

2025 ANNUAL WATER QUALITY REPORT
FOR THE
CLARKE COUNTY SANITARY LANDFILL
20-SDP-04-94C SOUTH SITE
OSCEOLA, IOWA

by:
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Certification

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Section 1.0 Background Information

1.1 Report Priority

This report is considered to be low priority for review. A majority of the site monitoring wells remain in detection monitoring. SSI have been detected at MW-21, MW-31, MW-33, MW-34, and MW-38. MW-21, MW-31, MW-33, MW-34, and MW-38 are assigned to the Assessment Monitoring network.

Based on the Confidence Interval Assessment for VOC and inorganic compounds, there are no SSL identified at any well. Therefore, no Corrective Measures are required.

1.2 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in February, 2008. Statistical evaluations herein are based on the 2025 water quality data collected March 10, 2025 and September 5, 2025 (MW-33).

1.3 Current Site Map

Figure 1 is attached illustrating the current site features, monitoring well locations, and subsurface gas probe locations.

1.4 Site Status and Applicable Rules

Site Location

The Clarke County Sanitary Landfill is located in the S½ of the SE¼ of the NE¼ and a portion of the SE¼ of Section 2, T72N, R26W, Clarke County, Iowa. The site encompasses approximately 35 acres. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 20-SDP-04-94C.

Landfill Layout & History

The site is referenced herein as the “South Site”. The site is situated in gently rolling terrain on land that was previously quarried for limestone. Drainage from the site is predominantly to ditches along the east, west, and south sides of the site. All ditches ultimately drain to a creek located across the road to the east of the site. The facility is closed.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the site.

1.5 Summary of Hydrologic Monitoring System Plan (HMSP)

Permit Amendment #16 dated September 2, 2021 (Doc# 101159) modified the HMSP by removing MW-10 from the HMSP and adding the replacement well MW-38. The HMSP still includes thirteen (13) monitoring wells. Permit Amendment #17 dated March 8, 2023 (Doc #106027) reduced the frequency of monitoring well sampling from a semi-annual to an annual frequency, except at MW-33 (which remains on a semi-annual frequency of sample collection). The Site Plan and the approved monitoring network are illustrated on Figure 1. The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2026 is itemized in Table 2.

MONITORING WELL MAINTENANCE PERFORMANCE REEVALUATION

Table 3 outlines the status of well performance and maintenance activities performed as required by IAC 567-113.10(2) f.

High & Low Water Levels

Current year water elevation data is included in Table 4. Historic water elevation is included in the Table 4A. The maximum depth to water and the minimum depth to water are included in the tables. A Water Table Contour Map (Figure 2) dated September 5, 2025 is included with this report. The Water Table Contour Map illustrates the water table surface and the effects of the topography. A bedrock Water Surface Map is also included in this report as Figure 3.

Well Depth & Sedimentation

Well depth measurements were made in September 5, 2025. Review of the well depth data included on Table 4 indicate that well sedimentation is estimated to be less than one (1) foot at all site monitoring wells.

Well Recharge Rates & Chemistry

The 1990 HR Green HIR includes a summary of horizontal hydraulic conductivity testing results for numerous monitoring wells and piezometers that exist on site (Table 4 and Appendix A). Horizontal hydraulic conductivities in till (or fill) ranged between 10^{-4} cm/sec and 10^{-5} cm/sec. Horizontal hydraulic conductivities in limestone bedrock ranged between 10^{-3} cm/sec and 10^{-5} cm/sec.

Recorded field data from the September 4, 2024 monitoring event (Table 4) documents that the monitoring wells recover to at least 90% recovery within 24 hours after purging. The exception is at MW-22, where greater than 24 hours are required for the well to recover. Well recovery information indicates that recharge to the individual wells remained sufficient to promote collection of representative water quality samples and the wells were functioning as intended. Monitoring well recharge reevaluation is due biennially according to 113.10(2)"f", and should be evaluated again in 2026.

Based on the apparent static condition of the water surfaces across the site, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Further, the wells are interpreted to be appropriately located to detect any impact, should it occur. No changes or modifications to the site monitoring wells are recommended.

Section 2.0 Reporting Period Monitoring Activities

Field sampling information for March 10, 2025 and September 5, 2025 (MW-33) sampling episodes are included on the field forms (IDNR Form 542-1322) in Appendix B.

A comprehensive summary of Analytical Data for the episodes between February 19, 2008 and September 5, 2025 is included in Table 9.

2.1 Current Detection Monitoring Activities

The background wells are in detection monitoring and consist of MW-23 (till), MW-27 (till), MW-28 (limestone), MW-29 (limestone) and MW-36 (limestone). Downgradient wells include MW-21 (till), MW-31 (till), MW-33 (till), MW-34 (till), MW-22 (limestone), MW-32 (limestone), MW-37 (limestone), and MW-38 (limestone). The wells assigned to the detection monitoring system include MW-22, MW-32, MW-37.

2.2 Current Assessment Monitoring Activities

Site monitoring points that are assigned to the assessment monitoring system include MW-21, MW-31, MW-33, MW-34, and MW-38. An index of the full Appendix II sampling episodes is included in the Table below.

Monitoring Point	1 st Episode	2 nd Episode	3 rd episode	4th episode	5th episode
MW-21	9/9/2021	9/9/2022			
MW-31	3/10/2020	3/4/2021			
MW-33	3/22/2010	9/7/2010	9/20/2011	9/14/2016	9/9/2021
MW-34	2/27/2010	9/27/2013	9/5/2018	4/1/2024	
MW-38	6/3/2024	3/10/2025			

A minimum of two (2) rounds of full Appendix II sampling has been completed at each listed monitoring well. All Assessment Monitoring Wells are placed in on-going assessment monitoring following the initial two (2) rounds of sampling in accordance with requirements of IAC 567-113.10(6)"d"(2).

A five (5) year frequency for the full Appendix II sampling was approved by IDNR on July 30, 2015 (Doc# 83972). The next scheduled full Appendix II sampling events are due in 2026 at MW-31 and MW-33 (Table 2).

Rule requires that testing performed during on-going assessment monitoring includes Appendix I plus all detected Appendix II compounds beyond the Appendix I list. Sulfide testing at MW-33 will be continued semi-annually based on the common detections over time. A summary of detections of sulfide and bis(2-ethylhexyl)phthalate is included in Appendix G.

2.3 Current Corrective Action Activities

A methane remediation system was installed along a portion of the west side of the site in May 2014. There are no additional Corrective Actions in place at this facility.

Section 3.0 Data Evaluation and Summary

Statistical Evaluations are prepared by Otter Creek Environmental Services for each semi-annual annual monitoring episode. The Groundwater Statistics Report for the Clarke County Landfill, First Semi-Annual Monitoring Event in 2025, dated April, 2025 is included in Appendix C.1.

The Groundwater Statistics Report for the Clarke County Landfill, Second Semi-Annual Monitoring Event in 2025, dated December 2025, is included in Appendix C.2.

The Analytical Reports for the laboratory testing for sampling episodes on March 10, 2025, and September 5, 2025 (MW-33 only) are included in Appendix D.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-36 during the March 10, 2025 sampling episode.

The purpose of the field duplicate is to evaluate the precision of sample collection and analysis process from the field through the laboratory. The calculation of the Relative Percent Difference (RPD) for duplicate pair results is used as a means to evaluate the precision.

The Quality Control (QC) limit for the RPD on field duplicates is established at thirty percent (30%) for duplicate pairs that have reported concentrations five (5) times greater than the laboratory Reporting Limit. For samples and respective duplicates with reported analyte concentrations nearer the Reporting Limit, the RPD calculations demonstrate greater variability and the RPD can be very large. RPD values are considered non-representative in the following conditions:

- a) Both the original and/or the duplicate results are less than five (5) times the Reporting Limit.
- b) One or both results are qualified, flagged, or estimated.
- c) One or both results are non-detected.

The results of the blind duplicate and the monitoring well results were within the limits established and indicate that the data quality is acceptable without restriction.

BACKGROUND DATA VALIDATION

On July 10, 2014 an unnumbered Permit Amendment and Memo was issued by the IDNR regarding turbidity (Doc # 80708). A TSS and Field Turbidity Evaluation Report was prepared and submitted on March 24, 2015 (Doc# 82834), and was approved by IDNR on July 30, 2015 (Doc #83972). IDNR correspondence dated November 28, 2016 (Doc #87761) includes a requirement to reevaluate wells based only on “No Purge” data.

The background data utilized herein has been restricted to include only sample results that have been collected by “No Purge” methods. A summary of the recorded field turbidity measurements is included in Appendix E.

Upgradient Data, Table 1, Attachment B (till), and Upgradient Data, Table 1, Attachment D (bedrock), to the Spring Statistical Evaluation Report (Appendix C.1) includes a summary of the background data. The site prediction limits established are based on the background collected September 29, 2014 and later. Note that the results collected during the three (3) initial

collection episodes at MW-36 were manually tagged as outliers and the values are not utilized in the calculation of the prediction limits.

SITE SPECIFIC GWPS

Table 5 and Appendix F include the comparison of the site prediction limits to the GWPS. The Standards History information in Appendix F is obtained from IDNR Table 5 and the Inorganic Prediction Limits, Table 5, Attachment B (Shallow Till System) and Inorganic Prediction Limits, Table 5, Attachment D (Bedrock system) in the Statistical Evaluation Report (Appendix C.1).

Table 5 and the Standards History included in Appendix F indicate that the prediction limit for the following compounds in the following HMSP systems *exceed* the published IAC 567, Chapter 137 Statewide Standard:

Shallow/Till System

<u>Compound</u>	<u>Prediction Limit</u>	<u>IAC 137 GWPS</u>
Cobalt	20.2173 ug/L	2.1 ug/L

Bedrock System

<u>Compound</u>	<u>Prediction Limit</u>	<u>IAC 137 GWPS</u>
Antimony	7.9 ug/L	6.0 ug/L
Cadmium	6.8 ug/L	5.0 ug/L
Cobalt	15.3211 ug/L	2.1 ug/L

The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. For this report, the prediction limits itemized above are utilized as the Site-Specific GWPS for the respective HMSP Systems. For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS.

STATISTICALLY SIGNIFICANT INCREASES

The detected concentrations of each compound are compared to the site prediction limit for each respective compound calculated based on the background data set. A detected and verified concentration for a compound that is in excess of the calculated site prediction limit is recorded as a Statistically Significant Increase (SSI). Table 6 is a summary of all compounds (inorganic & VOC) at site monitoring wells that have exceeded a *current year* prediction limit in 2025. Table 7 includes an on-going summary of compound detections that exceed the prediction limits (highlighted in light brown).

All detected concentrations that exceeded a prediction limit were recorded in existing assessment monitoring wells. The exceedances in assessment wells are not required to be reported as SSI, but a running summary of recorded prediction limit exceedances (beginning in Fall of 2014) is included in Table 1, Table 1A, Table 6, and Table 7. The current year list of exceedances (all at assessment monitoring points) are listed below:

Spring 2025*		Fall 2025	
MW-21**	None	MW-21**	<i>Not Tested</i>
MW-31**	None	MW-31**	<i>Not Tested</i>
MW-33**	Arsenic	MW-33**	1,1-dichloroethane
	1,1-dichloroethane		1,2-dichloropropane
	1,2-dichloropropane		cis-1,2-dichloroethane
	cis-1,2-dichloroethane		
MW-34**	None	MW-34**	<i>Not Tested</i>
MW-38**	Arsenic	MW-34**	<i>Not Tested</i>

* The Annual Sampling was performed in the Spring.

** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

This report serves as notice to the operating record in accordance with IAC 567-113.10(5)c.

A summary of the current prediction limit exceedances is also included on page 3 and 4 of the body of the report in the Otter Creek Reports (Appendix C).

ASSESSMENT MONITORING SUMMARY

Assessment monitoring including the full Appendix II list has been performed at each well where a historic SSI was recorded. On-going assessment monitoring has been performed following the initial two (2) rounds of sampling in accordance with requirements of IAC 567-113.10(6)"d"(2), which included Appendix I plus all detected Appendix II compounds beyond the Appendix I list.

The summary of assessment monitoring detections to date is presented in Appendix G. The full Appendix II sampling episodes are highlighted green in the tables in Appendix G.

The five (5) year frequency for the full Appendix II sampling was approved by IDNR on July 30, 2015 (Doc# 83972).

Based on the historic Appendix II sample data (Appendix G), compounds detected beyond the Appendix I list are limited to sulfide MW-33 and bis(2-ethylhexyl)phthalate at MW-21 and MW-31.

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The detections that exceed site prediction limits are utilized to calculate the Confidence Interval (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) in accordance with the 2009 Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities by US EPA. The 95% LCL values are compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as an SSL. All wells with a

recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and required completion of an Assessment of Corrective Measures (ACM).

The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points.

Based on review of the information in Table 7, there are currently no SSL recorded. No SSL are identified at those wells in assessment monitoring (MW-21, MW-31, MW-33, MW-34, or MW-38). The shading provided on Table 7 represents the tracking of historic SSI. Since no SSL are identified, Table 8, Table 10, and Table 11 are not required to be included in this report.

ASSESSMENT OF CORRECTIVE MEASURES (ACM)

A methane remediation system was installed along a portion of the west side of the site in May, 2014. There are no additional Corrective Actions in place at this facility.

Based on current water quality data, an ACM is not warranted. Continued monitoring going forward will verify whether the water quality will continue to remain static.

CORRECTIVE ACTION EVALUATIONS & MONITORING

Corrective Action and Corrective Action Monitoring are not required at this time.

Section 4.0 Leachate Collection System Performance Evaluation

Leachate System Performance

The South Site was developed in six cells, each with one leachate collection lateral. Cells 1 through 5 were developed with alternative clay liners including leachate collection laterals and a leachate drainage layer. Cell 6 was developed with a composite liner including a leachate collection lateral and a leachate drainage layer. Leachate laterals in each cell are orientated east-west, with flow toward the west. The laterals from each cell are connected to a common leachate header pipe along the west side of the fill area. Illustration of the leachate collection system is included on Figure 1 in Appendix H.

The leachate header pipe conveys leachate to an on-site leachate storage lagoon with an approximate operating capacity of 300,000 gallons.

When lagoon levels warrant, leachate is hauled off site to a wastewater treatment plant for treatment and disposal. In 2025 there was no leachate hauled to the Des Moines Metropolitan Wastewater Reclamation Facility for treatment and disposal. The Hauled Leachate Permit between the Clarke County Landfill Commission and the Des Moines Metropolitan Wastewater Reclamation Facility is included in Appendix H. The annual leachate analyses required by the Des Moines Metropolitan Wastewater Reclamation Facility are also included in Appendix H.

The leachate head piezometers at the site are included in the table below.

Piezometer	Area Monitored
LPZ-1	Cell 1
LPZ-2	Cell 2
LPZ-3	Cells 3A and 3B
LPZ-4	Cells 4A and 4B
LPZ-5	Cell 5
LPZ-6	Cell 6

LPZ-1, LPZ-2, LPZ-3, LPZ-4, LPZ-5, and LPZ-6 were measured semi-annually in 2025 in accordance with Permit Amendment #13 dated April 1, 2020 (Doc #97364).

Leachate head measurements are included in Table 12. The measurements are summarized as follows:

- LPZ-1 – leachate thickness measured less than 1 foot for all measurements in 2025.
- LPZ-2 – leachate thickness measured less than, or equal to, 1 foot for all measurements in 2025, except on March 10, 2025. The leachate thickness was recorded at 3.5 feet thick at LPZ-2 on March 10, 2025. Supplemental measurements at LPZ-2 were collected in May, June, July, November, and December of 2025 to verify that the elevated leachate condition recorded at LPZ-2 represented a transient condition and was not persistent. Based on the supplemental elevation readings at LPZ-2, the condition corrected itself and did not persist beyond May 2025. All readings at LPZ-2 were 1.0 ft or less, except on March 10, 2025.
- LPZ-3 – leachate thickness measured less than 1 foot for all measurements in 2025.
- LPZ-4 – leachate thickness measured less than 1 foot for all measurements in 2025.
- LPZ-5 – leachate thickness measured less than 1 foot for all measurements in 2025.
- LPZ-6 – leachate thickness measured less than 1 foot for all measurements in 2025.

Note that based on the historical “High Leachate Column Thickness” included in Table 12 (from Table 3-1 of the 2013 AWQR (Doc #79361)), the leachate thicknesses measured during 2025 are all lower than the historical high leachate thickness measurements and are typically dry. The leachate control system appears to be operating effectively.

Leachate Line Cleaning

The leachate collection and conveyance lines were cleaned March 26, 2025 and March 27, 2025. The line cleaning should be performed again in 2028.

Performance Evaluation

No modifications to the leachate collection system are recommended for next year.

Section 5.0 Gas Monitoring

Explosive gas monitoring per 113.9(2) was conducted semi-annually during 2025. Permit Amendment #14, dated May 12, 2020 (Doc #97700) modified the GMSP. Explosive gas monitoring was performed in accordance with Permit Amendment #14.

The following subsurface monitoring points are included in the approved GMSP, as illustrated on Figure 4.

LFGW-W1 -	subsurface
LFGW-W2 -	subsurface
GP-2 -	subsurface
GP-3 -	subsurface
MW-36 -	subsurface
MW-19 -	subsurface
MW-17 -	subsurface

A summary table of gas monitoring is included as Table 13. Table 13 includes an assessment of the exposed screen in monitoring wells MW-36, MW-19, and MW-17. Explosive gas concentrations were below actionable levels during the monitoring episodes.

As a result of historical elevated readings at LFGW-W2 a Methane Remediation Plan was completed in 2014. Documentation of the constructed Methane Remediation System was submitted and approved by IDNR in Permit Amendment #6 dated July 7, 2014 (Doc #80639).

Section 6.0 Recommendations/Requests

It is recommended that the detection monitoring and assessment monitoring continue to be performed on an annual basis at the HMSP monitoring points (except MW-33 where semi-annual sampling is required) and that the sampling in 2026 be in conformance with that listed in Table 2.

A majority of the site monitoring wells remain in detection monitoring. SSI are recorded at MW-21, MW-31, MW-33, MW-34, and MW-38. Therefore, MW-21, MW-31, MW-33, MW-34, and MW-38 are assigned to the Assessment Monitoring network.

Based on the Confidence Interval Assessment for inorganic and organic compounds presented above, there are no SSL identified at any well. Therefore, no Assessment of Corrective Measures (ACM) is required at this time.

It is recommended that the leachate level monitoring and the gas monitoring continue to be performed on a semi-annual basis at the facility.

Figures



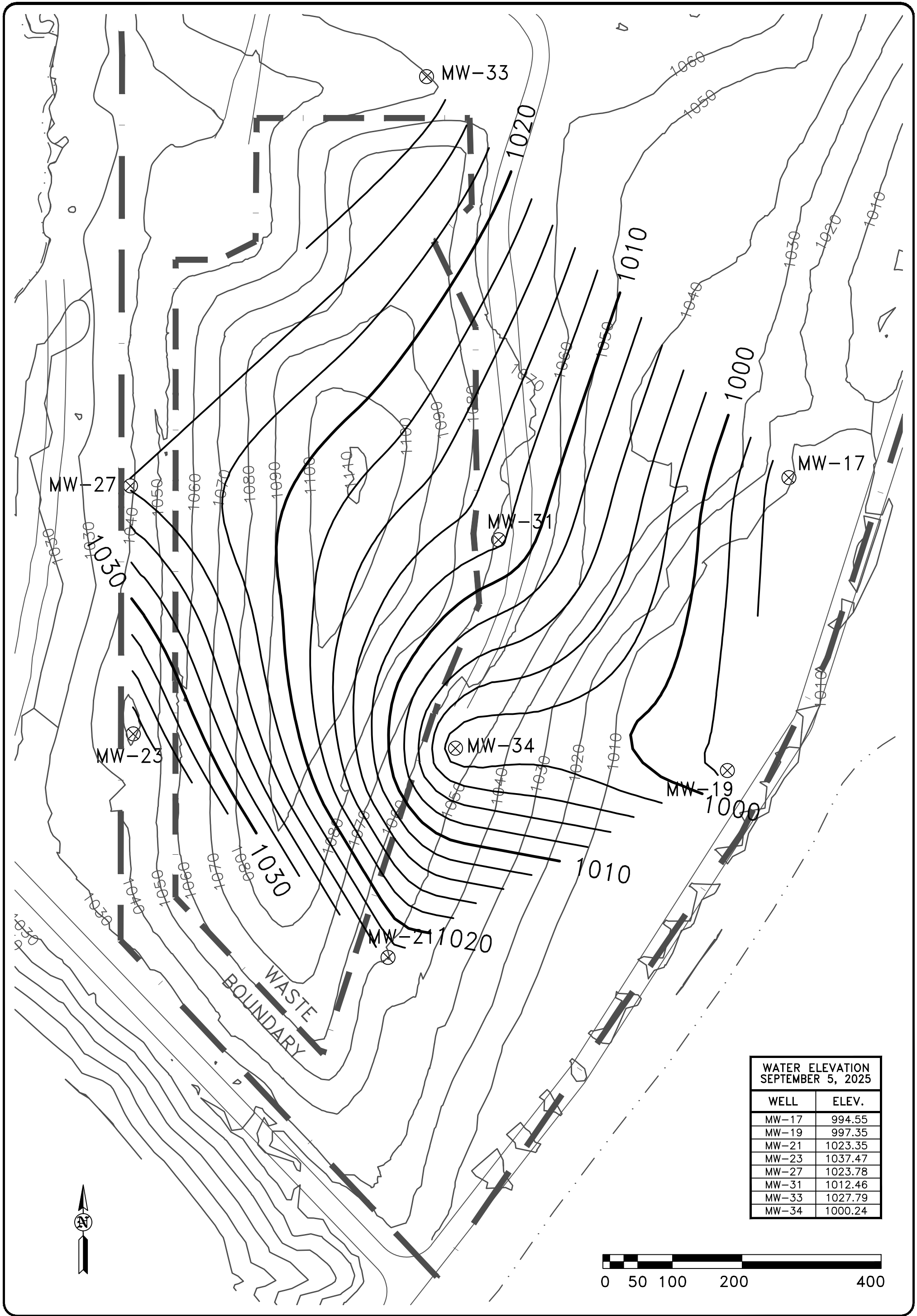


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SITE PLAN

CLARKE COUNTY SANITARY LANDFILL
OSCEOLA, IOWA

FIGURE: 1		
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6037	DATE 9-29-25

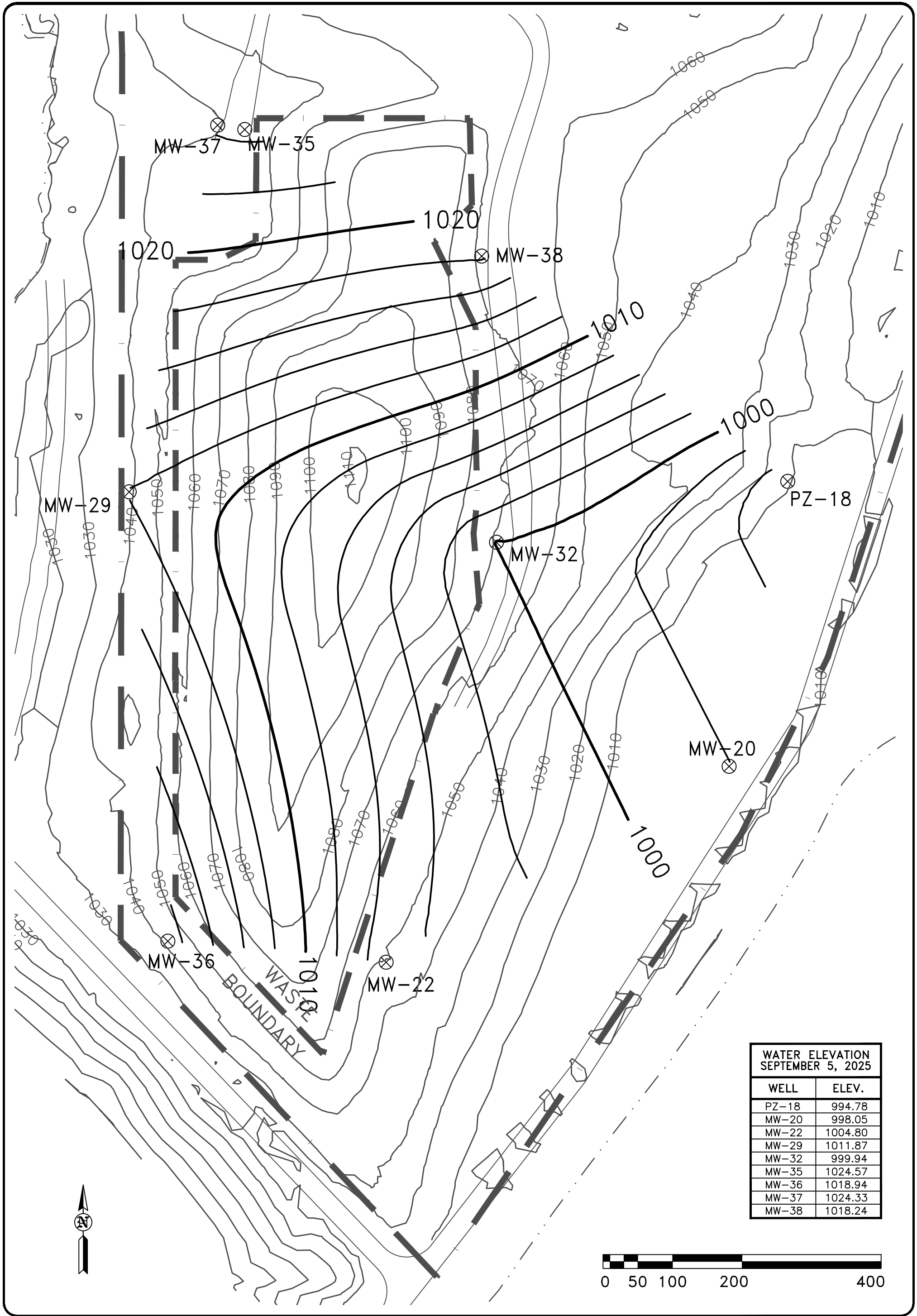


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WATER TABLE CONTOUR MAP
CLARKE COUNTY SANITARY LANDFILL
OSCEOLA, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6037	DATE 9-29-25



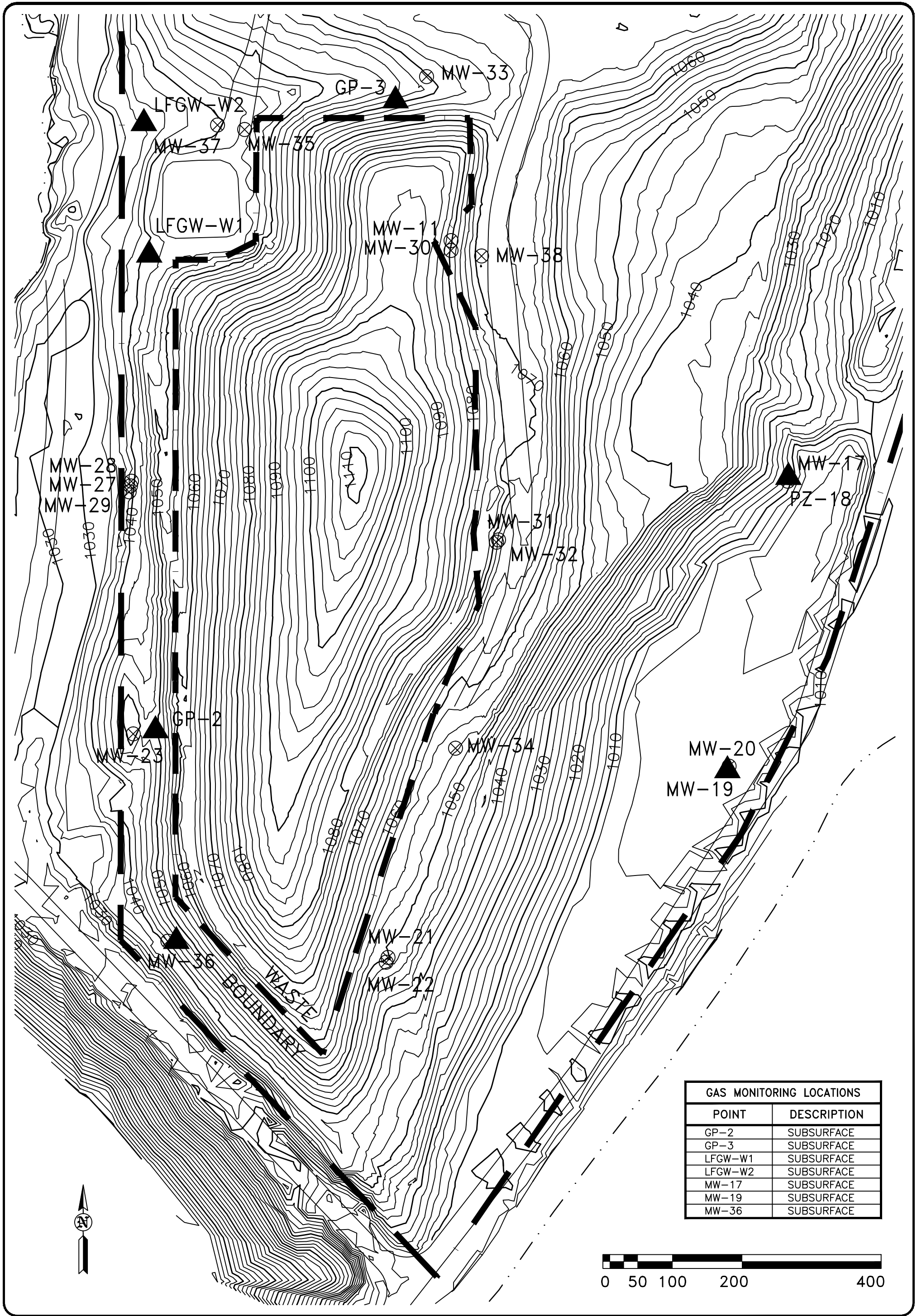
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BEDROCK AQUIFER CONTOUR MAP

CLARKE COUNTY SANITARY LANDFILL
OSCEOLA, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6037	DATE 9-29-25



GAS MONITORING LOCATIONS	
POINT	DESCRIPTION
GP-2	SUBSURFACE
GP-3	SUBSURFACE
LFGW-W1	SUBSURFACE
LFGW-W2	SUBSURFACE
MW-17	SUBSURFACE
MW-19	SUBSURFACE
MW-36	SUBSURFACE

Tables (in IDNR Format)

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Table 8 - Summary of Ongoing and Newly Identified SSL (<i>NOT USED</i>)
Table 9 – Analytical Data Summary
Table 10 – Historic SSI and SSL (<i>NOT USED- See Table 7</i>)
Table 11 – Corrective Action Trend Analysis (<i>NOT USED</i>)
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Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH SITE
Permit No. 20-SDP-04-94C

[illegible]

Table 1A – Exceedance of the Prediction Limit Summary Tables

TABLE 1A – Exceedances of the Prediction Limits to Date

Spring 2014 – See Doc # 80535		Fall 2014†	
		MW-33	1,1-dichloroethane
			1,2-dichloropropane
			Acetone
			Carbon disulfide
			Cis-1,2-dichloroethane

Spring 2015 †		Fall 2015†	
MW-33	1,1-dichloroethane	MW-33	1,1-dichloroethane
	Acetone		1,2-dichloropropane
	Cis-1,2-dichloroethane		Cis-1,2-dichloroethane

Spring 2016 †		Fall 2016	
MW-10**	Acetone	MW-10**	Arsenic
			Chromium
MW-33**	1,1-dichloroethane	MW-33**	Arsenic
	1,2-dichloropropane		1,1-dichloroethane
	Cis-1,2-dichloroethane		1,2-dichloropropane
			Cis-1,2-dichloroethane
			Dichlorodifluoromethane
		MW-34**	Barium
		MW-35**	Arsenic

** Monitoring well is an Assessment or Corrective Action monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

† = predates the restriction of background data to the “No Purge” data and predates the corrected HMSP.

Spring 2017		Fall 2017	
MW-10**	Arsenic	MW-10**	Arsenic
MW-33**	Arsenic	MW-33**	Arsenic
	1,1-dichloroethane		1,2-dichloropropane
	1,2-dichloropropane		Cis-1,2-dichloroethane
	Cis-1,2-dichloroethane		
MW-34**	Barium	MW-34**	Barium
MW-35**	Arsenic	MW-35**	Arsenic

** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

Spring 2018		Fall 2018	
MW-10**	Arsenic	MW-10**	Arsenic
			bis(2-ethylhexyl)phthalate
MW-33**	cis-1,2-dichloroethane	MW-33**	Arsenic
			1,1-dichloroethane
			1,2-dichloropropane
			cis-1,2-dichloroethane
MW-34**	Barium	MW-34**	Barium
MW-35**	None	MW-35**	Arsenic
			bis(2-ethylhexyl)phthalate

Spring 2019		Fall 2019	
MW-10**	Arsenic	MW-10**	Arsenic
MW-31	None	MW-31**	Copper
MW-33**	Arsenic	MW-33**	Arsenic
	1,1-dichloroethane		1,2-dichloropropane
	1,2-dichloropropane		cis-1,2-dichloroethane
	cis-1,2-dichloroethane		
MW-34**	Barium	MW-34**	Barium
MW-35**	Arsenic	MW-35**	Arsenic
	Cobalt		Cobalt
	Nickel		Nickel
	Zinc		Zinc

Spring 2020		Fall 2020	
MW-10**	Arsenic	MW-10**	Arsenic
MW-31**	Cadmium	MW-31**	None
	Copper		
MW-33**	Arsenic	MW-33**	Arsenic
			1,1-dichloroethane
			1,2-dichloropropane
			cis-1,2-dichloroethane
MW-34**	Barium	MW-34**	Barium

** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

Spring 2021		Fall 2021	
MW-21**	Copper	MW-21**	None
MW-31**	Bis(2-ethylhexyl)phthalate	MW-31**	Bis(2-ethylhexyl)phthalate
MW-33**	Arsenic	MW-33**	Arsenic
	1,1-dichloroethane		1,1-dichloroethane
	1,2-dichloropropane		1,2-dichloropropane
	cis-1,2-dichloroethane		cis-1,2-dichloroethane
MW-34**	Barium	MW-34**	Barium

*** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.*

Spring 2022		Fall 2022	
MW-21**	None	MW-21**	Bis(2-ethylhexyl)phthalate
MW-31**	None	MW-31**	Bis(2-ethylhexyl)phthalate
MW-33**	Arsenic	MW-33**	Arsenic
	1,1-dichloroethane		1,1-dichloroethane
	1,2-dichloropropane		1,2-dichloropropane
	cis-1,2-dichloroethane		cis-1,2-dichloroethane
MW-34**	Barium	MW-34**	Barium

*** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.*

Spring 2023		Fall 2023	
MW-21**	None	MW-21**	Not Tested
MW-31**	None	MW-31**	Not Tested
MW-33**	1,1-dichloroethane	MW-33**	1,2-dichloropropane
	1,2-dichloropropane		cis-1,2-dichloroethane
	cis-1,2-dichloroethane		
MW-34**	Barium	MW-34**	Not Tested
MW-38**	Arsenic — verified May 9, 2023	MW-34**	Not Tested

*** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.*

Spring 2024		Fall 2024*	
MW-21**	<i>Not Tested</i>	MW-21**	None
MW-31**	<i>Not Tested</i>	MW-31**	None
MW-33**	1,1-dichloroethane	MW-33**	1,1-dichloroethane
	1,2-dichloropropane		1,2-dichloropropane
	cis-1,2-dichloroethane		cis-1,2-dichloroethane
MW-34**	Barium (4/1/24)	MW-34**	<i>Not Tested</i>
MW-38**	None (6/3/24)	MW-34**	<i>Not Tested</i>

* The Annual Sampling was performed in the Fall.

** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

Spring 2025*		Fall 2025	
MW-21**	None	MW-21**	<i>Not Tested</i>
MW-31**	None	MW-31**	<i>Not Tested</i>
MW-33**	Arsenic	MW-33**	1,1-dichloroethane
	1,1-dichloroethane		1,2-dichloropropane
	1,2-dichloropropane		cis-1,2-dichloroethane
	cis-1,2-dichloroethane		
MW-34**	None	MW-34**	<i>Not Tested</i>
MW-38**	Arsenic	MW-34**	<i>Not Tested</i>

* The Annual Sampling was performed in the Spring.

** Monitoring well is an Assessment monitoring point and water quality should be compared to GWPS, rather than site prediction limits.

