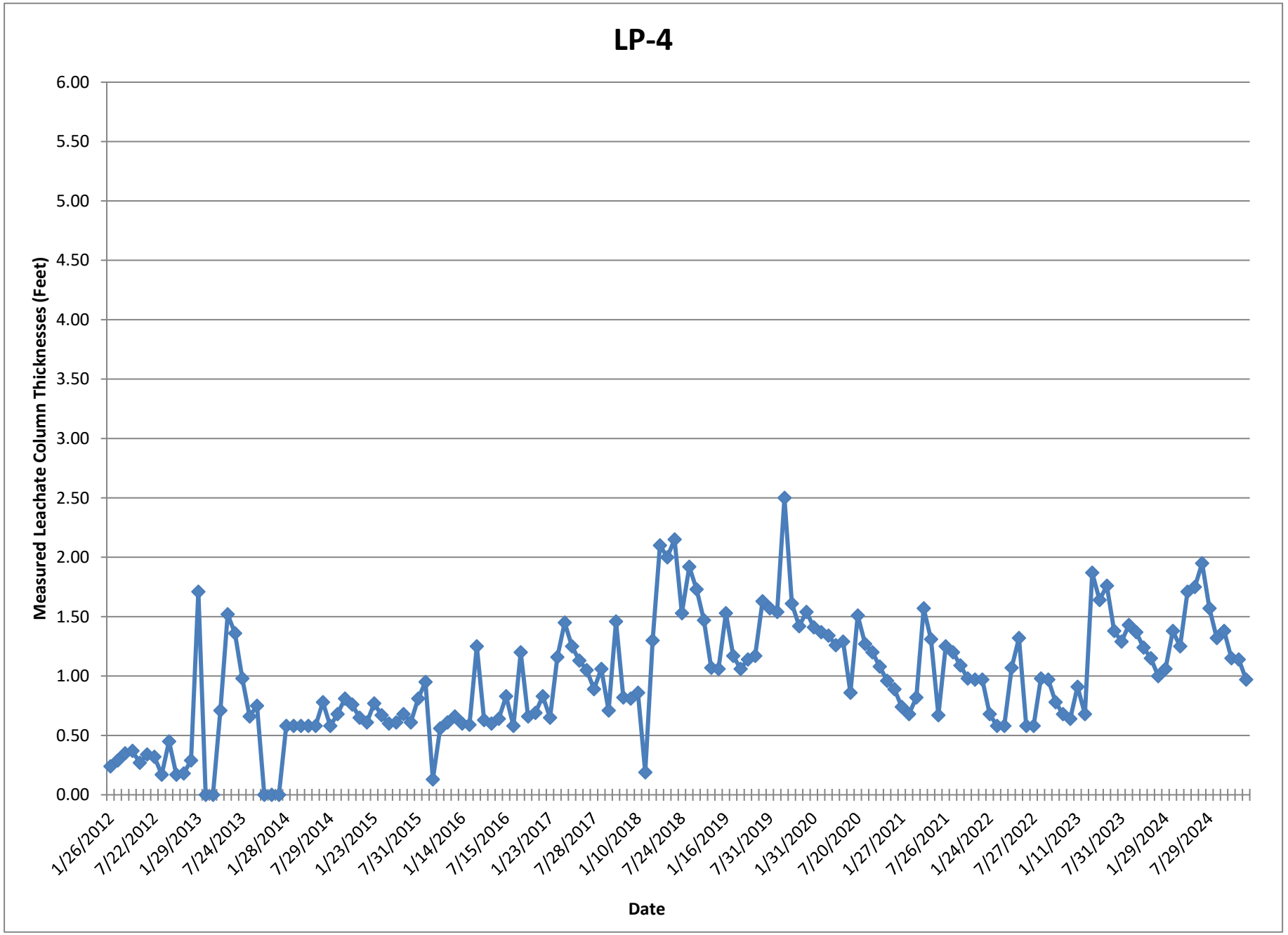

C-5
Measured Leachate Column Thicknesses (Feet)
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

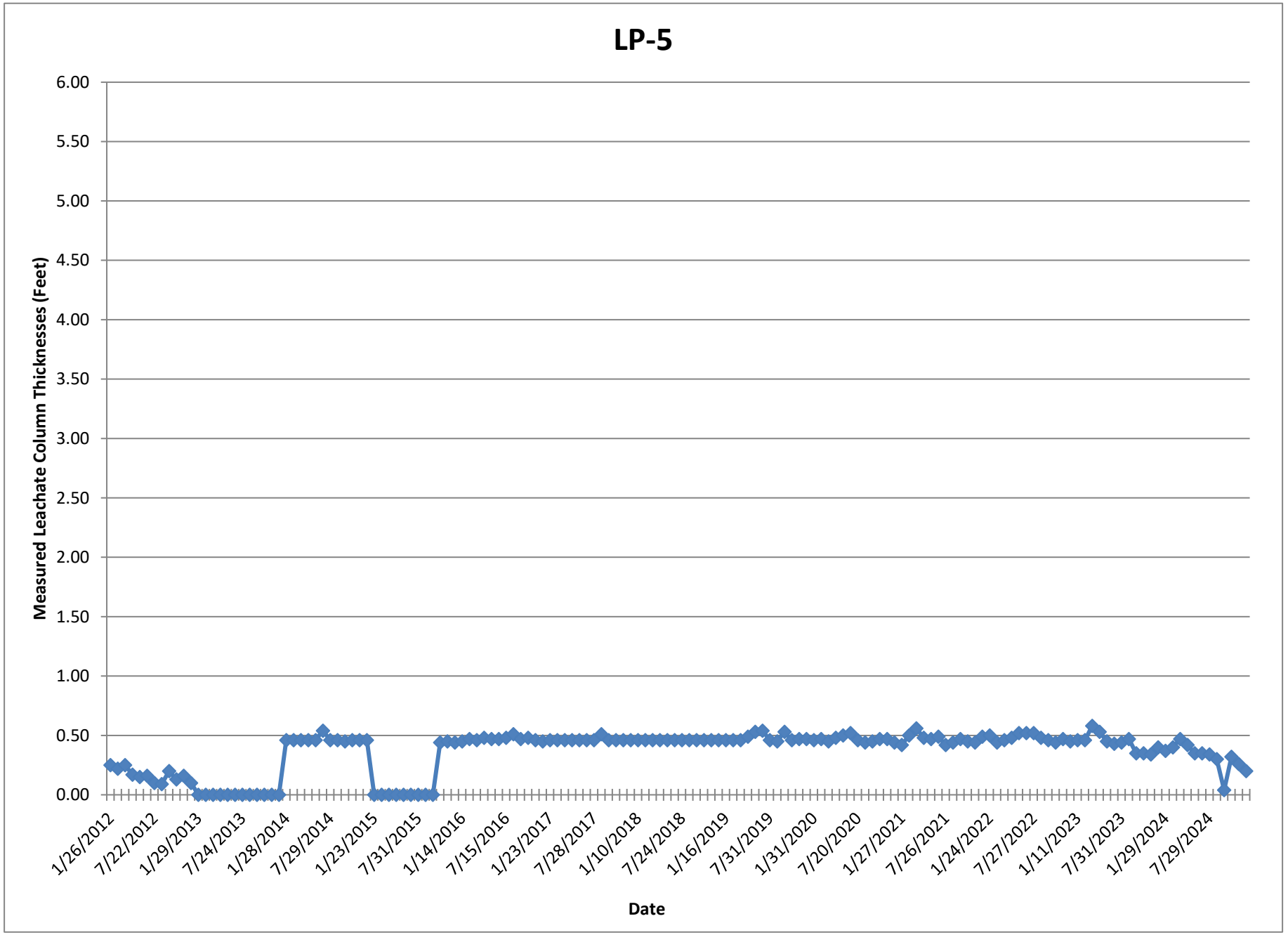

C-7
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

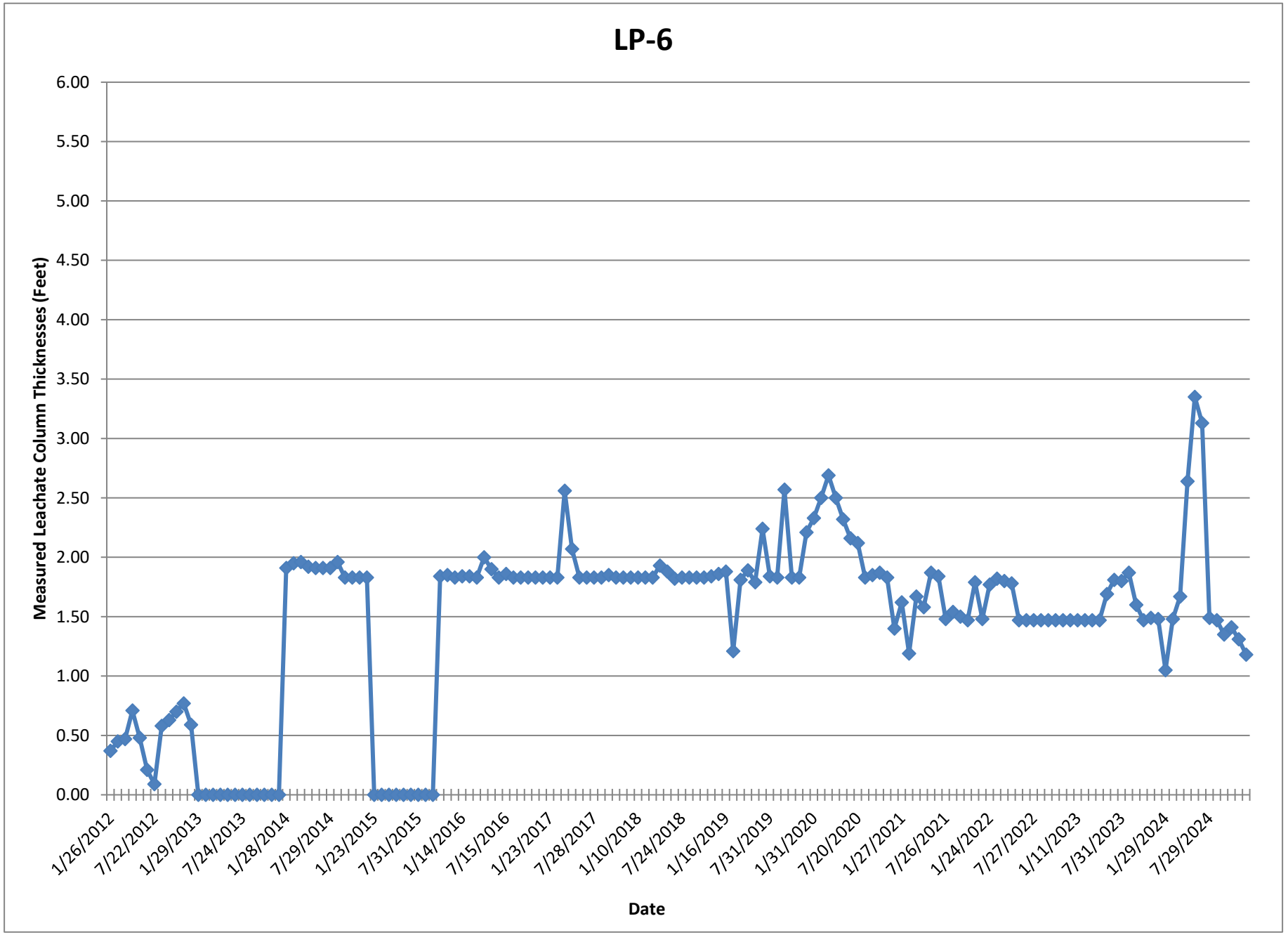

LP-1
Measured Leachate Column Thicknesses (Feet)
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