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH SITE
Permit No. 20-SDP-04-94C

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
		March 2026	September 2026	Previously Collected	Next Event
MW-23		---	Appendix I		
MW-27		---	Appendix I		
MW-21	See following pages	---	Appendix I	9/9/21, 9/9/22	2027
MW-31		---	Appendix II	3/10/20, 3/4/21	2026
MW-33		Appendix I ⁽¹⁾	Appendix II	3/22/10, 9/7/10, 9/20/11, 9/14/16, 9/9/21	2026
MW-34		---	Appendix I	2/7/2010, 9/27/13, 9/5/18, 4/1/24	2029
MW-28		---	Appendix I		
MW-29		---	Appendix I		
MW-36		---	Appendix I		
MW-37		---	Appendix I		
MW-38		---	Appendix I	6/3/24, 3/10/25	2030
MW-22		---	Appendix I		
MW-32		---	Appendix I		

⁽¹⁾ add sulfide

⁽²⁾ add bis (2-ethylhexyl)phthalate

Table 2A – Summary of Testing to Date

TABLE 2A - Sampling Summary to Date

Prior to 9/29/2014 – see Document #80535

ASSESSMENT MONITORING TO DATE

Monitoring Point	1 st Episode	2 nd Episode	3 rd Episode	4 th Episode	5 th Episode
MW-21	9/9/2021	9/9/2022			
MW-31	3/10/2020	3/4/2021			
MW-33	3/22/2010	9/7/2010	9/20/2011	9/14/2016	9/9/2021
MW-34	2/27/2010	9/27/2013	9/5/2018	4/1/2024	
MW-38	6/3/2024	pending			

2014

MW-23 (b-till)	Appendix I ⁽²⁾
MW-27 (b-till)	Appendix I ⁽²⁾
MW-28 (b-LS)	Appendix I ⁽²⁾
MW-29 (b-LS)	Appendix I ⁽²⁾
MW-36 (b-LS)	Appendix I ^(2,4)
MW-21	Appendix I
MW-22	-----
MW-31	Appendix I
MW-32	-----
MW-33	Appendix I ^(2,3,4)
MW-34	Appendix I ^(4,6,7)
MW-10	Appendix I ^(2,4,5)
MW-35	Appendix I ^(2,4)

September 29, 2014

2015

MW-23 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-27 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-28 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-29 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-36 (b-LS)	Appendix I ^(2,4)	Appendix I ^(2,4)
MW-21	Appendix I	Appendix I
MW-22	-----	Appendix I
MW-31	Appendix I	Appendix I
MW-32	-----	Appendix I
MW-33	Appendix I ^(2,3,4)	Appendix I ^(2,3,4)
MW-34	Appendix I ^(4,6,7)	Appendix I ^(4,6,7)
MW-10	Appendix I ^(2,4,5)	Appendix I ^(2,4,5)
MW-35	Appendix I ^(2,4)	Appendix I ^(2,4)

March 19, 2015

August 26, 2015

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = Appendix I plus no detected Appendix II compounds performed in accordance with 113.10(6)C.2.

(2) = sulfide

(3) = Endosulfan I

(4) = tin

(5) = aldrin

(6) = 2,4-D

(7) = mercury

2016	March 9, 2016	September 14, 2016
MW-23 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-27 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-28 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-29 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-36 (b-LS)	Appendix I ^(2,4)	Appendix I ^(2,4)
MW-21	Appendix I	Appendix I
MW-22	Appendix I	Appendix I
MW-31	Appendix I	Appendix I
MW-32	Appendix I	Appendix I
MW-33	Appendix I ^(2,3,4)	Appendix II
MW-34	Appendix I ^(4,6,7)	Appendix I ^(4,6,7)
MW-10	Appendix I ^(2,4,5)	Appendix I ^(2,4,5)
MW-35	Appendix I ^(2,4)	Appendix I ^(2,4)

2017	March 7, 2017	June 6, 2017	Sept. 11, 2017
MW-23 (b-till)	Appendix I ⁽²⁾		Appendix I ⁽²⁾
MW-27 (b-till)	Appendix I ⁽²⁾		Appendix I ⁽²⁾
MW-28 (b-LS)	Appendix I ⁽²⁾		Appendix I ⁽²⁾
MW-29 (b-LS)	Appendix I ⁽²⁾		Appendix I ⁽²⁾
MW-36 (b-LS)	Appendix I ⁽²⁾		Appendix I ⁽²⁾
MW-21	Appendix I		Appendix I
MW-22	Appendix I		Appendix I
MW-31	Appendix I		Appendix I
MW-32	Appendix I	barium	Appendix I
MW-33	Appendix I ^(2,3)		Appendix I ⁽²⁾
MW-34	Appendix I		Appendix I
MW-10	Appendix I ⁽⁵⁾		Appendix I
MW-35	Appendix I ⁽²⁾		Appendix I ⁽²⁾

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = Appendix I plus no detected Appendix II compounds performed in accordance with 113.10(6)C.2.

(2) = sulfide

(3) = Endosulfan I

(4) = tin

(5) = aldrin

(6) = 2,4-D

(7) = mercury

2018	March 7, 2018	September 5, 2018
MW-23 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-27 (b-till)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-28 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-29 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-36 (b-LS)	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-21	Appendix I	Appendix I
MW-22	Appendix I	Appendix I
MW-31	Appendix I	Appendix I
MW-32	Appendix I	Appendix I
MW-33	Appendix I ⁽²⁾	Appendix I ⁽²⁾
MW-34	Appendix I	Appendix II
MW-10	Appendix I ⁽⁵⁾	Appendix II
MW-35	Appendix I ⁽²⁾	Appendix II

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = Appendix I plus no detected Appendix II compounds performed in accordance with 113.10(6)C.2.

(2) = sulfide

(3) = Endosulfan I

(4) = tin

(5) = aldrin

(6) = 2,4-D

(7) = mercury

2019	April 1, 2019	June 7, 2019	September 9, 2019	December 5, 2019
MW-23 (b-till)	Appendix I ⁽¹⁾		Appendix I	
MW-27 (b-till)	Appendix I ⁽¹⁾		Appendix I	
MW-28 (b-LS)	Appendix I ⁽¹⁾		Appendix I	
MW-29 (b-LS)	Appendix I ⁽¹⁾		Appendix I	
MW-36 (b-LS)	Appendix I ⁽¹⁾		Appendix I	
MW-21	Appendix I	Ba	Appendix I	
MW-22	Appendix I		Appendix I	
MW-31	Appendix I		Appendix I	Cu
MW-32	Appendix I	Cr, Pb, V	Appendix I	
MW-33	Appendix I ⁽¹⁾		Appendix I ⁽¹⁾	
MW-34	Appendix I		Appendix I	
MW-10	Appendix I ⁽²⁾		Appendix I ⁽²⁾	
MW-35	Appendix I ^(1,2)	As, Co, Ni, Zn	Appendix I ^(1,2)	

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = sulfide

(2) = bis (2-ethylhexyl)phthalate

2020+2021	3/10/2020	9/14/2020	3/4/2021	5/18/2021	9/9/2021
MW-23 (b-till)	Appendix I	Appendix I	Appendix I	Cu	Appendix I
MW-27 (b-till)	Appendix I	Appendix I	Appendix I		Appendix I
MW-28 (b-LS)	Appendix I	Appendix I	Appendix I		Appendix I
MW-29 (b-LS)	Appendix I	Appendix I	Appendix I		Appendix I
MW-36 (b-LS)	Appendix I	Appendix I	Appendix I		Appendix I
MW-21	Appendix I	Appendix I	Appendix I		Appendix II
MW-22	Appendix I	Appendix I	Appendix I		Appendix I
MW-31	Appendix II	Appendix I	Appendix II		Appendix I ⁽²⁾
MW-32	Appendix I	Appendix I	Appendix I		Appendix I
MW-33	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		Appendix II
MW-34	Appendix I	Appendix I	Appendix I		Appendix I
MW-10	Appendix I	Appendix I	Appendix I		Appendix I
MW-35	Appendix I ^(1,2)	Appendix I	Appendix I		Appendix I
MW-37	Did Not Exist	Appendix I	Appendix I		Appendix I
2022	3/24/2022	9/9/2022	11/10/2022		
MW-23 (b-till)	Appendix I	Appendix I			
MW-27 (b-till)	Appendix I	Appendix I			
MW-28 (b-LS)	Appendix I	Appendix I			
MW-29 (b-LS)	Appendix I	Appendix I			
MW-36 (b-LS)	Appendix I	Appendix I			
MW-21	Appendix I	Appendix II			
MW-22	Appendix I	Appendix I			
MW-31	Appendix I ⁽²⁾	Appendix I ⁽²⁾			
MW-32	Appendix I	Appendix I			
MW-33	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾			
MW-34	Appendix I	Appendix I			
MW-37	Appendix I	Appendix I			
MW-38	Appendix I	Appendix I	Cu		
Duplicate	MW-37	MW-37			
2023	3/1/2023	5/9/2023	9/7/2023		
MW-23 (b-till)	Appendix I				
MW-27 (b-till)	Appendix I				
MW-28 (b-LS)	Appendix I				
MW-29 (b-LS)	Appendix I				
MW-36 (b-LS)	Appendix I				
MW-21	Appendix I ⁽²⁾				
MW-22	Appendix I				
MW-31	Appendix I ⁽²⁾				
MW-32	Appendix I				
MW-33	Appendix I ⁽¹⁾		Appendix I ⁽¹⁾		
MW-34	Appendix I				
MW-37	Appendix I				
MW-38	Appendix I	As			
Duplicate	MW-37				

	3/6/2024	4/1/2024	6/3/2024	9/4/2024
MW-23 (b-till)				Appendix I
MW-27 (b-till)				Appendix I
MW-28 (b-LS)				Appendix I
MW-29 (b-LS)				Appendix I
MW-36 (b-LS)				Appendix I
MW-21				Appendix I
MW-22				Appendix I
MW-31				Appendix I
MW-32				Appendix I
MW-33	Appendix I ⁽¹⁾			Appendix I ⁽¹⁾
MW-34		Appendix II		Appendix I
MW-37				Appendix I
MW-38			Appendix II	Appendix I
Duplicate				MW-21

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = sulfide

(2) = bis (2-ethylhexyl)phthalate

	3/10/2025	9/5/2025
MW-23 (b-till)	Appendix I	
MW-27 (b-till)	Appendix I	
MW-28 (b-LS)	Appendix I	
MW-29 (b-LS)	Appendix I	
MW-36 (b-LS)	Appendix I	
MW-21	Appendix I	
MW-22	Appendix I	
MW-31	Appendix I	
MW-32	Appendix I	
MW-33	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾
MW-34	Appendix I	
MW-37	Appendix I	
MW-38	Appendix II	
Duplicate	MW-36	

(b-till)(b-LS) background wells, glacial till system or limestone system.

(1) = sulfide

(2) = bis (2-ethylhexyl)phthalate

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Revaluation Schedule
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH SITE
Permit No. 20-SDP-04-94C

Compliance with:	Monitoring Calendar Years									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)		X		X		X		X		X
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (historic = 1 per 5 years; current = biennial)		X		X		X		X		X
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		X		X		X		X		X
Waste separation from ground water 113.6(2)"I"	2X	2X	2X	2X	2X	2X	2X	2X	2X	X

Compliance with:	Monitoring Calendar Years									
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)		P		P		P		P		P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (historic = 1 per 5 years; current = biennial)		P		P		P		P		P
567 IAC 113.10(2)"f"(3) well depths (annual)	X	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		P		P		P		P		P
Waste separation from ground water 113.6(2)"I"	2X	2P	2P	2P	2P	2P	2P	2P	2P	2P

X = completed

P = Planned

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH SITE
Permit No. 20-SDP-04-94C

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements ⁽¹⁾		Maximum Depth Discrepancy (ft)	Hydraulic Cond. (cm/sec)/date	Most Recent Recharge Rate ⁽²⁾	
					3/10/2025	9/5/2025			9/4/2024	Change
MW-23	1055.07	1030.77	34.3	Groundwater Level (ft)	17.01	17.6	0.3	0.0002 August 1994	12% recovery in 2.5 hour	None percieved
				Groundwater Elevation (Ft MSL)	1038.06	1037.47				
				Measured Well Depth (ft)	34	34				
				Submerged (+) or Exposed screen (-)	7.29	6.7				
MW-27	1041.44	1016.44	34.75	Groundwater Level (ft)	18.28	17.49	0	0.000032 August 1994	25% recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1023.16	1023.95				
				Measured Well Depth (ft)	34.75	34.75				
				Submerged (+) or Exposed screen (-)	6.72	7.51				
MW-21	1052.67	1019.57	43.1	Groundwater Level (ft)	29.35	29.32	0.35	0.00034 August 1994	18% recovery in 3 hour	None percieved
				Groundwater Elevation (Ft MSL)	1023.32	1023.35				
				Measured Well Depth (ft)	42.75	42.75				
				Submerged (+) or Exposed screen (-)	3.75	3.78				
MW-31	1070.11	1008.21	71.9	Groundwater Level (ft)	58.4	57.65	0.1	0.000000985 March 2022	13% recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	1011.71	1012.46				
				Measured Well Depth (ft)	71.8	71.8				
				Submerged (+) or Exposed screen (-)	3.5	4.25				
MW-33	1062.3	1024.5	47.8	Groundwater Level (ft)	34.38	34.51	-0.6	0.00000173 March 2022	28% recovery in 1 hour	None percieved
				Groundwater Elevation (Ft MSL)	1027.92	1027.79				
				Measured Well Depth (ft)	48.4	48.4				
				Submerged (+) or Exposed screen (-)	3.42	3.29				
MW-34	1057.36	989.33	78.03	Groundwater Level (ft)	52.33	57.12	0.63	0.000146 March 2022	Full recovery in 2 hours	None percieved
				Groundwater Elevation (Ft MSL)	1005.03	1000.24				
				Measured Well Depth (ft)	77.4	77.4				
				Submerged (+) or Exposed screen (-)	15.7	10.91				
MW-28	1040.06	994.16	50.9	Groundwater Level (ft)	22.88	22.47	-0.9	0.092 August 1994	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1017.18	1017.59				
				Measured Well Depth (ft)	51.8	51.8				
				Submerged (+) or Exposed screen (-)	23.02	23.43				
MW-29	1037.62	975.77	66.85	Groundwater Level (ft)	24.85	25.75	0.25	0.00001 August 1994	51% recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	1012.77	1011.87				
				Measured Well Depth (ft)	66.6	66.6				
				Submerged (+) or Exposed screen (-)	37	36.1				
MW-36	1043.41	1023.91	29.5	Groundwater Level (ft)	25.24	24.47	0.1	0.00035 March 2022	Full recovery in 3 hours	None percieved
				Groundwater Elevation (Ft MSL)	1018.17	1018.94				
				Measured Well Depth (ft)	29.4	29.4				
				Submerged (+) or Exposed screen (-)	-5.74	-4.97				
MW-37	1042.58	1019.23	33.35	Groundwater Level (ft)	19.3	18.25	0	0.000151 March 2022	Full recovery in 2 hours	None percieved
				Groundwater Elevation (Ft MSL)	1023.3	1024.33				
				Measured Well Depth (ft)	33.35	33.35				
				Submerged (+) or Exposed screen (-)	4.07	5.1				
MW-38	1071.53	1012.43	64.1	Groundwater Level (ft)	53.84	53.29	0	0.00335 March 2022	No drawdown	None percieved
				Groundwater Elevation (Ft MSL)	1017.69	1018.24				
				Measured Well Depth (ft)	64.1	64.1				
				Submerged (+) or Exposed screen (-)	5.26	5.81				
MW-22	1052.77	952	105.75	Groundwater Level (ft)	46.71	47.97	0.05	0.000048 August 1994	8% recovery in 3 hour	None percieved
				Groundwater Elevation (Ft MSL)	1006.06	1004.8				
				Measured Well Depth (ft)	105.7	105.7				
				Submerged (+) or Exposed screen (-)	54.06	52.8				
MW-32	1070.23	979.99	97.24	Groundwater Level (ft)	67.51	70.29	-0.66	0.0000234 March 2022	62% recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	1002.72	999.94				
				Measured Well Depth (ft)	97.9	97.9				
				Submerged (+) or Exposed screen (-)	22.73	19.95				

(1) - See also the Historic Summary of Water Table Measurements in the attached Table 4A
(2) - See the Field Sampling Forms (IDNR Form 542-1322) for referenced date in corresponding AWQR

Table 4A – Historic Water Elevation Summary Tables

Table 4 Supplement

Water Elevation Data
Clarke County Sanitary Landfill - SOUTH SITE
20-SDP-4-94C

Well/TOC	MW-101080.25		MW-211052.67		MW-231055.07		MW-271041.441041.27		MW-281040.011039.93		MW-291037.62		MW-301069.4	
	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
03/13/14	66.95	1013.30	33.59	1019.08	15.16	1039.91			26.88	1013.13			NR	NR
09/29/14	64.60	1015.65	34.35	1018.32	15.10	1039.97	19.05	1022.39	23.95	1016.06	27.30	1010.32	68.35	1001.05
11/24/14	NR	NR	NR	NR	13.30	1041.77	17.40	1024.04	24.20	1015.81	26.50	1011.12	NR	NR
03/19/15	64.70	1015.55	34.00	1018.67	15.30	1039.77	17.40	1024.04	24.80	1015.21	26.80	1010.82	68.30	1001.10
06/17/15	NR	NR	NR	NR	15.75	1039.32	14.48	1026.96	22.84	1017.17	25.89	1011.73	NR	NR
08/26/15	63.80	1016.45	33.80	1018.87	14.62	1040.45	16.90	1024.37	23.50	1016.43	25.80	1011.82	67.44	1001.96
03/09/16	63.50	1016.75	32.45	1020.22	14.17	1040.90	14.21	1027.06	21.53	1018.40	24.41	1013.21	67.08	1002.32
09/14/16	65.36	1014.89	32.22	1020.45	13.70	1041.37	16.45	1024.82	21.55	1018.38	26.18	1011.44	67.72	1001.68
03/07/17	64.72	1015.53	31.74	1020.93	14.02	1041.05	4.62	1036.65	23.93	1016.00	25.61	1012.01	68.20	1001.20
09/11/17	65.05	1015.20	32.23	1020.44	14.15	1040.92	16.18	1025.09	24.87	1015.06	28.49	1009.13	68.42	1000.98
03/07/18	65.80	1014.45	30.15	1022.52	14.74	1040.33	15.05	1026.22	24.31	1015.62	27.30	1010.32	68.42	1000.98
09/05/18	64.50	1015.75	32.65	1020.02	15.13	1039.94	16.48	1024.79	24.46	1015.47	25.55	1012.07	68.45	1000.95
04/01/19	62.65	1017.60	31.60	1021.07	16.13	1038.94	12.30	1028.97	21.52	1018.41	24.25	1013.37	67.38	1002.02
09/09/19	63.20	1017.05	29.53	1023.14	15.19	1039.88	15.14	1026.13	22.82	1017.11	25.34	1012.28	67.11	1002.29
03/10/20	62.42	1017.83	29.27	1023.40	15.51	1039.56	11.80	1029.47	21.46	1018.47	24.34	1013.28	66.93	1002.47
09/14/20	65.45	1014.80	28.29	1024.38	15.02	1040.05	15.28	1025.99	23.04	1016.89	25.41	1012.21	67.02	1002.38
03/04/21	63.99	1016.26	28.66	1024.01	15.19	1039.88	16.85	1024.42	23.10	1016.83	26.23	1011.39	67.92	1001.48
09/09/21	63.31	1016.94	29.05	1023.62	15.05	1040.02	16.17	1025.10	22.65	1017.28	25.56	1012.06	67.32	1002.08
03/24/22	63.07	1017.18	28.22	1024.45	15.31	1039.76	12.38	1028.89	22.03	1017.90	22.65	1014.97	67.31	1002.09
09/09/22	63.60	1016.65	27.21	1025.46	15.35	1039.72	15.90	1025.37	23.03	1016.90	25.71	1011.91	67.37	1002.03
03/01/23	63.59	1016.66	27.62	1025.05	15.35	1039.72	15.75	1025.52	22.62	1017.31	23.15	1014.47	67.61	1001.79
09/09/22	63.70	1016.55	27.76	1024.91	15.82	1039.25	16.67	1024.60	23.25	1016.68	26.10	1011.52	67.54	1001.86
03/06/24	63.43	1016.82	28.35	1024.32	16.16	1038.91	17.95	1023.32	23.70	1016.23	26.64	1010.98	67.99	1001.41
09/04/24	64.07	1016.18	29.35	1023.32	16.83	1038.24	18.05	1023.22	27.95	1011.98	26.32	1011.30	NR	NR
03/10/25	NR	NR	29.35	1023.32	17.01	1038.06	18.28	1022.99	22.88	1017.05	24.85	1012.77	NR	NR
09/05/25	NR	NR	29.32	1023.35	17.60	1037.47	17.49	1023.78	22.47	1017.46	25.75	1011.87	NR	NR
minimum	62.42	1013.30	27.21	1018.32	13.30	1037.47	4.62	1022.39	21.46	1011.98	22.65	1009.13	66.93	1000.95
maximum	66.95	1017.83	34.35	1025.46	17.60	1041.77	19.05	1036.65	27.95	1018.47	28.49	1014.97	68.45	1002.47

Water Elevation Data
Clarke County Sanitary Landfill - SOUTH SITE
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Well/TOC	MW-31 1070.11		MW-33 1062.3		MW-34 1057.53 1057.36		MW-35 1047.65		MW-36 1043.41		MW-37 1042.58		MW-38 1071.53	
Date	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
03/13/14	54.94	1015.17	36.67	1025.63	59.02	998.51	28.08	1019.57	27.51	1015.90				
09/29/14	54.80	1015.31	37.75	1024.55	54.70	1002.83	25.16	1022.49	26.75	1016.66				
11/24/14	NR	NR	NR	NR	NR	NR	25.10	1022.55	NR	NR				
03/19/15	55.25	1014.86	37.80	1024.50	55.00	1002.53	25.15	1022.50	26.80	1016.61				
06/17/15	NR	NR	NR	NR	NR	NR	24.15	1023.50	NR	NR				
08/26/15	53.85	1016.26	37.39	1024.91	55.14	1002.22	24.15	1023.50	25.76	1017.65				
03/09/16	53.55	1016.56	36.50	1025.80	51.30	1006.06	25.28	1022.37	25.50	1017.91				
09/14/16	54.73	1015.38	36.55	1025.75	58.64	998.72	24.95	1022.70	25.80	1017.61				
03/07/17	54.50	1015.61	36.40	1025.90	57.18	1000.18	25.66	1021.99	26.44	1016.97				
09/11/17	54.95	1015.16	36.45	1025.85	60.36	997.00	25.53	1022.12	25.54	1017.87				
03/07/18	54.80	1015.31	35.82	1026.48	58.70	998.66	26.91	1020.74	26.27	1017.14				
09/05/18	57.01	1013.10	36.60	1025.70	52.24	1005.12	24.94	1022.71	26.02	1017.39				
04/01/19	55.27	1014.84	30.38	1031.92	52.05	1005.31	23.05	1024.60	23.99	1019.42				
09/09/19	55.29	1014.82	35.37	1026.93	57.91	999.45	24.05	1023.60	23.92	1019.49				
03/10/20	55.72	1014.39	34.76	1027.54	54.08	1003.28	23.54	1024.11	23.75	1019.66				
09/14/20	57.47	1012.64	34.87	1027.43	58.85	998.51	24.19	1023.46	23.95	1019.46	19.28	1023.30		
03/04/21	56.79	1013.32	34.52	1027.78	55.67	1001.69	25.32	1022.33	24.90	1018.51	20.39	1022.19		
09/09/21	58.88	1011.23	34.20	1028.10	58.43	998.93	24.02	1023.63	24.20	1019.21	19.11	1023.47	53.22	1018.31
03/24/22	48.17	1021.94	34.10	1028.20	52.01	1005.35	24.18	1023.47	24.27	1019.14	19.25	1023.33	53.02	1018.51
09/09/22	57.68	1012.43	34.70	1027.60	59.42	997.94	24.11	1023.54	24.21	1019.20	19.26	1023.32	53.55	1017.98
03/01/23	55.18	1014.93	34.19	1028.11	52.09	1005.27	24.05	1023.60	24.90	1018.51	19.22	1023.36	53.63	1017.90
09/09/22	56.75	1013.36	34.54	1027.76	59.56	997.80	24.30	1023.35	24.55	1018.86	19.47	1023.11	53.76	1017.77
03/06/24	57.42	1012.69	34.45	1027.85	58.81	998.55	25.63	1022.02	25.36	1018.05	20.82	1021.76	54.40	1017.13
09/04/24	57.64	1012.47	34.73	1027.57	58.95	998.41	24.32	1023.33	25.11	1018.30	19.49	1023.09	54.13	1017.40
03/10/25	58.40	1011.71	34.38	1027.92	52.33	1005.03	24.14	1023.51	25.24	1018.17	19.30	1023.28	53.84	1017.69
09/05/25	57.65	1012.46	34.51	1027.79	57.12	1000.24	23.08	1024.57	24.47	1018.94	18.25	1024.33	53.29	1018.24
minimum	48.17	1011.23	30.38	1024.50	51.30	997.00	23.05	1019.57	23.75	1015.90	18.25	1021.76	53.02	1017.13
maximum	58.88	1021.94	37.80	1031.92	60.36	1006.06	28.08	1024.60	27.51	1019.66	20.82	1024.33	54.40	1018.51

Water Elevation Data
Clarke County Sanitary Landfill - SOUTH SITE
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Well/TOC	MW-11 1070.16		MW-32 1070.23		MW-22 1052.77		MW-17 1006.08		MW-18 1006.52		MW-19 1007.37		MW-20 1007.83	
Date	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation	Water Depth	Water Elevation
03/13/14	NR	NR	NR	NR	NR	NR	59.02	947.06	28.08	978.44	27.51	979.86	27.51	980.32
09/29/14	65.40	1004.76	68.25	1001.98	NR	NR	10.50	995.58	10.70	995.82	7.20	1000.17	7.30	1000.53
11/24/14	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
03/19/15	65.40	1004.76	69.10	1001.13	44.00	1008.77	10.80	995.28	11.00	995.52	7.70	999.67	7.70	1000.13
06/17/15	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
08/26/15	64.60	1005.56	68.62	1001.61	44.15	1008.62	10.90	995.18	11.10	995.42	7.97	999.40	7.97	999.86
03/09/16	60.40	1009.76	67.20	1003.03	44.15	1008.62	5.29	1000.79	5.45	1001.07	3.90	1003.47	3.22	1004.61
09/14/16	65.04	1005.12	71.30	998.93	44.55	1008.22	11.73	994.35	12.04	994.48	9.69	997.68	9.69	998.14
03/07/17	45.85	1024.31	70.77	999.46	44.28	1008.49	9.45	996.63	9.65	996.87	6.05	1001.32	5.80	1002.03
09/11/17	65.81	1004.35	72.53	997.70	44.47	1008.30	13.85	992.23	14.12	992.40	12.04	995.33	12.14	995.69
03/07/18	65.81	1004.35	71.70	998.53	44.06	1008.71	13.85	992.23	14.12	992.40	12.04	995.33	12.14	995.69
09/05/18	55.75	1014.41	68.63	1001.60	46.12	1006.65	5.55	1000.53	5.60	1000.92	3.50	1003.87	4.05	1003.78
04/01/19	63.86	1006.30	66.61	1003.62	45.82	1006.95	6.81	999.27	7.08	999.44	4.56	1002.81	4.91	1002.92
09/09/19	63.86	1006.30	70.48	999.75	47.54	1005.23	12.15	993.93	12.39	994.13	10.16	997.21	10.10	997.73
03/10/20	61.77	1008.39	68.17	1002.06	46.61	1006.16	9.55	996.53			6.27	1001.10		
09/14/20	64.08	1006.08	71.33	998.90	48.26	1004.51	12.75	993.33	13.01	993.51	10.86	996.51	10.89	996.94
03/04/21	63.96	1006.20	69.96	1000.27	47.14	1005.63	9.73	996.35	9.98	996.54	8.32	999.05	8.05	999.78
09/09/21	63.45	1006.71	71.04	999.19	48.64	1004.13	12.38	993.70	12.62	993.90	10.79	996.58	10.65	997.18
03/24/22	55.98	1014.18	68.38	1001.85	46.90	1005.87	4.91	1001.17	5.15	1001.37	4.31	1003.06	4.55	1003.28
09/09/22	64.26	1005.90	71.68	998.55	48.95	1003.82	12.78	993.30	13.01	993.51	11.37	996.00	11.31	996.52
03/01/23	NR	NR	67.40	1002.83	46.48	1006.29	5.21	1000.87	5.45	1001.07	4.33	1003.04	4.82	1003.01
09/09/22	62.15	1008.01	72.15	998.08	48.91	1003.86	13.22	992.86	13.47	993.05	11.41	995.96	11.60	996.23
03/06/24	NR	NR	71.75	998.48	48.62	1004.15	12.20	993.88	12.50	994.02	10.81	996.56	10.95	996.88
09/04/24	NR	NR	71.88	998.35	48.58	1004.19	12.48	993.60	12.71	993.81	10.96	996.41	10.88	996.95
03/10/25	NR	NR	67.51	1002.72	46.71	1006.06	5.68	1000.40	5.97	1000.55	4.94	1002.43	5.09	1002.74
09/05/25	NR	NR	70.29	999.94	47.97	1004.80	11.53	994.55	11.74	994.78	10.02	997.35	9.78	998.05
minimum	45.85	1004.35	66.61	997.70	44.00	1003.82	4.91	947.06	5.15	978.44	3.50	979.86	3.22	980.32
maximum	65.81	1024.31	72.53	1003.62	48.95	1008.77	59.02	1001.17	28.08	1001.37	27.51	1003.87	27.51	1004.61

Table 5 – Background and GWPS Summary

Table 5
Background and GWPS Summary
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH SITE
Permit No. 20-SDP-04-94C

Interwell Background Wells (Shallow/Glacial Till System - MW-23 and MW-27)

Inorganics - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
Antimony (Sb)	µg/l	nonparametric	44	1			4.0000	0.99	6	SS
Arsenic (As)	µg/l	nonparametric	44	1			6.3000	0.99	10	SS
Barium (Ba)	µg/l	nonparametric	44	44			108.0000	0.99	2000	SS
Beryllium (Be)	µg/l	nonparametric	44	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	44	6			3.8000	0.99	5	SS
Chromium (Cr)	µg/l	nonparametric	44	0			8.0000	0.99	100	SS
Cobalt (Co)	µg/l	normal	43	33	6.3279	5.6776	20.2173		20.2173	Site
Copper (Cu)	µg/l	nonparametric	44	4			8.9000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	44	0			4.0000	0.99	15	SS
Nickel (Ni)	µg/l	normal	44	28	18.9068	17.8226	62.4558		100	SS
Selenium (Se)	µg/l	nonparametric	44	4			9.7000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	44	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	44	1			2.0000*	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	44	0			20.0000	0.99	35	SS
Zinc (Zn)	µg/l	nonparametric	44	9			24.9000	0.99	2000	SS
VOC - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
All	µg/l	DQR	44	0	<1	<1	<1	<1	various	SS

* - the thallium MRL was historically elevated at 4.0 ug/L, but has recently been reduced to 2.0 ug/L.
= Prediction limit exceeds the GWPS. A Site-Specific GWPS is warranted
see attached information for notes

Interwell Background Wells (Bedrock System MW-28, MW-29, and MW-36)

Inorganics - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
Antimony (Sb)	µg/l	nonparametric	59	9			7.9000	0.99	7.9000	Site
Arsenic (As)	µg/l	nonparametric	59	3			5.7000	0.99	10	SS
Barium (Ba)	µg/l	nonparametric	59	59			109.0000	0.99	2000	SS
Beryllium (Be)	µg/l	nonparametric	59	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	59	16			6.8000	0.99	6.8000	Site
Chromium (Cr)	µg/l	nonparametric	59	0			8.0000	0.99	100	SS
Cobalt (Co)	µg/l	normal	59	45	4.4085	4.5233	15.3211		15.3211	Site
Copper (Cu)	µg/l	nonparametric	59	9			13.6000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	59	0			4.0000	0.99	15	SS
Nickel (Ni)	µg/l	normal	59	46	19.8102	17.6659	62.4296		100	SS
Selenium (Se)	µg/l	nonparametric	59	7			14.4000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	59	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	59	0			2.0000	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	59	0			20.0000	0.99	35	SS
Zinc (Zn)	µg/l	lognormal	59	34	1.9302	1.7539	474.1207		2000	SS
VOC - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
All	µg/l	DQR	59	0	<1	<1	<1	<1	various	SS

= Prediction limit exceeds the GWPS. A Site-Specific GWPS is warranted
see attached information for notes

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit
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Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	GWPS (ug/l)	Monitoring Program
<i>Shallow/Till System</i>						
MW-33	arsenic	3/10/2025	11	6.3	10	Assessment Monitoring
MW-33	1,1-dichloroethane	3/10/2025	1.20	1.0	140	Assessment Monitoring
MW-33	1,1-dichloroethane	9/5/2025	1.30	1.0	140	Assessment Monitoring
MW-33	1,2-dichloropropane	3/10/2025	3.00	1.0	5	Assessment Monitoring
MW-33	1,2-dichloropropane	9/5/2025	5.00	1.0	5	Assessment Monitoring
MW-33	cis-1,2-DCE	3/10/2025	3.30	1.0	70	Assessment Monitoring
MW-33	cis-1,2-DCE	9/5/2025	4.20	1.0	70	Assessment Monitoring
<i>Bedrock System</i>						
MW-38	arsenic	3/10/2025	10.80	5.7	10.0	Assessment Monitoring

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-21	Copper	9/14/2016	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/7/2017	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/11/2017	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/7/2018	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/5/2018	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	4/1/2019	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/9/2019	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	12/5/2019	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/10/2020	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/14/2020	<4.0	4.000	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/4/2021	4.70	4.000	1.087	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	5/19/2021	4.90	4.000	1.087	1300	3/4/2021	5/19/2021	9/5/2018
MW-21	Copper	9/9/2021	<4.0	4.000	1.496	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/24/2022	<4.0	8.900	1.496	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/9/2022	<4.0	8.900	1.019	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/1/2023	<4.0	8.900	2.000	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	9/4/2024	4.60	8.900	1.087	1300	3/4/2021	N/A	9/5/2018
MW-21	Copper	3/10/2025	<4.0	8.900	1.087	1300	3/4/2021	N/A	9/5/2018

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-21	bis(2-ethylhexyl)phthalate	9/14/2016	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/7/2017	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/11/2017	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/7/2018	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/5/2018	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	4/1/2019	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/9/2019	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	12/5/2019	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/10/2020	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/14/2020	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/4/2021	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	5/19/2021	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/9/2021	<6	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/24/2022	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/9/2022	9.00	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/1/2023	<6	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	9/4/2024	---	6.000	---	6	9/9/2022	N/A	pending
MW-21	bis(2-ethylhexyl)phthalate	3/10/2025	---	6.000	---	6	9/9/2022	N/A	pending

Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-31	Cadmium	9/14/2016	<0.8	1.100	---	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/7/2017	<0.8	1.100	---	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/11/2017	<0.8	1.100	---	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/7/2018	<0.8	1.100	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/5/2018	<0.8	1.100	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	4/1/2019	<0.8	1.100	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/9/2019	<0.8	1.100	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/10/2020	1.30	1.100	0.096	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/14/2020	<0.8	1.350	0.096	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/4/2021	<0.8	1.350	0.096	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/9/2021	<0.8	1.350	0.096	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/24/2022	<0.8	3.800	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/9/2022	<0.8	3.800	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/1/2023	<0.8	3.800	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	9/4/2024	<0.8	3.800	0.400	5	3/10/2020	N/A	9/14/2016
MW-31	Cadmium	3/10/2025	<0.8	3.800	0.400	5	3/10/2020	N/A	9/14/2016

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Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-31	Copper	9/14/2016	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/7/2017	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/11/2017	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/7/2018	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/5/2018	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	4/1/2019	<4.0	4.000	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/9/2019	9.70	4.000	<8.428	1300	12/5/2019	12/5/2019	9/14/2016
MW-31	Copper	12/5/2019	13.70	4.000	<8.428	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/10/2020	9.60	4.000	8.428	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/14/2020	<4.0	4.000	8.428	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/4/2021	<4.0	4.000	8.428	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/9/2021	<4.0	4.000	0.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/24/2022	<4.0	8.900	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/9/2022	<4.0	8.900	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/1/2023	<4.0	8.900	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	9/4/2024	<4.0	8.900	2.000	1300	12/5/2019	N/A	9/14/2016
MW-31	Copper	3/10/2025	<4.0	8.900	2.000	1300	12/5/2019	N/A	9/14/2016

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-31	bis(2-ethylhexyl)phthalate	9/14/2016	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/7/2017	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/11/2017	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/7/2018	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/5/2018	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	4/1/2019	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/9/2019	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	12/5/2019	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/10/2020	<6.0	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/14/2020	---	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/4/2021	34.00	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/9/2021	33.00	6.00	---	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/24/2022	<6.0	6.00	0.000	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/9/2022	97.00	6.00	0.000	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/1/2023	<6.0	6.00	0.000	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	9/4/2024	---	6.00	0.000	6.00	N/A	N/A	N/A
MW-31	bis(2-ethylhexyl)phthalate	3/10/2025	---	6.00	0.000	6.00	N/A	N/A	N/A

Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-33	Arsenic	9/14/2016	4.60	4.0	3.596	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/7/2017	7.80	4.0	4.745	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/11/2017	5.20	4.0	4.305	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/7/2018	<4.0	4.0	2.100	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/5/2018	7.80	4.0	2.460	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	4/1/2019	7.10	4.0	2.474	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/9/2019	4.50	4.0	2.237	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/10/2020	5.90	4.0	4.622	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/14/2020	11.20	4.0	3.780	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/4/2021	7.00	4.0	3.754	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/9/2021	15.30	6.3	4.802	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/24/2022	7.30	6.3	5.611	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/9/2022	16.90	6.3	5.497	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/1/2023	5.40	6.3	4.497	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/7/2023	4.30	6.3	3.494	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/6/2024	4.50	6.3	0.597	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/4/2024	<4.0	6.3	2.347	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	3/10/2025	11.00	6.3	0.898	10	9/14/2016	N/A	3/9/2016
MW-33	Arsenic	9/5/2025	2.10	6.3	0.000	10	9/14/2016	N/A	3/9/2016

Table 7
Summary of Ongoing & Newly Identified SSI
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Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-33	1,1-dichloroethane	9/14/2016	1.50	1.00	1.3 81	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/7/2017	1.50	1.00	1.482	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/11/2017	<1.0	1.00	0.665	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/7/2018	<1.0	1.00	0.665	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/5/2018	1.70	1.00	0.297	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	4/1/2019	2.00	1.00	0.247	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/9/2019	<1.0	1.00	0.247	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/10/2020	<1.0	1.00	0.247	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/14/2020	1.10	1.00	0.191	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/4/2021	1.90	1.00	0.220	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/9/2021	1.40	1.00	0.537	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/24/2022	1.40	1.00	1.060	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/9/2022	<1.0	1.00	1.231	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/1/2023	1.70	1.00	1.299	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/7/2023	<1.0	1.00	1.299	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/6/2024	1.60	1.00	0.656	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/4/2024	1.40	1.00	0.656	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	3/10/2025	1.20	1.00	0.612	140	9/14/2016	N/A	3/9/2016
MW-33	1,1-dichloroethane	9/5/2025	1.30	1.00	1.174	140	9/14/2016	N/A	3/9/2016

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Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-33	1,2-dichloropropane	9/14/2016	2.40	1.00	0.403	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/7/2017	5.30	1.00	2.004	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/11/2017	4.60	1.00	2.025	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/7/2018	<1.0	1.00	2.025	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/5/2018	5.40	1.00	1.212	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	4/1/2019	8.80	1.00	0.814	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/9/2019	1.30	1.00	0.000	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/10/2020	<1.0	1.00	0.000	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/14/2020	1.80	1.00	0.000	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/4/2021	3.60	1.00	0.254	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/9/2021	5.10	1.00	0.377	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/24/2022	3.40	1.00	1.887	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/9/2022	5.40	1.00	3.174	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/1/2023	4.30	1.00	3.496	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/7/2023	1.00	1.00	1.904	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/6/2024	7.80	1.00	1.303	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/4/2024	5.10	1.00	1.256	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	3/10/2025	3.00	1.00	0.799	5	9/14/2016	N/A	3/9/2016
MW-33	1,2-dichloropropane	9/5/2025	5.00	1.00	2.907	5	9/14/2016	N/A	3/9/2016

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Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-33	cis-1,2-DCE	9/14/2016	2.00	1.00	1.904	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/7/2017	4.40	1.00	1.943	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/11/2017	3.90	1.00	1.960	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/7/2018	2.90	1.00	2.044	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/5/2018	5.10	1.00	2.987	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	4/1/2019	8.20	1.00	2.320	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/9/2019	3.50	1.00	2.134	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/10/2020	<1.0	1.00	0.548	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/14/2020	1.70	1.00	0.000	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/4/2021	3.60	1.00	0.564	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/9/2021	5.00	1.00	0.353	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/24/2022	2.90	1.00	1.679	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/9/2022	4.90	1.00	2.897	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/1/2023	4.30	1.00	3.137	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/7/2023	1.00	1.00	1.774	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/6/2024	6.60	1.00	1.441	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/4/2024	3.90	1.00	1.246	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	3/10/2025	3.30	1.00	0.992	70	9/14/2016	N/A	3/9/2016
MW-33	cis-1,2-DCE	9/5/2025	4.20	1.00	2.795	70	9/14/2016	N/A	3/9/2016

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Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-33	dichlorodifluoromethane	9/14/2016	1.60	1.00	1.466	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/7/2017	1.90	1.00	1.402	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/11/2017	NS	1.00	1.402	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/7/2018	<1.0	1.00	1.402	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/5/2018	<1.0	1.00	1.402	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	4/1/2019	<1.0	1.00	1.402	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/9/2019	<1.0	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/10/2020	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/14/2020	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/4/2021	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/9/2021	<1.0	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/24/2022	<1.0	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/9/2022	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/9/2022	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/9/2022	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/6/2024	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/4/2024	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	3/10/2025	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016
MW-33	dichlorodifluoromethane	9/5/2025	NT	1.00	0.500	1000	9/14/2016	N/A	3/9/2016

Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:	SSI	SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-34	Barium	9/14/2016	91.90	38.383	47.647	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/7/2017	153.00	36.919	100.748	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/11/2017	297.00	36.689	70.944	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/7/2018	97.10	35.677	47.310	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/5/2018	129.00	36.186	65.117	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	4/1/2019	108.00	36.577	47.491	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/9/2019	76.50	38.980	76.901	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/10/2020	77.20	39.065	67.643	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/14/2020	119.00	38.488	69.728	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/4/2021	84.20	37.834	65.520	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/9/2021	68.20	49.470	61.012	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/24/2022	80.00	48.920	62.156	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	9/9/2022	91.40	70.700	69.521	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/1/2023	100.00	51.670	68.641	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	4/1/2024	76.30	54.123	74.187	2000	9/14/2016	N/A	3/9/2016
MW-34	Barium	3/10/2025	61.10	108.000	74.187	2000	9/14/2016	N/A	3/9/2016

Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Clarke County Sanitary Landfill - SOUTH
Permit No. 20-SDP-04-94C

KEY:

SSI

SSL LCL>GWPS

Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-38	Arsenic	10/11/2021	5.30	5.7	---	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	3/24/2022	4.00	5.7	---	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	9/9/2022	5.60	5.7	---	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	3/1/2023	19.70	5.7	0.000	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	5/9/2023	23.70	5.7	4.664	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	6/3/2024	5.20	5.7	2.313	10	3/1/2023	N/A	5/9/2023
MW-38	Arsenic	3/10/2025	10.80	5.7	4.976	10	3/1/2023	N/A	5/9/2023

Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Table 8 - Summary of Ongoing and Newly Identified SSL (***NOT REQUIRED***)

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for MW-21

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017
0,0,0-triethylphosphorothioate	ug/L									
1,1,1,2-tetrachloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2 *	<1	<1		<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L									
1,2,3-trichloropropane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L									
1,2,4-trichlorobenzene	ug/L									
1,2-dibromo-3-chloropropane	ug/L	<12 *	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<13 *	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L									
1,3,5-trinitrobenzene	ug/L									
1,3-dichlorobenzene	ug/L									
1,3-dichloropropane	ug/L									
1,3-dinitrobenzene	ug/L									
1,4-dichlorobenzene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L									
1,4-phenylenediamine	ug/L									
1-naphthylamine	ug/L									
2,2-dichloropropane	ug/L									
2,3,4,6-tetrachlorophenol	ug/L									
2,4,5-t	ug/L									
2,4,5-tp (silvex)	ug/L									
2,4,5-trichlorophenol	ug/L									
2,4,6-trichlorophenol	ug/L									
2,4-d	ug/L									
2,4-dichlorophenol	ug/L									
2,4-dimethylphenol	ug/L									
2,4-dinitrophenol	ug/L									
2,4-dinitrotoluene	ug/L									
2,6-dichlorophenol	ug/L									
2,6-dinitrotoluene	ug/L									
2-acetylaminofluorene	ug/L									
2-butanone	ug/L	<10 *	<5	<5		<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L									
2-chlorophenol	ug/L									
2-hexanone	ug/L	<10 *	<5	<5		<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L									
2-methylphenol (o-cresol)	ug/L									
2-naphthylamine	ug/L									
2-nitroaniline	ug/L									
2-nitrophenol	ug/L									
3,3'-dichlorobenzidine	ug/L									
3,3'-dimethylbenzidine	ug/L									
3/4-methylphenol	ug/L									
3-methylcholanthrene	ug/L									
3-nitroaniline	ug/L									
4,4'-ddd	ug/L									
4,4'-dde	ug/L									
4,4'-ddt	ug/L									
4,6-dinitro-2-methylphenol	ug/L									
4-aminobiphenyl	ug/L									
4-bromophenyl phenyl ether	ug/L									
4-chloro-3-methylphenol	ug/L									
4-chloroaniline	ug/L									
4-chlorophenyl phenyl ether	ug/L									
4-methyl-2-pentanone	ug/L	<10 *	<5	<5		<5	<5	<5	<5	<5
4-nitroaniline	ug/L									
4-nitrophenol	ug/L									
5-nitro-o-toluidine	ug/L									
7,12-dimethylbenz(a)anthracene	ug/L									
Acenaphthene	ug/L									
Acenaphthylene	ug/L									
Acetone	ug/L	<10 *	<10	<10		<10	<10	<10	<10	<10
Acetonitrile	mg/L									
Acetophenone	ug/L									
Acrolein	ug/L									
Acrylonitrile	ug/L	<10 *	<5	<5		<5	<5	<5	<5	<5
Aldrin	ug/L									
Alkalinity, total (as cacO3)	mg/L		994	1100		1060				
Allyl chloride	ug/L									

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/7/2018	9/5/2018	4/1/2019	6/12/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	5/19/2021	9/9/2021
0,0,0-triethylphosphorothioate										<.4
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,1-dichloroethene	<1	<1	<1		<1	<1	<1	<1		<1
1,1-dichloropropene										<1
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1		<1
1,2,4,5-tetrachlorobenzene										<8
1,2,4-trichlorobenzene										<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00		<1.00	<1.00	<5.00	<5.00		<1.00
1,2-dibromoethane	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00		<1.00
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1	<1		<1
1,2-dinitrobenzene										<8
1,3,5-trinitrobenzene										<8
1,3-dichlorobenzene										<1
1,3-dichloropropane										<1
1,3-dinitrobenzene										<8
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
1,4-naphthoquinone										<8
1,4-phenylenediamine										<8
1-naphthylamine										<8
2,2-dichloropropane										<1
2,3,4,6-tetrachlorophenol										<8
2,4,5-t										<.5
2,4,5-tp (silvex)										<.5
2,4,5-trichlorophenol										<8
2,4,6-trichlorophenol										<8
2,4-d										<2
2,4-dichlorophenol										<8
2,4-dimethylphenol										<8
2,4-dinitrophenol										<8
2,4-dinitrotoluene										<8
2,6-dichlorophenol										<8
2,6-dinitrotoluene										<8
2-acetylaminofluorene										<8
2-butanone	<5	<5	<5		<5	<5	<5	<5		<5
2-chloronaphthalene										<8
2-chlorophenol										<8
2-hexanone	<5	<5	<5		<5	<5	<5	<5		<5
2-methylnaphthalene										<8
2-methylphenol (o-cresol)										<8
2-naphthylamine										<8
2-nitroaniline										<8
2-nitrophenol										<8
3,3'-dichlorobenzidine										<8
3,3'-dimethylbenzidine										<8
3/4-methylphenol										<8
3-methylcholanthrene										<8
3-nitroaniline										<8
4,4'-ddd										<.05
4,4'-dde										<.05
4,4'-ddt										<.05
4,6-dinitro-2-methylphenol										<8
4-aminobiphenyl										<8
4-bromophenyl phenyl ether										<8
4-chloro-3-methylphenol										<8
4-chloroaniline										<8
4-chlorophenyl phenyl ether										<8
4-methyl-2-pentanone	<5	<5	<5		<5	<5	<5	<5		<5
4-nitroaniline										<8
4-nitrophenol										<8
5-nitro-o-toluidine										<8
7,12-dimethylbenz(a)anthracene										<8
Acenaphthene										<8
Acenaphthylene										<8
Acetone	<10	<10	<10		<10	<10	<10	<10		<10
Acetonitrile										<.01
Acetophenone										<8
Acrolein										<10
Acrylonitrile	<5	<5	<5		<5	<5	<5	<5		<5
Aldrin										<.05
Alkalinity, total (as cacO3)										
Allyl chloride										<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
0,0,0-triethylphosphorothioate		<.4			
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1
1,1-dichloropropene		<1			
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8			
1,2,4-trichlorobenzene		<1			
1,2-dibromo-3-chloropropane	<5.00	<1.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8			
1,3,5-trinitrobenzene		<8			
1,3-dichlorobenzene		<1			
1,3-dichloropropane		<1			
1,3-dinitrobenzene		<8			
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone		<8			
1,4-phenylenediamine		<8			
1-naphthylamine		<8			
2,2-dichloropropane		<1			
2,3,4,6-tetrachlorophenol		<8			
2,4,5-t		<.5			
2,4,5-tp (silvex)		<.5			
2,4,5-trichlorophenol		<8			
2,4,6-trichlorophenol		<8			
2,4-d		<2			
2,4-dichlorophenol		<8			
2,4-dimethylphenol		<8			
2,4-dinitrophenol		<8			
2,4-dinitrotoluene		<8			
2,6-dichlorophenol		<8			
2,6-dinitrotoluene		<8			
2-acetylaminofluorene		<8			
2-butanone	<10	<5	<10	<10	<10
2-chloronaphthalene		<8			
2-chlorophenol		<8			
2-hexanone	<5	<5	<5	<5	<5
2-methylnaphthalene		<8			
2-methylphenol (o-cresol)		<8			
2-naphthylamine		<8			
2-nitroaniline		<8			
2-nitrophenol		<8			
3,3'-dichlorobenzidine		<8			
3,3'-dimethylbenzidine		<8			
3/4-methylphenol		<8			
3-methylcholanthrene		<8			
3-nitroaniline		<8			
4,4'-ddd		<.05			
4,4'-dde		<.05			
4,4'-ddt		<.05			
4,6-dinitro-2-methylphenol		<8			
4-aminobiphenyl		<8			
4-bromophenyl phenyl ether		<8			
4-chloro-3-methylphenol		<8			
4-chloroaniline		<8			
4-chlorophenyl phenyl ether		<8			
4-methyl-2-pentanone	<5	<5	<5	<5	<5
4-nitroaniline		<8			
4-nitrophenol		<8			
5-nitro-o-toluidine		<8			
7,12-dimethylbenz(a)anthracene		<8			
Acenaphthene		<8			
Acenaphthylene		<8			
Acetone	<10	<10	<10	<10	<10
Acetonitrile		<.01			
Acetophenone		<8			
Acrolein		<10			
Acrylonitrile	<5	<5	<5		<5
Aldrin		<.05			
Alkalinity, total (as cacO3)					
Allyl chloride		<1			

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017
Alpha-bhc	ug/L									
Anthracene	ug/L									
Antimony, total	ug/L	<6 *	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<1.0 *	<4.0	16.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene	ug/L									
Barium, total	ug/L	29.1 *	22.0	3450.0	29.1	26.5	26.7	19.3	21.2	20.5
Benzene	ug/L	<.5 *	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L									
Benzo(a)pyrene	ug/L									
Benzo(b)fluoranthene	ug/L									
Benzo(ghi)perylene	ug/L									
Benzo(k)fluoranthene	ug/L									
Benzyl alcohol	ug/L									
Beryllium, total	ug/L	<1 *	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L									
Bis(2-chloroethoxy)methane	ug/L									
Bis(2-chloroethyl)ether	ug/L									
Bis(2-chloroisopropyl)ether	ug/L									
Bis(2-ethylhexyl)phthalate	ug/L									
Bromochloromethane	ug/L	<5 *	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	ug/L	<5 *	<1	<1		<1	<1	<1	<1	<1
Bromomethane	ug/L	<4 *	<1	<1		<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L									
Cadmium, total	ug/L	1.49 *	<.80	6.90	<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total	mg/L		331	350		330				
Carbon disulfide	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2 *	<1	<1		<1	<1	<1	<1	<1
Chlordane	ug/L									
Chloride	mg/L		18.1	21.9		16.3				
Chlorobenzene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Chlorobenzilate	ug/L									
Chlorodibromomethane	ug/L	<5								
Chloroethane	ug/L	<4 *	<1	<1		<1	<1	<1	<1	<1
Chloroform	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Chloromethane	ug/L	<3 *	<1	<1		<1	<1	<1	<1	<1
Chloroprene	ug/L									
Chromium, total	ug/L	<15.0 *	<8.0	28.5	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene	ug/L									
Cis-1,2-dichloroethene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.79 *	<.80	17.50	<.80	<.80	<.80	<.80	<.80	<.80
Copper, total	ug/L	<20.0 *	<4.0	66.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L									
Delta-bhc	ug/L									
Diallate	ug/L									
Dibenzo(a,h)anthracene	ug/L									
Dibenzofuran	ug/L									
Dibromochloromethane	ug/L	<5	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1		<1	<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1								
Dichlorodifluoromethane	ug/L									
Dieldrin	ug/L									
Diethyl phthalate	ug/L									
Dimethoate	ug/L									
Dimethylphthalate	ug/L									
Di-n-butyl phthalate	ug/L									
Di-n-octyl phthalate	ug/L									
Dinoseb	ug/L									
Diphenylamine	ug/L									
Disulfoton	ug/L									
Endosulfan i	ug/L									
Endosulfan ii	ug/L									
Endosulfan sulfate	ug/L									
Endrin	ug/L									
Endrin aldehyde	ug/L									
Ethyl methacrylate	ug/L									
Ethyl methane sulfonate	ug/L									
Ethylbenzene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Famphur	ug/L									
Fluoranthene	ug/L									
Fluorene	ug/L									
Gamma-bhc [lindane]	ug/L									
Heptachlor	ug/L									
Heptachlor epoxide	ug/L									
Hexachlorobenzene	ug/L									
Hexachlorobutadiene	ug/L									

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/7/2018	9/5/2018	4/1/2019	6/12/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	5/19/2021	9/9/2021
Alpha-bhc										<.05
Anthracene										<8
Antimony, total	<2	<2	<2		<2	<2	<2	<2		<2
Arsenic, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0		<4.0
Azobenzene										<8
Barium, total	20.7	20.1	38.1	17.6	28.5	17.7	15.5	15.1		16.6
Benzene	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0		<1.0
Benzo(a)anthracene										<8
Benzo(a)pyrene										<8
Benzo(b)fluoranthene										<8
Benzo(ghi)perylene										<8
Benzo(k)fluoranthene										<8
Benzyl alcohol										<8
Beryllium, total	<4	<4	<4		<4	<4	<4	<4		<4
Beta-bhc										<.05
Bis(2-chloroethoxy)methane										<8
Bis(2-chloroethyl)ether										<8
Bis(2-chloroisopropyl)ether										<8
Bis(2-ethylhexyl)phthalate										<6
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Bromoform	<1	<1	<1		<1	<1	<1	<1		<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1		<1
Butyl benzyl phthalate										<8
Cadmium, total	<.80	<.80	<.80		.90	<.80	<.80	<.80		.80
Calcium, total										
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1		<1
Chlordane										<.1
Chloride										
Chlorobenzene	<1	<1	<1		<1	<1	<1	<1		<1
Chlorobenzilate										<8
Chlorodibromomethane										
Chloroethane	<1	<1	<1		<1	<1	<1	<1		<1
Chloroform	<1	<1	<1		<1	<1	<1	<1		<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Chloroprene										<1
Chromium, total	<8.0	<8.0	<8.0		<8.0	<8.0	<8.0	<8.0		<8.0
Chrysene										<8
Cis-1,2-dichloroethene	<1	<1	<1		<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1		<1
Cobalt, total	1.00	<.80	2.00		<.80	<.80	<.40	<.40		<.40
Copper, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	4.7	4.9	<4.0
Cyanide, total										<.005
Delta-bhc										<.05
Diallate										<8
Dibenzo(a,h)anthracene										<8
Dibenzofuran										<8
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1		<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1		<1
Dichlorobromomethane										<1
Dichlorodifluoromethane										<1
Dieldrin										<.05
Diethyl phthalate										<8
Dimethoate										<.4
Dimethylphthalate										<8
Di-n-butyl phthalate										<8
Di-n-octyl phthalate										<8
Dinoseb										<.5
Diphenylamine										<8
Disulfoton										<.4
Endosulfan i										<.05
Endosulfan ii										<.05
Endosulfan sulfate										<.05
Endrin										<.05
Endrin aldehyde										<.05
Ethyl methacrylate										<10
Ethyl methane sulfonate										<8
Ethylbenzene	<1	<1	<1		<1	<1	<1	<1		<1
Famphur										<.4
Fluoranthene										<8
Fluorene										<8
Gamma-bhc [lindane]										<.05
Heptachlor										<.05
Heptachlor epoxide										<.05
Hexachlorobenzene										<.05
Hexachlorobutadiene										<8

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Alpha-bhc		<.05			
Anthracene		<8			
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene		<8			
Barium, total	13.1	13.1	17.4	18.0	16.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene		<8			
Benzo(a)pyrene		<8			
Benzo(b)fluoranthene		<8			
Benzo(ghi)perylene		<8			
Benzo(k)fluoranthene		<8			
Benzyl alcohol		<8			
Beryllium, total	<4	<4	<4	<4	<4
Beta-bhc		<.05			
Bis(2-chloroethoxy)methane		<8			
Bis(2-chloroethyl)ether		<8			
Bis(2-chloroisopropyl)ether		<8			
Bis(2-ethylhexyl)phthalate		9	<6		
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8			
Cadmium, total	<.80	<.80	<.80	<.80	<.80
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane		<.1			
Chloride					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate		<8			
Chlorodibromomethane					
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene		<1			
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene		<8			
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.40	<.40	<.40	<.40	<.40
Copper, total	<4.0	<4.0	<4.0	4.6	<4.0
Cyanide, total		<.005			
Delta-bhc		<.05			
Diallate		<8			
Dibenzo(a,h)anthracene		<8			
Dibenzofuran		<8			
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorobromomethane					
Dichlorodifluoromethane		<1			
Dieldrin		<.05			
Diethyl phthalate		<8			
Dimethoate		<.4			
Dimethylphthalate		<8			
Di-n-butyl phthalate		<8			
Di-n-octyl phthalate		<8			
Dinoseb		<.5			
Diphenylamine		<8			
Disulfoton		<.4			
Endosulfan i		<.05			
Endosulfan ii		<.05			
Endosulfan sulfate		<.05			
Endrin		<.05			
Endrin aldehyde		<.05			
Ethyl methacrylate		<10			
Ethyl methane sulfonate		<8			
Ethylbenzene	<1	<1	<1	<1	<1
Famphur		<.4			
Fluoranthene		<8			
Fluorene		<8			
Gamma-bhc [lindane]		<.05			
Heptachlor		<.05			
Heptachlor epoxide		<.05			
Hexachlorobenzene		<.05			
Hexachlorobutadiene		<8			

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017
Hexachlorocyclopentadiene	ug/L									
Hexachloroethane	ug/L									
Hexachloropropene	ug/L									
Indeno(1,2,3-cd)pyrene	ug/L									
Iodomethane	ug/L	<10 *	<1	<1		<1	<1	<1	<1	<1
Isobutanol	mg/L									
Isodrin	ug/L									
Isophorone	ug/L									
Isosafrole	ug/L									
Kepone	ug/L									
Lead, total	ug/L	<4 *	<4	22	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L		137	144		134				
Mercury, total	ug/L									
Methacrylonitrile	ug/L									
Methapyrilene	ug/L									
Methoxychlor	ug/L									
Methyl methacrylate	ug/L									
Methyl methanesulfonate	ug/L									
Methyl parathion	ug/L									
Methylene bromide	ug/L	<1								
Methylene chloride	ug/L	<5 *	<5	<5		<5	<5	<5	<5	<5
Naphthalene	ug/L									
Nickel, total	ug/L	<50.0 *	<4.0	71.6	5.8	17.1	22.8	19.4	19.8	20.9
Nitrobenzene	ug/L									
Nitrogen, ammonia	mg/L		<1	<1		<1				
N-nitrosodiethylamine	ug/L									
N-nitrosodimethylamine	ug/L									
N-nitrosodi-n-butylamine	ug/L									
N-nitroso-di-n-propylamine	ug/L									
N-nitrosodiphenylamine	ug/L									
N-nitrosomethylethylamine	ug/L									
N-nitrosopiperidine	ug/L									
N-nitrosopyrrolidine	ug/L									
O-toluidine	ug/L									
P-(dimethylamino)azobenzene	ug/L									
Parathion	ug/L									
Pcb 1016	ug/L									
Pcb 1221	ug/L									
Pcb 1232	ug/L									
Pcb 1242	ug/L									
Pcb 1248	ug/L									
Pcb 1254	ug/L									
Pcb 1260	ug/L									
Pentachlorobenzene	ug/L									
Pentachloronitrobenzene	ug/L									
Pentachlorophenol	ug/L									
Phenacetin	ug/L									
Phenanthrene	ug/L									
Phenols, total	mg/L									
Phorate	ug/L									
Potassium, total	mg/L		3.1	2.4		2.4				
Pronamide	ug/L									
Propionitrile	ug/L									
Pyrene	ug/L									
Safrole	ug/L									
Selenium, total	ug/L	<5 *	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<20 *	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L		138	147		144				
Solids, total dissolved	mg/L		2000	1830		1960				
Styrene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Sulfate	mg/L		644	690		709				
Sulfide, total	mg/L									
Tetrachloroethene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Thallium, total	ug/L	<2 *	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L									
Tin, total	ug/L									
Toluene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Total suspended solids	mg/L	707 *	1080	732						
Toxaphene	ug/L									
Trans-1,2-dichloroethene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *	<1	<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10 *	<5	<5		<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4 *	<1	<1		<1	<1	<1	<1	<1
Vanadium, total	ug/L	<40.0 *	<20.0	57.6	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<2 *	<5	<5		<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1 *	<1	<1		<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/7/2018	9/5/2018	4/1/2019	6/12/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	5/19/2021	9/9/2021
Hexachlorocyclopentadiene										<8
Hexachloroethane										<8
Hexachloropropene										<8
Indeno(1,2,3-cd)pyrene										<8
Iodomethane	<1	<1	<1		<1	<1	<1	<1		<2
Isobutanol										<1
Isodrin										<8
Isophorone										<8
Isosafrole										<8
Kepone										<8
Lead, total	<4	<4	<4		<4	<4	<4	<4		<4
Magnesium, total										
Mercury, total										<.5
Methacrylonitrile										<1
Methapyriline										<8
Methoxychlor										<.05
Methyl methacrylate										<1
Methyl methanesulfonate										<8
Methyl parathion										<.4
Methylene bromide										
Methylene chloride	<5	<5	<5		<5	<5	<5	<5		<5
Naphthalene										<8
Nickel, total	30.9	11.4	36.4		47.8	27.3	12.6	32.0		30.4
Nitrobenzene										<8
Nitrogen, ammonia										
N-nitrosodiethylamine										<8
N-nitrosodimethylamine										<8
N-nitrosodi-n-butylamine										<8
N-nitroso-di-n-propylamine										<8
N-nitrosodiphenylamine										<8
N-nitrosomethylethylamine										<8
N-nitrosopiperidine										<8
N-nitrosopyrrolidine										<8
O-toluidine										<8
P-(dimethylamino)azobenzene										<8
Parathion										<.4
Pcb 1016										<.1
Pcb 1221										<.2
Pcb 1232										<.2
Pcb 1242										<.2
Pcb 1248										<.2
Pcb 1254										<.1
Pcb 1260										<.1
Pentachlorobenzene										<8
Pentachloronitrobenzene										<8
Pentachlorophenol										<8
Phenacetin										<8
Phenanthrene										<8
Phenols, total										<.008
Phorate										<.4
Potassium, total										
Pronamide										<8
Propionitrile										<10
Pyrene										<8
Safrole										<8
Selenium, total	<4	<4	<4		<4	<4	<4	<4		<4
Silver, total	<4	<4	<4		<4	<4	<4	<4		<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1		<1	<1	<1	<1		<1
Sulfate										
Sulfide, total										<.10
Tetrachloroethene	<1	<1	<1		<1	<1	<1	<1		<1
Thallium, total	<4	<4	<2		<2	<2	<2	<2		<2
Thionazin										<.4
Tin, total										<20
Toluene	<1	<1	<1		<1	<1	<1	<1		<1
Total suspended solids										
Toxaphene										<.2
Trans-1,2-dichloroethene	<1	<1	<1		<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5		<5
Trichloroethene	<1	<1	<1		<1	<1	<1	<1		<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1	<1		<1
Vanadium, total	<20.0	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0		<20.0
Vinyl acetate	<5	<5	<5		<5	<5	<5	<5		<5
Vinyl chloride	<1	<1	<1		<1	<1	<1	<1		<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Hexachlorocyclopentadiene		<8			
Hexachloroethane		<8			
Hexachloropropene		<8			
Indeno(1,2,3-cd)pyrene		<8			
Iodomethane	<1	<2	<1	<1	<1
Isobutanol		<1			
Isodrin		<8			
Isophorone		<8			
Isosafrole		<8			
Kepone		<8			
Lead, total	<4	<4	<4	<4	<4
Magnesium, total					
Mercury, total		<.5			
Methacrylonitrile		<1			
Methapyrilene		<8			
Methoxychlor		<.05			
Methyl methacrylate		<1			
Methyl methanesulfonate		<8			
Methyl parathion		<.4			
Methylene bromide					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene		<8			
Nickel, total	<4.0	<4.0	5.0	18.3	4.9
Nitrobenzene		<8			
Nitrogen, ammonia					
N-nitrosodiethylamine		<8			
N-nitrosodimethylamine		<8			
N-nitrosodi-n-butylamine		<8			
N-nitroso-di-n-propylamine		<8			
N-nitrosodiphenylamine		<8			
N-nitrosomethylethylamine		<8			
N-nitrosopiperidine		<8			
N-nitrosopyrrolidine		<8			
O-toluidine		<8			
P-(dimethylamino)azobenzene		<8			
Parathion		<.4			
Pcb 1016		<.1			
Pcb 1221		<.2			
Pcb 1232		<.2			
Pcb 1242		<.2			
Pcb 1248		<.2			
Pcb 1254		<.1			
Pcb 1260		<.1			
Pentachlorobenzene		<8			
Pentachloronitrobenzene		<8			
Pentachlorophenol		<8			
Phenacetin		<8			
Phenanthrene		<8			
Phenols, total		<.008			
Phorate		<.4			
Potassium, total					
Pronamide		<8			
Propionitrile		<10			
Pyrene		<8			
Safrole		<8			
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Solids, total dissolved					
Styrene	<1	<1	<1	<1	<1
Sulfate					
Sulfide, total		<.15			
Tetrachloroethene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin		<.4			
Tin, total		<20			
Toluene	<1	<1	<1	<1	<1
Total suspended solids					
Toxaphene		<.2			
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017
Xylenes, total	ug/L	<3 *	<2	<2		<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0 *	<8.0	115.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-21

Constituents	3/7/2018	9/5/2018	4/1/2019	6/12/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	5/19/2021	9/9/2021
Xylenes, total	<2	<2	<2		<2	<2	<2	<2		<2
Zinc, total	<8.0	<20.0	<20.0		12.8	13.3	<20.0	<20.0		<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9**Analytical Data Summary for MW-21**

Constituents	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-22

Constituents	Units	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)	mg/L	298								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	26.2	29.5	24.2	24.9	24.3	28.1	25.9	28.7	25.1
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	65.6								
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L	225								
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	1.2	1.4	1.1	1.1	1.0	1.1	1.0	1.4	1.2
Copper, total	ug/L	5.8	6.5	<4.0	<4.0	<4.0	<4.0	5.8	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	44.4								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Nitrogen, ammonia	mg/L	1.9								
Potassium, total	mg/L	10.5								
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	1030								
Solids, total dissolved	mg/L	3240								
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	1950								
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	8.2	<8.0	<8.0	<8.0	<8.0	39.5	<20.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-22

Constituents	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	27.3	24.4	24.8	23.9	23.4	22.7	26.7	22.5	20.6
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.0	1.6	1.2	.9	.8	1.3	1.4	.7	1.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Nitrogen, ammonia									
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	Units	3/13/2014	9/29/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
1,1,1,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<12 *	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<13 *	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0 *	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)	mg/L		648		627		592			
Antimony, total	ug/L	<6 *	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<1 *	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	17.8 *	15.5	22.1	21.5	17.0	18.1	17.5	15.9	16.7
Benzene	ug/L	<5 *	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<1	<4	<4	<4	<4	<4	<4	<4	<1
Bromochloromethane	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	2.26 *	<.80	<.80	1.10	<.80	<.80	<.80	<.80	<.80
Calcium, total	mg/L		573		590		566			
Carbon disulfide	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2 *	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L		33					<10 *	<10 *	
Chloride	mg/L		25.2 *		31.8		30.4	20.0 *	20.0 *	
Chlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	ug/L	<5	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<3 *	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<17 *	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	23.5 *	13.2	24.5	16.2	13.1	16.6	10.3	11.9	10.0
Copper, total	ug/L	37.6 *	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<10 *	<1	<1	<1	<1	<1	<1	<1	<1
Iron, dissolved	ug/L		518					135 *	315 *	
Lead, total	ug/L	4.05 *	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total	mg/L		215		227		210			
Methylene bromide	ug/L	<1	<5	<5	<5	<5	<5	<5	<5	<5
Methylene chloride	ug/L	<5 *	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	53.0 *	42.5	51.3	51.9	41.9	39.4	37.3	43.3	38.1
Nitrogen, ammonia	mg/L		<1 *		<1		<1	<1 *	<1 *	
Phenols, total	mg/L								<1 *	
Potassium, total	mg/L		9.5		9.0		9.2			
Selenium, total	ug/L	<5 *	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<20 *	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L		139		147		137			
Solids, total dissolved	mg/L		3500		3350		3440			
Styrene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L		2110		2150		2210			
Sulfide, total	mg/L	<1.00 *	<.10	<.10	<.10		.21	<.10	<.10	<.10
Tetrachloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2 *	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens	mg/L								.015 *	
Total suspended solids	mg/L	1333 *	129		7					
Trans-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<43 *	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<2 *	<5	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	14.1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)										
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	17.0	19.0	15.7	17.3	19.0	16.5	16.0	18.3	18.0	16.3
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.80	1.10	<.80	<.80	<.80	<.80	1.35 *	<.80	<.80	<.80
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand										
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane										
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	10.8	10.2	12.1	13.7	12.4	9.0	9.5	10.9	13.6	8.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane										
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, dissolved										
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total										
Methylene bromide										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	37.7	41.4	30.2	34.4	30.6	32.3	30.6	28.8	26.6	28.3
Nitrogen, ammonia										
Phenols, total										
Potassium, total										
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic halogens										
Total suspended solids										
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	9/9/2022	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5		<5
Alkalinity, total (as CaCO ₃)				
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4
Barium, total	16.0	17.8	16.3	20.5
Benzene	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.80	<.80	<.80	1.40
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chemical oxygen demand				
Chloride				
Chlorobenzene	<1	<1	<1	<1
Chlorodibromomethane				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	10.0	11.0	7.0	15.1
Copper, total	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorobromomethane				
Ethylbenzene	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1
Iron, dissolved				
Lead, total	<4.00	<4.00	<4.00	<4.00
Magnesium, total				
Methylene bromide				
Methylene chloride	<5	<5	<5	<5
Nickel, total	28.1	26.6	27.7	30.4
Nitrogen, ammonia				
Phenols, total				
Potassium, total				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Styrene	<1	<1	<1	<1
Sulfate				
Sulfide, total				
Tetrachloroethene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total organic halogens				
Total suspended solids				
Trans-1,2-dichloroethene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	Units	3/13/2014	9/29/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
Vinyl chloride	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<3 *	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	54.6 *	8.1	<8.0	16.3	<8.0	11.6	<8.0	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	24.9	13.8	<20.0	<20.0	9.6	13.1	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-23

Constituents	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	22.6

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-27

Constituents	Units	9/29/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	15.5
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)	mg/L	393		236		333				
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	38.4	26.6	24.4	25.4	18.7	18.2	24.9	17.2	27.8
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	555		484		509				
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L	14.7		13.8		14.8				
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	3.7	.9	3.5	4.4	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	225.0		95.6		170.0				
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	6.9	<4.0	<4.0	8.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrogen, ammonia	mg/L	1.49		<1.00		<1.00				
Potassium, total	mg/L	10.7		8.5		10.0				
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.5	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	174		21		118				
Solids, total dissolved	mg/L	3450		2460		3050				
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	2240		1670		2160				
Sulfide, total	mg/L	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	766		6						
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-27

Constituents	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)										
Antimony, total	<2	<2	<2	<2	<2	<2	<2	4	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	6.3	<4.0	<4.0
Barium, total	22.3	30.1	30.5	39.2	30.4	23.9	17.1	70.7	28.2	19.6
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	3.8	<.8	<.8
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	2.0	3.2	<.4	<.4	.4	.5	.9
Copper, total	<4.0	<4.0	<4.0	4.0	<4.0	<4.0	<4.0	8.9	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	10.6	<4.0	<4.0
Nitrogen, ammonia										
Potassium, total										
Selenium, total	4.8	<4.0	4.7	<4.0	<4.0	<4.0	<4.0	9.7	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.5	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<20.0	10.5	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-27

Constituents	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone	<10	<10	<10
2-hexanone	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5
Acetone	<10.0	<10.0	<10.0
Acrylonitrile	<5		<5
Alkalinity, total (as CaCO ₃)			
Antimony, total	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0
Barium, total	54.6	47.7	108.0
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	1.6
Calcium, total			
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chloride			
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	.9	3.6	3.0
Copper, total	4.8	<4.0	4.3
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Iodomethane	<1	<1	<1
Lead, total	<4	<4	<4
Magnesium, total			
Methylene chloride	<5	<5	<5
Nickel, total	5.8	8.1	13.1
Nitrogen, ammonia			
Potassium, total			
Selenium, total	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4
Sodium, total			
Solids, total dissolved			
Styrene	<1	<1	<1
Sulfate			
Sulfide, total			
Tetrachloroethene	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0
Toluene	<1	<1	<1
Total suspended solids			
Trans-1,2-dichloroethene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-28

Constituents	Units	3/13/2014	9/29/2014	11/24/2014	3/19/2015	8/26/2015	3/9/2016	5/10/2016	9/14/2016	3/7/2017
1,1,1,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,1,1-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,1,2-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethene	ug/L	<2 *	<1	<1	<1	<1	<1		<1	<1
1,2,3-trichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,2-dibromo-3-chloropropane	ug/L	<12 *	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.00
1,2-dibromoethane	ug/L	<13 *	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
1,4-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
2-butanone	ug/L	<10 *	<5	<5	<5	<5	<5		<5	<5
2-hexanone	ug/L	<10 *	<5	<5	<5	<5	<5		<5	<5
4-methyl-2-pentanone	ug/L	<10 *	<5	<5	<5	<5	<5		<5	<5
Acetone	ug/L	<10.0 *	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
Acrylonitrile	ug/L	<10 *	<5	<5	<5	<5	<5		<5	<5
Alkalinity, total (as CaCO3)	mg/L		414		592	455				
Antimony, total	ug/L	<6	<2	<2	<2	<2	<2		<2	<2
Arsenic, total	ug/L	<1.0	5.7	4.0	<4.0	<4.0	<4.0		<4.0	<4.0
Barium, total	ug/L	15.2	22.9	29.1	29.6	51.7	26.0		20.7	37.1
Benzene	ug/L	<5 *	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Beryllium, total	ug/L	<1 *	<4	<4	<4	<4	<4		<4	<4
Bromochloromethane	ug/L	<5 *	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1		<1	<1
Bromoform	ug/L	<5 *	<1	<1	<1	<1	<1		<1	<1
Bromomethane	ug/L	<4 *	<1	<1	<1	<1	<1		<1	<1
Cadmium, total	ug/L	.669	<.800	<.800	<.800	<.800	<.800		<.800	.900
Calcium, total	mg/L		486		464	779				
Carbon disulfide	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	ug/L	<2 *	<1	<1	<1	<1	<1		<1	<1
Chloride	mg/L		8.9		15.1	7.8				
Chlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Chlorodibromomethane	ug/L	<5								
Chloroethane	ug/L	<4 *	<1	<1	<1	<1	<1		<1	<1
Chloroform	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Chloromethane	ug/L	<3 *	<1	<1	<1	<1	<1		<1	<1
Chromium, total	ug/L	<10	<8	<8	<8	<8	<8		<8	<8
Cis-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	ug/L	16.4	12.5	17.6	6.3	5.9	3.9		1.2	6.7
Copper, total	ug/L	<20.0	<4.0	5.4	<4.0	6.2	<4.0		<4.0	4.0
Dibromochloromethane	ug/L	<5	<1	<1	<1	<1	<1		<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1		<1	<1
Dichlorobromomethane	ug/L	<1	<1	<1	<1	<1	<1		<1	<1
Ethylbenzene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Iodomethane	ug/L	<10 *	<1	<1	<1	<1	<1		<1	<1
Lead, total	ug/L	<4 *	<4	<4	<4	<4	<4		<4	<4
Magnesium, total	mg/L		159		164	148				
Methylene bromide	ug/L	<1								
Methylene chloride	ug/L	<5 *	<5	<5	<5	<5	<5		<5	<5
Nickel, total	ug/L	53.5	34.1	37.8	28.9	19.5	14.1		9.4	31.4
Nitrogen, ammonia	mg/L		<1		<1	<1				
Potassium, total	mg/L		9.9		12.0	14.3				
Selenium, total	ug/L	<5.0 *	<4.0	<4.0	<4.0	<4.0	<4.0		4.2	4.4
Silver, total	ug/L	<20 *	<4	<4	<4	<4	<4		<4	<4
Sodium, total	mg/L		71.8		96.2	41.5				
Solids, total dissolved	mg/L		2590		2770	2530				
Styrene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Sulfate	mg/L		1620		1720	1610				
Sulfide, total	mg/L	<1.0 *	<1.5	<1	.4	1.1	<1		<1	<1
Tetrachloroethene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Thallium, total	ug/L	<2 *	<4	<4	<4	<4	<4		<4	<4
Toluene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Total suspended solids	mg/L	64 *	72		285					
Trans-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10 *	<5	<5	<5	<5	33		<5	<5
Trichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	ug/L	<4 *	<1	<1	<1	<1	<1		<1	<1
Vanadium, total	ug/L	<50 *	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	ug/L	<2 *	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	ug/L	<1 *	<1	<1	<1	<1	<1		<1	<1
Xylenes, total	ug/L	<3 *	<2	<2	<2	<2	<2		<2	<2
Zinc, total	ug/L	<20.0	9.3	16.1	12.7	19.2	13.5		10.8	17.3

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-28

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	13.8	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)										
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	24.9	35.2	79.1	83.0	47.5	68.0	58.5	20.3	64.2	85.6
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.800	<.800	2.100	1.300	1.600	<.800	<.800	<.800	<.800	<.800
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane										
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.1	4.5	15.4	7.3	5.9	5.8	2.5	1.2	3.7	5.5
Copper, total	<4.0	<4.0	7.7	<4.0	<4.0	<4.0	<4.0	4.7	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane										
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total										
Methylene bromide										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	9.4	21.7	62.7	41.8	33.5	22.0	13.5	12.7	9.5	16.9
Nitrogen, ammonia										
Potassium, total										
Selenium, total	<4.0	5.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	8.0	10.9	38.2	20.0	22.0	14.8	<20.0	47.1	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-28

Constituents	9/9/2022	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5
Alkalinity, total (as CaCO3)				
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0
Barium, total	69.5	59.5	75.7	109.0
Benzene	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	1.000	<.800	<.800	1.500
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chloride				
Chlorobenzene	<1	<1	<1	<1
Chlorodibromomethane				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	10.2	2.8	1.6	12.7
Copper, total	5.1	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorobromomethane				
Ethylbenzene	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
Magnesium, total				
Methylene bromide				
Methylene chloride	<5	<5	<5	<5
Nickel, total	21.6	8.5	13.2	48.2
Nitrogen, ammonia				
Potassium, total				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Styrene	<1	<1	<1	<1
Sulfate				
Sulfide, total				
Tetrachloroethene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
Total suspended solids				
Trans-1,2-dichloroethene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	21.6	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	Units	3/13/2014	3/25/2014	9/29/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2		<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<.12		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<.13		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<10		<5	<5	<5	<5	<5	<5
2-hexanone	ug/L	<10		<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<10		<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10		<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<10		<5	<5	<5	<5	<5	<5
Alkalinity, bicarbonate (as caco3)	mg/L		558						
Alkalinity, carbonate (as caco3)	mg/L		<5						
Alkalinity, total (as caco3)	mg/L			435		505		435	
Antimony, total	ug/L	<6		<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<2		<4	<4	<4	<4	<4	<4
Barium, total	ug/L	16.0		20.9	19.8	22.3	17.5	19.2	16.8
Benzene	ug/L	<.5		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<1		<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<5		<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L			<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<5		<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<4		<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.5		<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L			263		181		205	
Carbon disulfide	ug/L	<1		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2		<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L			25					<10 *
Chloride	mg/L			40.4 *		64.0		58.6	<10.0 *
Chlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<4		<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1		<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<3		<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<20		<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5		<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	2.33		2.90	2.20	5.60	1.80	<.80	<.80
Copper, total	ug/L	<20.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<5		<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1							
Ethylbenzene	ug/L	<1		<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<10		<1	<1	<1	<1	<1	<1
Iron, dissolved	ug/L			<100					<100 *
Iron, total	ug/L		5890						
Lead, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L			150		157		143	
Manganese, total	ug/L		1580						
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<50.0		8.2	7.6	10.1	4.8	4.9	8.1
Nitrate, nitrogen	mg/L		<.1						
Nitrogen, ammonia	mg/L			3.07 *		2.57		3.00	<1.00 *
Phenols, total	mg/L			<.1					
Potassium, total	mg/L			13.5		13.6		13.4	
Selenium, total	ug/L	<5		<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<20		<4	<4	<4	<4	<4	<4
Sodium, total	mg/L			539		626		646	
Solids, total dissolved	mg/L			3280		3330		3350	
Styrene	ug/L	<1		<1	<1	<1	<1	<1	<1
Sulfate	mg/L		1590	1890		2060		2010	
Sulfide, total	mg/L			<.10	<.10	.46		.16	.12
Tetrachloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2		<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1.0		<1.0	1.1	<1.0	<1.0	<1.0	<1.0
Total organic carbon	mg/L		3.59						
Total organic halogens	mg/L			.01					
Total suspended solids	mg/L	16.3	52.8	29.0		13.0			
Trans-1,2-dichloroethene	ug/L	<1		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5		<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10		<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, bicarbonate (as cacO3)									
Alkalinity, carbonate (as cacO3)									
Alkalinity, total (as cacO3)									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	26.9	21.0	18.1	14.2	27.3	18.7	23.6	24.9	29.5
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	<10 *								
Chloride	<10.0 *								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.00	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.40
Copper, total	13.6	<4.0	<4.0	<4.0	4.4	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iron, dissolved	<100 *								
Iron, total									
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Manganese, total									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	6.9	<4.0	<4.0	<4.0	4.3	<4.0	<4.0	<4.0	<4.0
Nitrate, nitrogen									
Nitrogen, ammonia	<1.00 *								
Phenols, total	<.1 *								
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide, total	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10	<.10
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<4	<4	<4	<2	<2	<2
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total organic carbon									
Total organic halogens	<.01 *								
Total suspended solids									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<10	<10	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5		<5
Alkalinity, bicarbonate (as caco3)							
Alkalinity, carbonate (as caco3)							
Alkalinity, total (as caco3)							
Antimony, total	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4
Barium, total	21.1	31.9	22.6	20.3	22.7	60.4	28.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand							
Chloride							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.40	<.40	.50	.50	<.40	.40	<.40
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	5.4	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane							
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1
Iron, dissolved							
Iron, total							
Lead, total	<4	<4	<4	<4	<4	<4	<4
Magnesium, total							
Manganese, total							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	4.1	<4.0
Nitrate, nitrogen							
Nitrogen, ammonia							
Phenols, total							
Potassium, total							
Selenium, total	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4
Sodium, total							
Solids, total dissolved							
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfate							
Sulfide, total							
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total organic carbon							
Total organic halogens							
Total suspended solids							
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	Units	3/13/2014	3/25/2014	9/29/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	3/9/2016
Trichloroethene	ug/L	<1.0		<1.0	1.8	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	<4		<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<50		<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<2		<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<3		<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0		<8.0	9.0	14.1	<8.0	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	55.9	<8.0	<8.0	<8.0	<20.0	<20.0	<8.0	<8.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-29

Constituents	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
0,0,0-triethylphosphorothioate	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2 *		<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<.12 *		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<.13 *		<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone	ug/L	<10 *		<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone	ug/L	<10 *		<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol (o-cresol)	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3/4-methylphenol	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone	ug/L	<10 *		<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10 *		<10	<10	<10	<10	<10	<10
Acetonitrile	mg/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<10 *		<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Alkalinity, bicarbonate (as caco3)	mg/L		388						
Alkalinity, carbonate (as caco3)	mg/L		<5						

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	12/5/2019	3/10/2020	9/14/2020	3/4/2021
0,0,0-triethylphosphorothioate							<.4		<.4
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1		<1	<1	<1
1,1-dichloropropene							<1		<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1	<1	<1
1,2,4,5-tetrachlorobenzene							<8		<8
1,2,4-trichlorobenzene							<1		<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<5.00	<1.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1		<1	<1	<1
1,2-dinitrobenzene							<8		<8
1,3,5-trinitrobenzene							<8		<8
1,3-dichlorobenzene							<1		<1
1,3-dichloropropane							<1		<1
1,3-dinitrobenzene							<8		<8
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
1,4-naphthoquinone							<8		<8
1,4-phenylenediamine							<8		<8
1-naphthylamine							<8		<8
2,2-dichloropropane							<1		<1
2,3,4,6-tetrachlorophenol							<8		<8
2,4,5-t							<.5		<.5
2,4,5-tp (silvex)							<.5		<.5
2,4,5-trichlorophenol							<8		<8
2,4,6-trichlorophenol							<8		<8
2,4-d							<2		<2
2,4-dichlorophenol							<8		<8
2,4-dimethylphenol							<8		<8
2,4-dinitrophenol							<8		<8
2,4-dinitrotoluene							<8		<8
2,6-dichlorophenol							<8		<8
2,6-dinitrotoluene							<8		<8
2-acetylaminofluorene							<8		<8
2-butanone	<5	<5	<5	<5	<5		<5	<5	<5
2-chloronaphthalene							<8		<8
2-chlorophenol							<8		<8
2-hexanone	<5	<5	<5	<5	<5		<5	<5	<5
2-methylnaphthalene							<8		<8
2-methylphenol (o-cresol)							<8		<8
2-naphthylamine							<8		<8
2-nitroaniline							<8		<8
2-nitrophenol							<8		<8
3,3'-dichlorobenzidine							<8		<8
3,3'-dimethylbenzidine							<8		<8
3/4-methylphenol							<8		<8
3-methylcholanthrene							<8		<8
3-nitroaniline							<8		<8
4,4'-ddd							<.05		<.05
4,4'-dde							<.05		<.05
4,4'-ddt							<.05		<.05
4,6-dinitro-2-methylphenol							<8		<8
4-aminobiphenyl							<8		<8
4-bromophenyl phenyl ether							<8		<8
4-chloro-3-methylphenol							<8		<8
4-chloroaniline							<8		<8
4-chlorophenyl phenyl ether							<8		<8
4-methyl-2-pentanone	<5	<5	<5	<5	<5		<5	<5	<5
4-nitroaniline							<8		<8
4-nitrophenol							<8		<8
5-nitro-o-toluidine							<8		<8
7,12-dimethylbenz(a)anthracene							<8		<8
Acenaphthene							<8		<8
Acenaphthylene							<8		<8
Acetone	<10	<10	<10	<10	<10		<10	<10	<10
Acetonitrile							<.01		<.01
Acetophenone							<8		<8
Acrolein							<10		<10
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	<5
Aldrin							<.05		<.05
Alkalinity, bicarbonate (as cac03)									
Alkalinity, carbonate (as cac03)									

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/9/2021	3/24/2022	4/1/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
0,0,0-triethylphosphorothioate							
1,1,1,2-tetrachloroethane	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	<1	<1		<1	<1	<1	<1
1,1-dichloropropene							
1,2,3-trichloropropane	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene							
1,2,4-trichlorobenzene							
1,2-dibromo-3-chloropropane	<5.00	<5.00		<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	<1	<1		<1	<1	<1	<1
1,2-dinitrobenzene							
1,3,5-trinitrobenzene							
1,3-dichlorobenzene							
1,3-dichloropropane							
1,3-dinitrobenzene							
1,4-dichlorobenzene	<1	<1		<1	<1	<1	<1
1,4-naphthoquinone							
1,4-phenylenediamine							
1-naphthylamine							
2,2-dichloropropane							
2,3,4,6-tetrachlorophenol							
2,4,5-t							
2,4,5-tp (silvex)							
2,4,5-trichlorophenol							
2,4,6-trichlorophenol							
2,4-d							
2,4-dichlorophenol							
2,4-dimethylphenol							
2,4-dinitrophenol							
2,4-dinitrotoluene							
2,6-dichlorophenol							
2,6-dinitrotoluene							
2-acetylaminofluorene							
2-butanone	<5	<10		<10	<10	<10	<10
2-chloronaphthalene							
2-chlorophenol							
2-hexanone	<5	<5		<5	<5	<5	<5
2-methylnaphthalene							
2-methylphenol (o-cresol)							
2-naphthylamine							
2-nitroaniline							
2-nitrophenol							
3,3'-dichlorobenzidine							
3,3'-dimethylbenzidine							
3/4-methylphenol							
3-methylcholanthrene							
3-nitroaniline							
4,4'-ddd							
4,4'-dde							
4,4'-ddt							
4,6-dinitro-2-methylphenol							
4-aminobiphenyl							
4-bromophenyl phenyl ether							
4-chloro-3-methylphenol							
4-chloroaniline							
4-chlorophenyl phenyl ether							
4-methyl-2-pentanone	<5	<5		<5	<5	<5	<5
4-nitroaniline							
4-nitrophenol							
5-nitro-o-toluidine							
7,12-dimethylbenz(a)anthracene							
Acenaphthene							
Acenaphthylene							
Acetone	<10	<10		<10	<10	<10	<10
Acetonitrile							
Acetophenone							
Acrolein							
Acrylonitrile	<5	<5		<5	<5		<5
Aldrin							
Alkalinity, bicarbonate (as caco3)							
Alkalinity, carbonate (as caco3)							

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
Alkalinity, total (as CaCO ₃)	mg/L			497	602	553			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								
Antimony, total	ug/L	<6 *		<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<2 *		<4	<4	<4	<4	<4	<4
Azobenzene	ug/L								
Barium, total	ug/L	<10.0 *		19.8	25.3	17.8	16.5	14.7	14.9
Benzene	ug/L	<.5 *		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(ghi)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<1 *		<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								
Bis(2-chloroethoxy)methane	ug/L								
Bis(2-chloroethyl)ether	ug/L								
Bis(2-chloroisopropyl)ether	ug/L								
Bis(2-ethylhexyl)phthalate	ug/L								
Bromochloromethane	ug/L	<5 *		<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Bromoforn	ug/L	<5 *		<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<4 *		<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	2.78 *		<.80	<.80	<.80	.80	<.80	<.80
Calcium, total	mg/L			603	617	536			
Carbon disulfide	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2 *		<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chloride	mg/L			16.1	20.9	18.0			
Chlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chlorodibromomethane	ug/L	<5 *							
Chloroethane	ug/L	<4 *		<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<3 *		<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<13 *		<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<1.32 *		<.80	<.80	<.80	<.80	<.80	<.80
Copper, total	ug/L	<20.0 *		5.4	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<5		<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1							
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methane sulfonate	ug/L								
Ethylbenzene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc [lindane]	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	12/5/2019	3/10/2020	9/14/2020	3/4/2021
Alkalinity, total (as CaCO ₃)									
Allyl chloride							<1		<1
Alpha-bhc							<.05		<.05
Anthracene							<8		<8
Antimony, total	<2	<2	<2	<2	<2		<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4		<4	<4	<4
Azobenzene							<8		<8
Barium, total	16.1	16.3	14.8	16.2	14.2		13.8	14.3	14.8
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0
Benzo(a)anthracene							<8		<8
Benzo(a)pyrene							<8		<8
Benzo(b)fluoranthene							<8		<8
Benzo(ghi)perylene							<8		<8
Benzo(k)fluoranthene							<8		<8
Benzyl alcohol							<8		<8
Beryllium, total	<4	<4	<4	<4	<4		<4	<4	<4
Beta-bhc							<.05		<.05
Bis(2-chloroethoxy)methane							<8		<8
Bis(2-chloroethyl)ether							<8		<8
Bis(2-chloroisopropyl)ether							<8		<8
Bis(2-ethylhexyl)phthalate							<6		34
Bromochloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Bromoform	<1	<1	<1	<1	<1		<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1		<1	<1	<1
Butyl benzyl phthalate							<8		<8
Cadmium, total	<.80	<.80	<.80	<.80	<.80		1.30	<.80	<.80
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1	<1
Chlordane							<.1		<.1
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
Chlorobenzilate							<8		<8
Chlorodibromomethane									
Chloroethane	<1	<1	<1	<1	<1		<1	<1	<1
Chloroform	<1	<1	<1	<1	<1		<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Chloroprene							<1		<1
Chromium, total	<8	<8	<8	<8	<8		<8	<8	<8
Chrysene							<8		<8
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	<1
Cobalt, total	<.80	<.80	<.80	<.80	<.80		<.80	<.40	<.40
Copper, total	<4.0	<4.0	<4.0	<4.0	9.7	13.7	9.6	<4.0	<4.0
Cyanide, total							<.005		<.005
Delta-bhc							<.05		<.05
Diallate							<8		<8
Dibenzo(a,h)anthracene							<8		<8
Dibenzofuran							<8		<8
Dibromochloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1		<1	<1	<1
Dichlorobromomethane									
Dichlorodifluoromethane							<1		<1
Dieldrin							<.05		<.05
Diethyl phthalate							<8		<8
Dimethoate							<.4		<.4
Dimethylphthalate							<8		<8
Di-n-butyl phthalate							<8		<8
Di-n-octyl phthalate							<8		<8
Dinoseb							<.5		<.5
Diphenylamine							<8		<8
Disulfoton							<.4		<.4
Endosulfan i							<.05		<.05
Endosulfan ii							<.05		<.05
Endosulfan sulfate							<.05		<.05
Endrin							<.05		<.05
Endrin aldehyde							<.05		<.05
Ethyl methacrylate							<10		<10
Ethyl methane sulfonate							<8		<8
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1	<1
Famphur							<.4		<.4
Fluoranthene							<8		<8
Fluorene							<8		<8
Gamma-bhc [lindane]							<.05		<.05
Heptachlor							<.05		<.05
Heptachlor epoxide							<.05		<.05

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/9/2021	3/24/2022	4/1/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Alkalinity, total (as CaCO ₃)							
Allyl chloride							
Alpha-bhc							
Anthracene							
Antimony, total	<2	<2		<2	<2	<2	<2
Arsenic, total	<4	<4		<4	<4	<4	<4
Azobenzene							
Barium, total	16.6	8.9		12.7	9.3	9.4	14.3
Benzene	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b)fluoranthene							
Benzo(ghi)perylene							
Benzo(k)fluoranthene							
Benzyl alcohol							
Beryllium, total	<4	<4		<4	<4	<4	<4
Beta-bhc							
Bis(2-chloroethoxy)methane							
Bis(2-chloroethyl)ether							
Bis(2-chloroisopropyl)ether							
Bis(2-ethylhexyl)phthalate	33		<6	97	<6		
Bromochloromethane	<1	<1		<1	<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1
Bromoform	<1	<1		<1	<1	<1	<1
Bromomethane	<1	<1		<1	<1	<1	<1
Butyl benzyl phthalate							
Cadmium, total	<.80	<.80		<.80	<.80	<.80	<.80
Calcium, total							
Carbon disulfide	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1
Chlordane							
Chloride							
Chlorobenzene	<1	<1		<1	<1	<1	<1
Chlorobenzilate							
Chlorodibromomethane							
Chloroethane	<1	<1		<1	<1	<1	<1
Chloroform	<1	<1		<1	<1	<1	<1
Chloromethane	<1	<1		<1	<1	<1	<1
Chloroprene							
Chromium, total	<8	<8		<8	<8	<8	<8
Chrysene							
Cis-1,2-dichloroethene	<1	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1
Cobalt, total	<.40	<.40		<.40	<.40	<.40	<.40
Copper, total	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Cyanide, total							
Delta-bhc							
Diallate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Dibromochloromethane	<1	<1		<1	<1	<1	<1
Dibromomethane	<1	<1		<1	<1	<1	<1
Dichlorobromomethane							
Dichlorodifluoromethane							
Dieldrin							
Diethyl phthalate							
Dimethoate							
Dimethylphthalate							
Di-n-butyl phthalate							
Di-n-octyl phthalate							
Dinoseb							
Diphenylamine							
Disulfoton							
Endosulfan i							
Endosulfan ii							
Endosulfan sulfate							
Endrin							
Endrin aldehyde							
Ethyl methacrylate							
Ethyl methane sulfonate							
Ethylbenzene	<1	<1		<1	<1	<1	<1
Famphur							
Fluoranthene							
Fluorene							
Gamma-bhc [lindane]							
Heptachlor							
Heptachlor epoxide							

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iodomethane	ug/L	<10 *		<1	<1	<1	<1	<1	<1
Iron, total	ug/L		152						
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4 *		<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L			148	149	135			
Manganese, total	ug/L		6390						
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene bromide	ug/L	<1 *							
Methylene chloride	ug/L	<5 *		<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	<50.0 *		5.1	5.0	6.8	13.5	9.6	11.8
Nitrate, nitrogen	mg/L		<.1						
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L			<1	<1	<1			
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pcb 1016	ug/L								
Pcb 1221	ug/L								
Pcb 1232	ug/L								
Pcb 1242	ug/L								
Pcb 1248	ug/L								
Pcb 1254	ug/L								
Pcb 1260	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenols, total	mg/L								
Phorate	ug/L								
Potassium, total	mg/L			3.2	3.1	3.1			
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<5 *		<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<20 *		<4	<4	<4	<4	<4	<4
Sodium, total	mg/L			248	252	230			
Solids, total dissolved	mg/L			3340	3230	3360			
Styrene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Sulfate	mg/L		1810	2040	2010	2020			
Sulfide, total	mg/L								
Tetrachloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2 *		<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Total organic carbon	mg/L		4.55						
Total suspended solids	mg/L	230.7 *	58.4	86.0	12.0				
Toxaphene	ug/L								
Trans-1,2-dichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	12/5/2019	3/10/2020	9/14/2020	3/4/2021
Hexachlorobenzene							<.05		<.05
Hexachlorobutadiene							<8		<8
Hexachlorocyclopentadiene							<8		<8
Hexachloroethane							<8		<8
Hexachloropropene							<8		<8
Indeno(1,2,3-cd)pyrene							<8		<8
Iodomethane	<1	<1	<1	<1	<1		<1	<1	<2
Iron, total									
Isobutanol							<1		<1
Isodrin							<8		<8
Isophorone							<8		<8
Isosafrole							<8		<8
Kepon							<8		<8
Lead, total	<4	<4	<4	<4	<4		<4	<4	<4
Magnesium, total									
Manganese, total									
Mercury, total							<.5		<.5
Methacrylonitrile							<1		<1
Methapyrene							<8		<8
Methoxychlor							<.05		<.05
Methyl methacrylate							<1		<1
Methyl methanesulfonate							<8		<8
Methyl parathion							<.4		<.4
Methylene bromide									
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	<5
Naphthalene							<8		<8
Nickel, total	8.5	15.2	<4.0	5.7	5.4		8.7	<4.0	10.4
Nitrate, nitrogen									
Nitrobenzene							<8		<8
Nitrogen, ammonia									
N-nitrosodiethylamine							<8		<8
N-nitrosodimethylamine							<8		<8
N-nitrosodi-n-butylamine							<8		<8
N-nitroso-di-n-propylamine							<8		<8
N-nitrosodiphenylamine							<8		<8
N-nitrosomethylethylamine							<8		<8
N-nitrosopiperidine							<8		<8
N-nitrosopyrrolidine							<8		<8
O-toluidine							<8		<8
P-(dimethylamino)azobenzene							<8		<8
Parathion							<.4		<.4
Pcb 1016							<.1		<.1
Pcb 1221							<.2		<.2
Pcb 1232							<.2		<.2
Pcb 1242							<.2		<.2
Pcb 1248							<.2		<.2
Pcb 1254							<.1		<.1
Pcb 1260							<.1		<.1
Pentachlorobenzene							<8		<8
Pentachloronitrobenzene							<8		<8
Pentachlorophenol							<8		<8
Phenacetin							<8		<8
Phenanthrene							<8		<8
Phenols, total							<.008		<.008
Phorate							<.4		<.4
Potassium, total									
Pronamide							<8		<8
Propionitrile							<10		<10
Pyrene							<8		<8
Safrole							<8		<8
Selenium, total	<4	<4	<4	<4	<4		<4	<4	<4
Silver, total	<4	<4	<4	<4	<4		<4	<4	<4
Sodium, total									
Solids, total dissolved									
Styrene	<1	<1	<1	<1	<1		<1	<1	<1
Sulfate									
Sulfide, total							<.1		<.1
Tetrachloroethene	<1	<1	<1	<1	<1		<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2		<2	<2	<2
Thionazin							<.4		<.4
Tin, total							<20		<20
Toluene	<1	<1	<1	<1	<1		<1	<1	<1
Total organic carbon									
Total suspended solids									
Toxaphene							<.2		<.2
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/9/2021	3/24/2022	4/1/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Hexachloropropene							
Indeno(1,2,3-cd)pyrene							
Iodomethane	<1	<1		<1	<1	<1	<1
Iron, total							
Isobutanol							
Isodrin							
Isophorone							
Isosafrole							
Kepon							
Lead, total	<4	<4		<4	<4	<4	<4
Magnesium, total							
Manganese, total							
Mercury, total							
Methacrylonitrile							
Methapyriline							
Methoxychlor							
Methyl methacrylate							
Methyl methanesulfonate							
Methyl parathion							
Methylene bromide							
Methylene chloride	<5	<5		<5	<5	<5	<5
Naphthalene							
Nickel, total	4.0	5.9		<4.0	4.8	11.3	20.1
Nitrate, nitrogen							
Nitrobenzene							
Nitrogen, ammonia							
N-nitrosodiethylamine							
N-nitrosodimethylamine							
N-nitrosodi-n-butylamine							
N-nitroso-di-n-propylamine							
N-nitrosodiphenylamine							
N-nitrosomethylethylamine							
N-nitrosopiperidine							
N-nitrosopyrrolidine							
O-toluidine							
P-(dimethylamino)azobenzene							
Parathion							
Pcb 1016							
Pcb 1221							
Pcb 1232							
Pcb 1242							
Pcb 1248							
Pcb 1254							
Pcb 1260							
Pentachlorobenzene							
Pentachloronitrobenzene							
Pentachlorophenol							
Phenacetin							
Phenanthrene							
Phenols, total							
Phorate							
Potassium, total							
Pronamide							
Propionitrile							
Pyrene							
Safrole							
Selenium, total	<4	<4		<4	<4	<4	<4
Silver, total	<4	<4		<4	<4	<4	<4
Sodium, total							
Solids, total dissolved							
Styrene	<1	<1		<1	<1	<1	<1
Sulfate							
Sulfide, total							
Tetrachloroethene	<1	<1		<1	<1	<1	<1
Thallium, total	<2	<2		<2	<2	<2	<2
Thionazin							
Tin, total							
Toluene	<1	<1		<1	<1	<1	<1
Total organic carbon							
Total suspended solids							
Toxaphene							
Trans-1,2-dichloroethene	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017
Trans-1,4-dichloro-2-butene	ug/L	<10 *		<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4 *		<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<43 *		<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<2 *		<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1 *		<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<3 *		<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	34.5 *		8.1	<8.0	15.2	17.4	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	12/5/2019	3/10/2020	9/14/2020	3/4/2021
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20		<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5		<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1		<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2		<2	<2	<2
Zinc, total	<8.0	<8.0	<20.0	<20.0	11.2		12.6	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-31

Constituents	9/9/2021	3/24/2022	4/1/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5
Trichloroethene	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1
Vanadium, total	<20	<20		<20	<20	<20	<20
Vinyl acetate	<5	<5		<5	<5	<5	<5
Vinyl chloride	<1	<1		<1	<1	<1	<1
Xylenes, total	<2	<2		<2	<2	<2	<2
Zinc, total	<20.0	<20.0		<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-32

Constituents	Units	3/25/2014	8/26/2015	3/9/2016	9/14/2016	3/7/2017	6/6/2017	9/11/2017	3/7/2018	9/5/2018
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,1-dichloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,1-dichloroethene	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2-dibromoethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2-dichloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,2-dichloropropane	ug/L		<1	<1	<1	<1		<1	<1	<1
1,4-dichlorobenzene	ug/L		<1	<1	<1	<1		<1	<1	<1
2-butanone	ug/L		<5	<5	<5	<5		<5	<5	<5
2-hexanone	ug/L		<5	<5	<5	<5		<5	<5	<5
4-methyl-2-pentanone	ug/L		<5	<5	<5	<5		<5	<5	<5
Acetone	ug/L		<10	<10	<10	<10		<10	<10	<10
Acrylonitrile	ug/L		<5	<5	<5	<5		<5	<5	<5
Alkalinity, bicarbonate (as caco3)	mg/L	752								
Alkalinity, carbonate (as caco3)	mg/L	<5								
Alkalinity, total (as caco3)	mg/L		613							
Antimony, total	ug/L		<2	<2	<2	<2		<2	<2	<2
Arsenic, total	ug/L		<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Barium, total	ug/L		34.8	35.1	35.2	52.1	32.8	31.8	29.4	22.9
Benzene	ug/L		<1	<1	<1	<1		<1	<1	<1
Beryllium, total	ug/L		<4	<4	<4	<4		<4	<4	<4
Bromochloromethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Bromoform	ug/L		<1	<1	<1	<1		<1	<1	<1
Bromomethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Cadmium, total	ug/L		<.8	<.8	<.8	<.8		<.8	<.8	<.8
Calcium, total	mg/L		401							
Carbon disulfide	ug/L		<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	ug/L		<1	<1	<1	<1		<1	<1	<1
Chloride	mg/L		43.4							
Chlorobenzene	ug/L		<1	<1	<1	<1		<1	<1	<1
Chloroethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Chloroform	ug/L		<1	<1	<1	<1		<1	<1	<1
Chloromethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Chromium, total	ug/L		<8.0	<8.0	<8.0	<8.0		<8.0	<8.0	<8.0
Cis-1,2-dichloroethene	ug/L		<1	<1	<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<1	<1	<1	<1		<1	<1	<1
Cobalt, total	ug/L		<.8	1.1	1.4	1.6		.8	<.8	<.8
Copper, total	ug/L		<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Dibromochloromethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Dibromomethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Ethylbenzene	ug/L		<1	<1	<1	<1		<1	<1	<1
Iodomethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Iron, total	ug/L	2010								
Lead, total	ug/L		<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Magnesium, total	mg/L		104							
Manganese, total	ug/L	719								
Methylene chloride	ug/L		<5	<5	<5	<5		<5	<5	<5
Nickel, total	ug/L		<4.0	4.1	4.0	6.2		<4.0	<4.0	<4.0
Nitrate, nitrogen	mg/L	<.1								
Nitrogen, ammonia	mg/L		3.11							
Potassium, total	mg/L		10.3							
Selenium, total	ug/L		<4	<4	<4	<4		<4	<4	<4
Silver, total	ug/L		<4	<4	<4	<4		<4	<4	<4
Sodium, total	mg/L		189							
Solids, total dissolved	mg/L		2360							
Styrene	ug/L		<1	<1	<1	<1		<1	<1	<1
Sulfate	mg/L	113	1130							
Tetrachloroethene	ug/L		<1	<1	<1	<1		<1	<1	<1
Thallium, total	ug/L		<4	<4	<4	<4		<4	<4	<4
Toluene	ug/L		<1	<1	<1	<1		<1	<1	<1
Total organic carbon	mg/L	1.88								
Total suspended solids	mg/L	13100								
Trans-1,2-dichloroethene	ug/L		<1	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L		<1	<1	<1	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<5	<5	<5	<5		<5	<5	<5
Trichloroethene	ug/L		<1	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	ug/L		<1	<1	<1	<1		<1	<1	<1
Vanadium, total	ug/L		<20	<20	<20	<20		<20	<20	<20
Vinyl acetate	ug/L		<5	<5	<5	<5		<5	<5	<5
Vinyl chloride	ug/L		<1	<1	<1	<1		<1	<1	<1
Xylenes, total	ug/L		<2	<2	<2	<2		<2	<2	<2