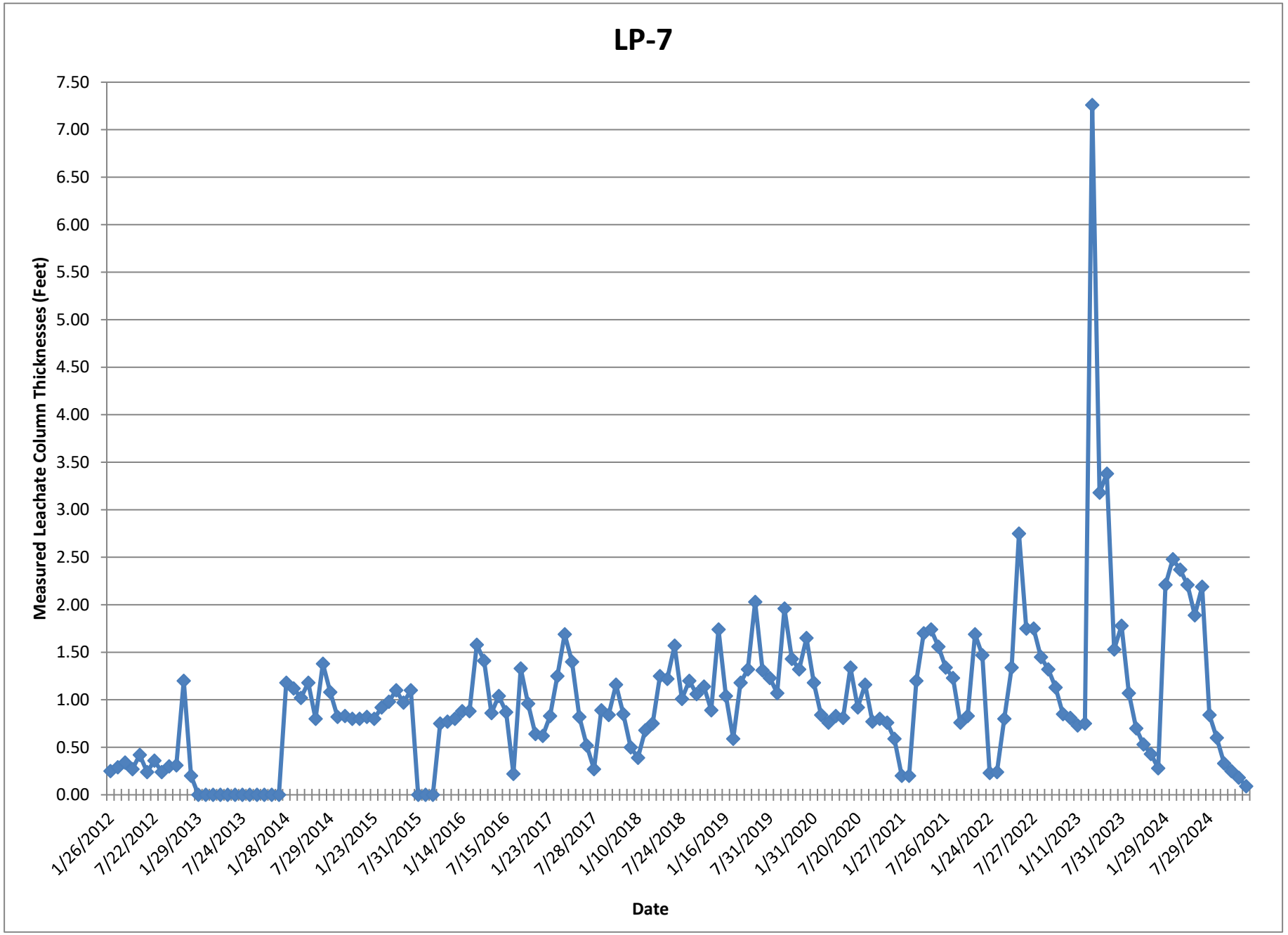

LP-2
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

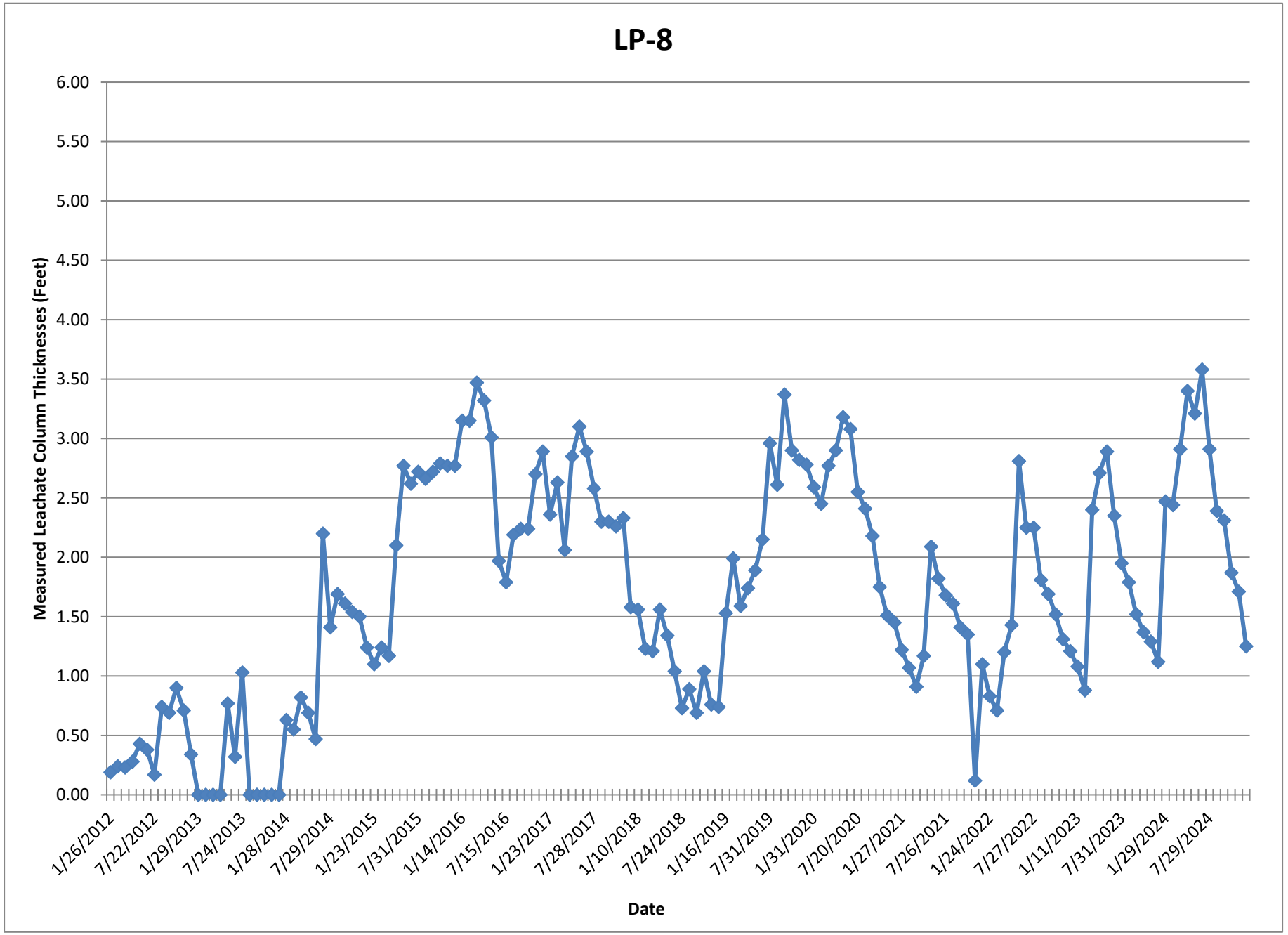

LP-3
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

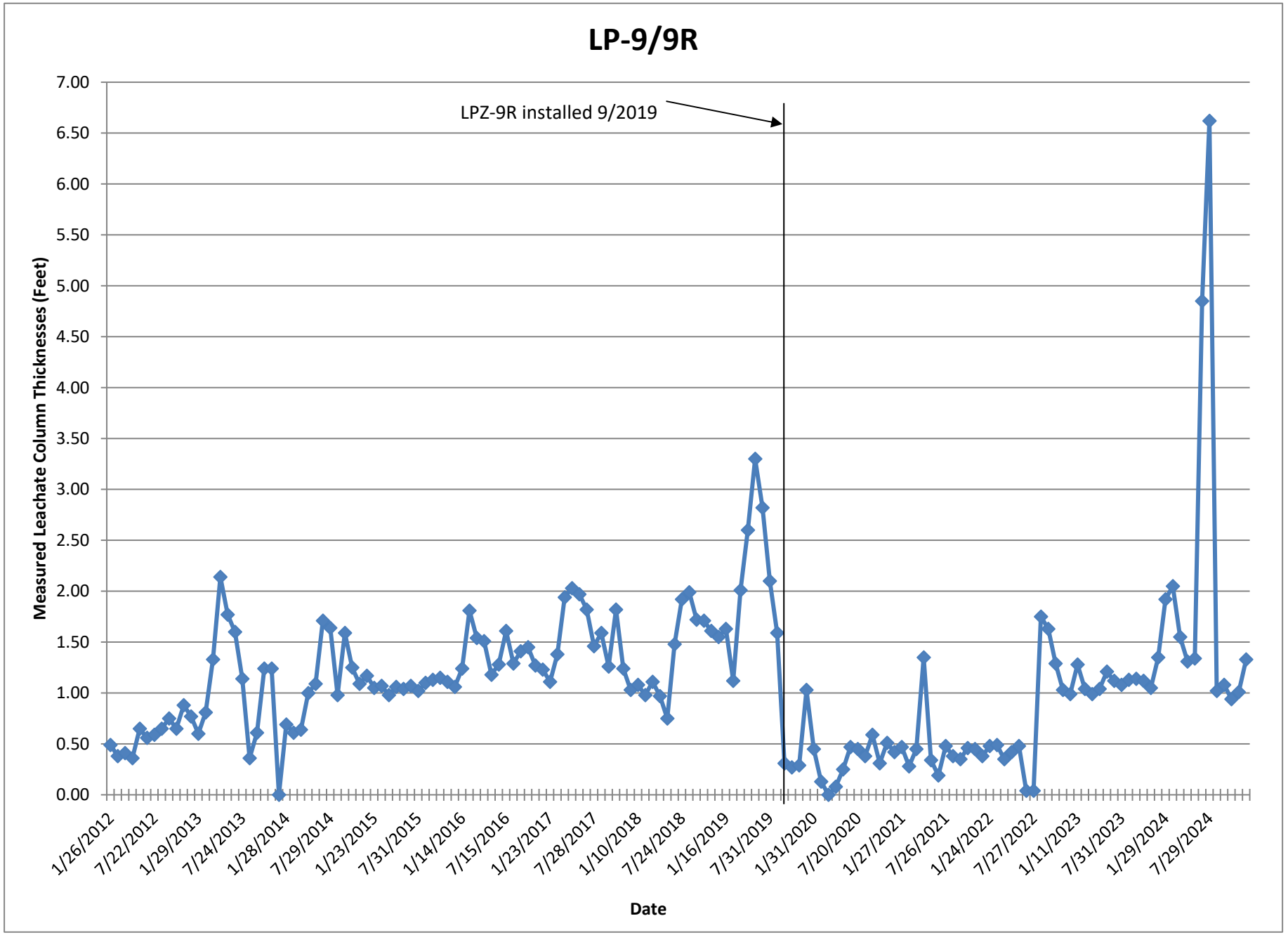

LP-4
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

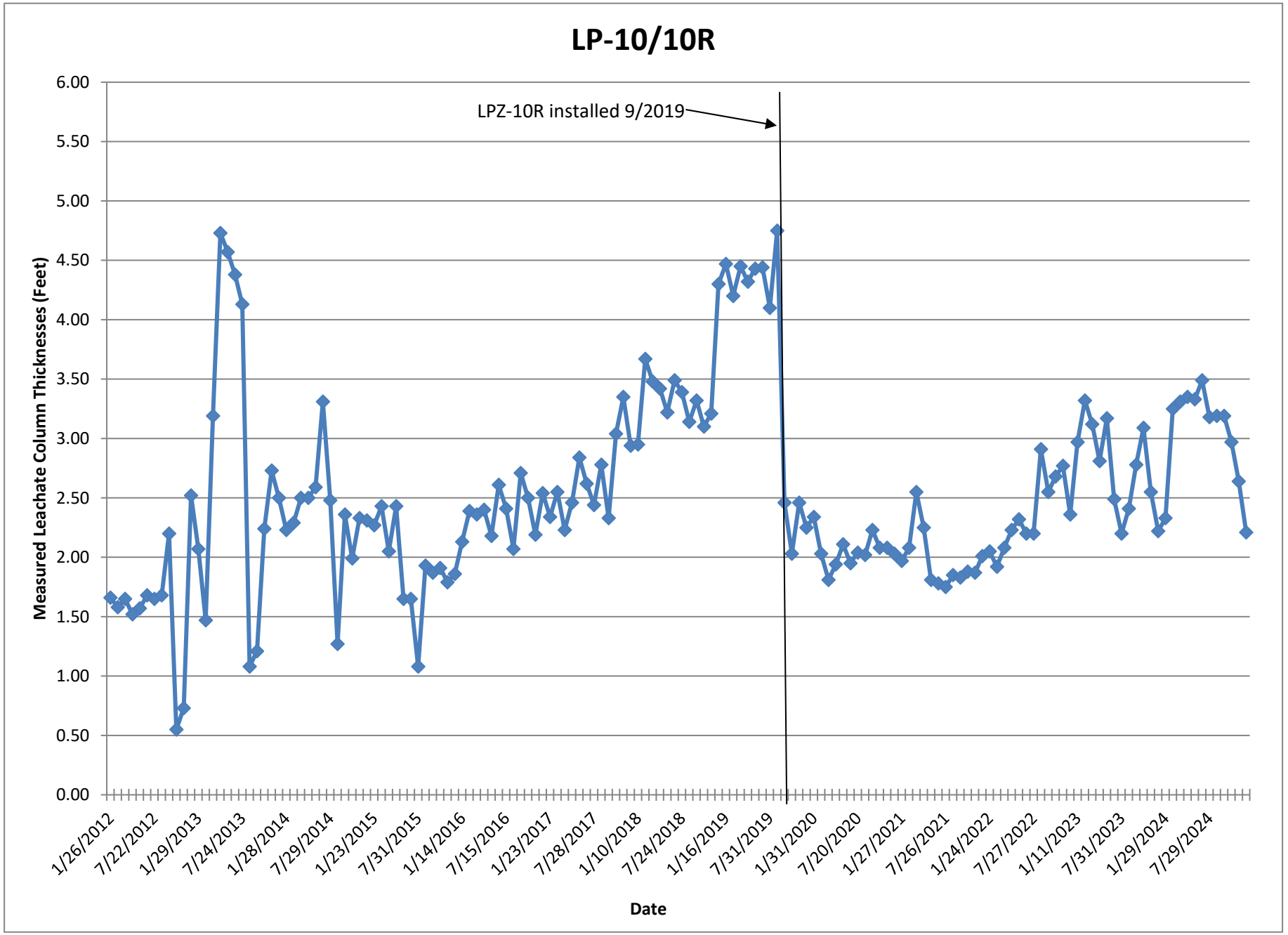