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-32

Constituents	4/1/2019	6/7/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
1,1,1,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1		<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1		<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5		<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone	<5		<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5		<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10		<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5		<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, bicarbonate (as cacO3)										
Alkalinity, carbonate (as cacO3)										
Alkalinity, total (as cacO3)										
Antimony, total	<2		<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	4.3		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	64.8		22.8	20.5	16.9	20.6	19.4	20.2	13.3	17.7
Benzene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4		<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1		<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total										
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1	<1
Chloride										
Chlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1		<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	11.7	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	3.0		<.8	<.8	.5	<.4	<.4	<.4	<.4	<.4
Copper, total	7.2		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Iron, total										
Lead, total	4.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total										
Manganese, total										
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	11.3		4.1	4.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrate, nitrogen										
Nitrogen, ammonia										
Potassium, total										
Selenium, total	<4		<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4		<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Tetrachloroethene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2		<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon										
Total suspended solids										
Trans-1,2-dichloroethene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1		<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	22	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2		<2	<2	<2	<2	<2	<2	<2	<2

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-32

Constituents	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethene	<1	<1
1,2,3-trichloropropane	<1	<1
1,2-dibromo-3-chloropropane	<5	<5
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,4-dichlorobenzene	<1	<1
2-butanone	<10	<10
2-hexanone	<5	<5
4-methyl-2-pentanone	<5	<5
Acetone	<10	<10
Acrylonitrile		<5
Alkalinity, bicarbonate (as caco3)		
Alkalinity, carbonate (as caco3)		
Alkalinity, total (as caco3)		
Antimony, total	<2	<2
Arsenic, total	<4.0	<4.0
Barium, total	19.0	12.9
Benzene	<1	<1
Beryllium, total	<4	<4
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Cadmium, total	<.8	<.8
Calcium, total		
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chloride		
Chlorobenzene	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chromium, total	<8.0	<8.0
Cis-1,2-dichloroethene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	<.4	<.4
Copper, total	<4.0	<4.0
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Ethylbenzene	<1	<1
Iodomethane	<1	<1
Iron, total		
Lead, total	<4.0	<4.0
Magnesium, total		
Manganese, total		
Methylene chloride	<5	<5
Nickel, total	<4.0	<4.0
Nitrate, nitrogen		
Nitrogen, ammonia		
Potassium, total		
Selenium, total	<4	<4
Silver, total	<4	<4
Sodium, total		
Solids, total dissolved		
Styrene	<1	<1
Sulfate		
Tetrachloroethene	<1	<1
Thallium, total	<2	<2
Toluene	<1	<1
Total organic carbon		
Total suspended solids		
Trans-1,2-dichloroethene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<20
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-32

Constituents	Units	3/25/2014	8/26/2015	3/9/2016	9/14/2016	3/7/2017	6/6/2017	9/11/2017	3/7/2018	9/5/2018
Zinc, total	ug/L		16.3	64.5	56.5	65.4		36.2	22.4	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-32

Constituents	4/1/2019	6/7/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
Zinc, total	27.4		<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9**Analytical Data Summary for MW-32**

Constituents	9/4/2024	3/10/2025
Zinc, total	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	11/9/2016
0,0,0-triethylphosphorothioate	ug/L							<.4	
1,1,1,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,1-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,2,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,2-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1-dichloroethane	ug/L	2.05		1.70	2.10	1.60	1.60	1.50	
1,1-dichloroethene	ug/L	<2 *		<1	<1	<1	<1	<1	
1,1-dichloropropene	ug/L							<1	
1,2,3-trichloropropane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2,4,5-tetrachlorobenzene	ug/L							<8	
1,2,4-trichlorobenzene	ug/L							<1	
1,2-dibromo-3-chloropropane	ug/L	<.12 *		<1.00	<1.00	<1.00	<1.00	<1.00	
1,2-dibromoethane	ug/L	<.13 *		<1.00	<1.00	<1.00	<1.00	<1.00	
1,2-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2-dichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2-dichloropropane	ug/L	9.43		6.40	<1.00	5.20	2.60	2.40	
1,2-dinitrobenzene	ug/L							<8	
1,3,5-trinitrobenzene	ug/L							<8	
1,3-dichlorobenzene	ug/L							<1	
1,3-dichloropropane	ug/L							<1	
1,3-dinitrobenzene	ug/L							<8	
1,4-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
1,4-naphthoquinone	ug/L							<8	
1,4-phenylenediamine	ug/L							<8	
1-naphthylamine	ug/L							<8	
2,2-dichloropropane	ug/L							<1	
2,3,4,6-tetrachlorophenol	ug/L							<8	
2,4,5-t	ug/L							<.5	
2,4,5-tp (silvex)	ug/L							<.5	
2,4,5-trichlorophenol	ug/L							<8	
2,4,6-trichlorophenol	ug/L							<8	
2,4-d	ug/L							<2.0	
2,4-dichlorophenol	ug/L							<8	
2,4-dimethylphenol	ug/L							<8	
2,4-dinitrophenol	ug/L							<8	
2,4-dinitrotoluene	ug/L							<8	
2,6-dichlorophenol	ug/L							<8	
2,6-dinitrotoluene	ug/L							<8	
2-acetylaminofluorene	ug/L							<8	
2-butanone	ug/L	<10 *		<5	<5	<5	<5	<5	
2-chloronaphthalene	ug/L							<8	
2-chlorophenol	ug/L							<8	
2-hexanone	ug/L	<10 *		<5	<5	<5	<5	<5	
2-methylnaphthalene	ug/L							<8	
2-methylphenol (o-cresol)	ug/L							<8	
2-naphthylamine	ug/L							<8	
2-nitroaniline	ug/L							<8	
2-nitrophenol	ug/L							<8	
3,3'-dichlorobenzidine	ug/L							<8	
3,3'-dimethylbenzidine	ug/L							<8	
3/4-methylphenol	ug/L							<8	
3-methylcholanthrene	ug/L							<8	
3-nitroaniline	ug/L							<8	
4,4'-ddd	ug/L							<.05	
4,4'-dde	ug/L							<.05	
4,4'-ddt	ug/L							<.05	
4,6-dinitro-2-methylphenol	ug/L							<8	
4-aminobiphenyl	ug/L							<8	
4-bromophenyl phenyl ether	ug/L							<8	
4-chloro-3-methylphenol	ug/L							<8	
4-chloroaniline	ug/L							<8	
4-chlorophenyl phenyl ether	ug/L							<8	
4-methyl-2-pentanone	ug/L	<10 *		<5	<5	<5	<5	<5	
4-nitroaniline	ug/L							<8	
4-nitrophenol	ug/L							<8	
5-nitro-o-toluidine	ug/L							<8	
7,12-dimethylbenz(a)anthracene	ug/L							<8	
Acenaphthene	ug/L							<8	
Acenaphthylene	ug/L							<8	
Acetone	ug/L	<10.0		14.8	21.3	<10.0	<10.0	<10.0	
Acetonitrile	mg/L							<.01	
Acetophenone	ug/L							<8	
Acrolein	ug/L							<10	
Acrylonitrile	ug/L	<10 *		<5	<5	<5	<5	<5	
Aldrin	ug/L							<.05	
Alkalinity, bicarbonate (as caco3)	mg/L		582						
Alkalinity, carbonate (as caco3)	mg/L		<5						

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021
0,0,0-triethylphosphorothioate										<.4
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	1.50	<1.00	<1.00	1.70	2.00	<1.00	<1.00	1.10	1.90	1.40
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene										<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene										<8
1,2,4-trichlorobenzene										<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<1.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	5.30	4.60	<1.00	5.40	8.80	1.30	<1.00	1.80	3.60	5.10
1,2-dinitrobenzene										<8
1,3,5-trinitrobenzene										<8
1,3-dichlorobenzene										<1
1,3-dichloropropane										<1
1,3-dinitrobenzene										<8
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone										<8
1,4-phenylenediamine										<8
1-naphthylamine										<8
2,2-dichloropropane										<1
2,3,4,6-tetrachlorophenol										<8
2,4,5-t										<6
2,4,5-tp (silvex)										<6
2,4,5-trichlorophenol										<8
2,4,6-trichlorophenol										<8
2,4-d										<2.5
2,4-dichlorophenol										<8
2,4-dimethylphenol										<8
2,4-dinitrophenol										<8
2,4-dinitrotoluene										<8
2,6-dichlorophenol										<8
2,6-dinitrotoluene										<8
2-acetylaminofluorene										<8
2-butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene										<8
2-chlorophenol										<8
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene										<8
2-methylphenol (o-cresol)										<8
2-naphthylamine										<8
2-nitroaniline										<8
2-nitrophenol										<8
3,3'-dichlorobenzidine										<8
3,3'-dimethylbenzidine										<8
3/4-methylphenol										<8
3-methylcholanthrene										<8
3-nitroaniline										<8
4,4'-ddd										<.05
4,4'-dde										<.05
4,4'-ddt										<.05
4,6-dinitro-2-methylphenol										<8
4-aminobiphenyl										<8
4-bromophenyl phenyl ether										<8
4-chloro-3-methylphenol										<8
4-chloroaniline										<8
4-chlorophenyl phenyl ether										<8
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline										<8
4-nitrophenol										<8
5-nitro-o-toluidine										<8
7,12-dimethylbenz(a)anthracene										<8
Acenaphthene										<8
Acenaphthylene										<8
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile										<.01
Acetophenone										<8
Acrolein										<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin										<.05
Alkalinity, bicarbonate (as caco3)										
Alkalinity, carbonate (as caco3)										

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/24/2022	9/9/2022	3/1/2023	9/7/2023	3/6/2024	9/4/2024	3/10/2025	9/5/2025
0,0,0-triethylphosphorothioate								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	1.40	1.40	1.70	<1.00	1.60	1.40	1.20	1.30
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene								
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene								
1,2,4-trichlorobenzene								
1,2-dibromo-3-chloropropane	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	3.40	5.40	4.30	1.00	7.80	5.10	3.00	5.00
1,2-dinitrobenzene								
1,3,5-trinitrobenzene								
1,3-dichlorobenzene								
1,3-dichloropropane								
1,3-dinitrobenzene								
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone								
1,4-phenylenediamine								
1-naphthylamine								
2,2-dichloropropane								
2,3,4,6-tetrachlorophenol								
2,4,5-t								
2,4,5-tp (silvex)								
2,4,5-trichlorophenol								
2,4,6-trichlorophenol								
2,4-d								
2,4-dichlorophenol								
2,4-dimethylphenol								
2,4-dinitrophenol								
2,4-dinitrotoluene								
2,6-dichlorophenol								
2,6-dinitrotoluene								
2-acetylaminofluorene								
2-butanone	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene								
2-chlorophenol								
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene								
2-methylphenol (o-cresol)								
2-naphthylamine								
2-nitroaniline								
2-nitrophenol								
3,3'-dichlorobenzidine								
3,3'-dimethylbenzidine								
3/4-methylphenol								
3-methylcholanthrene								
3-nitroaniline								
4,4'-ddd								
4,4'-dde								
4,4'-ddt								
4,6-dinitro-2-methylphenol								
4-aminobiphenyl								
4-bromophenyl phenyl ether								
4-chloro-3-methylphenol								
4-chloroaniline								
4-chlorophenyl phenyl ether								
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline								
4-nitrophenol								
5-nitro-o-toluidine								
7,12-dimethylbenz(a)anthracene								
Acenaphthene								
Acenaphthylene								
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile								
Acetophenone								
Acrolein								
Acrylonitrile	<5	<5	<5				<5	
Aldrin								
Alkalinity, bicarbonate (as caco3)								
Alkalinity, carbonate (as caco3)								

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	11/9/2016
Alkalinity, total (as CaCO ₃)	mg/L			828	857	795			
Allyl chloride	ug/L							<1	
Alpha-bhc	ug/L							<.05	
Anthracene	ug/L							<8	
Antimony, total	ug/L	<6 *		<2	<2	<2	<2	<2	
Arsenic, total	ug/L	5.71 *		11.40	11.90	6.60	6.20	4.60	
Azobenzene	ug/L							<8	
Barium, total	ug/L	11.1 *		20.1	19.3	17.0	18.5	14.4	
Benzene	ug/L	.903		<1.000	<1.000	<1.000	<1.000	<1.000	
Benzo(a)anthracene	ug/L							<8	
Benzo(a)pyrene	ug/L							<8	
Benzo(b)fluoranthene	ug/L							<8	
Benzo(ghi)perylene	ug/L							<8	
Benzo(k)fluoranthene	ug/L							<8	
Benzyl alcohol	ug/L							<8	
Beryllium, total	ug/L	<1.0 *		<4.0	<4.0	<4.0	<4.0	<4.0	
Beta-bhc	ug/L							<.05	
Bis(2-chloroethoxy)methane	ug/L							<8	
Bis(2-chloroethyl)ether	ug/L							<8	
Bis(2-chloroisopropyl)ether	ug/L							<8	
Bis(2-ethylhexyl)phthalate	ug/L							<8	
Bromochloromethane	ug/L	<5 *		<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Bromoform	ug/L	<5 *		<1	<1	<1	<1	<1	
Bromomethane	ug/L	<4 *		<1	<1	<1	<1	<1	
Butyl benzyl phthalate	ug/L							<8	
Cadmium, total	ug/L	<.5 *		<.8	<.8	<.8	<.8	<.8	
Calcium, total	mg/L			660	641	617			
Carbon disulfide	ug/L	<1.0 *		5.9	<1.0	<1.0	<1.0	<1.0	
Carbon tetrachloride	ug/L	<2 *		<1	<1	<1	<1	<1	
Chlordane	ug/L							<.1	
Chloride	mg/L			18.9	23.5	17.2			
Chlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
Chlorobenzilate	ug/L							<8	
Chlorodibromomethane	ug/L	<5							
Chloroethane	ug/L	<4 *		<1	<1	<1	<1	<1	
Chloroform	ug/L	<1 *		<1	<1	<1	<1	<1	
Chloromethane	ug/L	<3 *		<1	<1	<1	<1	<1	
Chloroprene	ug/L							<1	
Chromium, total	ug/L	<15 *		<8	<8	<8	<8	<8	
Chrysene	ug/L							<8	
Cis-1,2-dichloroethene	ug/L	8.0		4.6	3.3	4.4	2.7	2.0	
Cis-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	
Cobalt, total	ug/L	27.8 *		29.7	24.9	14.3	13.3	15.8	
Copper, total	ug/L	<20 *		<4	<4	<4	<4	<4	
Cyanide, total	mg/L							<.005	
Delta-bhc	ug/L							<.05	
Diallate	ug/L							<8	
Dibenzo(a,h)anthracene	ug/L							<8	
Dibenzofuran	ug/L							<8	
Dibromochloromethane	ug/L	<5		<1	<1	<1	<1	<1	
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	
Dichlorobromomethane	ug/L	<1							
Dichlorodifluoromethane	ug/L							1.6	1.9
Dieldrin	ug/L							<.05	
Diethyl phthalate	ug/L							<8	
Dimethoate	ug/L							<.4	
Dimethylphthalate	ug/L							<8	
Di-n-butyl phthalate	ug/L							<8	
Di-n-octyl phthalate	ug/L							<8	
Dinoseb	ug/L							<.5	
Diphenylamine	ug/L							<8	
Disulfoton	ug/L							<.4	
Endosulfan i	ug/L	.101		<.050	<.050	<.050	<.050	<.050	
Endosulfan ii	ug/L							<.05	
Endosulfan sulfate	ug/L							<.05	
Endrin	ug/L							<.05	
Endrin aldehyde	ug/L							<.05	
Ethyl methacrylate	ug/L							<10	
Ethyl methane sulfonate	ug/L							<8	
Ethylbenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
Famphur	ug/L							<.4	
Fluoranthene	ug/L							<8	
Fluorene	ug/L							<8	
Gamma-bhc [lindane]	ug/L							<.05	
Heptachlor	ug/L							<.05	
Heptachlor epoxide	ug/L							<.05	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021
Alkalinity, total (as CaCO ₃)										<1
Allyl chloride										<.05
Alpha-bhc										<8
Anthracene										<2
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	15.30
Arsenic, total	7.80	5.20	<4.00	7.80	7.10	4.50	5.90	11.20	7.00	<8
Azobenzene										40.0
Barium, total	17.0	15.6	14.8	15.6	25.7	15.7	16.1	14.7	14.8	<1.000
Benzene	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<8
Benzo(a)anthracene										<8
Benzo(a)pyrene										<8
Benzo(b)fluoranthene										<8
Benzo(ghi)perylene										<8
Benzo(k)fluoranthene										<8
Benzyl alcohol										<8
Beryllium, total	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc										<.05
Bis(2-chloroethoxy)methane										<8
Bis(2-chloroethyl)ether										<8
Bis(2-chloroisopropyl)ether										<8
Bis(2-ethylhexyl)phthalate										<6
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate										<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total										<1.0
Carbon disulfide	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane										<.1
Chloride										<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate										<8
Chlorodibromomethane										<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene										<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene										<8
Cis-1,2-dichloroethene	4.4	3.9	2.9	5.1	8.2	3.5	<1.0	1.7	3.6	5.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	11.5	10.8	14.3	15.6	17.8	13.0	18.1	23.0	2.8	2.0
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total										<.005
Delta-bhc										<.05
Diallate										<8
Dibenzo(a,h)anthracene										<8
Dibenzofuran										<8
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane										<1.0
Dichlorodifluoromethane										<.05
Dieldrin										<8
Diethyl phthalate										<.4
Dimethoate										<8
Dimethylphthalate										<8
Di-n-butyl phthalate										<8
Di-n-octyl phthalate										<8
Dinoseb										<.6
Diphenylamine										<8
Disulfoton										<.4
Endosulfan i	.060									<.050
Endosulfan ii										<.05
Endosulfan sulfate										<.05
Endrin										<.05
Endrin aldehyde										<.05
Ethyl methacrylate										<10
Ethyl methane sulfonate										<8
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur										<.4
Fluoranthene										<8
Fluorene										<8
Gamma-bhc [lindane]										<.05
Heptachlor										<.05
Heptachlor epoxide										<.05

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/24/2022	9/9/2022	3/1/2023	9/7/2023	3/6/2024	9/4/2024	3/10/2025	9/5/2025
Alkalinity, total (as CaCO ₃)								
Allyl chloride								
Alpha-bhc								
Anthracene								
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<1
Arsenic, total	7.30	16.90	5.40	4.30	4.50	<4.00	11.00	2.10
Azobenzene								
Barium, total	17.1	50.3	17.7	18.7	31.1	15.3	16.3	25.4
Benzene	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
Benzo(a)anthracene								
Benzo(a)pyrene								
Benzo(b)fluoranthene								
Benzo(ghi)perylene								
Benzo(k)fluoranthene								
Benzyl alcohol								
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<.5
Beta-bhc								
Bis(2-chloroethoxy)methane								
Bis(2-chloroethyl)ether								
Bis(2-chloroisopropyl)ether								
Bis(2-ethylhexyl)phthalate								
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate								
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	2.1
Calcium, total								
Carbon disulfide	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane								
Chloride								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate								
Chlorodibromomethane								
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	1
Chrysene								
Cis-1,2-dichloroethene	2.9	4.9	4.3	1.0	6.6	3.9	3.3	4.2
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.3	19.8	1.4	7.3	2.9	2.8	21.0	15.7
Copper, total	<4	<4	<4	<4	<4	<4	<4	<5
Cyanide, total								
Delta-bhc								
Diallate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane								
Dichlorodifluoromethane								
Dieldrin								
Diethyl phthalate								
Dimethoate								
Dimethylphthalate								
Di-n-butyl phthalate								
Di-n-octyl phthalate								
Dinoseb								
Diphenylamine								
Disulfoton								
Endosulfan i								
Endosulfan ii								
Endosulfan sulfate								
Endrin								
Endrin aldehyde								
Ethyl methacrylate								
Ethyl methane sulfonate								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Famphur								
Fluoranthene								
Fluorene								
Gamma-bhc [lindane]								
Heptachlor								
Heptachlor epoxide								

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	11/9/2016
Hexachlorobenzene	ug/L							<.05	
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Iodomethane	ug/L	<10 *		<1	<1	<1	<1	<1	
Iron, total	ug/L		14000						
Isobutanol	mg/L							<1	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepon	ug/L							<8	
Lead, total	ug/L	<4 *		<4	<4	<4	<4	<4	
Magnesium, total	mg/L			164	153	160			
Manganese, total	ug/L		10300						
Mercury, total	ug/L							<.5	
Methacrylonitrile	ug/L							<1	
Methapyrene	ug/L							<8	
Methoxychlor	ug/L							<.05	
Methyl methacrylate	ug/L							<1	
Methyl methanesulfonate	ug/L							<8	
Methyl parathion	ug/L							<.4	
Methylene bromide	ug/L	<1							
Methylene chloride	ug/L	<2.6 *		<5.0	<5.0	<5.0	<5.0	<5.0	
Naphthalene	ug/L							<8	
Nickel, total	ug/L	56.4 *		38.9	42.5	23.2	19.0	19.7	
Nitrate, nitrogen	mg/L		<.1						
Nitrobenzene	ug/L							<8	
Nitrogen, ammonia	mg/L			<1.00	1.04	<1.00			
N-nitrosodiethylamine	ug/L							<8	
N-nitrosodimethylamine	ug/L							<8	
N-nitrosodi-n-butylamine	ug/L							<8	
N-nitroso-di-n-propylamine	ug/L							<8	
N-nitrosodiphenylamine	ug/L							<8	
N-nitrosomethylethylamine	ug/L							<8	
N-nitrosopiperidine	ug/L							<8	
N-nitrosopyrrolidine	ug/L							<8	
O-toluidine	ug/L							<8	
P-(dimethylamino)azobenzene	ug/L							<8	
Parathion	ug/L							<.4	
Pcb 1016	ug/L							<.1	
Pcb 1221	ug/L							<.2	
Pcb 1232	ug/L							<.2	
Pcb 1242	ug/L							<.2	
Pcb 1248	ug/L							<.2	
Pcb 1254	ug/L							<.1	
Pcb 1260	ug/L							<.1	
Pentachlorobenzene	ug/L							<8	
Pentachloronitrobenzene	ug/L							<8	
Pentachlorophenol	ug/L							<8	
Phenacetin	ug/L							<8	
Phenanthrene	ug/L							<8	
Phenols, total	mg/L							<.008	
Phorate	ug/L							<.4	
Potassium, total	mg/L			3.7	4.6	4.1			
Pronamide	ug/L							<8	
Propionitrile	ug/L							<10	
Pyrene	ug/L							<8	
Safrole	ug/L							<8	
Selenium, total	ug/L	<5.0 *		<4.0	<4.0	<4.0	<4.0	<4.0	
Silver, total	ug/L	<20 *		<4	<4	<4	<4	<4	
Sodium, total	mg/L			235	229	230			
Solids, total dissolved	mg/L			3600	3470	3530			
Styrene	ug/L	<1 *		<1	<1	<1	<1	<1	
Sulfate	mg/L		59	2020	1960	1930			
Sulfide, total	mg/L	<1.00 *		<.10	<.10	.33	.40	.11	
Tetrachloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Thallium, total	ug/L	<2.0 *		<4.0	<4.0	<4.0	<4.0	<4.0	
Thionazin	ug/L							<.4	
Tin, total	ug/L	<100 *		<20	<20	<20	<20	<20	
Toluene	ug/L	<1 *		<1	<1	<1	<1	<1	
Total organic carbon	mg/L		2.83						
Total suspended solids	mg/L	102 *	340	70	62				
Toxaphene	ug/L							<.2	
Trans-1,2-dichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Trans-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021
Hexachlorobenzene										<.05
Hexachlorobutadiene										<8
Hexachlorocyclopentadiene										<8
Hexachloroethane										<8
Hexachloropropene										<8
Indeno(1,2,3-cd)pyrene										<8
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
Iron, total										<1
Isobutanol										<8
Isodrin										<8
Isophorone										<8
Isosafrole										<8
Kepon										<8
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total										
Manganese, total										
Mercury, total										<.5
Methacrylonitrile										<1
Methapyrene										<8
Methoxychlor										<.05
Methyl methacrylate										<1
Methyl methanesulfonate										<8
Methyl parathion										<.4
Methylene bromide										
Methylene chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene										<8
Nickel, total	16.0	13.6	13.2	19.4	16.5	19.2	20.1	26.5	4.8	13.9
Nitrate, nitrogen										
Nitrobenzene										<8
Nitrogen, ammonia										
N-nitrosodiethylamine										<8
N-nitrosodimethylamine										<8
N-nitrosodi-n-butylamine										<8
N-nitroso-di-n-propylamine										<8
N-nitrosodiphenylamine										<8
N-nitrosomethylethylamine										<8
N-nitrosopiperidine										<8
N-nitrosopyrrolidine										<8
O-toluidine										<8
P-(dimethylamino)azobenzene										<8
Parathion										<.4
Pcb 1016										<.1
Pcb 1221										<.2
Pcb 1232										<.2
Pcb 1242										<.2
Pcb 1248										<.2
Pcb 1254										<.1
Pcb 1260										<.1
Pentachlorobenzene										<8
Pentachloronitrobenzene										<8
Pentachlorophenol										<8
Phenacetin										<8
Phenanthrene										<8
Phenols, total										<.008
Phorate										<.4
Potassium, total										
Pronamide										<8
Propionitrile										<10
Pyrene										<8
Safrole										<8
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	.13	1.20	.49	.71	.47	<.10	.18	1.90	2.40	.17
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin										<.4
Tin, total	<20									<20
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon										
Total suspended solids										
Toxaphene										<.2
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/24/2022	9/9/2022	3/1/2023	9/7/2023	3/6/2024	9/4/2024	3/10/2025	9/5/2025
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Hexachloropropene								
Indeno(1,2,3-cd)pyrene								
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1
Iron, total								
Isobutanol								
Isodrin								
Isophorone								
Isosafrole								
Kepon								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<1
Magnesium, total								
Manganese, total								
Mercury, total								
Methacrylonitrile								
Methapyrilene								
Methoxychlor								
Methyl methacrylate								
Methyl methanesulfonate								
Methyl parathion								
Methylene bromide								
Methylene chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Naphthalene								
Nickel, total	5.4	20.3	<4.0	10.5	7.0	7.0	33.2	23.8
Nitrate, nitrogen								
Nitrobenzene								
Nitrogen, ammonia								
N-nitrosodiethylamine								
N-nitrosodimethylamine								
N-nitrosodi-n-butylamine								
N-nitroso-di-n-propylamine								
N-nitrosodiphenylamine								
N-nitrosomethylethylamine								
N-nitrosopiperidine								
N-nitrosopyrrolidine								
O-toluidine								
P-(dimethylamino)azobenzene								
Parathion								
Pcb 1016								
Pcb 1221								
Pcb 1232								
Pcb 1242								
Pcb 1248								
Pcb 1254								
Pcb 1260								
Pentachlorobenzene								
Pentachloronitrobenzene								
Pentachlorophenol								
Phenacetin								
Phenanthrene								
Phenols, total								
Phorate								
Potassium, total								
Pronamide								
Propionitrile								
Pyrene								
Safrole								
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<2.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<5
Sodium, total								
Solids, total dissolved								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate								
Sulfide, total	3.50	.29	2.40	3.00	2.30	18.00	<.10	<.10
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<.5
Thionazin								
Tin, total								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Total organic carbon								
Total suspended solids								
Toxaphene								
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	Units	3/13/2014	3/25/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	11/9/2016
Trans-1,4-dichloro-2-butene	ug/L	<10 *		<5	<5	<5	<5	<5	
Trichloroethene	ug/L	1.06		<1.00	<1.00	<1.00	<1.00	<1.00	
Trichlorofluoromethane	ug/L	<4 *		<1	<1	<1	<1	<1	
Vanadium, total	ug/L	<50 *		<20	<20	<20	<20	<20	
Vinyl acetate	ug/L	<2 *		<5	<5	<5	<5	<5	
Vinyl chloride	ug/L	<1 *		<1	<1	<1	<1	<1	
Xylenes, total	ug/L	<3 *		<2	<2	<2	<2	<2	
Zinc, total	ug/L	<20 *		9	<8	<8	<8	<8	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8	<8	<8	<20	<20	<8	<8	<20	<20	<20

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-33

Constituents	3/24/2022	9/9/2022	3/1/2023	9/7/2023	3/6/2024	9/4/2024	3/10/2025	9/5/2025
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20	<20	<20	<20	10

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018
0,0,0-triethylphosphorothioate	ug/L									
1,1,1,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2 *	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L									
1,2,3-trichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L									
1,2,4-trichlorobenzene	ug/L									
1,2-dibromo-3-chloropropane	ug/L	<12 *	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<13 *	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L									
1,3,5-trinitrobenzene	ug/L									
1,3-dichlorobenzene	ug/L									
1,3-dichloropropane	ug/L									
1,3-dinitrobenzene	ug/L									
1,4-dichlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L									
1,4-phenylenediamine	ug/L									
1-naphthylamine	ug/L									
2,2-dichloropropane	ug/L									
2,3,4,6-tetrachlorophenol	ug/L									
2,4,5-t	ug/L									
2,4,5-tp (silvex)	ug/L									
2,4,5-trichlorophenol	ug/L									
2,4,6-trichlorophenol	ug/L									
2,4-d	ug/L	<1.07	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00		
2,4-d [2c]	ug/L	<1.07								
2,4-dichlorophenol	ug/L									
2,4-dimethylphenol	ug/L									
2,4-dinitrophenol	ug/L									
2,4-dinitrotoluene	ug/L									
2,6-dichlorophenol	ug/L									
2,6-dinitrotoluene	ug/L									
2-acetylaminofluorene	ug/L									
2-butanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L									
2-chlorophenol	ug/L									
2-hexanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L									
2-methylphenol (o-cresol)	ug/L									
2-naphthylamine	ug/L									
2-nitroaniline	ug/L									
2-nitrophenol	ug/L									
3,3'-dichlorobenzidine	ug/L									
3,3'-dimethylbenzidine	ug/L									
3/4-methylphenol	ug/L									
3-methylcholanthrene	ug/L									
3-nitroaniline	ug/L									
4,4'-ddd	ug/L									
4,4'-dde	ug/L									
4,4'-ddt	ug/L									
4,6-dinitro-2-methylphenol	ug/L									
4-aminobiphenyl	ug/L									
4-bromophenyl phenyl ether	ug/L									
4-chloro-3-methylphenol	ug/L									
4-chloroaniline	ug/L									
4-chlorophenyl phenyl ether	ug/L									
4-methyl-2-pentanone	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L									
4-nitrophenol	ug/L									
5-nitro-o-toluidine	ug/L									
7,12-dimethylbenz(a)anthracene	ug/L									
Acenaphthene	ug/L									
Acenaphthylene	ug/L									
Acetone	ug/L	<10 *	<10	<10	<10	<10	<10	<10	11	<10
Acetonitrile	mg/L									
Acetophenone	ug/L									
Acrolein	ug/L									
Acrylonitrile	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L									
Alkalinity, total (as caco3)	mg/L		414	290	319					

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
0,0,0-triethylphosphorothioate	<.4									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8									
1,2,4-trichlorobenzene	<1									
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	<8									
1,3,5-trinitrobenzene	<8									
1,3-dichlorobenzene	<1									
1,3-dichloropropane	<1									
1,3-dinitrobenzene	<8									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	<8									
1,4-phenylenediamine	<8									
1-naphthylamine	<8									
2,2-dichloropropane	<1									
2,3,4,6-tetrachlorophenol	<8									
2,4,5-t	<.5									
2,4,5-tp (silvex)	<.5									
2,4,5-trichlorophenol	<8									
2,4,6-trichlorophenol	<8									
2,4-d	<2.00									
2,4-d [2c]										
2,4-dichlorophenol	<8									
2,4-dimethylphenol	<8									
2,4-dinitrophenol	<8									
2,4-dinitrotoluene	<8									
2,6-dichlorophenol	<8									
2,6-dinitrotoluene	<8									
2-acetylaminofluorene	<8									
2-butanone	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-chloronaphthalene	<8									
2-chlorophenol	<8									
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8									
2-methylphenol (o-cresol)	<8									
2-naphthylamine	<8									
2-nitroaniline	<8									
2-nitrophenol	<8									
3,3'-dichlorobenzidine	<8									
3,3'-dimethylbenzidine	<8									
3/4-methylphenol	<8									
3-methylcholanthrene	<8									
3-nitroaniline	<8									
4,4'-ddd	<.05									
4,4'-dde	<.05									
4,4'-ddt	<.05									
4,6-dinitro-2-methylphenol	<8									
4-aminobiphenyl	<8									
4-bromophenyl phenyl ether	<8									
4-chloro-3-methylphenol	<8									
4-chloroaniline	<8									
4-chlorophenyl phenyl ether	<8									
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8									
4-nitrophenol	<8									
5-nitro-o-toluidine	<8									
7,12-dimethylbenz(a)anthracene	<8									
Acenaphthene	<8									
Acenaphthylene	<8									
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	<.01									
Acetophenone	<8									
Acrolein	<10									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.01									
Alkalinity, total (as cacO3)										

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	4/1/2024	3/10/2025
0,0,0-triethylphosphorothioate	<.4	
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethene	<1	<1
1,1-dichloropropene	<1	
1,2,3-trichloropropane	<1	<1
1,2,4,5-tetrachlorobenzene	<8	
1,2,4-trichlorobenzene	<1	
1,2-dibromo-3-chloropropane	<1.00	<5.00
1,2-dibromoethane	<1.00	<1.00
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,2-dinitrobenzene	<8	
1,3,5-trinitrobenzene	<8	
1,3-dichlorobenzene	<1	
1,3-dichloropropane	<1	
1,3-dinitrobenzene	<8	
1,4-dichlorobenzene	<1	<1
1,4-naphthoquinone	<8	
1,4-phenylenediamine	<8	
1-naphthylamine	<8	
2,2-dichloropropane	<1	
2,3,4,6-tetrachlorophenol	<8	
2,4,5-t	<.5	
2,4,5-tp (silvex)	<.5	
2,4,5-trichlorophenol	<8	
2,4,6-trichlorophenol	<8	
2,4-d	<2.00	
2,4-d [2c]		
2,4-dichlorophenol	<8	
2,4-dimethylphenol	<8	
2,4-dinitrophenol	<8	
2,4-dinitrotoluene	<8	
2,6-dichlorophenol	<8	
2,6-dinitrotoluene	<8	
2-acetylaminofluorene	<8	
2-butanone	<5	<10
2-chloronaphthalene	<8	
2-chlorophenol	<8	
2-hexanone	<5	<5
2-methylnaphthalene	<8	
2-methylphenol (o-cresol)	<8	
2-naphthylamine	<8	
2-nitroaniline	<8	
2-nitrophenol	<8	
3,3'-dichlorobenzidine	<8	
3,3'-dimethylbenzidine	<8	
3/4-methylphenol	<8	
3-methylcholanthrene	<8	
3-nitroaniline	<8	
4,4'-ddd	<.05	
4,4'-dde	<.05	
4,4'-ddt	<.05	
4,6-dinitro-2-methylphenol	<8	
4-aminobiphenyl	<8	
4-bromophenyl phenyl ether	<8	
4-chloro-3-methylphenol	<8	
4-chloroaniline	<8	
4-chlorophenyl phenyl ether	<8	
4-methyl-2-pentanone	<5	<5
4-nitroaniline	<8	
4-nitrophenol	<8	
5-nitro-o-toluidine	<8	
7,12-dimethylbenz(a)anthracene	<8	
Acenaphthene	<8	
Acenaphthylene	<8	
Acetone	<10	<10
Acetonitrile	<.01	
Acetophenone	<8	
Acrolein	<10	
Acrylonitrile	<5	<5
Aldrin	<.05	
Alkalinity, total (as cacO3)		

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018
Allyl chloride	ug/L									
Alpha-bhc	ug/L									
Anthracene	ug/L									
Antimony, total	ug/L	<6 *	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	2.92 *	4.00	4.50	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene	ug/L									
Barium, total	ug/L	294.0 *	258.0	359.0	143.0	152.0	91.9	153.0	297.0	97.1
Benzene	ug/L	<.5 *	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L									
Benzo(a)pyrene	ug/L									
Benzo(b)fluoranthene	ug/L									
Benzo(ghi)perylene	ug/L									
Benzo(k)fluoranthene	ug/L									
Benzyl alcohol	ug/L									
Beryllium, total	ug/L	1.35 *	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc	ug/L									
Bis(2-chloroethoxy)methane	ug/L									
Bis(2-chloroethyl)ether	ug/L									
Bis(2-chloroisopropyl)ether	ug/L									
Bis(2-ethylhexyl)phthalate	ug/L									
Bromochloromethane	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L									
Cadmium, total	ug/L	1.74 *	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total	mg/L		364	122	376					
Carbon disulfide	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2 *	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L									
Chloride	mg/L		9.9	9.9	10.5					
Chlorobenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L									
Chlorodibromomethane	ug/L	<5								
Chloroethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<3 *	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L									
Chromium, total	ug/L	<15 *	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L									
Cis-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	18.3 *	10.1	13.2	5.5	10.1	3.4	7.9	9.7	3.8
Copper, total	ug/L	<20 *	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	mg/L									
Delta-bhc	ug/L									
Diallate	ug/L									
Dibenzo(a,h)anthracene	ug/L									
Dibenzofuran	ug/L									
Dibromochloromethane	ug/L	<5	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1								
Dichlorodifluoromethane	ug/L									
Dieldrin	ug/L									
Diethyl phthalate	ug/L									
Dimethoate	ug/L									
Dimethylphthalate	ug/L									
Di-n-butyl phthalate	ug/L									
Di-n-octyl phthalate	ug/L									
Dinoseb	ug/L									
Diphenylamine	ug/L									
Disulfoton	ug/L									
Endosulfan i	ug/L									
Endosulfan ii	ug/L									
Endosulfan sulfate	ug/L									
Endrin	ug/L									
Endrin aldehyde	ug/L									
Ethyl methacrylate	ug/L									
Ethyl methane sulfonate	ug/L									
Ethylbenzene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L									
Fluoranthene	ug/L									
Fluorene	ug/L									
Gamma-bhc [lindane]	ug/L									
Heptachlor	ug/L									
Heptachlor epoxide	ug/L									
Hexachlorobenzene	ug/L									

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
Allyl chloride	<1									
Alpha-bhc	<.05									
Anthracene	<8									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Azobenzene	<8									
Barium, total	129.0	108.0	76.5	77.2	119.0	84.2	68.2	80.0	91.4	100.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<8									
Benzo(a)pyrene	<8									
Benzo(b)fluoranthene	<8									
Benzo(ghi)perylene	<8									
Benzo(k)fluoranthene	<8									
Benzyl alcohol	<8									
Beryllium, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Beta-bhc	<.05									
Bis(2-chloroethoxy)methane	<8									
Bis(2-chloroethyl)ether	<8									
Bis(2-chloroisopropyl)ether	<8									
Bis(2-ethylhexyl)phthalate	<6									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8									
Cadmium, total	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.80	<.80
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	<.1									
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8									
Chlorodibromomethane										
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8									
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	3.3	2.1	.9	1.0	2.7	1.1	.4	1.4	1.1	2.2
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	.005									
Delta-bhc	<.05									
Diallate	<8									
Dibenzo(a,h)anthracene	<8									
Dibenzofuran	<8									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane										
Dichlorodifluoromethane	<1									
Dieldrin	<.05									
Diethyl phthalate	<8									
Dimethoate	<.4									
Dimethylphthalate	<8									
Di-n-butyl phthalate	<8									
Di-n-octyl phthalate	<8									
Dinoseb	<.5									
Diphenylamine	<8									
Disulfoton	<.4									
Endosulfan i	<.05									
Endosulfan ii	<.05									
Endosulfan sulfate	<.05									
Endrin	<.05									
Endrin aldehyde	<.05									
Ethyl methacrylate	<10									
Ethyl methane sulfonate	<8									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	<.4									
Fluoranthene	<8									
Fluorene	<8									
Gamma-bhc [lindane]	<.05									
Heptachlor	<.05									
Heptachlor epoxide	<.05									
Hexachlorobenzene	<.05									

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	4/1/2024	3/10/2025
Allyl chloride	<1	
Alpha-bhc	<.05	
Anthracene	<8	
Antimony, total	<2	<2
Arsenic, total	<4.00	<4.00
Azobenzene	<8	
Barium, total	76.3	61.1
Benzene	<1.0	<1.0
Benzo(a)anthracene	<8	
Benzo(a)pyrene	<8	
Benzo(b)fluoranthene	<8	
Benzo(ghi)perylene	<8	
Benzo(k)fluoranthene	<8	
Benzyl alcohol	<8	
Beryllium, total	<4.00	<4.00
Beta-bhc	<.05	
Bis(2-chloroethoxy)methane	<8	
Bis(2-chloroethyl)ether	<8	
Bis(2-chloroisopropyl)ether	<8	
Bis(2-ethylhexyl)phthalate	<6	
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Butyl benzyl phthalate	<8	
Cadmium, total	<.80	<.80
Calcium, total		
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlordane	<.1	
Chloride		
Chlorobenzene	<1	<1
Chlorobenzilate	<8	
Chlorodibromomethane		
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chloroprene	<1	
Chromium, total	<8	<8
Chrysene	<8	
Cis-1,2-dichloroethene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	.7	.4
Copper, total	<4	<4
Cyanide, total	<.005	
Delta-bhc	<.05	
Diallate	<8	
Dibenzo(a,h)anthracene	<8	
Dibenzofuran	<8	
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Dichlorobromomethane		
Dichlorodifluoromethane	<1	
Dieldrin	<.05	
Diethyl phthalate	<8	
Dimethoate	<.4	
Dimethylphthalate	<8	
Di-n-butyl phthalate	<8	
Di-n-octyl phthalate	<8	
Dinoseb	<.5	
Diphenylamine	<8	
Disulfoton	<.4	
Endosulfan i	<.05	
Endosulfan ii	<.05	
Endosulfan sulfate	<.05	
Endrin	<.05	
Endrin aldehyde	<.05	
Ethyl methacrylate	<10	
Ethyl methane sulfonate	<8	
Ethylbenzene	<1	<1
Famphur	<.4	
Fluoranthene	<8	
Fluorene	<8	
Gamma-bhc [lindane]	<.05	
Heptachlor	<.05	
Heptachlor epoxide	<.05	
Hexachlorobenzene	<.05	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018
Hexachlorobutadiene	ug/L									
Hexachlorocyclopentadiene	ug/L									
Hexachloroethane	ug/L									
Hexachloropropene	ug/L									
Indeno(1,2,3-cd)pyrene	ug/L									
Iodomethane	ug/L	<10 *	<1	<1	<1	<1	<1	<1	<1	<1
Isobutanol	mg/L									
Isodrin	ug/L									
Isophorone	ug/L									
Isosafrole	ug/L									
Kepon	ug/L									
Lead, total	ug/L	9.76 *	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total	mg/L		49.4	20.7	49.4					
Mercury, total	ug/L	<.2 *	<.5	<.5	<.5	<.5	<.5	<.5		
Methacrylonitrile	ug/L									
Methapyrilene	ug/L									
Methoxychlor	ug/L									
Methyl methacrylate	ug/L									
Methyl methanesulfonate	ug/L									
Methyl parathion	ug/L									
Methylene bromide	ug/L	<1								
Methylene chloride	ug/L	<5 *	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L									
Nickel, total	ug/L	<50.0 *	4.9	9.5	5.2	5.1	5.2	11.6	5.0	5.7
Nitrobenzene	ug/L									
Nitrogen, ammonia	mg/L		<1	<1	<1					
N-nitrosodiethylamine	ug/L									
N-nitrosodimethylamine	ug/L									
N-nitrosodi-n-butylamine	ug/L									
N-nitroso-di-n-propylamine	ug/L									
N-nitrosodiphenylamine	ug/L									
N-nitrosomethylethylamine	ug/L									
N-nitrosopiperidine	ug/L									
N-nitrosopyrrolidine	ug/L									
O-toluidine	ug/L									
P-(dimethylamino)azobenzene	ug/L									
Parathion	ug/L									
Pcb 1016	ug/L									
Pcb 1221	ug/L									
Pcb 1232	ug/L									
Pcb 1242	ug/L									
Pcb 1248	ug/L									
Pcb 1254	ug/L									
Pcb 1260	ug/L									
Pentachlorobenzene	ug/L									
Pentachloronitrobenzene	ug/L									
Pentachlorophenol	ug/L									
Phenacetin	ug/L									
Phenanthrene	ug/L									
Phenols, total	mg/L									
Phorate	ug/L									
Potassium, total	mg/L		9.7	1.9	10.2					
Pronamide	ug/L									
Propionitrile	ug/L									
Pyrene	ug/L									
Safrole	ug/L									
Selenium, total	ug/L	<5 *	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<20 *	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L		18.5	11.9	16.7					
Solids, total dissolved	mg/L		2590	487	756					
Styrene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L		284	173	258					
Sulfide, total	mg/L									
Tetrachloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2 *	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L									
Tin, total	ug/L	<100 *	<20	<20	<20	<20	<20	<20	<20	<20
Toluene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids	mg/L	1200 *	5400	212						
Toxaphene	ug/L									
Trans-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10 *	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4 *	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<40 *	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<2 *	<5	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
Hexachlorobutadiene	<8									
Hexachlorocyclopentadiene	<8									
Hexachloroethane	<8									
Hexachloropropene	<8									
Indeno(1,2,3-cd)pyrene	<8									
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isobutanol	<1									
Isodrin	<8									
Isophorone	<8									
Isosafrole	<8									
Kepone	<8									
Lead, total	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
Magnesium, total										
Mercury, total	<.5									
Methacrylonitrile	<1									
Methapyrene	<8									
Methoxychlor	<.05									
Methyl methacrylate	<1									
Methyl methanesulfonate	<8									
Methyl parathion	<.4									
Methylene bromide										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8									
Nickel, total	5.5	6.6	4.9	<4.0	4.6	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	<8									
Nitrogen, ammonia										
N-nitrosodiethylamine	<8									
N-nitrosodimethylamine	<8									
N-nitrosodi-n-butylamine	<8									
N-nitroso-di-n-propylamine	<8									
N-nitrosodiphenylamine	<8									
N-nitrosomethylethylamine	<8									
N-nitrosopiperidine	<8									
N-nitrosopyrrolidine	<8									
O-toluidine	<8									
P-(dimethylamino)azobenzene	<8									
Parathion	<.4									
Pcb 1016	<.1									
Pcb 1221	<.2									
Pcb 1232	<.2									
Pcb 1242	<.2									
Pcb 1248	<.2									
Pcb 1254	<.1									
Pcb 1260	<.1									
Pentachlorobenzene	<8									
Pentachloronitrobenzene	<8									
Pentachlorophenol	<8									
Phenacetin	<8									
Phenanthrene	<8									
Phenols, total	<.008									
Phorate	<.4									
Potassium, total										
Pronamide	<8									
Propionitrile	<10									
Pyrene	<8									
Safrole	<8									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	<.30									
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	<.4									
Tin, total	<20									
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Toxaphene	<.2									
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	4/1/2024	3/10/2025
Hexachlorobutadiene	<8	
Hexachlorocyclopentadiene	<8	
Hexachloroethane	<8	
Hexachloropropene	<8	
Indeno(1,2,3-cd)pyrene	<8	
Iodomethane	<2	<1
Isobutanol	<1	
Isodrin	<8	
Isophorone	<8	
Isosafrole	<8	
Kepone	<8	
Lead, total	<4.00	<4.00
Magnesium, total		
Mercury, total	<.5	
Methacrylonitrile	<1	
Methapyrilene	<8	
Methoxychlor	<.05	
Methyl methacrylate	<1	
Methyl methanesulfonate	<8	
Methyl parathion	<.4	
Methylene bromide		
Methylene chloride	<5	<5
Naphthalene	<8	
Nickel, total	<4.0	<4.0
Nitrobenzene	<8	
Nitrogen, ammonia		
N-nitrosodiethylamine	<8	
N-nitrosodimethylamine	<8	
N-nitrosodi-n-butylamine	<8	
N-nitroso-di-n-propylamine	<8	
N-nitrosodiphenylamine	<8	
N-nitrosomethylethylamine	<8	
N-nitrosopiperidine	<8	
N-nitrosopyrrolidine	<8	
O-toluidine	<8	
P-(dimethylamino)azobenzene	<8	
Parathion	<.4	
Pcb 1016	<.2	
Pcb 1221	<.2	
Pcb 1232	<.2	
Pcb 1242	<.2	
Pcb 1248	<.2	
Pcb 1254	<.2	
Pcb 1260	<.2	
Pentachlorobenzene	<8	
Pentachloronitrobenzene	<8	
Pentachlorophenol	<8	
Phenacetin	<8	
Phenanthrene	<8	
Phenols, total	<.008	
Phorate	<.4	
Potassium, total		
Pronamide	<8	
Propionitrile	<10	
Pyrene	<8	
Safrole	<8	
Selenium, total	<4	<4
Silver, total	<4	<4
Sodium, total		
Solids, total dissolved		
Styrene	<1	<1
Sulfate		
Sulfide, total	<.15	
Tetrachloroethene	<1	<1
Thallium, total	<2	<2
Thionazin	<.4	
Tin, total	<20	
Toluene	<1	<1
Total suspended solids		
Toxaphene	<.2	
Trans-1,2-dichloroethene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<20
Vinyl acetate	<5	<5

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	Units	3/13/2014	9/30/2014	3/19/2015	8/26/2015	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018
Vinyl chloride	ug/L	<1 *	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<3 *	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0 *	<8.0	10.8	<8.0	<8.0	12.3	<8.0	<8.0	<8.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<8.0	9.9	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-34

Constituents	4/1/2024	3/10/2025
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	Units	3/13/2014	9/29/2014	9/30/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	11/10/2015
0,0,0-triethylphosphorothioate	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,1-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,2,2-tetrachloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1,2-trichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,1-dichloroethane	ug/L	<1.0 *		<1.0	2.2	<1.0	<1.0	<1.0	
1,1-dichloroethene	ug/L	<2 *		<1	<1	<1	<1	<1	
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<12 *		<1.00	<1.00	<1.00	<1.00	<1.00	
1,2-dibromoethane	ug/L	<13 *		<1.00	<1.00	<1.00	<1.00	<1.00	
1,2-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2-dichloroethane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2-dichloropropane	ug/L	<1 *		<1	<1	<1	<1	<1	
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone	ug/L	<10 *		<5	<5	<5	<5	<5	
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone	ug/L	<10 *		<5	<5	<5	<5	<5	
2-methylnaphthalene	ug/L								
2-methylphenol (o-cresol)	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3/4-methylphenol	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone	ug/L	<10 *		<5	<5	<5	<5	<5	
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10 *		<10	<10	<10	<10	<10	
Acetonitrile	mg/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<10 *		<5	<5	<5	<5	<5	
Aldrin	ug/L								
Alkalinity, total (as cacO3)	mg/L		828			840		737	
Allyl chloride	ug/L								

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	6/7/2019	9/9/2019	3/10/2020
0,0,0-triethylphosphorothioate						<.4				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,1-dichloropropene						<1				
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene						<8				
1,2,4-trichlorobenzene						<1				
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dinitrobenzene						<8				
1,3,5-trinitrobenzene						<8				
1,3-dichlorobenzene						<1				
1,3-dichloropropane						<1				
1,3-dinitrobenzene						<8				
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
1,4-naphthoquinone						<8				
1,4-phenylenediamine						<8				
1-naphthylamine						<8				
2,2-dichloropropane						<1				
2,3,4,6-tetrachlorophenol						<8				
2,4,5-t						<.5				
2,4,5-tp (silvex)						<.5				
2,4,5-trichlorophenol						<8				
2,4,6-trichlorophenol						<8				
2,4-d						<2				
2,4-dichlorophenol						<8				
2,4-dimethylphenol						<8				
2,4-dinitrophenol						<8				
2,4-dinitrotoluene						<8				
2,6-dichlorophenol						<8				
2,6-dinitrotoluene						<8				
2-acetylaminofluorene						<8				
2-butanone	<5	<5	<5	<5	<5	<5	<5		<5	<5
2-chloronaphthalene						<8				
2-chlorophenol						<8				
2-hexanone	<5	<5	<5	<5	<5	<5	<5		<5	<5
2-methylnaphthalene						<8				
2-methylphenol (o-cresol)						<8				
2-naphthylamine						<8				
2-nitroaniline						<8				
2-nitrophenol						<8				
3,3'-dichlorobenzidine						<8				
3,3'-dimethylbenzidine						<8				
3/4-methylphenol						<8				
3-methylcholanthrene						<8				
3-nitroaniline						<8				
4,4'-ddd						<.05				
4,4'-dde						<.05				
4,4'-ddt						<.05				
4,6-dinitro-2-methylphenol						<8				
4-aminobiphenyl						<8				
4-bromophenyl phenyl ether						<8				
4-chloro-3-methylphenol						<8				
4-chloroaniline						<8				
4-chlorophenyl phenyl ether						<8				
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5		<5	<5
4-nitroaniline						<8				
4-nitrophenol						<8				
5-nitro-o-toluidine						<8				
7,12-dimethylbenz(a)anthracene						<8				
Acenaphthene						<8				
Acenaphthylene						<8				
Acetone	<10	<10	<10	<10	<10	<10	<10		<10	<10
Acetonitrile						<.01				
Acetophenone						<8				
Acrolein						<10				
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5		<5	<5
Aldrin						<.01				
Alkalinity, total (as cacO3)										
Allyl chloride						<1				

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	7/6/2020	9/14/2020
0,0,0-triethylphosphorothioate		
1,1,1,2-tetrachloroethane		<1
1,1,1-trichloroethane		<1
1,1,2,2-tetrachloroethane		<1
1,1,2-trichloroethane		<1
1,1-dichloroethane		<1.0
1,1-dichloroethene		<1
1,1-dichloropropene		
1,2,3-trichloropropane		<1
1,2,4,5-tetrachlorobenzene		
1,2,4-trichlorobenzene		
1,2-dibromo-3-chloropropane		<5.00
1,2-dibromoethane		<1.00
1,2-dichlorobenzene		<1
1,2-dichloroethane		<1
1,2-dichloropropane		<1
1,2-dinitrobenzene		
1,3,5-trinitrobenzene		
1,3-dichlorobenzene		
1,3-dichloropropane		
1,3-dinitrobenzene		
1,4-dichlorobenzene		<1
1,4-naphthoquinone		
1,4-phenylenediamine		
1-naphthylamine		
2,2-dichloropropane		
2,3,4,6-tetrachlorophenol		
2,4,5-t		
2,4,5-tp (silvex)		
2,4,5-trichlorophenol		
2,4,6-trichlorophenol		
2,4-d		
2,4-dichlorophenol		
2,4-dimethylphenol		
2,4-dinitrophenol		
2,4-dinitrotoluene		
2,6-dichlorophenol		
2,6-dinitrotoluene		
2-acetylaminofluorene		
2-butanone		<5
2-chloronaphthalene		
2-chlorophenol		
2-hexanone		<5
2-methylnaphthalene		
2-methylphenol (o-cresol)		
2-naphthylamine		
2-nitroaniline		
2-nitrophenol		
3,3'-dichlorobenzidine		
3,3'-dimethylbenzidine		
3/4-methylphenol		
3-methylcholanthrene		
3-nitroaniline		
4,4'-ddd		
4,4'-dde		
4,4'-ddt		
4,6-dinitro-2-methylphenol		
4-aminobiphenyl		
4-bromophenyl phenyl ether		
4-chloro-3-methylphenol		
4-chloroaniline		
4-chlorophenyl phenyl ether		
4-methyl-2-pentanone		<5
4-nitroaniline		
4-nitrophenol		
5-nitro-o-toluidine		
7,12-dimethylbenz(a)anthracene		
Acenaphthene		
Acenaphthylene		
Acetone		<10
Acetonitrile		
Acetophenone		
Acrolein		
Acrylonitrile		<5
Aldrin		
Alkalinity, total (as cacO3)		
Allyl chloride		

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	Units	3/13/2014	9/29/2014	9/30/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	11/10/2015
Alpha-bhc	ug/L								
Anthracene	ug/L								
Antimony, total	ug/L	<6 *		<2	<2	<2	<2	<2	
Arsenic, total	ug/L	12.2 *		9.8	10.2	12.9	7.3	16.9	6.6
Azobenzene	ug/L								
Barium, total	ug/L	<10.0 *		11.6	14.6	13.0	11.7	12.7	
Benzene	ug/L	<.5 *		<1.0	<1.0	<1.0	<1.0	<1.0	
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(ghi)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<1 *		<4	<4	<4	<4	<4	
Beta-bhc	ug/L								
Bis(2-chloroethoxy)methane	ug/L								
Bis(2-chloroethyl)ether	ug/L								
Bis(2-chloroisopropyl)ether	ug/L								
Bis(2-ethylhexyl)phthalate	ug/L								
Bromochloromethane	ug/L	<5 *		<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Bromoform	ug/L	<5 *		<1	<1	<1	<1	<1	
Bromomethane	ug/L	<4 *		<1	<1	<1	<1	<1	
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	.738 *		<.800	<.800	<.800	<.800	<.800	
Calcium, total	mg/L		711			681		640	
Carbon disulfide	ug/L	<1 *		<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	<2 *		<1	<1	<1	<1	<1	
Chlordane	ug/L								
Chloride	mg/L		12.8			18.0		11.8	
Chlorobenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
Chlorobenzilate	ug/L								
Chlorodibromomethane	ug/L	<5							
Chloroethane	ug/L	<4.0 *		<1.0	1.7	<1.0	<1.0	<1.0	
Chloroform	ug/L	<1 *		<1	<1	<1	<1	<1	
Chloromethane	ug/L	<3 *		<1	<1	<1	<1	<1	
Chloroprene	ug/L								
Chromium, total	ug/L	<15 *		<8	<8	<8	<8	<8	
Chrysene	ug/L								
Cis-1,2-dichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Cis-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	
Cobalt, total	ug/L	<1.32 *		1.00	1.30	1.90	1.70	38.40	15.50
Copper, total	ug/L	<20 *		<4	<4	<4	<4	<4	
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<5		<1	<1	<1	<1	<1	
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	
Dichlorobromomethane	ug/L	<1							
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethane	mg/L								
Ethene	mg/L								
Ethyl methacrylate	ug/L								
Ethyl methane sulfonate	ug/L								
Ethylbenzene	ug/L	<1 *		<1	<1	<1	<1	<1	
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc [lindane]	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	6/7/2019	9/9/2019	3/10/2020
Alpha-bhc						<.05				
Anthracene						<8				
Antimony, total	<2	<2	<2	<2	<2	<2	<2	17.2	<2	<2
Arsenic, total	4.3	8.1	6.4	8.8	5.0	10.3	10.1		14.0	11.3
Azobenzene						<8				
Barium, total	13.2	11.8	12.4	12.1	19.2	17.6	15.5		15.4	12.3
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Benzo(a)anthracene						<8				
Benzo(a)pyrene						<8				
Benzo(b)fluoranthene						<8				
Benzo(ghi)perylene						<8				
Benzo(k)fluoranthene						<8				
Benzyl alcohol						<8				
Beryllium, total	<4	<4	<1	<4	<4	<4	<4		<4	<4
Beta-bhc						<.05				
Bis(2-chloroethoxy)methane						<8				
Bis(2-chloroethyl)ether						<8				
Bis(2-chloroisopropyl)ether						<8				
Bis(2-ethylhexyl)phthalate						8	<6		<6	<6
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Butyl benzyl phthalate						<8				
Cadmium, total	<.800	<.800	<.800	<.800	<.800	<.800	<.800		<.800	<.800
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chlordane						<.1				
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chlorobenzilate						<8				
Chlorodibromomethane										
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chloroprene						<1				
Chromium, total	<8	<8	<8	<8	<8	<8	<8		<8	<8
Chrysene						<8				
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	2.90	2.50	<.80	1.70	<.80	<.80	37.00	42.00	51.30	57.70
Copper, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Cyanide, total						<.005				
Delta-bhc						<.05				
Diallate						<8				
Dibenzo(a,h)anthracene						<8				
Dibenzofuran						<8				
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Dichlorobromomethane										
Dichlorodifluoromethane						<1				
Dieldrin						<.05				
Diethyl phthalate						<8				
Dimethoate						<.4				
Dimethylphthalate						<8				
Di-n-butyl phthalate						<8				
Di-n-octyl phthalate						<8				
Dinoseb						<.5				
Diphenylamine						<8				
Disulfoton						<.4				
Endosulfan i						<.05				
Endosulfan ii						<.05				
Endosulfan sulfate						<.05				
Endrin						<.05				
Endrin aldehyde						<.05				
Ethane										
Ethene										
Ethyl methacrylate						<10				
Ethyl methane sulfonate						<8				
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Famphur						<.4				
Fluoranthene						<8				
Fluorene						<8				
Gamma-bhc [lindane]						<.05				
Heptachlor						<.05				
Heptachlor epoxide						<.05				

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	7/6/2020	9/14/2020
Alpha-bhc		
Anthracene		
Antimony, total		<2
Arsenic, total		5.2
Azobenzene		
Barium, total		9.1
Benzene		<1.0
Benzo(a)anthracene		
Benzo(a)pyrene		
Benzo(b)fluoranthene		
Benzo(ghi)perylene		
Benzo(k)fluoranthene		
Benzyl alcohol		
Beryllium, total		<4
Beta-bhc		
Bis(2-chloroethoxy)methane		
Bis(2-chloroethyl)ether		
Bis(2-chloroisopropyl)ether		
Bis(2-ethylhexyl)phthalate		
Bromochloromethane		<1
Bromodichloromethane		<1
Bromoform		<1
Bromomethane		<1
Butyl benzyl phthalate		
Cadmium, total		<.800
Calcium, total		
Carbon disulfide		<1
Carbon tetrachloride		<1
Chlordane		
Chloride		
Chlorobenzene		<1
Chlorobenzilate		
Chlorodibromomethane		
Chloroethane		1.4
Chloroform		<1
Chloromethane		<1
Chloroprene		
Chromium, total		<8
Chrysene		
Cis-1,2-dichloroethene		<1
Cis-1,3-dichloropropene		<1
Cobalt, total		38.60
Copper, total		<4
Cyanide, total		
Delta-bhc		
Diallate		
Dibenzo(a,h)anthracene		
Dibenzofuran		
Dibromochloromethane		<1
Dibromomethane		<1
Dichlorobromomethane		
Dichlorodifluoromethane		
Dieldrin		
Diethyl phthalate		
Dimethoate		
Dimethylphthalate		
Di-n-butyl phthalate		
Di-n-octyl phthalate		
Dinoseb		
Diphenylamine		
Disulfoton		
Endosulfan i		
Endosulfan ii		
Endosulfan sulfate		
Endrin		
Endrin aldehyde		
Ethane	<.007	
Ethene	<.007	
Ethyl methacrylate		
Ethyl methane sulfonate		
Ethylbenzene		<1
Famphur		
Fluoranthene		
Fluorene		
Gamma-bhc [lindane]		
Heptachlor		
Heptachlor epoxide		

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	Units	3/13/2014	9/29/2014	9/30/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	11/10/2015
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Iodomethane	ug/L	<10 *		<1	<1	<1	<1	<1	
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4 *		<4	<4	<4	<4	<4	
Magnesium, total	mg/L		223			217		225	
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methane	mg/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene bromide	ug/L	<1							
Methylene chloride	ug/L	<2.6 *		<5.0	<5.0	<5.0	<5.0	<5.0	
Naphthalene	ug/L								
Nickel, total	ug/L	<50.0 *		6.7	6.8	9.0	7.8	200.0	88.5
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L		2.05			2.20		1.83	
N-nitrosodiethylamine	ug/L								
N-nitrosodimethylamine	ug/L								
N-nitrosodi-n-butylamine	ug/L								
N-nitroso-di-n-propylamine	ug/L								
N-nitrosodiphenylamine	ug/L								
N-nitrosomethylethylamine	ug/L								
N-nitrosopiperidine	ug/L								
N-nitrosopyrrolidine	ug/L								
O-toluidine	ug/L								
P-(dimethylamino)azobenzene	ug/L								
Parathion	ug/L								
Pcb 1016	ug/L								
Pcb 1221	ug/L								
Pcb 1232	ug/L								
Pcb 1242	ug/L								
Pcb 1248	ug/L								
Pcb 1254	ug/L								
Pcb 1260	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene	ug/L								
Pentachlorophenol	ug/L								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenols, total	mg/L								
Phorate	ug/L								
Potassium, total	mg/L		12.8			11.4		15.8	
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<5 *		<4	<4	<4	<4	<4	
Silver, total	ug/L	<20 *		<4	<4	<4	<4	<4	
Sodium, total	mg/L		97.4			105.0		87.4	
Solids, total dissolved	mg/L		3390			3280		3380	
Styrene	ug/L	<1 *		<1	<1	<1	<1	<1	
Sulfate	mg/L		1880			1920		1980	
Sulfide, total	mg/L	<1.00 *		.45	<.10	.11		.41	
Tetrachloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Thallium, total	ug/L	<2 *		<4	<4	<4	<4	<4	
Thionazin	ug/L								
Tin, total	ug/L	<100 *		<20	<20	<20		<20	
Toluene	ug/L	<1 *		<1	<1	<1	<1	<1	
Total suspended solids	mg/L	687 *	785			186			
Toxaphene	ug/L								
Trans-1,2-dichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Trans-1,3-dichloropropene	ug/L	<5 *		<1	<1	<1	<1	<1	
Trans-1,4-dichloro-2-butene	ug/L	<10 *		<5	<5	<5	<5	<5	
Trichloroethene	ug/L	<1 *		<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	<4 *		<1	<1	<1	<1	<1	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	6/7/2019	9/9/2019	3/10/2020
Hexachlorobenzene						<.05				
Hexachlorobutadiene						<8				
Hexachlorocyclopentadiene						<8				
Hexachloroethane						<8				
Hexachloropropene						<8				
Indeno(1,2,3-cd)pyrene						<8				
Iodomethane	<1	<1	<1	<1	<1	<1	<1		<1	<1
Isobutanol						<1				
Isodrin						<8				
Isophorone						<8				
Isosafrole						<8				
Kepon						<8				
Lead, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Magnesium, total										
Mercury, total						<.5				
Methacrylonitrile						<1				
Methane										
Methapyriline						<8				
Methoxychlor						<.05				
Methyl methacrylate						<1				
Methyl methanesulfonate						<8				
Methyl parathion						<.4				
Methylene bromide										
Methylene chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Naphthalene						<8				
Nickel, total	18.2	14.6	4.3	11.6	<4.0	5.4	176.0	193.0	206.0	211.0
Nitrobenzene						<8				
Nitrogen, ammonia										
N-nitrosodiethylamine						<8				
N-nitrosodimethylamine						<8				
N-nitrosodi-n-butylamine						<8				
N-nitroso-di-n-propylamine						<8				
N-nitrosodiphenylamine						<8				
N-nitrosomethylethylamine						<8				
N-nitrosopiperidine						<8				
N-nitrosopyrrolidine						<8				
O-toluidine						<8				
P-(dimethylamino)azobenzene						<8				
Parathion						<.4				
Pcb 1016						<.1				
Pcb 1221						<.2				
Pcb 1232						<.2				
Pcb 1242						<.2				
Pcb 1248						<.2				
Pcb 1254						<.1				
Pcb 1260						<.1				
Pentachlorobenzene						<8				
Pentachloronitrobenzene						<8				
Pentachlorophenol						<8				
Phenacetin						<8				
Phenanthrene						<8				
Phenols, total						<.008				
Phorate						<.4				
Potassium, total										
Pronamide						<8				
Propionitrile						<10				
Pyrene						<8				
Safrole						<8				
Selenium, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4		<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Sulfate										
Sulfide, total	.25	<.10	<.10	<.10	<.10	<.10	<.10		<.10	<.10
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Thallium, total	<4	<4	<4	<4	<4	<4	<2		<2	<2
Thionazin						<.4				
Tin, total	<20	<20	<20	<20	<20	<20	<20		<20	<20
Toluene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Total suspended solids										
Toxaphene						<.2				
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5		<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1		<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	7/6/2020	9/14/2020
Hexachlorobenzene		
Hexachlorobutadiene		
Hexachlorocyclopentadiene		
Hexachloroethane		
Hexachloropropene		
Indeno(1,2,3-cd)pyrene		
Iodomethane		<1
Isobutanol		
Isodrin		
Isophorone		
Isosafrole		
Kepone		
Lead, total		<4
Magnesium, total		
Mercury, total		
Methacrylonitrile		
Methane	6.56	
Methapyrilene		
Methoxychlor		
Methyl methacrylate		
Methyl methanesulfonate		
Methyl parathion		
Methylene bromide		
Methylene chloride		<5.0
Naphthalene		
Nickel, total		148.0
Nitrobenzene		
Nitrogen, ammonia		
N-nitrosodiethylamine		
N-nitrosodimethylamine		
N-nitrosodi-n-butylamine		
N-nitroso-di-n-propylamine		
N-nitrosodiphenylamine		
N-nitrosomethylethylamine		
N-nitrosopiperidine		
N-nitrosopyrrolidine		
O-toluidine		
P-(dimethylamino)azobenzene		
Parathion		
Pcb 1016		
Pcb 1221		
Pcb 1232		
Pcb 1242		
Pcb 1248		
Pcb 1254		
Pcb 1260		
Pentachlorobenzene		
Pentachloronitrobenzene		
Pentachlorophenol		
Phenacetin		
Phenanthrene		
Phenols, total		
Phorate		
Potassium, total		
Pronamide		
Propionitrile		
Pyrene		
Safrole		
Selenium, total		<4
Silver, total		<4
Sodium, total		
Solids, total dissolved		
Styrene		<1
Sulfate		
Sulfide, total		
Tetrachloroethene		<1
Thallium, total		<2
Thionazin		
Tin, total		
Toluene		<1
Total suspended solids		
Toxaphene		
Trans-1,2-dichloroethene		<1
Trans-1,3-dichloropropene		<1
Trans-1,4-dichloro-2-butene		<5
Trichloroethene		<1
Trichlorofluoromethane		<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	Units	3/13/2014	9/29/2014	9/30/2014	11/24/2014	3/19/2015	6/17/2015	8/26/2015	11/10/2015
Vanadium, total	ug/L	<50 *		<20	<20	<20	<20	<20	
Vinyl acetate	ug/L	<2 *		<5	<5	<5	<5	<5	
Vinyl chloride	ug/L	<1.0 *		<1.0	2.2	<1.0	<1.0	<1.0	
Xylenes, total	ug/L	<3 *		<2	<2	<2	<2	<2	
Zinc, total	ug/L	69.9 *		<8.0	<8.0	9.3	<8.0	273.0	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	3/9/2016	9/14/2016	3/7/2017	9/11/2017	3/7/2018	9/5/2018	4/1/2019	6/7/2019	9/9/2019	3/10/2020
Vanadium, total	<20	<20	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2		<2	<2
Zinc, total	<8.0	<8.0	<8.0	<8.0	9.2	<20.0	225.0	225.0	285.0	241.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-35

Constituents	7/6/2020	9/14/2020
Vanadium, total		<20
Vinyl acetate		<5
Vinyl chloride		<1.0
Xylenes, total		<2
Zinc, total		246.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-36

Constituents	Units	3/13/2014	9/29/2014	3/19/2015	8/26/2015	11/10/2015	3/9/2016	9/14/2016	9/11/2017	3/7/2018
1,1,1,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethene	ug/L	<2 *	<1	<1	<1		<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<12 *	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00
1,2-dibromoethane	ug/L	<13 *	<1.00	<1.00	<1.00		<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
2-butanone	ug/L	<10 *	<5	<5	<5		<5	<5	<5	<5
2-hexanone	ug/L	<10 *	<5	<5	<5		<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<10 *	<5	<5	<5		<5	<5	<5	<5
Acetone	ug/L	<10 *	<10	<10	<10		<10	<10	<10	<10
Acrylonitrile	ug/L	<10 *	<5	<5	<5		<5	<5	<5	<5
Alkalinity, total (as cac03)	mg/L		455	480	373					
Antimony, total	ug/L	6.96 *	15.30	5.00	10.20	8.00	5.20	3.20	3.50	7.90
Arsenic, total	ug/L	18.4 *	28.5	7.7	4.5		<4.0	<4.0	4.4	<4.0
Barium, total	ug/L	12.7 *	18.0	17.4	12.5		12.2	10.4	17.7	12.8
Benzene	ug/L	<5 *	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<1 *	<4	<4	<4		<4	<4	<4	<4
Bromochloromethane	ug/L	<5 *	<1	<1	<1		<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Bromoform	ug/L	<5 *	<1	<1	<1		<1	<1	<1	<1
Bromomethane	ug/L	<4 *	<1	<1	<1		<1	<1	<1	<1
Cadmium, total	ug/L	4.99 *	7.90	1.10	12.30	3.30	6.80	2.50	1.50	2.10
Calcium, total	mg/L		543	317	473					
Carbon disulfide	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<2 *	<1	<1	<1		<1	<1	<1	<1
Chloride	mg/L		11.4	14.9	6.6					
Chlorobenzene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Chlorodibromomethane	ug/L	<5								
Chloroethane	ug/L	<4 *	<1	<1	<1		<1	<1	<1	<1
Chloroform	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Chloromethane	ug/L	<3 *	<1	<1	<1		<1	<1	<1	<1
Chromium, total	ug/L	20.4 *	42.7	12.3	<8.0		<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1		<1	<1	<1	<1
Cobalt, total	ug/L	16.7 *	23.6	7.3	.8		2.8	6.6	12.5	2.2
Copper, total	ug/L	43.3 *	27.1	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<5	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1		<1	<1	<1	<1
Dichlorobromomethane	ug/L	<1								
Ethylbenzene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Iodomethane	ug/L	<10 *	<1	<1	<1		<1	<1	<1	<1
Lead, total	ug/L	28.7 *	29.5	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0
Magnesium, total	mg/L		224	195	167					
Methylene bromide	ug/L	<1								
Methylene chloride	ug/L	<5 *	<5	<5	<5		<5	<5	<5	<5
Nickel, total	ug/L	90.2 *	124.0	41.6	23.0		28.0	44.1	66.0	34.8
Nitrogen, ammonia	mg/L		1.16	1.24	<1.00					
Potassium, total	mg/L		15.2	12.2	7.0					
Selenium, total	ug/L	<5.0 *	10.7	<4.0	12.3	4.0	9.1	9.5	<4.0	14.4
Silver, total	ug/L	<20 *	<4	<4	<4		<4	<4	<4	<4
Sodium, total	mg/L		229	288	158					
Solids, total dissolved	mg/L		2400	2930	2970					
Styrene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Sulfate	mg/L		1810	1760	1980					
Sulfide, total	mg/L	1.8 *	<1	<1	<1		<1	<1	<1	<1
Tetrachloroethene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Thallium, total	ug/L	<2 *	<4	<4	<4		<4	<4	<4	<4
Tin, total	ug/L	<100 *	<20	<20	<20		<20	<20	<20	<20
Toluene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Total suspended solids	mg/L	6890 *	2450	125						
Trans-1,2-dichloroethene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<5 *	<1	<1	<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<10 *	<5	<5	<5		<5	<5	<5	<5
Trichloroethene	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<4 *	<1	<1	<1		<1	<1	<1	<1
Vanadium, total	ug/L	75.7 *	191.0	47.1	<20.0		<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<2 *	<5	<5	<5		<5	<5	<5	<5
Vinyl chloride	ug/L	<1 *	<1	<1	<1		<1	<1	<1	<1
Xylenes, total	ug/L	<3 *	<2	<2	<2		<2	<2	<2	<2
Zinc, total	ug/L	253.0 *	266.0	50.4	160.0		86.0	61.0	75.8	75.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-36