LP-5
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

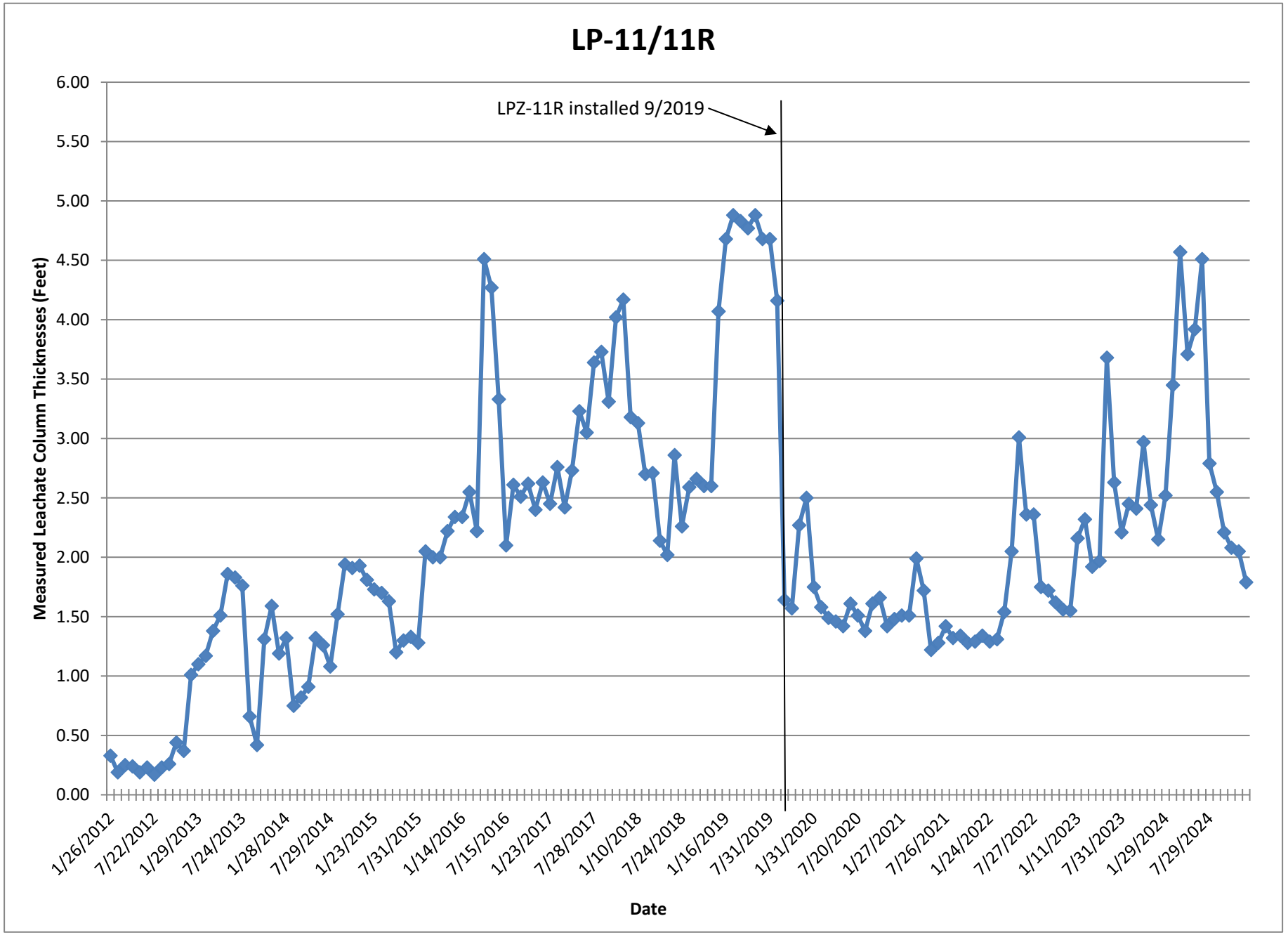

LP-6
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

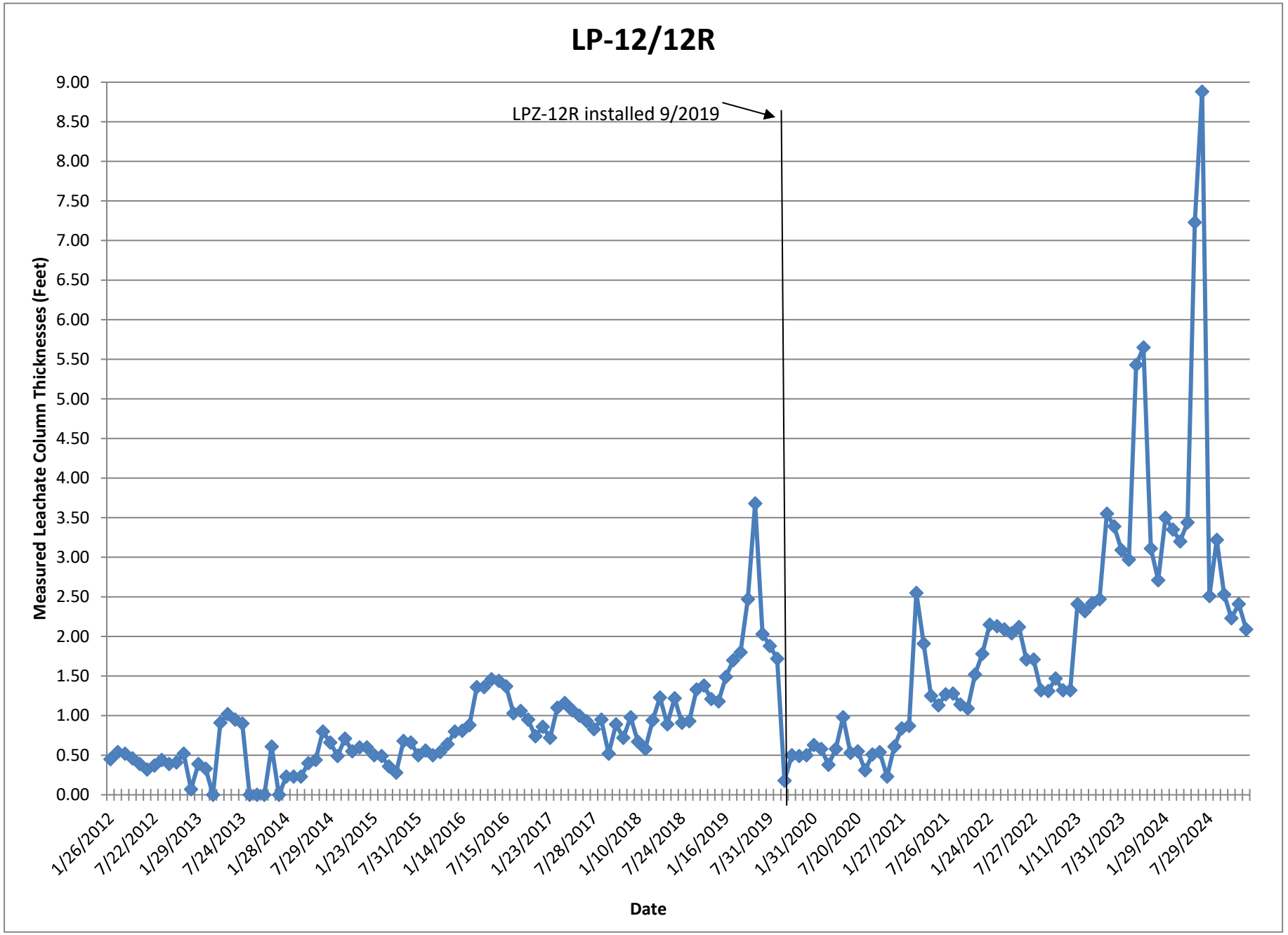

LP-7
Measured Leachate Column Thicknesses (Feet)
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