Constituents	9/5/2018	4/1/2019	9/9/2019	3/10/2020	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	<5	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, total (as CaCO3)										
Antimony, total	2.90	2.10	<2.00	<2.00	<2.00	<2.00	<2.00	4.40	<2.00	2.40
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	10.8	11.2	9.5	11.5	8.1	10.0	10.4	10.4	7.9	11.7
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	.90	.90	.90	1.00	<.80	<.80	<.80	.90	<.80	<.80
Calcium, total										
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride										
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane										
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	6.2	2.3	4.4	8.2	10.2	14.6	6.7	6.2	9.4	9.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorobromomethane										
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total										
Methylene bromide										
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	48.1	25.1	41.7	39.5	46.5	40.1	28.5	33.2	35.7	31.4
Nitrogen, ammonia										
Potassium, total										
Selenium, total	<4.0	5.1	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total										
Solids, total dissolved										
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate										
Sulfide, total	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin, total										
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total suspended solids										
Trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	60.1	42.7	49.5	52.0	55.9	45.5	31.1	48.4	40.3	35.4

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-36

Constituents	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethene	<1	<1
1,2,3-trichloropropane	<1	<1
1,2-dibromo-3-chloropropane	<5.00	<5.00
1,2-dibromoethane	<1.00	<1.00
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,4-dichlorobenzene	<1	<1
2-butanone	<10	<10
2-hexanone	<5	<5
4-methyl-2-pentanone	<5	<5
Acetone	<10	<10
Acrylonitrile		<5
Alkalinity, total (as CaCO ₃)		
Antimony, total	<2.00	3.30
Arsenic, total	<4.0	<4.0
Barium, total	10.5	10.0
Benzene	<1.0	<1.0
Beryllium, total	<4	<4
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Cadmium, total	<.80	1.00
Calcium, total		
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chloride		
Chlorobenzene	<1	<1
Chlorodibromomethane		
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chromium, total	<8.0	<8.0
Cis-1,2-dichloroethene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	6.5	2.7
Copper, total	<4.0	<4.0
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Dichlorobromomethane		
Ethylbenzene	<1	<1
Iodomethane	<1	<1
Lead, total	<4.0	<4.0
Magnesium, total		
Methylene bromide		
Methylene chloride	<5	<5
Nickel, total	29.9	26.8
Nitrogen, ammonia		
Potassium, total		
Selenium, total	<4.0	<4.0
Silver, total	<4	<4
Sodium, total		
Solids, total dissolved		
Styrene	<1	<1
Sulfate		
Sulfide, total		
Tetrachloroethene	<1	<1
Thallium, total	<2	<2
Tin, total		
Toluene	<1	<1
Total suspended solids		
Trans-1,2-dichloroethene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20.0	<20.0
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	38.3	48.4

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-37

Constituents	Units	9/14/2020	3/4/2021	9/9/2021	3/24/2022	9/9/2022	3/1/2023	9/4/2024	3/10/2025
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone	ug/L	<5	<5	<5	<10	<10	<10	<10	<10
2-hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	48.7	37.1	26.6	25.4	22.0	23.6	21.5	21.9
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	10.6	7.7	13.5	6.6	7.2	7.7	8.6	9.6
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	24.9	14.4	8.4	9.4	8.2	7.9	10.4	14.3
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	21.8	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-38

Constituents	Units	10/11/2021	1/5/2022	3/24/2022	9/9/2022	11/11/2022	3/1/2023	5/9/2023	6/3/2024	3/10/2025
0,0,0-triethylphosphorothioate	ug/L								<.4	<.4
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,1,1-trichloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,1,2-trichloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,1-dichloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,1-dichloroethene	ug/L	<1		<1	<1		<1		<1	<1
1,1-dichloropropene	ug/L								<1	<1
1,2,3-trichloropropane	ug/L	<1		<1	<1		<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								<8	<8
1,2,4-trichlorobenzene	ug/L								<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5		<5	<5		<5		<1	<1
1,2-dibromoethane	ug/L	<1		<1	<1		<1		<1	<1
1,2-dichlorobenzene	ug/L	<1		<1	<1		<1		<1	<1
1,2-dichloroethane	ug/L	<1		<1	<1		<1		<1	<1
1,2-dichloropropane	ug/L	<1		<1	<1		<1		<1	<1
1,2-dinitrobenzene	ug/L								<8	<8
1,3,5-trinitrobenzene	ug/L								<8	<8
1,3-dichlorobenzene	ug/L								<1	<1
1,3-dichloropropane	ug/L								<1	<1
1,3-dinitrobenzene	ug/L								<8	<8
1,4-dichlorobenzene	ug/L	<1		<1	<1		<1		<1	<1
1,4-naphthoquinone	ug/L								<8	<8
1,4-phenylenediamine	ug/L								<8	<8
1-naphthylamine	ug/L								<8	<8
2,2-dichloropropane	ug/L								<1	<1
2,3,4,6-tetrachlorophenol	ug/L								<8	<8
2,4,5-t	ug/L								<.5	<.5
2,4,5-tp (silvex)	ug/L								<.5	<.5
2,4,5-trichlorophenol	ug/L								<8	<8
2,4,6-trichlorophenol	ug/L								<8	<8
2,4-d	ug/L								<2	<2
2,4-dichlorophenol	ug/L								<8	<8
2,4-dimethylphenol	ug/L								<8	<8
2,4-dinitrophenol	ug/L								<8	<8
2,4-dinitrotoluene	ug/L								<8	<8
2,6-dichlorophenol	ug/L								<8	<8
2,6-dinitrotoluene	ug/L								<8	<8
2-acetylaminofluorene	ug/L								<8	<8
2-butanone	ug/L	<5		<10	<10		<10		<5	<5
2-chloronaphthalene	ug/L								<8	<8
2-chlorophenol	ug/L								<8	<8
2-hexanone	ug/L	<5		<5	<5		<5		<5	<5
2-methylnaphthalene	ug/L								<8	<8
2-methylphenol (o-cresol)	ug/L								<8	<8
2-naphthylamine	ug/L								<8	<8
2-nitroaniline	ug/L								<8	<8
2-nitrophenol	ug/L								<8	<8
3,3'-dichlorobenzidine	ug/L								<8	<8
3,3'-dimethylbenzidine	ug/L								<8	<8
3/4-methylphenol	ug/L								<8	<8
3-methylcholanthrene	ug/L								<8	<8
3-nitroaniline	ug/L								<8	<8
4,4'-ddd	ug/L								<.05	<.05
4,4'-dde	ug/L								<.05	<.05
4,4'-ddt	ug/L								<.05	<.05
4,6-dinitro-2-methylphenol	ug/L								<8	<8
4-aminobiphenyl	ug/L								<8	<8
4-bromophenyl phenyl ether	ug/L								<8	<8
4-chloro-3-methylphenol	ug/L								<8	<8
4-chloroaniline	ug/L								<8	<8
4-chlorophenyl phenyl ether	ug/L								<8	<8
4-methyl-2-pentanone	ug/L	<5		<5	<5		<5		<5	<5
4-nitroaniline	ug/L								<8	<8
4-nitrophenol	ug/L								<8	<8
5-nitro-o-toluidine	ug/L								<8	<8
7,12-dimethylbenz(a)anthracene	ug/L								<8	<8
Acenaphthene	ug/L								<8	<8
Acenaphthylene	ug/L								<8	<8
Acetone	ug/L	<10		<10	<10		<10		<10	<10
Acetonitrile	mg/L								<.01	<.01
Acetophenone	ug/L								<8	<8
Acrolein	ug/L								<10	<10
Acrylonitrile	ug/L	<5		<5	<5		<5		<5	<5
Aldrin	ug/L								<.05	<.05
Allyl chloride	ug/L								<1	<1
Alpha-bhc	ug/L								<.05	<.05

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-38

Constituents	Units	10/11/2021	1/5/2022	3/24/2022	9/9/2022	11/11/2022	3/1/2023	5/9/2023	6/3/2024	3/10/2025
Anthracene	ug/L								<8	<8
Antimony, total	ug/L	<2		<2	<2		<2		<2	<2
Arsenic, total	ug/L	5.3		4.0	5.6		19.7	23.7	5.2	10.8
Azobenzene	ug/L								<8	<8
Barium, total	ug/L	34.8		25.0	22.1		23.0		17.5	20.6
Benzene	ug/L	<1		<1	<1		<1		<1	<1
Benzo(a)anthracene	ug/L								<8	<8
Benzo(a)pyrene	ug/L								<8	<8
Benzo(b)fluoranthene	ug/L								<8	<8
Benzo(ghi)perylene	ug/L								<8	<8
Benzo(k)fluoranthene	ug/L								<8	<8
Benzyl alcohol	ug/L								<8	<8
Beryllium, total	ug/L	<4		<4	<4		<4		<4	<4
Beta-bhc	ug/L								<.05	<.05
Bis(2-chloroethoxy)methane	ug/L								<8	<8
Bis(2-chloroethyl)ether	ug/L								<8	<8
Bis(2-chloroisopropyl)ether	ug/L								<8	<8
Bis(2-ethylhexyl)phthalate	ug/L								<6	<6
Bromochloromethane	ug/L	<1		<1	<1		<1		<1	<1
Bromodichloromethane	ug/L	<1		<1	<1		<1		<1	<1
Bromoform	ug/L	<1		<1	<1		<1		<1	<1
Bromomethane	ug/L	<1		<1	<1		<1		<1	<1
Butyl benzyl phthalate	ug/L								<8	<8
Cadmium, total	ug/L	<.8		<.8	<.8		<.8		<.8	<.8
Carbon disulfide	ug/L	2.4	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0
Carbon tetrachloride	ug/L	<1		<1	<1		<1		<1	<1
Chlordane	ug/L								<1	<.1
Chlorobenzene	ug/L	<1		<1	<1		<1		<1	<1
Chlorobenzilate	ug/L								<8	<8
Chloroethane	ug/L	<1		<1	<1		<1		<1	<1
Chloroform	ug/L	<1		<1	<1		<1		<1	<1
Chloromethane	ug/L	<1		<1	<1		<1		<1	<1
Chloroprene	ug/L								<1	<1
Chromium, total	ug/L	<8		<8	<8		<8		<8	<8
Chrysene	ug/L								<8	<8
Cis-1,2-dichloroethene	ug/L	<1		<1	<1		<1		<1	<1
Cis-1,3-dichloropropene	ug/L	<1		<1	<1		<1		<1	<1
Cobalt, total	ug/L	3.6		4.0	2.9		2.6		1.3	4.4
Copper, total	ug/L	<4.0		<4.0	27.4	<4.0	<4.0		<4.0	<4.0
Cyanide, total	mg/L								<.005	<.010
Delta-bhc	ug/L								<.05	<.05
Diallate	ug/L								<8	<8
Dibenzo(a,h)anthracene	ug/L								<8	<8
Dibenzofuran	ug/L								<8	<8
Dibromochloromethane	ug/L	<1		<1	<1		<1		<1	<1
Dibromomethane	ug/L	<1		<1	<1		<1		<1	<1
Dichlorodifluoromethane	ug/L								<1	<1
Dieldrin	ug/L								<.05	<.05
Diethyl phthalate	ug/L								<8	<8
Dimethoate	ug/L								<.4	<.4
Dimethylphthalate	ug/L								<8	<8
Di-n-butyl phthalate	ug/L								<8	<8
Di-n-octyl phthalate	ug/L								<8	<8
Dinoseb	ug/L								<.5	<.5
Diphenylamine	ug/L								<8	<8
Disulfoton	ug/L								<.4	<.4
Endosulfan i	ug/L								<.05	<.05
Endosulfan ii	ug/L								<.05	<.05
Endosulfan sulfate	ug/L								<.05	<.05
Endrin	ug/L								<.05	<.05
Endrin aldehyde	ug/L								<.05	<.05
Ethyl methacrylate	ug/L								<10	<10
Ethyl methane sulfonate	ug/L								<8	<8
Ethylbenzene	ug/L	<1		<1	<1		<1		<1	<1
Famphur	ug/L								<.4	<.4
Fluoranthene	ug/L								<8	<8
Fluorene	ug/L								<8	<8
Gamma-bhc [lindane]	ug/L								<.05	<.05
Heptachlor	ug/L								<.05	<.05
Heptachlor epoxide	ug/L								<.05	<.05
Hexachlorobenzene	ug/L								<.05	<.05
Hexachlorobutadiene	ug/L								<8	<8
Hexachlorocyclopentadiene	ug/L								<8	<8
Hexachloroethane	ug/L								<8	<8
Hexachloropropene	ug/L								<8	<8
Indeno(1,2,3-cd)pyrene	ug/L								<8	<8
Iodomethane	ug/L	<1		<1	<1		<1		<2	<2

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for MW-38

Constituents	Units	10/11/2021	1/5/2022	3/24/2022	9/9/2022	11/11/2022	3/1/2023	5/9/2023	6/3/2024	3/10/2025
Isobutanol	mg/L								<1	<1
Isodrin	ug/L								<8	<8
Isophorone	ug/L								<8	<8
Isosafrole	ug/L								<8	<8
Kepone	ug/L								<8	<8
Lead, total	ug/L	<4		<4	<4		<4		<4	<4
Mercury, total	ug/L								<.5	<.5
Methacrylonitrile	ug/L								<1	<1
Methapyrilene	ug/L								<8	<8
Methoxychlor	ug/L								<.05	<.05
Methyl methacrylate	ug/L								<1	<1
Methyl methanesulfonate	ug/L								<8	<8
Methyl parathion	ug/L								<.4	<.4
Methylene chloride	ug/L	<5		<5	<5		<5		<5	<5
Naphthalene	ug/L								<8	<8
Nickel, total	ug/L	5.1		<4.0	<4.0		<4.0		4.3	6.3
Nitrobenzene	ug/L								<8	<8
N-nitrosodiethylamine	ug/L								<8	<8
N-nitrosodimethylamine	ug/L								<8	<8
N-nitrosodi-n-butylamine	ug/L								<8	<8
N-nitroso-di-n-propylamine	ug/L								<8	<8
N-nitrosodiphenylamine	ug/L								<8	<8
N-nitrosomethylethylamine	ug/L								<8	<8
N-nitrosopiperidine	ug/L								<8	<8
N-nitrosopyrrolidine	ug/L								<8	<8
O-toluidine	ug/L								<8	<8
P-(dimethylamino)azobenzene	ug/L								<8	<8
Parathion	ug/L								<.4	<.4
Pcb 1016	ug/L								<.2	<.2
Pcb 1221	ug/L								<.2	<.2
Pcb 1232	ug/L								<.2	<.2
Pcb 1242	ug/L								<.2	<.2
Pcb 1248	ug/L								<.2	<.2
Pcb 1254	ug/L								<.2	<.2
Pcb 1260	ug/L								<.2	<.2
Pentachlorobenzene	ug/L								<8	<8
Pentachloronitrobenzene	ug/L								<8	<8
Pentachlorophenol	ug/L								<8	<8
Phenacetin	ug/L								<8	<8
Phenanthrene	ug/L								<8	<8
Phenols, total	mg/L								<.008	<.008
Phorate	ug/L								<.4	<.4
Pronamide	ug/L								<8	<8
Propionitrile	ug/L								<10	<10
Pyrene	ug/L								<8	<8
Safrole	ug/L								<8	<8
Selenium, total	ug/L	<4		<4	<4		<4		<4	<4
Silver, total	ug/L	<4		<4	<4		<4		<4	<4
Styrene	ug/L	<1		<1	<1		<1		<1	<1
Sulfide, total	mg/L								<.15	<.10
Tetrachloroethene	ug/L	<1		<1	<1		<1		<1	<1
Thallium, total	ug/L	<2		<2	<2		<2		<2	<2
Thionazin	ug/L								<.4	<.4
Tin, total	ug/L								<20	<20
Toluene	ug/L	<1		<1	<1		<1		<1	<1
Toxaphene	ug/L								<.2	<.2
Trans-1,2-dichloroethene	ug/L	<1		<1	<1		<1		<1	<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1		<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5		<5		<5	<5
Trichloroethene	ug/L	<1		<1	<1		<1		<1	<1
Trichlorofluoromethane	ug/L	<1		<1	<1		<1		<1	<1
Vanadium, total	ug/L	<20		<20	<20		<20		<20	<20
Vinyl acetate	ug/L	<5		<5	<5		<5		<5	<5
Vinyl chloride	ug/L	<1		<1	<1		<1		<1	<1
Xylenes, total	ug/L	<2		<2	<2		<2		<2	<2
Zinc, total	ug/L	<20		<20	<20		<20		<20	<20

* - The displayed value is the arithmetic mean of multiple database matches.

Table 10 – Historic SSI and SSL (***NOT REQUIRED***)

Table 11 – Corrective Action Trend Analysis (***NOT REQUIRED***)

Table 12 – Leachate Summary

Table 12

Leachate Thickness Data

Clarke County SLF

Clarke County, Iowa

Existing Well ID	3/10/2025	5/21/2025	6/2/2025	7/8/2025	9/5/2025	11/11/2025	12/20/2025	HISTORIC RANGE ⁽¹⁾	
	Leachate Thickness (ft)	Leachate Thickness (ft)	Leachate Thickness (ft)	Leachate Thickness (ft)	Leachate Thickness (ft)	Leachate Thickness (ft)	Leachate Thickness (ft)	LOW	HIGH
LPZ-1	0.30	DRY	1.00	0.85	0.85	0.85	0.60	0	0.47
LPZ-2	3.50							0	6.14
LPZ-3	DRY							0	7.10
LPZ-4	0.15							0	5.00
LPZ-5	DRY							0	3.59
LPZ-6	DRY							0	2.16

NOTE: Leachate level measurement frequency was changed from quarterly to semi-annually in Permit Amendment #13 dated April 1, 2020.

(1) Historic range taken from 2013 AWQR. Doc # 79361.

Table 13 – Gas Monitoring Summary

Table 13
Annual Methane Gas Evaluation Report
Clarke County Sanitary Landfill
South Site - per Amendment # 14,

	3/10/25	9/5/25	3/10/2025			9/5/2025					
Location/Date	% LEL	% LEL	Point	Top Well Elevation	Top Screen Elevation	Depth to water (ft)	Water Elevation	Exposed Screen (ft)	Depth to water (ft)	Water Elevation	Exposed Screen (ft)
LFGW-W1	27.2	0									
LFGW-W2	50.0	0									
GP-2	0	0									
GP-3	0	0									
MW-36	0	0	MW-36	1043.41	1023.91	25.24	1018.17	-5.74	24.47	1018.94	-4.97
MW-19	0	0	MW-19	1007.37	999	4.94	1002.43	3.43	10.02	997.35	-1.65
MW-17	0	0	MW-17	1006.08	998	5.68	1000.4	2.4	11.53	994.55	-3.45

All readings by HLW.

 = exposed screen

Appendix A

Hydraulic Conductivity Data

Summary of Hydraulic Conductivity Measurements
 Clarke County Sanitary Landfill - South
 20-SDP-04-94C

Well	1994 K value cm/sec	2022 K Value cm/sec
Shallow - Unconsolidated fill/till		
MW-23	2.00E-04	2.56E-06
MW-27	3.20E-05	8.21E-06
MW-21	3.40E-04	3.73E-06
MW-31		9.85E-07
MW-33		1.73E-06
MW-34		1.46E-04
Deep - Limestone Bedrock		
MW-28	9.20E-02	2.19E-02
MW-29	1.00E-05	3.41E-05
MW-36		3.50E-04
MW-37		1.51E-04
MW-38		3.35E-03
MW-22	4.80E-05	2.58E-06
MW-32		2.34E-05

**TABLE 3. SUMMARY OF HYDRAULIC TESTING AND TRANSMISSIVITY CALCULATIONS,
CLARKE COUNTY SANITARY LANDFILL EXPANSION AREA**

WELL ID	HYDRAULIC CONDUCTIVITY (K)						TRANSMISSIVITY (T)	
	LABORATORY VALUES			IN SITU VALUES			T = (K)(b)	
	ELEVATION OF SAMPLE (ft., msl)	SEDIMENT DESCRIPTION	K (cm/sec)	ELEVATION OF SCREEN MIDPOINT (ft., msl)	SCREENED LITHOLOGY	K (cm/sec)	SATURATED THICKNESS (b) (ft.)	TRANSMISSIVITY (sq ft/day)
MW-10				1004.0	Limestone	4.0E-3	6	68.0
PZ-11	1023.0-1018.0	Fill: silty clay tr sand	5.3E-9	994.0	Shale	5.0E-8	8	0.001
MW-12	1011.5-1010.5	Fill: silty clay tr sand	2.3E-8	988.0	L.S./Shale	4.0E-5	4	0.454
MW-15				1000.5	Shale	2.0E-4	18	10.2
MW-16				976.5	Limestone	3.0E-4	5	4.25
MW-17				993.0	Silty Sand	1.5E-3	17	72.3
MW-18	997.0-996.0	Silt with sand & clay	9.4E-8	978.5	Sand/L.S.	1.7E-2	17	819.0
MW-19				994.0	Silty Clay	8.7E-5	20	4.93
MW-20	996.0-994.0	Silty clay	4.7E-9	979.5	Limestone	1.0E-3	20	56.7
MW-21				1015.0	Fill Material	3.4E-4	33	31.8
MW-22	1023.5-1022.0	Fill: silty clay with sand & grvl	4.3E-9	949.5	L.S./Shale	4.8E-5	8	1.09
MW-23	1020.0-1019.0	Fill: silty clay with sand & grvl	4.1E-9	1026.0	Fill Material	2.0E-4	26	14.7
MW-24				1015.0	Limestone	2.0E-2	10	567.0
MW-25	1027.5-1025.5	Fill: silty clay tr sand & grvl	6.5E-9	963.5	Limestone	5.9E-4	5	8.36
MW-26	1027.5-1026.0	Fill: silty clay with sand & grvl	7.6E-9	1060.0	Fill Material	3.4E-4	50	48.2
MW-27				1011.0	Fill Material	3.2E-5	34	3.08
MW-28				991.5	Fill/L.S.	9.2E-2	34	8870.0
MW-29	1020.0-1017.0	Fill: silty clay tr sand	7.8E-9	973.5	Limestone	1.0E-5	6	0.170

GROUNDWATER FLOW PATHS AND FLOW GRADIENTS

The water table flow direction is primarily toward the east and South Squaw Creek (Enclosure #2). The primary flow direction of the uppermost limestone aquifer is toward the east-southeast, with possible convergence along South Squaw Creek east of MW-17/18 (Enclosure #3).

Horizontal flow gradients were found to vary from 0.051 to 0.010 in the water table aquifer, and from 0.062 to 0.012 in the uppermost limestone aquifer (Table 4). The vertical gradients between the water table and the uppermost limestone aquifer were downward (recharge condition) and varied from 0.436 to 0.011. An exception is along the eastern perimeter where discharge to the South Squaw Creek alluvium occurs and an upward gradient of 0.049 is observed. The vertical:horizontal ratio is approximately equal to 1 except at MW-24/25 and MW-27/29 where it is 10.5:1 to 15.5:1, respectively.

HORIZONTAL GROUNDWATER FLOW RATES AND GROUNDWATER FLUX

Horizontal groundwater flow rates (velocity) vary directly as a function of hydraulic conductivity and gradient, and inversely as a function of the effective porosity. Flow rates were calculated using the generalized form of Darcy's equation as follows:

$$V_a = Ki/\eta$$

where:

V_a = Actual Flow Velocity (feet/day)

K = In-Situ Hydraulic Conductivity (feet per day)

i = Hydraulic Gradient (unitless)

η = Effective Porosity of Sediment (unitless)

The horizontal flow velocity at the water table varied from 8.504 to 0.017 ft/day. Flow velocity in the uppermost limestone aquifer varied from 2.891 to 0.018 ft/day.

TABLE 4. SUMMARY OF HYDROLOGIC DATA AND GROUNDWATER FLOW RATE AND FLUX CALCULATIONS, CLARKE COUNTY SANITARY LANDFILL EXPANSION AREA

WELL ID	WATER LEVEL ELEVATION (ft. msl)	HYDRAULIC HEAD MEASUREMENT POINT (ft. msl)	IN SITU HYDRAULIC CONDUCTIVITY (K) (ft/day)	EFFECTIVE POROSITY (η)	HYDRAULIC GRADIENT (i)		HORIZONTAL GROUNDWATER FLOW RATE (ft/day)	VERTICAL GROUNDWATER FLUX (Q) (cu ft/day/sq ft)
					Horizontal	Vertical		
MW-10	1017.26	1006.60	11.3386	0.15	0.041		3.100	
PZ-11	1018.24	994.45	0.0001	0.01	NA	NA	NA	NA
MW-12	1016.24	988.50	0.1134	0.1	0.018	NA	0.020	NA
MW-15	999.97	999.97	0.5669	0.1	0.010		0.057	
MW-16	999.72	977.50	0.8504	0.1	0.014	+0.011	0.119	0.006 (Recharge)
MW-17	994.57	994.57	4.2520	0.15	0.034		0.963	
MW-18	994.06	979.70	48.189	0.2	0.012	+0.034	2.891	0.145 (Recharge)
MW-19	997.19	997.19	0.2466	0.1	0.051		0.126	
MW-20	998.03	980.22	2.8350	0.15	0.012	-0.049	0.227	0.012 (Discharge)
MW-21	1014.64	1014.64	0.9638	0.1	0.032		0.308	
MW-22	955.09	955.09	0.1361	0.1	NA	NA	NA	NA
MW-23	1025.58	1025.58	0.5669	0.1	0.024	NA	0.136	NA
MW-24	1017.41	1017.41	56.693	0.2	0.030		8.504	
MW-25	994.44	964.67	1.6724	0.1	0.029	+0.436	0.485	0.729 (Recharge)
MW-26	1063.73	1063.73	0.9638	0.1	NA	NA	NA	NA
MW-27	1024.25	1024.25	0.0907	0.1	0.019		0.017	
MW-28	1017.23	992.48	260.79	0.2	NA	NA	NA	NA
MW-29	1014.31	974.59	0.0284	0.1	0.062	+0.200	0.018	0.006 (Recharge)

Appendix B

Field Sampling Forms

CLARKE COUNTY SANITARY LANDFILL - SOUTH
PERMIT # 20-SDP-04-94P

3/10/2025 Sampled by: T.Whipple Weather conditions: Sunny, calm, 32-55 degrees

IDNR Form 542-1322

Monitoring Well: MW-21 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1052.67
Well Depth	43.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1052.67
Well Depth	43.10
Top Screen	1019.57
Bottom Screen	1009.57
Bottom Well	1009.57
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	37.00
Top sample	1015.67
Bottom sample	1011.67
Turbidity(NTU)	1.70

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	10:32	29.35	1023.32	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.70
Appendix I	Metals	150	150		1.70
Appendix I	VOC	240	240		1.70
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis	945			
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1052.67	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	43.10	Before purging	3/10/2025	10:32	29.35	1023.32		0.0	
		After purging				1052.67			
		Top of Screen July 1994				1019.57			
						33.10	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1009.57			
		Bottom of Well	3/10/2025		42.75	1009.92			
						0.35	feet sedimentation		
		Before Sampling				1052.67			
		Recovery	9/4/2024	10:18	36.65	1016.02			
		Recovery	9/4/2024	13:19	35.36	1017.31			
		Recovery				1052.67			
		Recovery				1052.67			

IDNR Form 542-1322

Monitoring Well: MW-22 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1052.77
Well Depth	105.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1052.67
Well Depth	105.75
Top Screen	952.00
Bottom Screen	947.00
Bottom Well	947.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	100.00
Top sample	952.67
Bottom sample	948.67
Turbidity(NTU)	4.10

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	10:40	46.71	1006.06	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.10
Appendix I	Metals	150	150		4.10
Appendix I	VOC	240	240		4.10
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental					
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1052.77	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	105.75	Before purging	3/10/2025	10:40	46.71	1006.06		0.0	
		After purging				1052.77			
		Top of Screen July 1994				952.00			
						100.77	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				947.00			
		Bottom of Well	3/10/2025		105.70	947.07			
						0.07	feet sedimentation		
		Before Sampling				1052.77			
		Recovery				1052.77			
		Recovery				1052.77			
		Recovery				1052.77			
		Recovery				1052.77			

IDNR Form 542-1322

Monitoring Well: MW-23 (ug)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1055.07
Well Depth	34.30
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1055.07
Well Depth	34.30
Top Screen	1030.77
Bottom Screen	1020.77
Bottom Well	1020.77
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	28.00
Top sample	1027.07
Bottom sample	1023.07
Turbidity(NTU)	2.25

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	8:03	17.01	1038.06	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.25
Appendix I	Metals	150	150		2.25
Appendix I	VOC	240	240		2.25
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1055.07	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	34.30	Before purging	3/10/2025	8:03	17.01	1038.06	3	1.1	No
		After purging				1055.07			
		Top of Screen July 1994				1030.77			
						24.30	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1020.77			
		Bottom of Well	3/10/2025		34.00	1021.07			
						0.30	feet sedimentation		
		Before Sampling				1055.07			
		Recovery				1055.07			
		Recovery				1055.07			
		Recovery				1055.07			
		Recovery				1055.07			

IDNR Form 542-1322

Monitoring Well: MW-27 (ug)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1041.44
Well Depth	34.75
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1041.44
Well Depth	34.75
Top Screen	1016.44
Bottom Screen	1006.44
Bottom Well	1006.44
Sampler Length (ft)	1.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	1008.44
Bottom sample	1007.44
Turbidity(NTU)	8.37

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	8:47	14.28	1027.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.37
Appendix I	Metals	150	150		8.37
Appendix I	VOC	240	240		8.37
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1041.44	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	34.75	Before purging	3/10/2025	8:47	14.28	1027.16		0.0	
		After purging				1041.44			
		Top of Screen July 1994				1016.44			
						25.00	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1006.44			
		Bottom of Well	3/10/2025		34.75	1006.69			
						0.25	feet sedimentation		
		Before Sampling				1041.44			
		Recovery				1041.44			
		Recovery				1041.44			
		Recovery				1041.44			
		Recovery				1041.44			

IDNR Form 542-1322

Monitoring Well: MW-28 (ug)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1040.06
Well Depth	50.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1040.06
Well Depth	50.90
Top Screen	994.16
Bottom Screen	989.14
Bottom Well	989.14
Sampler Length (ft)	1.00
Sampler Volume (mL)	110.00
Feet cordage	50.00
Top sample	990.06
Bottom sample	989.06
Turbidity(NTU)	4.91

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	8:57	22.88	1017.18	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		4.91
Appendix I	Metals	150	150		4.91
Appendix I	VOC	240	240		4.91
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1040.06	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	50.90	Before purging	3/10/2025	8:57	22.88	1017.18		0.0	
		After purging				1040.06			
		Top of Screen July 1994				994.16			
						45.90	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				989.16			
		Bottom of Well	3/10/2025		51.80	988.26			
						-0.90	feet sedimentation		
		Before Sampling				1040.06			
		Recovery				1040.06			
		Recovery				1040.06			
		Recovery				1040.06			
		Recovery				1040.06			

IDNR Form 542-1322

Monitoring Well: MW-29 (ug)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1037.62
Well Depth	66.85
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1037.62
Well Depth	66.85
Top Screen	975.77
Bottom Screen	970.77
Bottom Well	970.77
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	60.00
Top sample	977.62
Bottom sample	973.62
Turbidity(NTU)	2.19

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	8:38	24.85	1012.77	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.19
Appendix I	Metals	150	150		2.19
Appendix I	VOC	240	240		2.19
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1037.62	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	66.85	Before purging	3/10/2025	8:38	24.85	1012.77		0.0	
		After purging				1037.62			
		Top of Screen July 1994				975.77			
						61.85	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				970.77			
		Bottom of Well	3/10/2025		66.60	971.02			
						0.25	feet sedimentation		
		Before Sampling				1037.62			
		Recovery				1037.62			
		Recovery				1037.62			
		Recovery				1037.62			
		Recovery				1037.62			

IDNR Form 542-1322

Monitoring Well: MW-31 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1070.11
Well Depth	71.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1070.11
Well Depth	71.90
Top Screen	1008.21
Bottom Screen	998.21
Bottom Well	998.21
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	66.00
Top sample	1004.11
Bottom sample	1000.11
Turbidity(NTU)	2.04

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	11:15	58.4	1011.71	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.04
Appendix I	Metals	150	150		2.04
Appendix I	VOC	240	240		2.04
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Bis	945			
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1070.11	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	71.90	Before purging	3/10/2025	11:15	58.4	1011.71		0.0	
		After purging				1070.11			
		Top of Screen July 1994				1008.21			
						61.90	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				998.21			
		Bottom of Well	3/10/2025		71.80	998.31			
						0.10	feet sedimentation		
		Before Sampling				1070.11			
		Recovery				1070.11			
		Recovery				1070.11			
		Recovery				1070.11			
		Recovery				1070.11			

IDNR Form 542-1322

Monitoring Well: MW-32 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1070.23
Well Depth	97.24
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1070.23
Well Depth	97.24
Top Screen	979.99
Bottom Screen	972.99
Bottom Well	972.99
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	90.00
Top sample	980.23
Bottom sample	976.23
Turbidity(NTU)	3.42

Date	Time	Water Level	Water Elevation
3/10/2025	11:24	67.51	1002.72

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.42
Appendix I	Metals	150	150		3.42
Appendix I	VOC	240	240		3.42
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental					
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1070.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	97.24	Before purging	3/10/2025	11:24	67.51	1002.72		0.0	
		After purging				1070.23			
		Top of Screen July 1994				979.99			
						90.24	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				972.99			
		Bottom of Well	3/10/2025		97.90	972.33			
						-0.66	feet sedimentation		
		Before Sampling				1070.23			
		Recovery				1070.23			
		Recovery				1070.23			
		Recovery				1070.23			
		Recovery				1070.23			

IDNR Form 542-1322

Monitoring Well: MW-33 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1062.3
Well Depth	47.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1062.3
Well Depth	47.80
Top Screen	1024.50
Bottom Screen	1014.50
Bottom Well	1014.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	42.00
Top sample	1020.30
Bottom sample	1016.30
Turbidity(NTU)	8.88

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	9:47	34.38	1027.92	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.88
Appendix I	Metals	150	150		8.88
Appendix I	VOC	240	240		8.88
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide	250	250		
Supplemental	Endosulfan				
Total			650	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1062.3	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	47.80	Before purging	3/10/2025	9:47	34.38	1027.92		0.0	
		After purging				1062.30			
		Top of Screen July 1994				1024.50			
						37.80	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1014.50			
		Bottom of Well	3/10/2025		48.40	1013.90			
						-0.60	feet sedimentation		
		Before Sampling				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			

IDNR Form 542-1322

Monitoring Well: MW-34 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1057.36
Well Depth	78.03
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1057.36
Well Depth	78.03
Top Screen	989.33
Bottom Screen	979.33
Bottom Well	979.33
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	71.00
Top sample	986.36
Bottom sample	982.36
Turbidity(NTU)	3.61

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	10:53	52.33	1005.03	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.61
Appendix I	Metals	150	150		3.61
Appendix I	VOC	240	240		3.61
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	2-4-D				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1057.36	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	78.03	Before purging	3/10/2025	10:53	52.33	1005.03		0.0	
		After purging				1057.36			
		Top of Screen July 1994				989.33			
						68.03	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				979.33			
		Bottom of Well	3/10/2025		77.4	979.96			
						0.63	feet sedimentation		
		Before Sampling				1057.36			
		Recovery				1057.36			
		Recovery				1057.36			
		Recovery				1057.36			
		Recovery				1057.36			