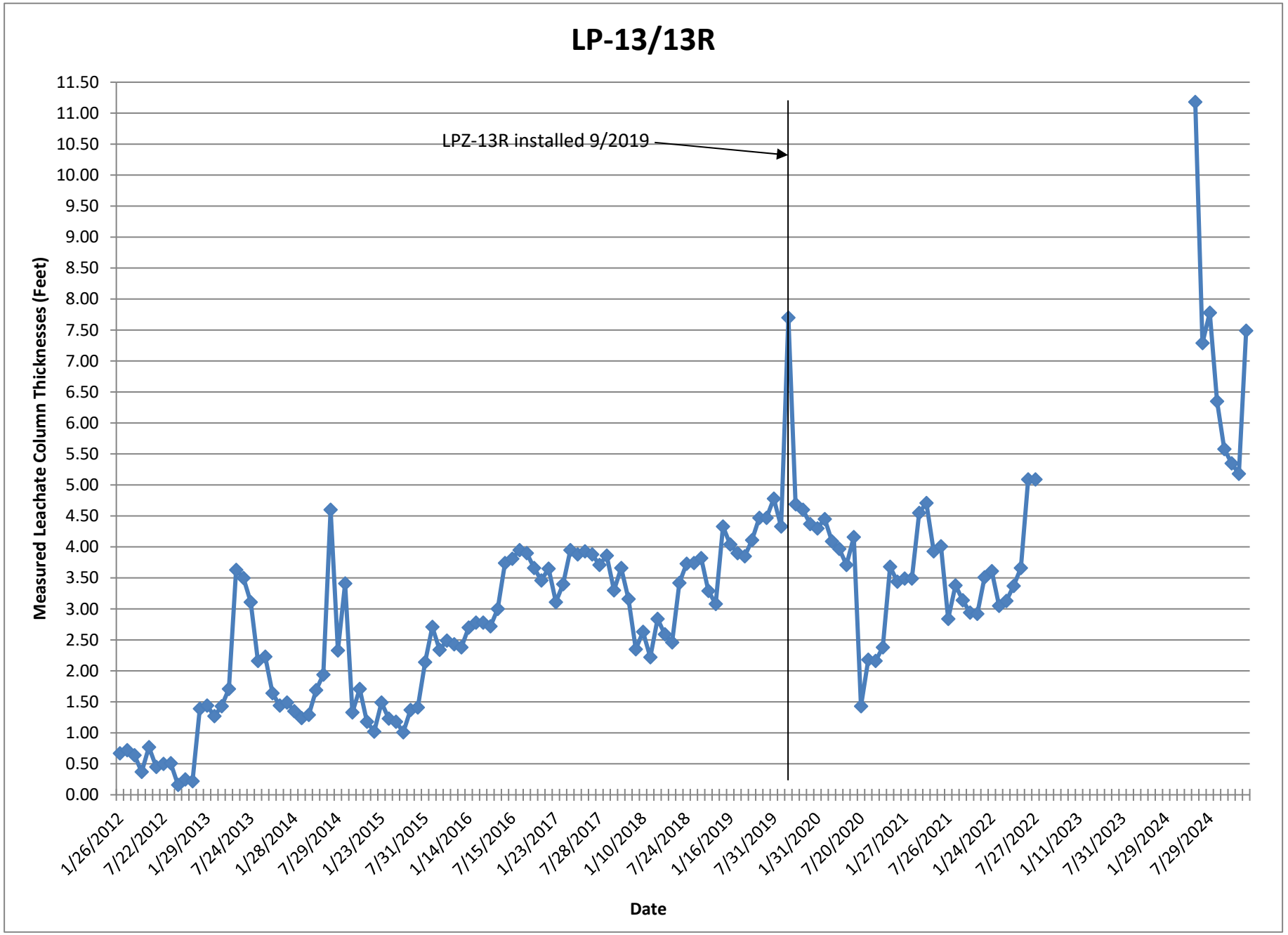

LP-8
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

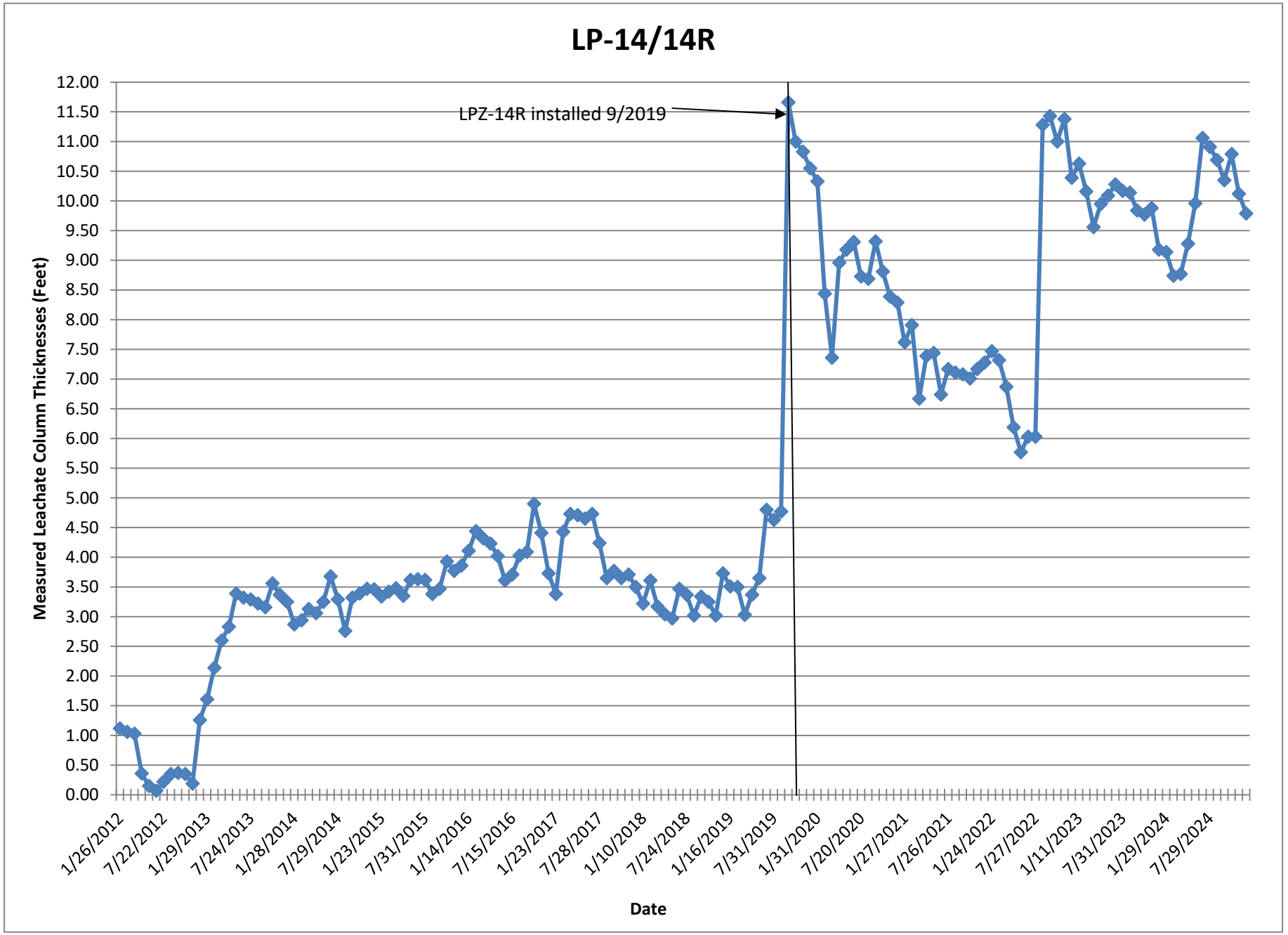

LP-9/9R
LPZ-9R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

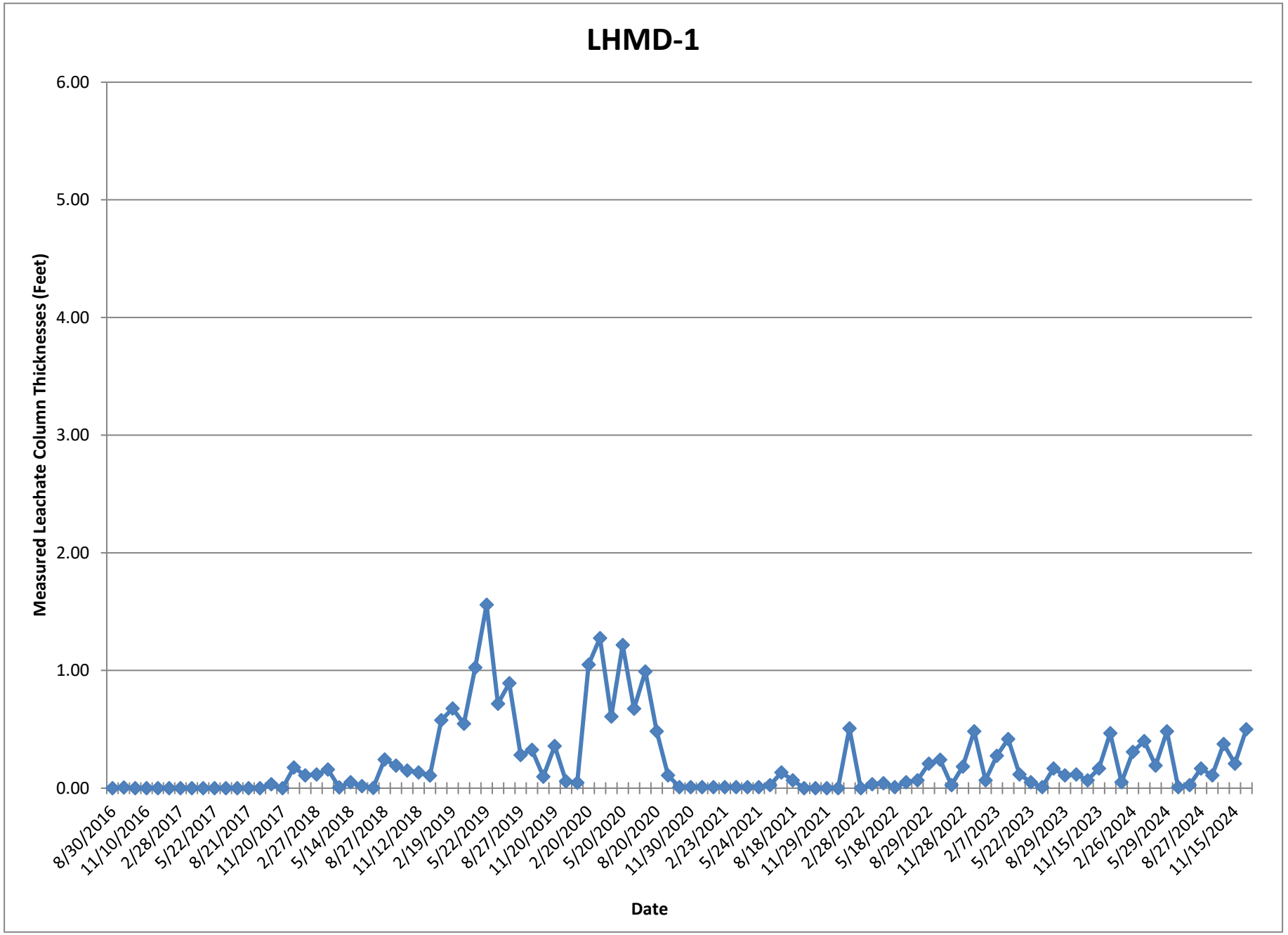

LP-10/10R
LPZ-10R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date

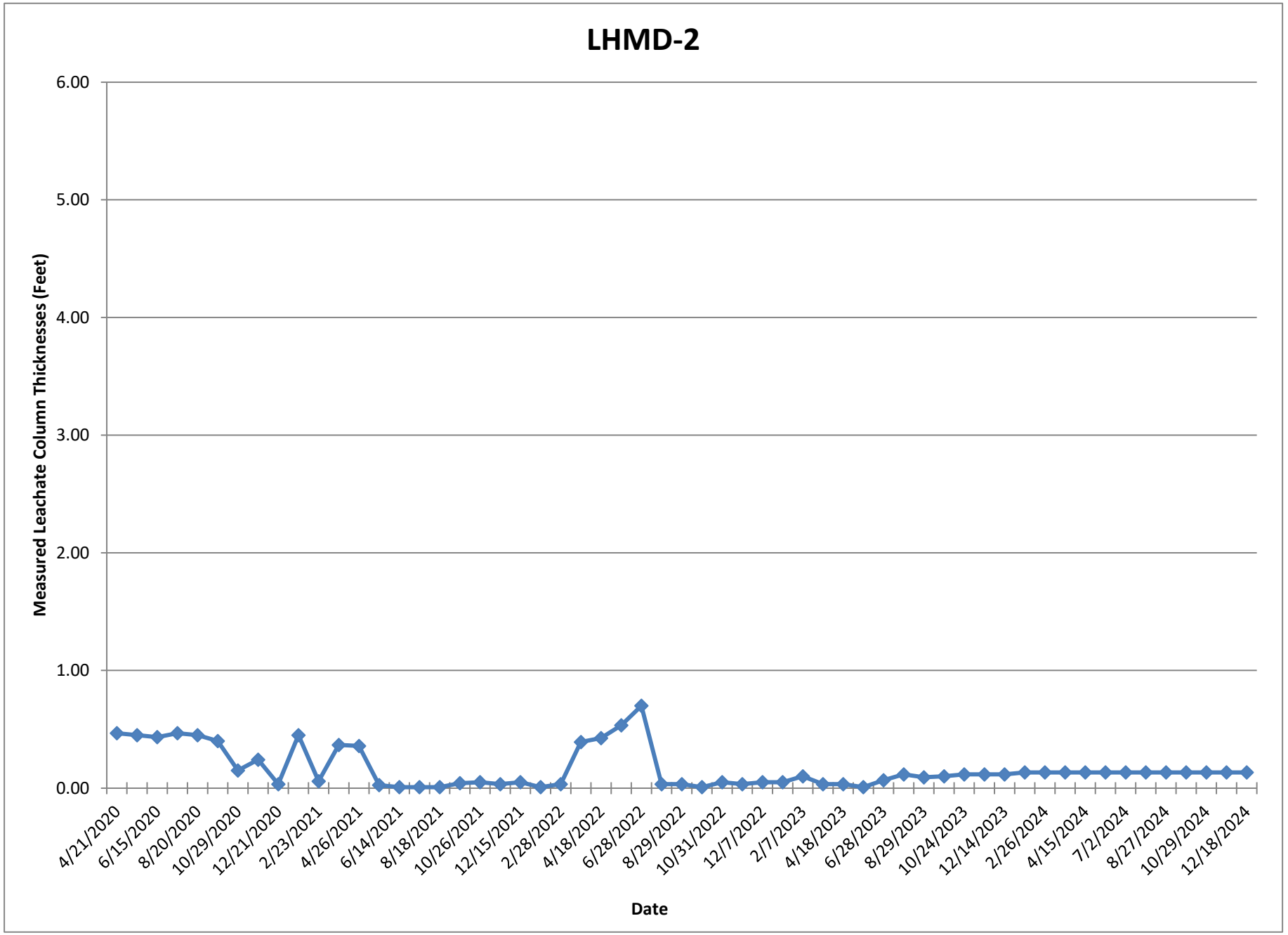

LP-11/11R
LPZ-11R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date


LP-12/12R
LPZ-12R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date


LP-13/13R
LPZ-13R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date


LP-14/14R
LPZ-14R installed 9/2019
Measured Leachate Column Thicknesses (Feet)
12.00
11.50
11.00
10.50
10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1/26/2012
7/22/2012
1/29/2013
7/24/2013
1/28/2014
7/29/2014
1/23/2015
7/31/2015
1/14/2016
7/15/2016
1/23/2017
7/28/2017
1/10/2018
7/24/2018
1/16/2019
7/31/2019
1/31/2020
7/20/2020
1/27/2021
7/26/2021
1/24/2022
7/27/2022
1/11/2023
7/31/2023
1/29/2024
7/29/2024
Date


LHMD-1
Measured Leachate Column Thicknesses (Feet)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
8/30/2016
11/10/2016
2/28/2017
5/22/2017
8/21/2017
11/20/2017
2/27/2018
5/14/2018
8/27/2018
11/12/2018
2/19/2019
5/22/2019
8/27/2019
11/20/2019
2/20/2020
5/20/2020
8/20/2020
11/30/2020
2/23/2021
5/24/2021
8/18/2021
11/29/2021
2/28/2022
5/18/2022
8/29/2022
11/28/2022
2/7/2023
5/22/2023
8/29/2023
11/15/2023
2/26/2024
5/29/2024
8/27/2024
11/15/2024
Date


LHMD-2
Measured Leachate Column Thicknesses (Feet)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
4/21/2020
6/15/2020
8/20/2020
10/29/2020
12/21/2020
2/23/2021
4/26/2021
6/14/2021
8/18/2021
10/26/2021
12/15/2021
2/28/2022
4/18/2022
6/28/2022
8/29/2022
10/31/2022
12/7/2022
2/7/2023
4/18/2023
6/28/2023
8/29/2023
10/24/2023
12/14/2023
2/26/2024
4/15/2024
7/2/2024
8/27/2024
10/29/2024
12/18/2024
Date

Appendix F
2024 Landfill Gas Annual Report

Table 13
Gas Monitoring Summary
2024 Gas Monitoring Report
Northwest Iowa Area Sanitary Landfill
Permit No. 84-SDP-01-74P

Monitoring Points				Methane Results (% LEL)							
Name		Type	Description	3/19/2024	S (Y/N)	6/19/2024	S (Y/N)	9/19/2024	S (Y/N)	12/18/2024	S (Y/N)
#1	Recycling Building	Indoor	Receiving Area - Recycling Building	0		0		0		0	
#2	Recycling Building	Indoor	Loadout Area - Recycling Building	0		0		0		0	
#3	Recycling Building	Indoor	Inside Recycling Building	0		0		0		0	
#4	Office Building	Indoor	Inside the building and crawl space	0		0		0		0	
#9	Monitoring Well DG-601	Monitoring Well	Vadose zone off the south corner of future fill area	0	NM	0	NM	0	NM	0	NM
#10	Monitoring Well DG-1401R	Monitoring Well	Vadose zone off the northeast corner of the closed area	0	NM	0	NM	0	NM	0	NM
#11	Monitoring Well DG-1001	Monitoring Well	Vadose zone off the east side of alternatively lined area	0	NM	0	NM	0	NM	0	NM
#14	Maintenance Building	Indoor	Inside maintenance building	0		0		0		0	
#15	East Storage Building	Indoor	Inside East Storage Building	0		0		0		0	
#16	HHM Building	Indoor	Inside HHM Building	0		0		0		0	
#17	GM-205	Gas Monitoring Probe	Shallow vadose zone, west side of unlined area	0	NM	0	NM	0	NM	0	NM

Measurements are collected by landfill staff.
S (Y/N) - Was screen submerged, yes or no or blank is non-applicable.
NM - Indicates not measured.



No.	Name	Type	Description
#1	Recycling Building	Indoor	Receiving Area - Recycling Building
#2	Recycling Building	Indoor	Loadout Area - Recycling Building
#3	Recycling Building	Indoor	Inside Recycling Building
#4	Office Building	Indoor	Inside the building and crawl space
#9	Monitoring Well UG-601	Monitoring Well	Vadose zone off the south corner of future fill area
#10	Monitoring Well DG-1401R	Monitoring Well	Vadose zone off the northeast corner of the closed area
#11	Monitoring Well DG-1001	Monitoring Well	Vadose zone off the east side of alternatively lined area
#14	Maintenance Building	Indoor	Inside maintenance building
#15	East Storage Building	Indoor	Inside East Storage Building
#16	HHM Building	Indoor	Inside HHM Building
#17	GM-205	Gas Monitoring Probe	Shallow vadose zone, west side of unlined area

SCS ENGINEERS
environmental consultants and contractors

Methane Monitoring Network

Legend

- Methane Monitoring Point
- Leachate Piezometers
- Monitoring Well
- Groundwater Underdrain
- Surface Water Monitoring Point
- Gas Vent
- Approximate FML Boundary
- Approximate Future Waste/ Expansion Boundary
- Approximate Waste Boundary
- Approximate Property Boundary

Northwest Iowa Area Sanitary Landfill
Sheldon, Iowa
Project No: 27223095.25
Drawing Date: March 2025

Figure 1

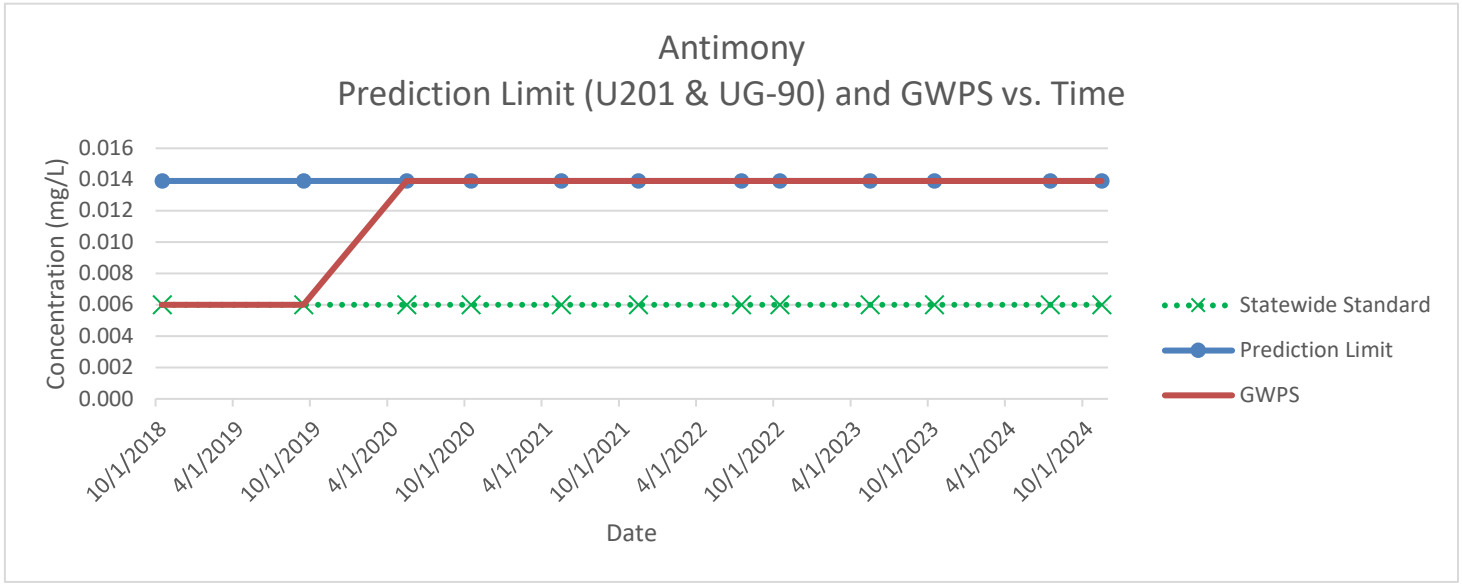
N
W E
S

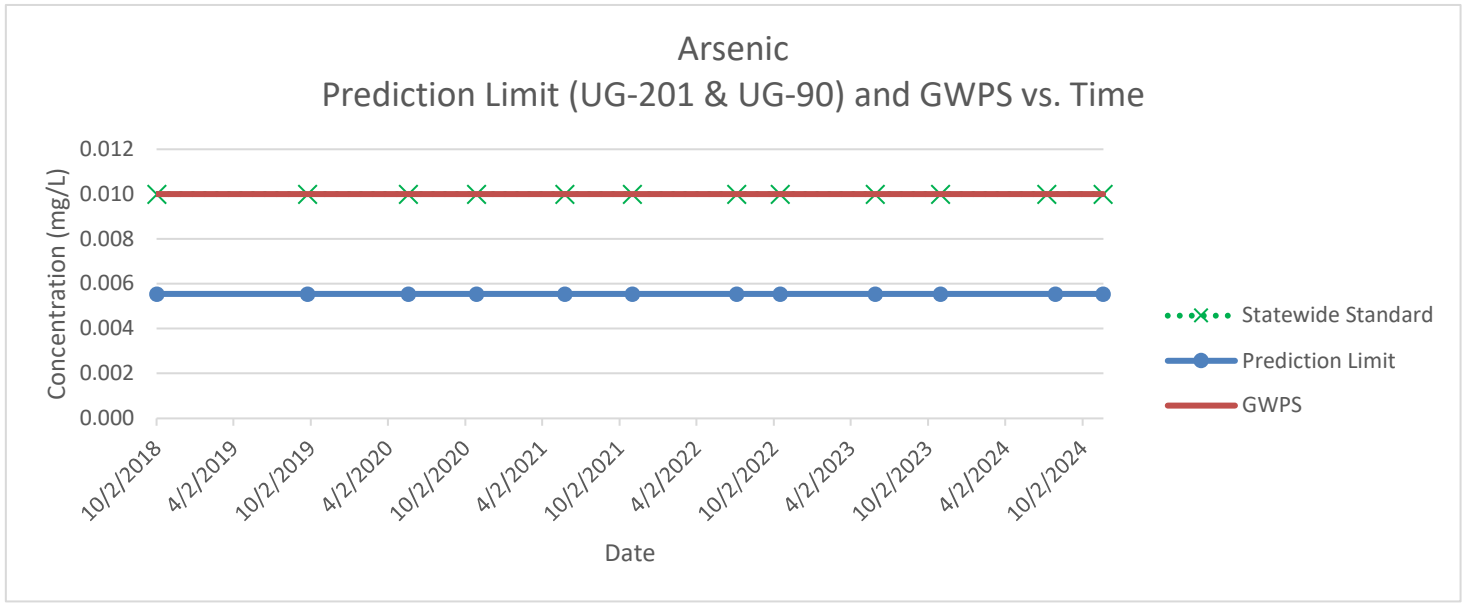
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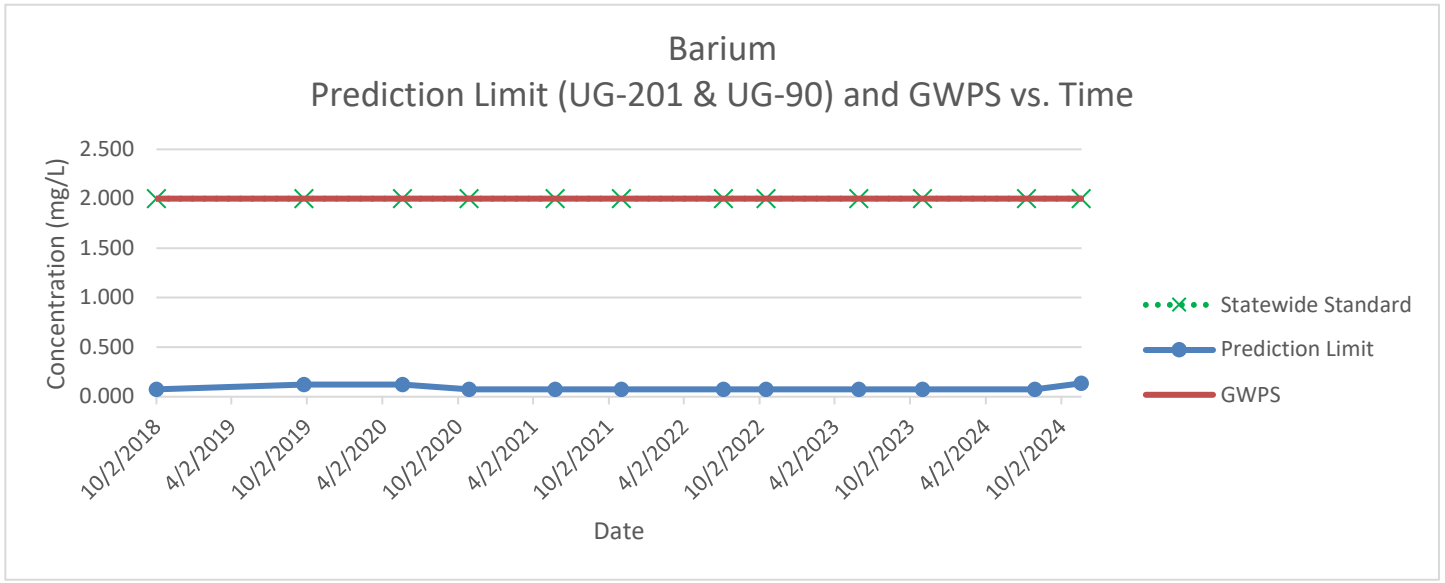
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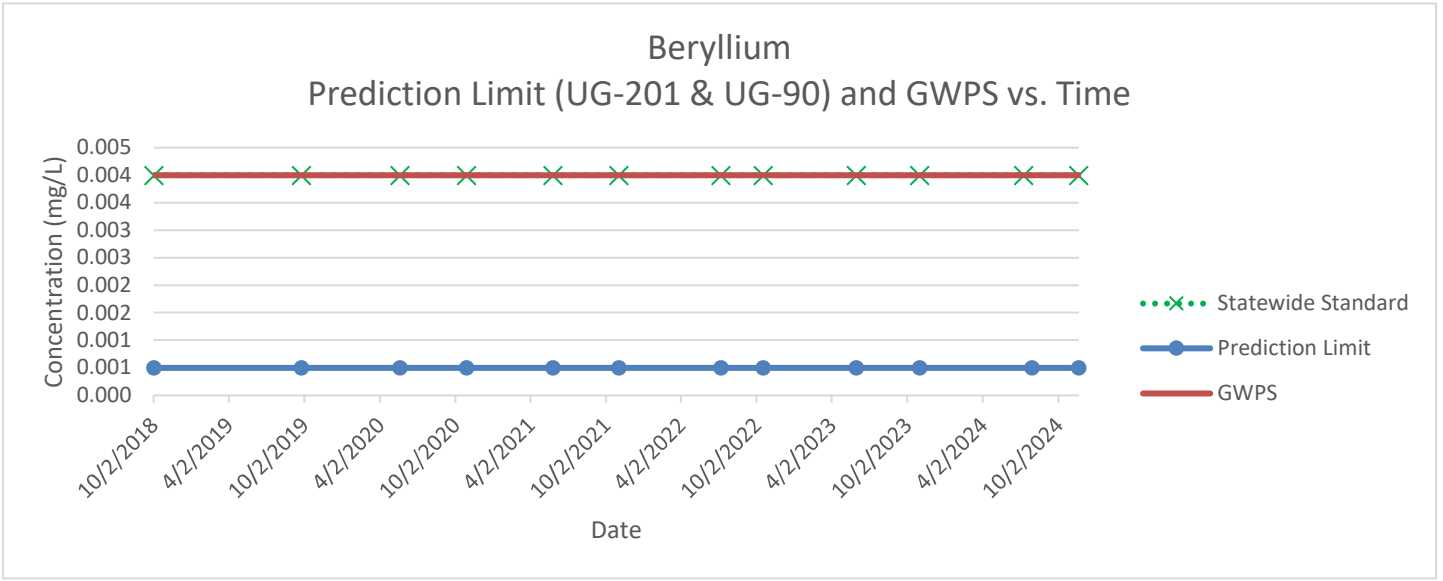
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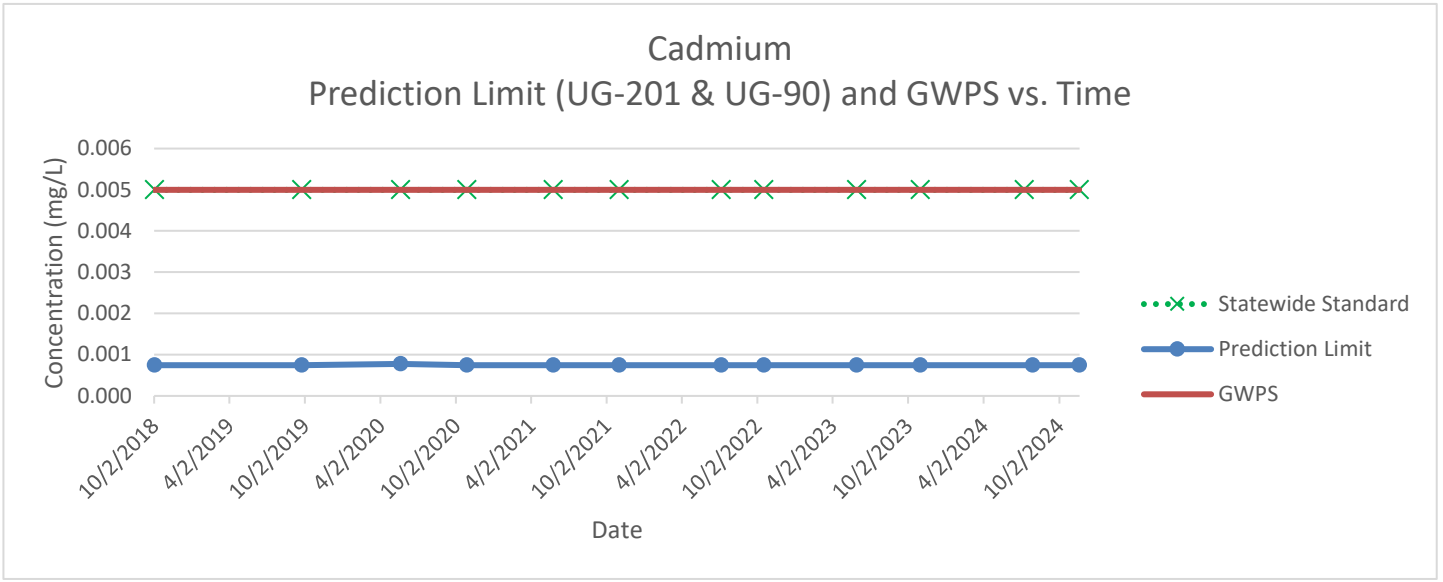
Appendix G
Standards History Graphs

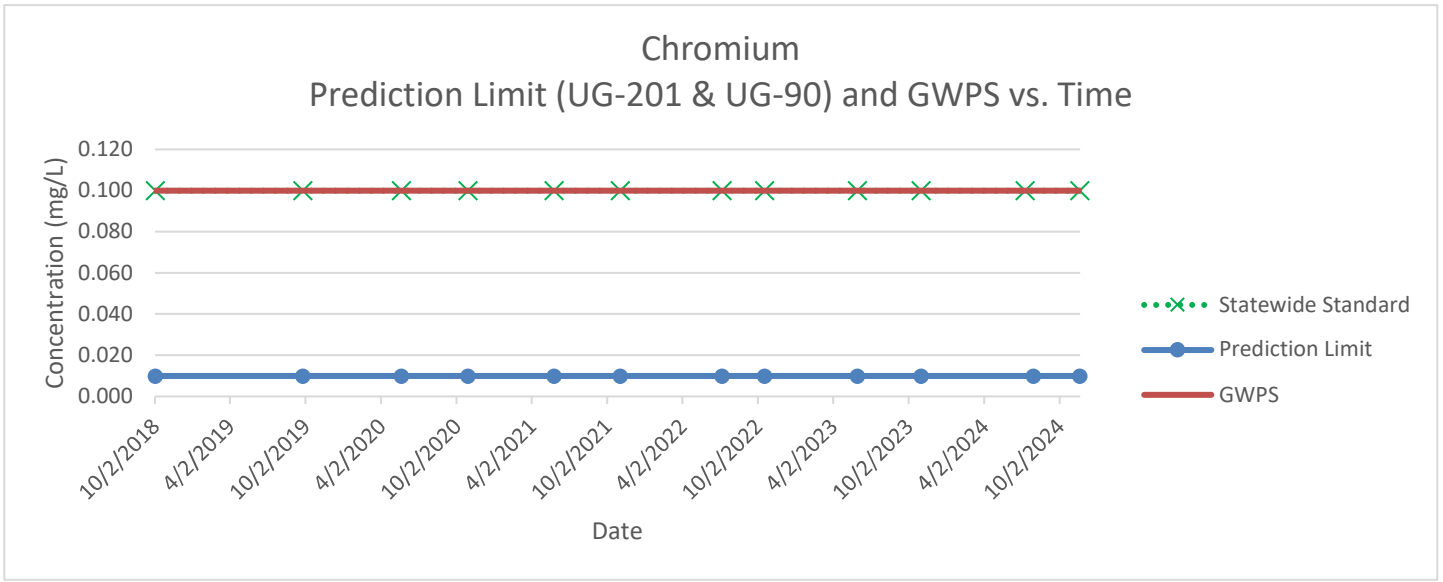

Antimony
Prediction Limit (U201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
10/1/2018
4/1/2019
10/1/2019
4/1/2020
10/1/2020
4/1/2021
10/1/2021
4/1/2022
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10/1/2023
4/1/2024
10/1/2024
Date
Statewide Standard
Prediction Limit
GWPS

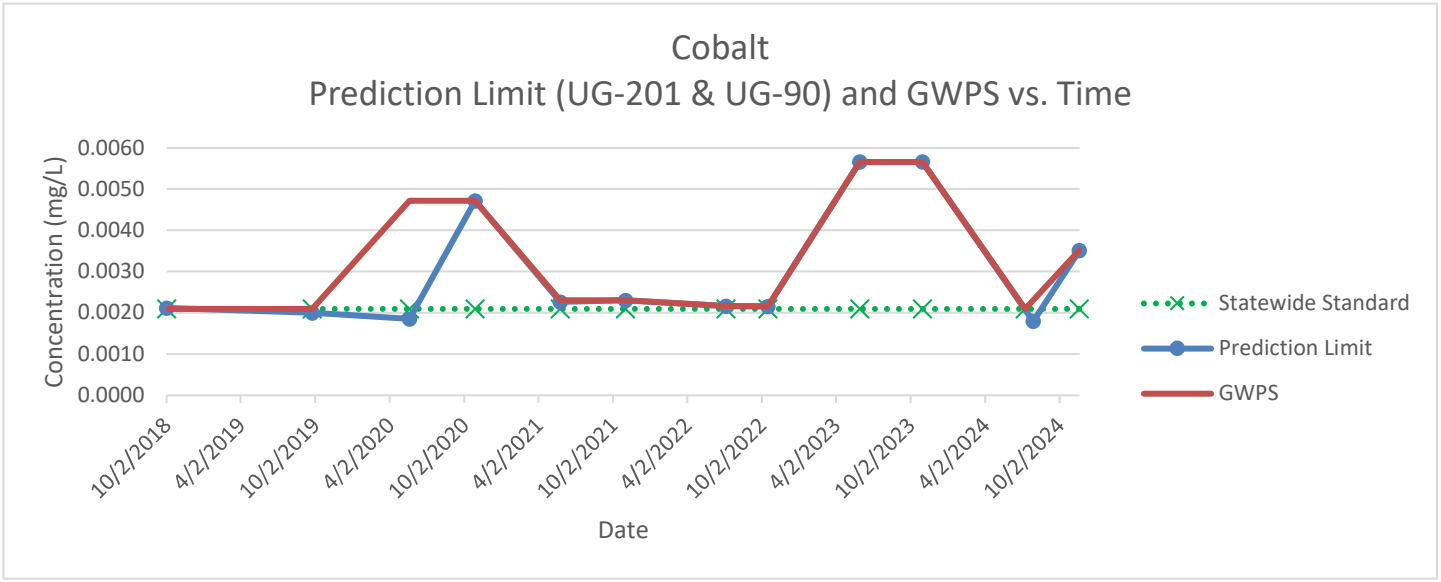

Arsenic
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.012
0.010
0.008
0.006
0.004
0.002
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

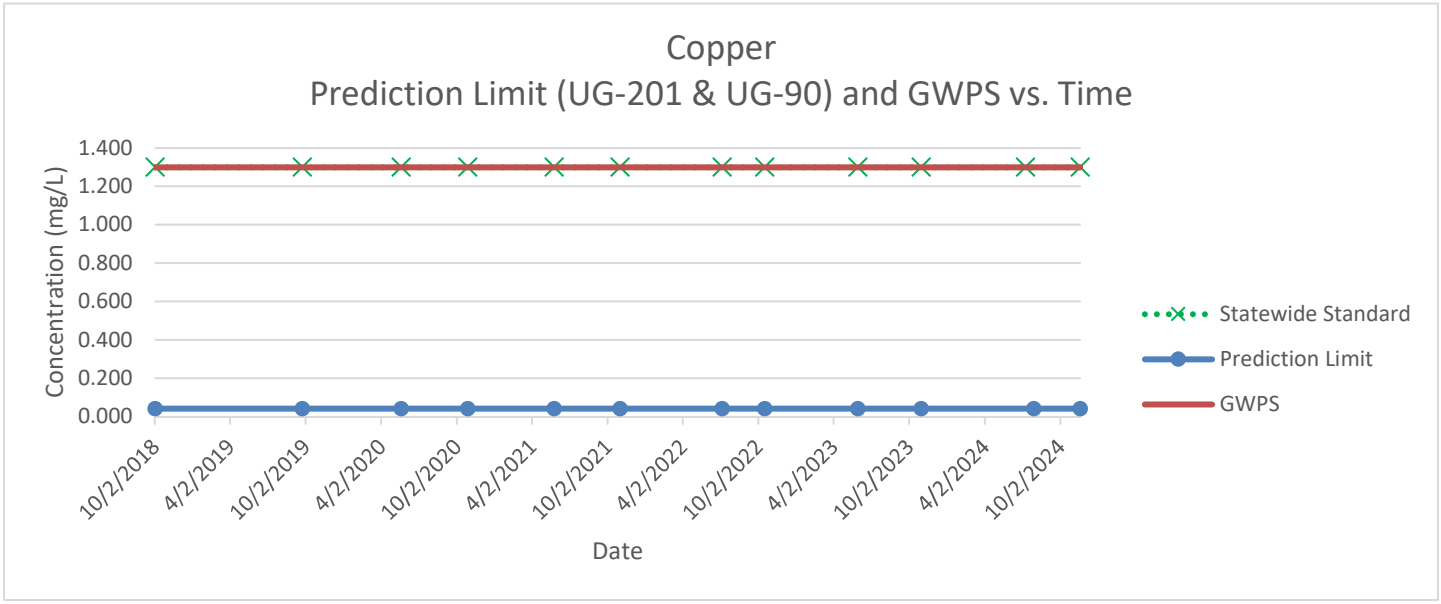

Barium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
2.500
2.000
1.500
1.000
0.500
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

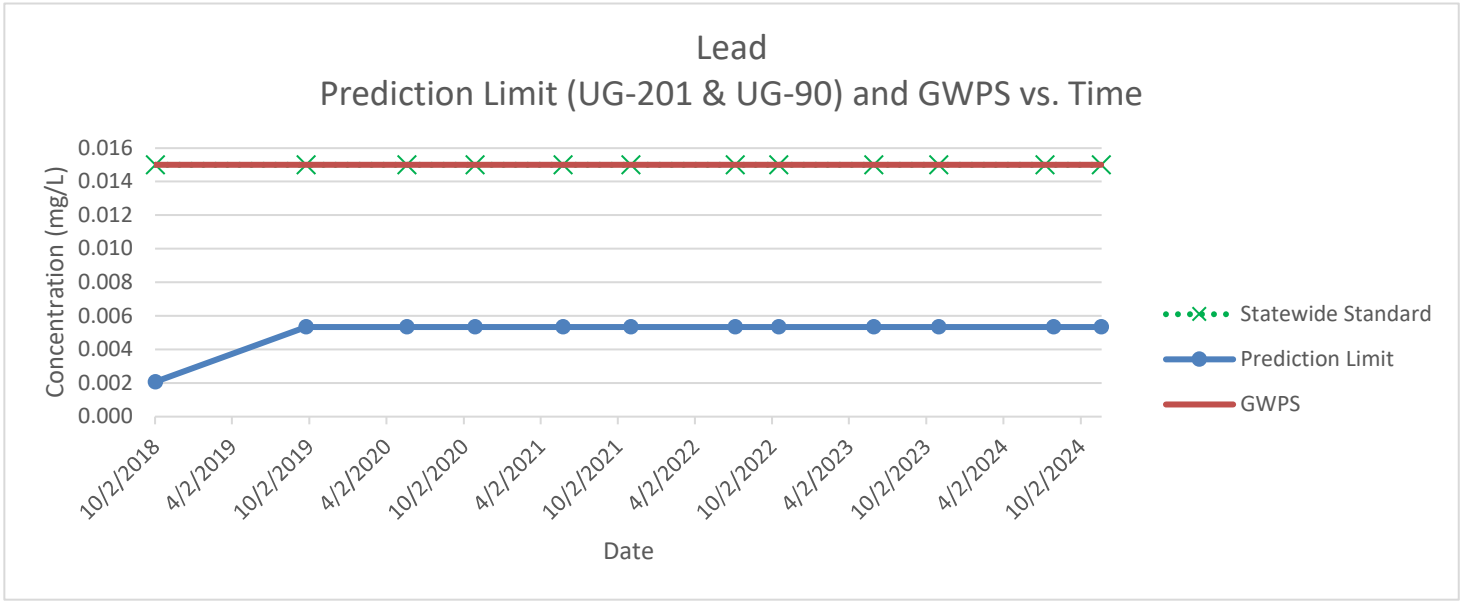

Beryllium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.005
0.004
0.004
0.003
0.003
0.002
0.002
0.001
0.001
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

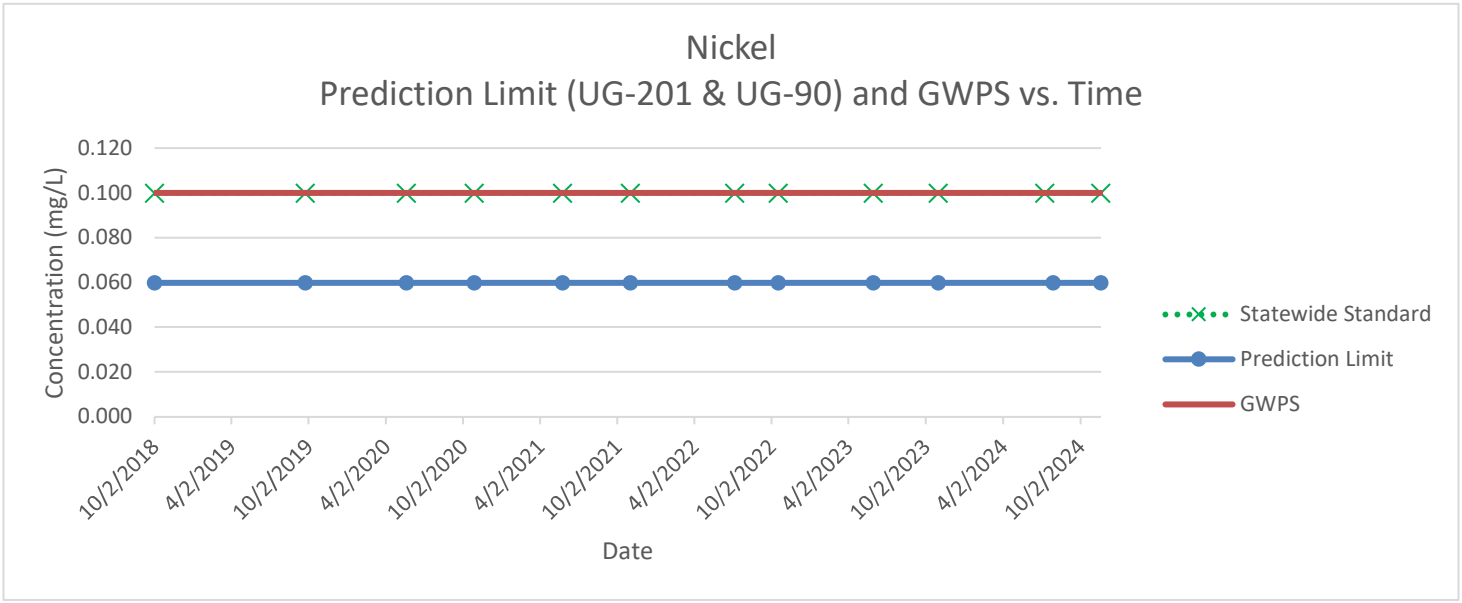

Cadmium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.006
0.005
0.004
0.003
0.002
0.001
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

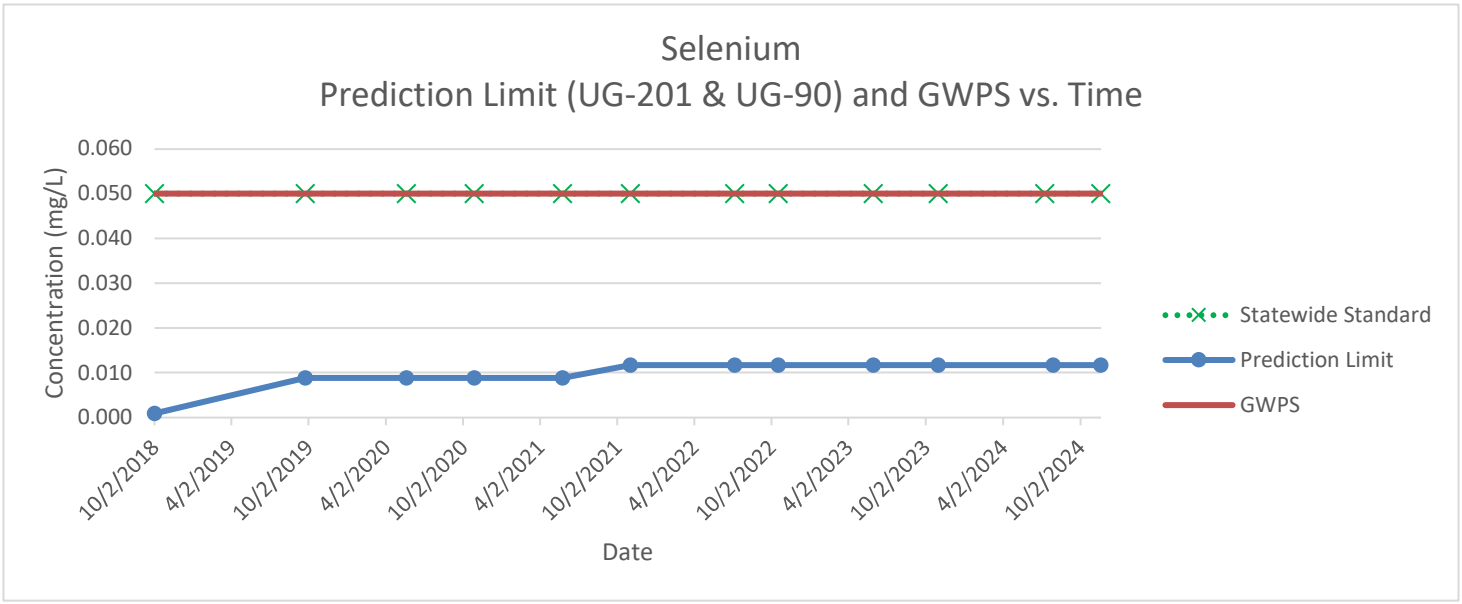

Chromium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.120
0.100
0.080
0.060
0.040
0.020
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
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Date
Statewide Standard
Prediction Limit
GWPS

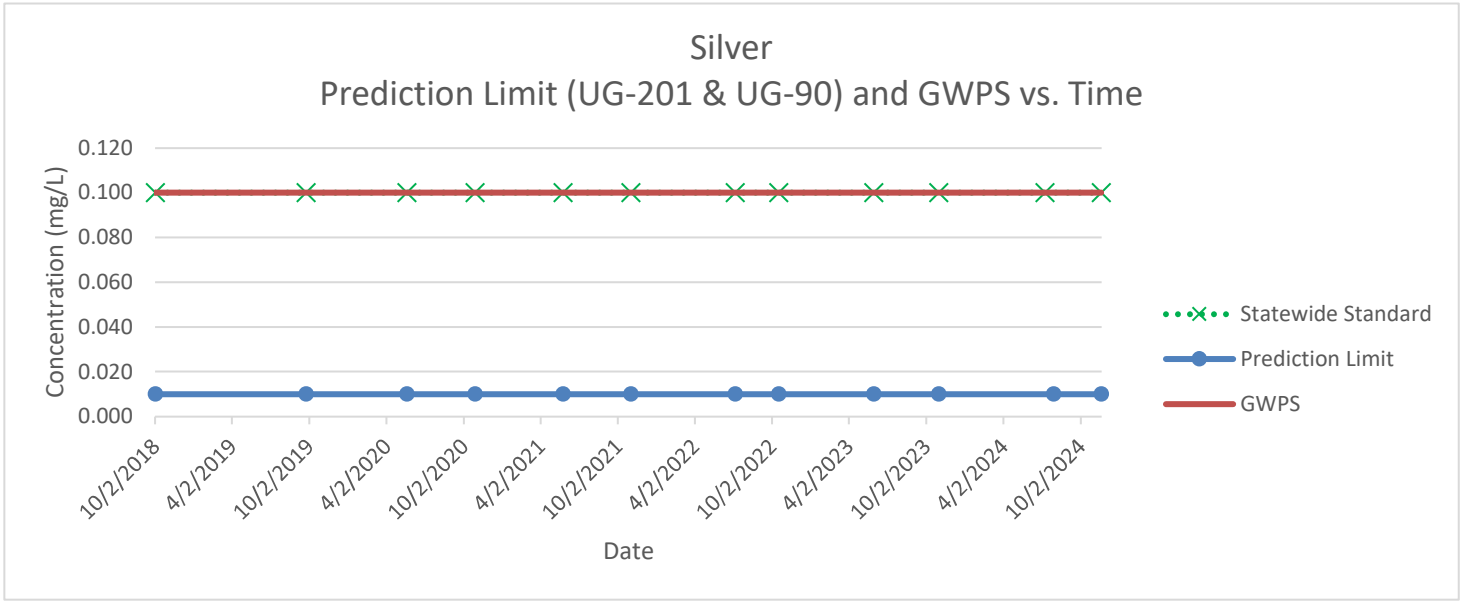

Cobalt
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.0060
0.0050
0.0040
0.0030
0.0020
0.0010
0.0000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
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10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

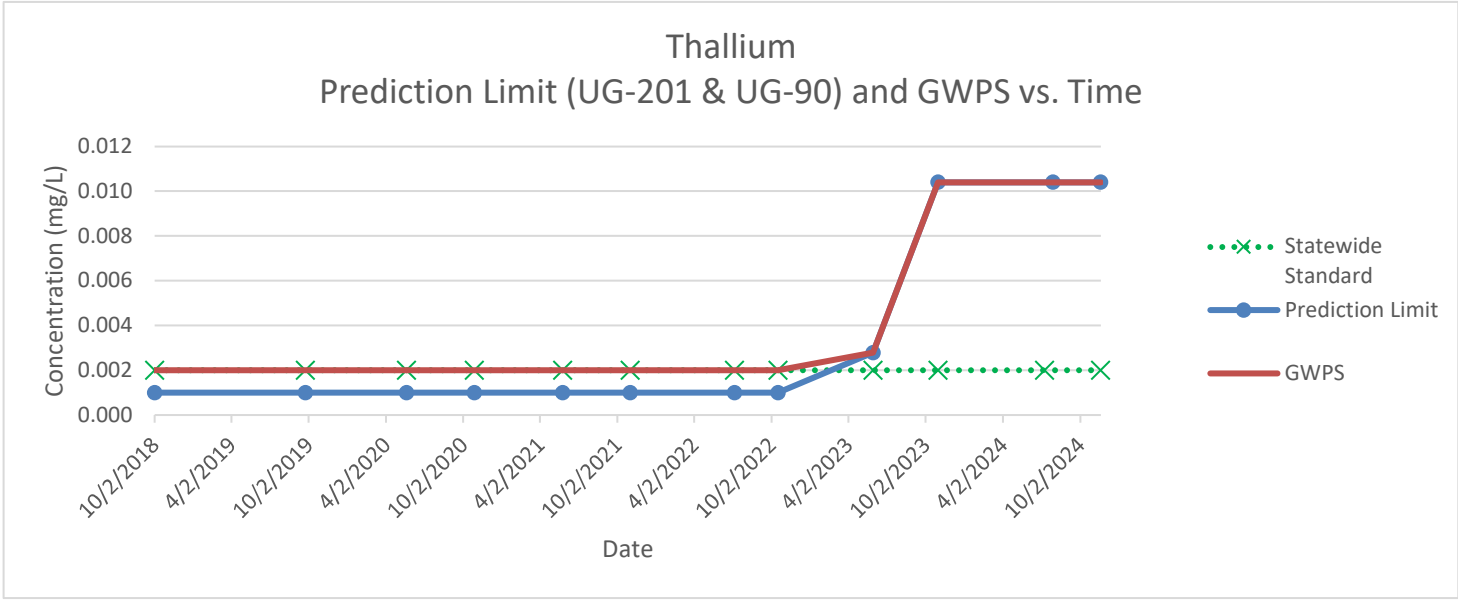

Copper
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
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10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

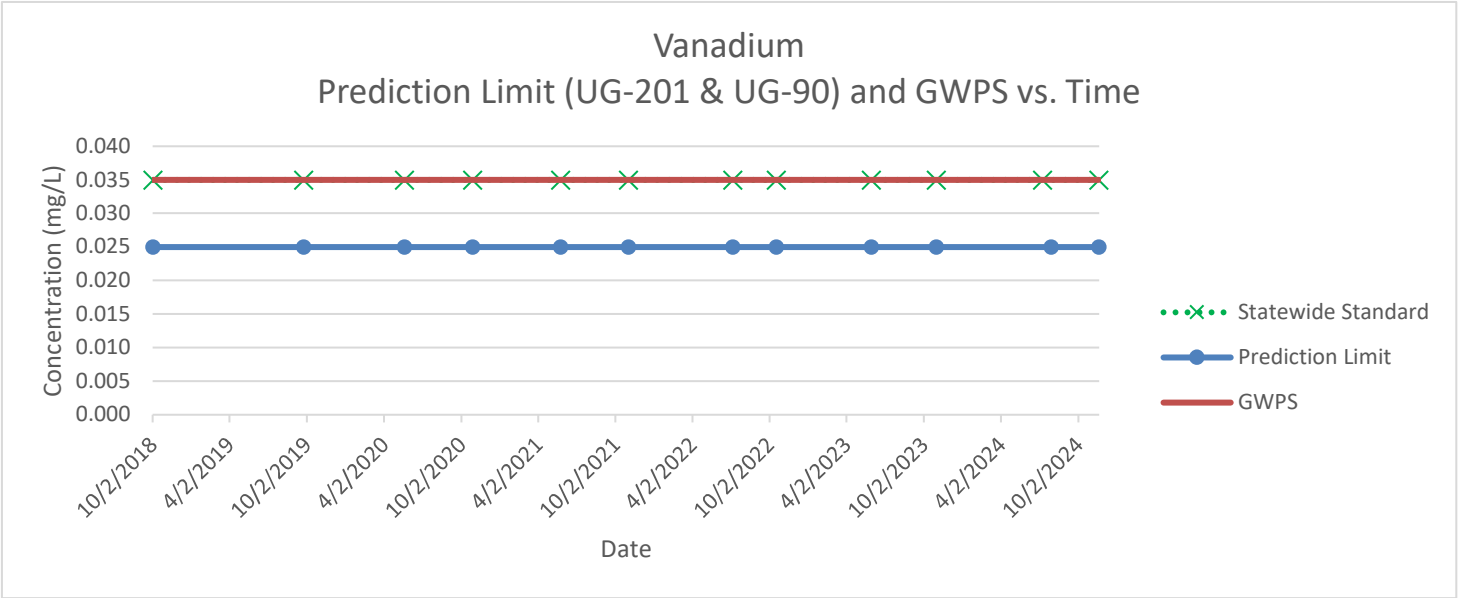

Lead
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS

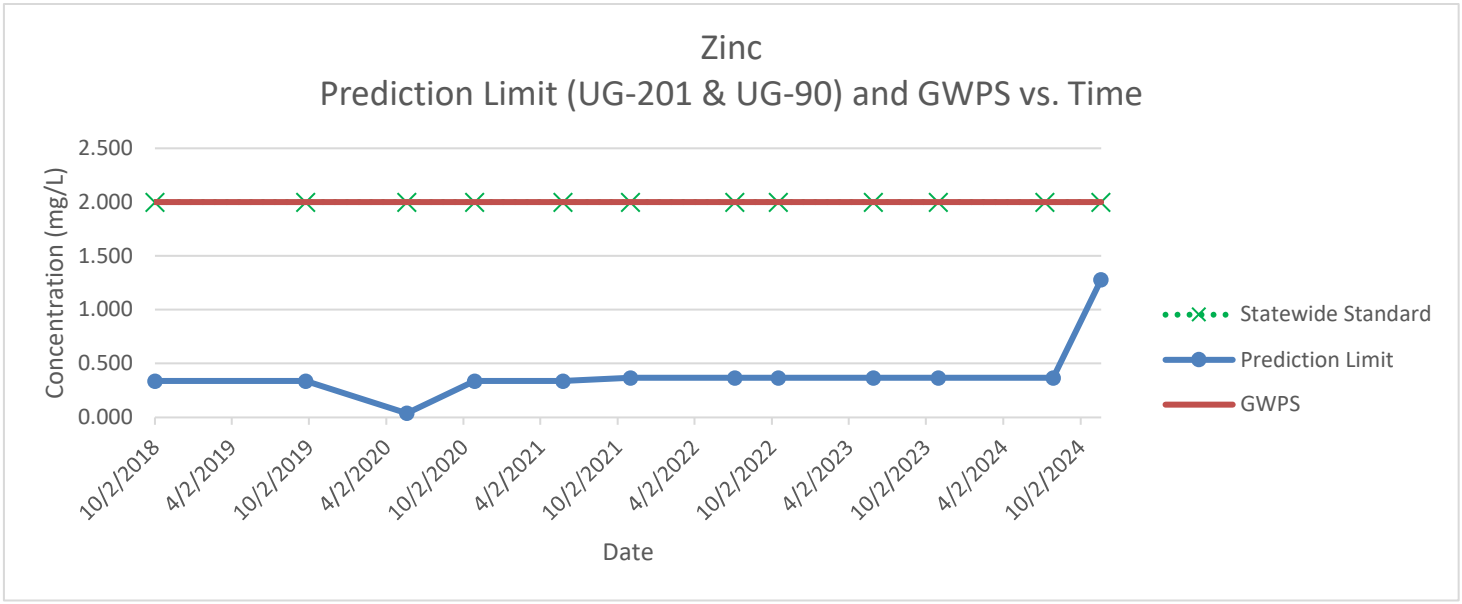

Nickel
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.120
0.100
0.080
0.060
0.040
0.020
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS


Selenium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.060
0.050
0.040
0.030
0.020
0.010
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS


Silver
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.120
0.100
0.080
0.060
0.040
0.020
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS


Thallium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.012
0.010
0.008
0.006
0.004
0.002
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS


Vanadium
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS


Zinc
Prediction Limit (UG-201 & UG-90) and GWPS vs. Time
Concentration (mg/L)
2.500
2.000
1.500
1.000
0.500
0.000
10/2/2018
4/2/2019
10/2/2019
4/2/2020
10/2/2020
4/2/2021
10/2/2021
4/2/2022
10/2/2022
4/2/2023
10/2/2023
4/2/2024
10/2/2024
Date
Statewide Standard
Prediction Limit
GWPS