IDNR Form 542-1322

Monitoring Well: MW-35 (dg)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1047.57
Well Depth	36.22
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1047.57
Well Depth	36.22
Top Screen	1021.35
Bottom Screen	1011.35
Bottom Well	1011.35
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1047.57
Bottom sample	1047.57
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
3/10/2025		24.14	1023.43	WL Only

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10			
Appendix I	Metals	250			
Appendix I	VOC	120			
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide	250			
Supplemental	BEHP	1-Qt			
Total			0	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1047.57	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.22	Before purging				1047.57	0	0.0	
		After purging				1047.57			
		Top of Screen (RECORD)				1021.35			
						26.22			feet above (+) or below (-) top screen
		Bottom of Well (RECORD)				1011.35			
		Bottom of Well				1047.57			
						36.22			feet sedimentation
		Before Sampling				1047.57			App I
		Before Sampling				1047.57			Supplemental
		Recovery				1047.57			
		Recovery				1047.57			
		Recovery				1047.57			

IDNR Form 542-1322

Monitoring Well: MW-36 (ug)

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1043.41
Well Depth	29.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1043.41
Well Depth	29.50
Top Screen	1023.91
Bottom Screen	1013.91
Bottom Well	1013.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	25.00
Top sample	1018.41
Bottom sample	1014.41
Turbidity(NTU)	1.79

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	7:45	25.24	1018.17	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.79
Appendix I	Metals	150	150		1.79
Appendix I	VOC	240	240		1.79
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1043.41	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.50	Before purging	3/10/2025	7:45	25.24	1018.17		0.0	
		After purging				1043.41			
		Top of Screen July 1994				1023.91			
						19.50	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1013.91			
		Bottom of Well	3/10/2025		29.40	1014.01			
						0.10	feet sedimentation		
		Before Sampling				1043.41			
		Recovery				1043.41			
		Recovery				1043.41			
		Recovery				1043.41			
		Recovery				1043.41			

IDNR Form 542-1322

Monitoring Well: MW-37

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1042.58
Well Depth	33.35
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1042.58
Well Depth	33.35
Top Screen	1019.23
Bottom Screen	1009.23
Bottom Well	1009.23
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	1015.58
Bottom sample	1011.58
Turbidity(NTU)	1.93

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	9:24	19.3	1023.28	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.93
Appendix I	Metals	150	150		1.93
Appendix I	VOC	240	240		1.93
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1042.58	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	33.35	Before purging	3/10/2025	9:24	19.3	1023.28		0.0	
		After purging				1042.58			
		Top of Screen July 1994				1019.23			
						23.35	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1009.23			
		Bottom of Well	3/10/2025		33.35	1009.23			
						0.00	feet sedimentation		
		Before Sampling				1042.58			
		Recovery				1042.58			
		Recovery				1042.58			
		Recovery				1042.58			
		Recovery				1042.58			

IDNR Form 542-1322

Monitoring Well: MW-38

Primary Sampling Method: No-Purge for Appendix I
Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1071.53
Well Depth	64.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1071.53
Well Depth	64.10
Top Screen	1012.43
Bottom Screen	1007.43
Bottom Well	1007.43
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	58.50
Top sample	1013.03
Bottom sample	1009.03
Turbidity(NTU)	3.76

Date	Time	Water Level	Water Elevation	Notes
3/10/2025	11:42	53.84	1017.69	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.76
Appendix I	Metals	150	150		3.76
Appendix I	VOC	240	240		3.76
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide				
Supplemental					
Total			400	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1071.53	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	64.10	Before purging	3/10/2025	11:42	53.84	1017.69	6	3.6	no
		After purging	3/10/2025	12:01	53.96	1017.57			
		Top of Screen July 1994				1012.43			
						5.14			feet above (+) or below (-) top screen
		Bottom of Well July 1994				1007.43			
		Bottom of Well	3/10/2025		64.10	1007.43			
						0.00			feet sedimentation
		Before Sampling				1071.53			
		Recovery				1071.53			
		Recovery				1071.53			
		Recovery				1071.53			
		Recovery				1071.53			

CLARKE COUNTY SANITARY LANDFILL - SOUTH
PERMIT # 20-SDP-04-94P

9/5/2025

Sampled by: Todd Whipple

Weather conditions:

Sunny, breezy, 58 degrees

IDNR Form 542-1322

Monitoring Well: MW-33 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1062.3
Well Depth	47.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1062.3
Well Depth	47.80
Top Screen	1024.50
Bottom Screen	1014.50
Bottom Well	1014.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	42.00
Top sample	1020.30
Bottom sample	1016.30
Turbidity(NTU)	5.47

Date	Time	Water Level	Water Elevation	Notes
9/5/2025	8:58	34.51	1027.79	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.47
Appendix I	Metals	150	150		5.47
Appendix I	VOC	240	240		5.47
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Sulfide		250		
Supplemental	Endosulfan				
Total			650	0	

PURGE & SAMPLE METHOD - Purge by Waterra Inertial Lift Pump, then well rest, then sample collection

TOC	1062.3	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	47.80	Before purging	9/5/2025	8:58	34.51	1027.79		0.0	
		After purging				1062.30			
		Top of Screen July 1994				1024.50			
						37.80	feet above (+) or below (-) top screen		
		Bottom of Well July 1994				1014.50			
		Bottom of Well	9/5/2025		48.40	1013.90			
						-0.60	feet sedimentation		
		Before Sampling				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			
		Recovery				1062.30			

Appendix C

Statistical Report

**Results of the Ground Water Statistics
for Clarke County Sanitary Landfill**

First Semi-Annual Monitoring Event in 2025

Prepared for:
Clarke County Sanitary Landfill
Osceola, Iowa

Prepared by:
Jeffrey A. Holmgren
Otter Creek Environmental Services, L.L.C.
Elgin, IL
(847) 464-1355

April 2025

INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2025 at Clarke County Sanitary Landfill in Osceola, Iowa. The ground water monitoring well network for the south site at Clarke County Sanitary Landfill includes MW-21, MW-23 (upgradient), MW-27 (upgradient), MW-31, MW-33, and MW-34 in the shallow glacial till aquifer and MW-22, MW-28 (upgradient), MW-29 (upgradient), MW-32, MW-36 (upgradient), MW-37, and MW-38 in the deep limestone aquifer.

The statistical plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Clarke County Sanitary Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA guidance document (“*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*”, March 2009).

Ground Water Monitoring Program

The south site groundwater monitoring wells are sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized below.

Detection monitoring constituents listed in Appendix I of IAC 567, Chapter 113.

Organic Compounds:

Acetone	<i>trans</i> -1,4-Dichloro-2-butene	Iodomethane
Acrylonitrile	1,1-Dichloroethane	4-Methyl-2-pentanone
Benzene	1,2-Dichloroethane	Styrene
Bromochloromethane	1,1-Dichloroethene	1,1,1,2-Tetrachloroethane
Bromodichloromethane	<i>cis</i> -1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	<i>trans</i> -1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	<i>trans</i> -1,3-Dichloropropene	1,1,2-Trichloroethane
Chloroethane	Ethylbenzene	Trichloroethene
Chloroform	2-Hexanone	Trichlorofluoromethane
Dibromochloromethane	Bromomethane	1,2,3-Trichloropropane
1,2-Dibromo-3-chloropropane	Chloromethane	Vinyl acetate
1,2-Dibromoethane	Dibromomethane	Vinyl chloride
1,2-Dichlorobenzene	Methylene chloride	Xylenes (Total)
1,4-Dichlorobenzene	2-Butanone	

Inorganic constituents:

Antimony, Total	Chromium, Total	Selenium, Total
Arsenic, Total	Cobalt, Total	Silver, Total
Barium, Total	Copper, Total	Thallium, Total
Beryllium, Total	Lead, Total	Vanadium, Total
Cadmium, Total	Nickel, Total	Zinc, Total

The ground water data obtained during the first semi-annual monitoring event in 2025 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The interwell method using site prediction limits was applied to the Clarke County Sanitary Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in “Statistical Methods for Groundwater Monitoring” by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance. Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

Interwell statistics are appropriate when the upgradient and downgradient wells monitor the same ground water formation and there is similar variability in the upgradient and downgradient zones. Site prediction limits are determined by pooling the historical ground water data from hydraulically upgradient wells. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. The type of prediction limit utilized (e.g., parametric or nonparametric) is based on the detection frequency and the data distribution of each parameter in the background data. The distribution of the background data is tested for normality using the Shapiro-Wilk test (Gibbons, 1994 and USEPA 1992). If the constituent is normally distributed, a normal prediction limit is used. If normality is rejected by the Shapiro-Wilk test, the background data is transformed by taking the natural logarithm. The Shapiro-Wilk test is then reapplied on the transformed data. If it is not rejected, lognormal prediction limits are used. If after transforming the data, normality is still rejected, nonparametric prediction limits are used for that analyte. The nonparametric prediction limit is the largest determination in the background measurements. For constituents where the background detection frequency is greater than 0% but less than 50%, nonparametric prediction limits will be used. If the detection frequency is 0% after thirteen samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit.

Results of the Interwell Statistics

South Landfill - Shallow Wells

The background data used in the statistical analysis of the shallow wells includes the ground water data collected from ground water wells MW-23 and MW-27 during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW-23 and MW-27 used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-21, MW-31, MW-33, and MW-34 compared to the site prediction limits. Prediction limit exceedances would be flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Prediction Limit Exceedances

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting verification
MW-33	Arsenic	11.0	6.3000	Nonparametric	Awaiting verification
	Cobalt	21.0	20.2173	Normal	Awaiting verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. For nonparametric cases, the prediction limit given indicates the highest concentration determined historically at MW-23 or MW-27 once outliers have been excluded. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 4 standard deviation unit increases over background.

The current and previous verified exceedances and ground water protection standard (GWPS) exceedances were evaluated against the GWPS using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, USEPA, March 2009 (Attachment C). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The calculated 95% LCLs for arsenic and cobalt at MW-33 do not exceed GWPS.

South Landfill – Deep Wells

The background data used in the statistical analysis of the deep wells includes the ground water data collected from ground water wells MW-28, MW-29, and MW-36 during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW-28, MW-29, and MW-36 used to determine the site prediction limits, is listed in Attachment D, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-22, MW-32, MW-37, and MW-38 compared to the site prediction limits. Prediction limit exceedances would be flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Prediction Limit Exceedances

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/Awaiting verification
MW-38	Arsenic	10.8	5.7000	Nonparametric	Awaiting verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. For nonparametric cases, the prediction limit given indicates the highest concentration determined historically at MW-28, MW-29, and MW-36 once outliers have been excluded. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 4 standard deviation unit increases over background.

The current and previous verified exceedances and GWPS exceedances were evaluated against the GWPS using confidence limits (Attachment E).

The calculated 95% LCLs for cobalt at MW-37 (7.032 µg/L) exceeds the GWPS of 2.1 µg/L. The calculated 95% LCLs for arsenic and cobalt at MW-38 do not exceed GWPS.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Clarke County Sanitary Landfill during the first semi-annual monitoring event in 2025 are summarized below. Historical VOC detections are summarized in Attachment F.

VOCs Detected during the First Semi-Annual Monitoring Event in 2025

Sample Point	VOC	Result	Reporting Limit	Verified/Awaiting Verification	GWPS
MW-33	1,1-Dichloroethane	1.2	1	Verified	140 ^b
	1,2-Dichloropropane	3.0	1	Verified	5 ^a
	cis-1,2-Dichloroethene	3.3	1	Verified	70 ^a

a - USEPA MCL, b – Iowa Statewide Standard

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits (Attachment G). The calculated LCLs for verified VOCs are below the respective GWPS.

Attachment A

Ground Water Data obtained during the First Semi-Annual Monitoring Event in 2025

Table 1

Analytical Data Summary for 3/10/2025

Constituents	Units	MW-21	MW-22	MW-23	MW-27	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-36	MW-37	MW-38
0,0,0-triethylphosphorothioate	ug/L													<.4
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L													<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L													<8
1,2,4-trichlorobenzene	ug/L													<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	3	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L													<8
1,3,5-trinitrobenzene	ug/L													<8
1,3-dichlorobenzene	ug/L													<1
1,3-dichloropropane	ug/L													<1
1,3-dinitrobenzene	ug/L													<8
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L													<8
1,4-phenylenediamine	ug/L													<8
1-naphthylamine	ug/L													<8
2,2-dichloropropane	ug/L													<1
2,3,4,6-tetrachlorophenol	ug/L													<8
2,4,5-t	ug/L													<.5
2,4,5-tp (silvex)	ug/L													<.5
2,4,5-trichlorophenol	ug/L													<8
2,4,6-trichlorophenol	ug/L													<8
2,4-d	ug/L													<2
2,4-dichlorophenol	ug/L													<8
2,4-dimethylphenol	ug/L													<8
2,4-dinitrophenol	ug/L													<8
2,4-dinitrotoluene	ug/L													<8
2,6-dichlorophenol	ug/L													<8
2,6-dinitrotoluene	ug/L													<8
2-acetylaminofluorene	ug/L													<8
2-butanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<5
2-chloronaphthalene	ug/L													<8
2-chlorophenol	ug/L													<8
2-hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylinaphthalene	ug/L													<8
2-methylphenol (o-cresol)	ug/L													<8
2-naphthylamine	ug/L													<8
2-nitroaniline	ug/L													<8
2-nitrophenol	ug/L													<8
3,3'-dichlorobenzidine	ug/L													<8
3,3'-dimethylbenzidine	ug/L													<8
3/4-methylphenol	ug/L													<8
3-methylcholanthrene	ug/L													<8
3-nitroaniline	ug/L													<8
4,4'-ddd	ug/L													<.05

* - The displayed value is the arithmetic mean of multiple database matches.

Table 1

Analytical Data Summary for 3/10/2025

Constituents	Units	MW-21	MW-22	MW-23	MW-27	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-36	MW-37	MW-38
4,4'-dde	ug/L													<.05
4,4'-ddt	ug/L													<.05
4,6-dinitro-2-methylphenol	ug/L													<8
4-aminobiphenyl	ug/L													<8
4-bromophenyl phenyl ether	ug/L													<8
4-chloro-3-methylphenol	ug/L													<8
4-chloroaniline	ug/L													<8
4-chlorophenyl phenyl ether	ug/L													<8
4-methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L													<8
4-nitrophenol	ug/L													<8
5-nitro-o-toluidine	ug/L													<8
7,12-dimethylbenz(a)anthracene	ug/L													<8
Acenaphthene	ug/L													<8
Acenaphthylene	ug/L													<8
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	mg/L													<.01
Acetophenone	ug/L													<8
Acrolein	ug/L													<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L													<.05
Allyl chloride	ug/L													<1
Alpha-bhc	ug/L													<.05
Anthracene	ug/L													<8
Antimony, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.3	<2.0	<2.0
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	11.0	<4.0	<4.0	<4.0	10.8
Azobenzene	ug/L													<8
Barium, total	ug/L	16.0	20.6	20.5	108.0	109.0	28.0	14.3	12.9	16.3	61.1	10.0	21.9	20.6
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L													<8
Benzo(a)pyrene	ug/L													<8
Benzo(b)fluoranthene	ug/L													<8
Benzo(ghi)perylene	ug/L													<8
Benzo(k)fluoranthene	ug/L													<8
Benzyl alcohol	ug/L													<8
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L													<.05
Bis(2-chloroethoxy)methane	ug/L													<8
Bis(2-chloroethyl)ether	ug/L													<8
Bis(2-chloroisopropyl)ether	ug/L													<8
Bis(2-ethylhexyl)phthalate	ug/L													<6
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L													<8
Cadmium, total	ug/L	<.8	<.8	1.4	1.6	1.5	<.8	<.8	<.8	<.8	<.8	1.0	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L													<.1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L													<8
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 1

Analytical Data Summary for 3/10/2025

Constituents	Units	MW-21	MW-22	MW-23	MW-27	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-36	MW-37	MW-38
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L													<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L													<8
Cis-1,2-dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.4	1.5	15.1	3.0	12.7	<.4	<.4	<.4	21.0	.4	2.7	9.6	4.4
Copper, total	ug/L	<4.0	<4.0	<4.0	4.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L													<.01
Delta-bhc	ug/L													<.05
Diallate	ug/L													<8
Dibenzo(a,h)anthracene	ug/L													<8
Dibenzofuran	ug/L													<8
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L													<1
Dieldrin	ug/L													<.05
Diethyl phthalate	ug/L													<8
Dimethoate	ug/L													<.4
Dimethylphthalate	ug/L													<8
Di-n-butyl phthalate	ug/L													<8
Di-n-octyl phthalate	ug/L													<8
Dinoseb	ug/L													<.5
Diphenylamine	ug/L													<8
Disulfoton	ug/L													<.4
Endosulfan i	ug/L													<.05
Endosulfan ii	ug/L													<.05
Endosulfan sulfate	ug/L													<.05
Endrin	ug/L													<.05
Endrin aldehyde	ug/L													<.05
Ethyl methacrylate	ug/L													<10
Ethyl methane sulfonate	ug/L													<8
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L													<.4
Fluoranthene	ug/L													<8
Fluorene	ug/L													<8
Gamma-bhc [lindane]	ug/L													<.05
Heptachlor	ug/L													<.05
Heptachlor epoxide	ug/L													<.05
Hexachlorobenzene	ug/L													<.05
Hexachlorobutadiene	ug/L													<8
Hexachlorocyclopentadiene	ug/L													<8
Hexachloroethane	ug/L													<8
Hexachloropropene	ug/L													<8
Indeno(1,2,3-cd)pyrene	ug/L													<8
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
Isobutanol	mg/L													<1
Isodrin	ug/L													<8
Isophorone	ug/L													<8
Isosafrole	ug/L													<8
Kepone	ug/L													<8
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L													<.5
Methacrylonitrile	ug/L													<1

* - The displayed value is the arithmetic mean of multiple database matches.

Table 1

Analytical Data Summary for 3/10/2025

Constituents	Units	MW-21	MW-22	MW-23	MW-27	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-36	MW-37	MW-38
Methapyrilene	ug/L													<8
Methoxychlor	ug/L													<.05
Methyl methacrylate	ug/L													<1
Methyl methanesulfonate	ug/L													<8
Methyl parathion	ug/L													<4
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L													<8
Nickel, total	ug/L	4.9	<4.0	30.4	13.1	48.2	<4.0	20.1	<4.0	33.2	<4.0	26.8	14.3	6.3
Nitrobenzene	ug/L													<8
N-nitrosodiethylamine	ug/L													<8
N-nitrosodimethylamine	ug/L													<8
N-nitrosodi-n-butylamine	ug/L													<8
N-nitroso-di-n-propylamine	ug/L													<8
N-nitrosodiphenylamine	ug/L													<8
N-nitrosomethylethylamine	ug/L													<8
N-nitrosopiperidine	ug/L													<8
N-nitrosopyrrolidine	ug/L													<8
O-toluidine	ug/L													<8
P-(dimethylamino)azobenzene	ug/L													<8
Parathion	ug/L													<4
Pcb 1016	ug/L													<.2
Pcb 1221	ug/L													<.2
Pcb 1232	ug/L													<.2
Pcb 1242	ug/L													<.2
Pcb 1248	ug/L													<.2
Pcb 1254	ug/L													<.2
Pcb 1260	ug/L													<.2
Pentachlorobenzene	ug/L													<8
Pentachloronitrobenzene	ug/L													<8
Pentachlorophenol	ug/L													<8
Phenacetin	ug/L													<8
Phenanthrene	ug/L													<8
Phenols, total	mg/L													<.008
Phorate	ug/L													<4
Pronamide	ug/L													<8
Propionitrile	ug/L													<10
Pyrene	ug/L													<8
Safrole	ug/L													<8
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L									<.1				<.1
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	ug/L													<4
Tin, total	ug/L													<20
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L													<.2
Trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20

* - The displayed value is the arithmetic mean of multiple database matches.

Table 1

Analytical Data Summary for 3/10/2025

Constituents	Units	MW-21	MW-22	MW-23	MW-27	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-36	MW-37	MW-38
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	22.6	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	48.4	<20.0	<20.0

* - The displayed value is the arithmetic mean of multiple database matches.

Attachment B

Summary Tables and Graphs for the Interwell Comparisons - South Site Shallow Wells

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-23	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-23	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-23	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	06/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-23	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-23	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-23	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-23	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-23	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-23	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-23	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-23	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-23	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-23	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-23	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-23	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-23	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Arsenic, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-23	09/29/2014		15.5000		
Barium, total	ug/L	MW-23	11/24/2014		22.1000		
Barium, total	ug/L	MW-23	03/19/2015		21.5000		
Barium, total	ug/L	MW-23	06/17/2015		17.0000		
Barium, total	ug/L	MW-23	08/26/2015		18.1000		
Barium, total	ug/L	MW-23	03/09/2016		17.5000		
Barium, total	ug/L	MW-23	09/14/2016		15.9000		
Barium, total	ug/L	MW-23	03/07/2017		16.7000		
Barium, total	ug/L	MW-23	09/11/2017		17.0000		
Barium, total	ug/L	MW-23	03/07/2018		19.0000		
Barium, total	ug/L	MW-23	09/05/2018		15.7000		
Barium, total	ug/L	MW-23	04/01/2019		17.3000		
Barium, total	ug/L	MW-23	09/09/2019		19.0000		
Barium, total	ug/L	MW-23	03/10/2020		16.5000		
Barium, total	ug/L	MW-23	09/14/2020		16.0000		
Barium, total	ug/L	MW-23	03/04/2021		18.3000		
Barium, total	ug/L	MW-23	09/09/2021		18.0000		
Barium, total	ug/L	MW-23	03/24/2022		16.3000		
Barium, total	ug/L	MW-23	09/09/2022		16.0000		
Barium, total	ug/L	MW-23	03/01/2023		17.8000		
Barium, total	ug/L	MW-23	09/04/2024		16.3000		
Barium, total	ug/L	MW-23	03/10/2025		20.5000		
Beryllium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/07/2017	ND	1.0000	4.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-23	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-23	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/19/2015		1.1000		
Cadmium, total	ug/L	MW-23	06/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-23	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/07/2017	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/07/2018		1.1000		
Cadmium, total	ug/L	MW-23	09/05/2018	ND	0.8000		
Cadmium, total	ug/L	MW-23	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2019	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/14/2020		1.3500		
Cadmium, total	ug/L	MW-23	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/10/2025		1.4000		
Chromium, total	ug/L	MW-23	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-23	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-23	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	06/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-23	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-23	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-23	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-23	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-23	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-23	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-23	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-23	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-23	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-23	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-23	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-23	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-23	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-23	09/29/2014		13.2000		
Cobalt, total	ug/L	MW-23	11/24/2014		24.5000		*
Cobalt, total	ug/L	MW-23	03/19/2015		16.2000		
Cobalt, total	ug/L	MW-23	06/17/2015		13.1000		
Cobalt, total	ug/L	MW-23	08/26/2015		16.6000		
Cobalt, total	ug/L	MW-23	03/09/2016		10.3000		
Cobalt, total	ug/L	MW-23	09/14/2016		11.9000		
Cobalt, total	ug/L	MW-23	03/07/2017		10.0000		
Cobalt, total	ug/L	MW-23	09/11/2017		10.8000		
Cobalt, total	ug/L	MW-23	03/07/2018		10.2000		
Cobalt, total	ug/L	MW-23	09/05/2018		12.1000		
Cobalt, total	ug/L	MW-23	04/01/2019		13.7000		
Cobalt, total	ug/L	MW-23	09/09/2019		12.4000		
Cobalt, total	ug/L	MW-23	03/10/2020		9.0000		
Cobalt, total	ug/L	MW-23	09/14/2020		9.5000		
Cobalt, total	ug/L	MW-23	03/04/2021		10.9000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-23	09/09/2021		13.6000		
Cobalt, total	ug/L	MW-23	03/24/2022		8.5000		
Cobalt, total	ug/L	MW-23	09/09/2022		10.0000		
Cobalt, total	ug/L	MW-23	03/01/2023		11.0000		
Cobalt, total	ug/L	MW-23	09/04/2024		7.0000		
Cobalt, total	ug/L	MW-23	03/10/2025		15.1000		
Copper, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Copper, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Copper, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Copper, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Copper, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Copper, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Copper, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Copper, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Copper, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Lead, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Lead, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-23	09/29/2014		42.5000		
Nickel, total	ug/L	MW-23	11/24/2014		51.3000		
Nickel, total	ug/L	MW-23	03/19/2015		51.9000		
Nickel, total	ug/L	MW-23	06/17/2015		41.9000		
Nickel, total	ug/L	MW-23	08/26/2015		39.4000		
Nickel, total	ug/L	MW-23	03/09/2016		37.3000		
Nickel, total	ug/L	MW-23	09/14/2016		43.3000		
Nickel, total	ug/L	MW-23	03/07/2017		38.1000		
Nickel, total	ug/L	MW-23	09/11/2017		37.7000		
Nickel, total	ug/L	MW-23	03/07/2018		41.4000		
Nickel, total	ug/L	MW-23	09/05/2018		30.2000		
Nickel, total	ug/L	MW-23	04/01/2019		34.4000		
Nickel, total	ug/L	MW-23	09/09/2019		30.6000		
Nickel, total	ug/L	MW-23	03/10/2020		32.3000		
Nickel, total	ug/L	MW-23	09/14/2020		30.6000		
Nickel, total	ug/L	MW-23	03/04/2021		28.8000		
Nickel, total	ug/L	MW-23	09/09/2021		26.6000		
Nickel, total	ug/L	MW-23	03/24/2022		28.3000		
Nickel, total	ug/L	MW-23	09/09/2022		28.1000		
Nickel, total	ug/L	MW-23	03/01/2023		26.6000		
Nickel, total	ug/L	MW-23	09/04/2024		27.7000		
Nickel, total	ug/L	MW-23	03/10/2025		30.4000		
Selenium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-23	11/24/2014	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Selenium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Selenium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Silver, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Silver, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Thallium, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Thallium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Thallium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Thallium, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Thallium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Thallium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Thallium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Thallium, total	ug/L	MW-23	04/01/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/10/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/14/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/04/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/24/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/01/2023	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/04/2024	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/10/2025	ND	2.0000	4.0000	**
Vanadium, total	ug/L	MW-23	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-23	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	06/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/07/2018	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-23	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-23	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-23	09/29/2014		8.1000		
Zinc, total	ug/L	MW-23	11/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	03/19/2015		16.3000		
Zinc, total	ug/L	MW-23	06/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	08/26/2015		11.6000		
Zinc, total	ug/L	MW-23	03/09/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	03/07/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	09/11/2017		24.9000		
Zinc, total	ug/L	MW-23	03/07/2018		13.8000		
Zinc, total	ug/L	MW-23	09/05/2018	ND	20.0000		
Zinc, total	ug/L	MW-23	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2019		9.6000		
Zinc, total	ug/L	MW-23	03/10/2020		13.1000		
Zinc, total	ug/L	MW-23	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-23	03/04/2021	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-23	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2022	ND	20.0000		
Zinc, total	ug/L	MW-23	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-23	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-23	03/10/2025		22.6000		
Antimony, total	ug/L	MW-27	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-27	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-27	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	06/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2021		4.0000		
Antimony, total	ug/L	MW-27	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-27	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Arsenic, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/09/2021		6.3000		
Arsenic, total	ug/L	MW-27	03/24/2022	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-27	09/29/2014		38.4000		
Barium, total	ug/L	MW-27	11/24/2014		26.6000		
Barium, total	ug/L	MW-27	03/19/2015		24.4000		
Barium, total	ug/L	MW-27	06/17/2015		25.4000		
Barium, total	ug/L	MW-27	08/26/2015		18.7000		
Barium, total	ug/L	MW-27	03/09/2016		18.2000		
Barium, total	ug/L	MW-27	09/14/2016		24.9000		
Barium, total	ug/L	MW-27	03/07/2017		17.2000		
Barium, total	ug/L	MW-27	09/11/2017		27.8000		
Barium, total	ug/L	MW-27	03/07/2018		22.3000		
Barium, total	ug/L	MW-27	09/05/2018		30.1000		
Barium, total	ug/L	MW-27	04/01/2019		30.5000		
Barium, total	ug/L	MW-27	09/09/2019		39.2000		
Barium, total	ug/L	MW-27	03/10/2020		30.4000		
Barium, total	ug/L	MW-27	09/14/2020		23.9000		
Barium, total	ug/L	MW-27	03/04/2021		17.1000		
Barium, total	ug/L	MW-27	09/09/2021		70.7000		
Barium, total	ug/L	MW-27	03/24/2022		28.2000		
Barium, total	ug/L	MW-27	09/09/2022		19.6000		
Barium, total	ug/L	MW-27	03/01/2023		54.6000		
Barium, total	ug/L	MW-27	09/04/2024		47.7000		
Barium, total	ug/L	MW-27	03/10/2025		108.0000		
Beryllium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-27	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-27	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/19/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	06/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/05/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/14/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2021		3.8000		
Cadmium, total	ug/L	MW-27	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/10/2025		1.6000		
Chromium, total	ug/L	MW-27	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-27	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-27	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-27	06/17/2015	ND	8.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-27	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-27	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-27	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-27	09/29/2014		3.7000		
Cobalt, total	ug/L	MW-27	11/24/2014		0.9000		
Cobalt, total	ug/L	MW-27	03/19/2015		3.5000		
Cobalt, total	ug/L	MW-27	06/17/2015		4.4000		
Cobalt, total	ug/L	MW-27	08/26/2015	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/09/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/07/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/11/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/07/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/05/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/09/2019		2.0000		
Cobalt, total	ug/L	MW-27	03/10/2020		3.2000		
Cobalt, total	ug/L	MW-27	09/14/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-27	03/04/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-27	09/09/2021		0.4000		
Cobalt, total	ug/L	MW-27	03/24/2022		0.5000		
Cobalt, total	ug/L	MW-27	09/09/2022		0.9000		
Cobalt, total	ug/L	MW-27	03/01/2023		0.9000		
Cobalt, total	ug/L	MW-27	09/04/2024		3.6000		
Cobalt, total	ug/L	MW-27	03/10/2025		3.0000		
Copper, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Copper, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Copper, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Copper, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Copper, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Copper, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Copper, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2019		4.0000		
Copper, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2021		8.9000		
Copper, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-27	03/01/2023		4.8000		
Copper, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-27	03/10/2025		4.3000		
Lead, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Lead, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-27	04/01/2019	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-27	09/29/2014		6.9000		
Nickel, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Nickel, total	ug/L	MW-27	06/17/2015		8.0000		
Nickel, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Nickel, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2021		10.6000		
Nickel, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	03/01/2023		5.8000		
Nickel, total	ug/L	MW-27	09/04/2024		8.1000		
Nickel, total	ug/L	MW-27	03/10/2025		13.1000		
Selenium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-27	09/14/2016		5.5000		
Selenium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	03/07/2018		4.8000		
Selenium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	04/01/2019		4.7000		
Selenium, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	09/09/2021		9.7000		
Selenium, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Silver, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-27	03/01/2023	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Thallium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Thallium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Thallium, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Thallium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Thallium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Thallium, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Thallium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Thallium, total	ug/L	MW-27	04/01/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/10/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/14/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/04/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2021		3.5000		
Thallium, total	ug/L	MW-27	03/24/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/01/2023	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/04/2024	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/10/2025	ND	2.0000	4.0000	**
Vanadium, total	ug/L	MW-27	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-27	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	06/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-27	09/29/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	11/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/19/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	06/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	08/26/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/09/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/07/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/07/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/05/2018	ND	20.0000		
Zinc, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2019		10.5000		
Zinc, total	ug/L	MW-27	03/10/2020	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	03/04/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-27	03/10/2025	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result	Pred. Limit
Antimony, total	ug/L	MW-21	03/10/2025	ND	2.0000	4.0000
Arsenic, total	ug/L	MW-21	03/10/2025	ND	4.0000	6.3000
Barium, total	ug/L	MW-21	03/10/2025		16.0000	108.0000
Beryllium, total	ug/L	MW-21	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-21	03/10/2025	ND	0.8000	3.8000
Chromium, total	ug/L	MW-21	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-21	03/10/2025	ND	0.4000	20.2173
Copper, total	ug/L	MW-21	03/10/2025	ND	4.0000	8.9000
Lead, total	ug/L	MW-21	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-21	03/10/2025		4.9000	62.4558
Selenium, total	ug/L	MW-21	03/10/2025	ND	4.0000	9.7000
Silver, total	ug/L	MW-21	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-21	03/10/2025	ND	2.0000	4.0000
Vanadium, total	ug/L	MW-21	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-21	03/10/2025	ND	20.0000	24.9000
Antimony, total	ug/L	MW-31	03/10/2025	ND	2.0000	4.0000
Arsenic, total	ug/L	MW-31	03/10/2025	ND	4.0000	6.3000
Barium, total	ug/L	MW-31	03/10/2025		14.3000	108.0000
Beryllium, total	ug/L	MW-31	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-31	03/10/2025	ND	0.8000	3.8000
Chromium, total	ug/L	MW-31	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-31	03/10/2025	ND	0.4000	20.2173
Copper, total	ug/L	MW-31	03/10/2025	ND	4.0000	8.9000
Lead, total	ug/L	MW-31	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-31	03/10/2025		20.1000	62.4558
Selenium, total	ug/L	MW-31	03/10/2025	ND	4.0000	9.7000
Silver, total	ug/L	MW-31	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-31	03/10/2025	ND	2.0000	4.0000
Vanadium, total	ug/L	MW-31	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-31	03/10/2025	ND	20.0000	24.9000
Antimony, total	ug/L	MW-33	03/10/2025	ND	2.0000	4.0000
Arsenic, total	ug/L	MW-33	03/10/2025		11.0000 *	6.3000
Barium, total	ug/L	MW-33	03/10/2025		16.3000	108.0000
Beryllium, total	ug/L	MW-33	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-33	03/10/2025	ND	0.8000	3.8000
Chromium, total	ug/L	MW-33	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-33	03/10/2025		21.0000 *	20.2173
Copper, total	ug/L	MW-33	03/10/2025	ND	4.0000	8.9000
Lead, total	ug/L	MW-33	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-33	03/10/2025		33.2000	62.4558
Selenium, total	ug/L	MW-33	03/10/2025	ND	4.0000	9.7000
Silver, total	ug/L	MW-33	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-33	03/10/2025	ND	2.0000	4.0000
Vanadium, total	ug/L	MW-33	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-33	03/10/2025	ND	20.0000	24.9000
Antimony, total	ug/L	MW-34	03/10/2025	ND	2.0000	4.0000
Arsenic, total	ug/L	MW-34	03/10/2025	ND	4.0000	6.3000
Barium, total	ug/L	MW-34	03/10/2025		61.1000	108.0000
Beryllium, total	ug/L	MW-34	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-34	03/10/2025	ND	0.8000	3.8000
Chromium, total	ug/L	MW-34	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-34	03/10/2025		0.4000	20.2173
Copper, total	ug/L	MW-34	03/10/2025	ND	4.0000	8.9000
Lead, total	ug/L	MW-34	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-34	03/10/2025	ND	4.0000	62.4558
Selenium, total	ug/L	MW-34	03/10/2025	ND	4.0000	9.7000
Silver, total	ug/L	MW-34	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-34	03/10/2025	ND	2.0000	4.0000
Vanadium, total	ug/L	MW-34	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-34	03/10/2025	ND	20.0000	24.9000

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	1	44	0.023	5	141	0.035
Arsenic, total	1	44	0.023	60	141	0.426
Barium, total	44	44	1.000	141	142	0.993
Beryllium, total	0	44	0.000	15	141	0.106
Cadmium, total	6	44	0.136	56	141	0.397
Chromium, total	0	44	0.000	8	141	0.057
Cobalt, total	33	43	0.767	83	141	0.589
Copper, total	4	44	0.091	21	143	0.147
Lead, total	0	44	0.000	26	141	0.184
Nickel, total	28	44	0.636	79	141	0.560
Selenium, total	4	44	0.091	2	141	0.014
Silver, total	0	44	0.000	0	141	0.000
Thallium, total	1	44	0.023	1	141	0.007
Vanadium, total	0	44	0.000	8	141	0.057
Zinc, total	9	44	0.205	55	141	0.390

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	1	44	0.023									nonpar
Arsenic, total	1	44	0.023									nonpar
Barium, total	44	44	1.000	4.691	2.564					2.326	non-norm	nonpar
Beryllium, total	0	44	0.000									nonpar
Cadmium, total	6	44	0.136	1.268	1.328					2.326	normal	nonpar
Chromium, total	0	44	0.000									nonpar
Cobalt, total	33	43	0.767	0.380	0.043					2.326	normal	normal
Copper, total	4	44	0.091	1.698	1.210					2.326	normal	nonpar
Lead, total	0	44	0.000									nonpar
Nickel, total	28	44	0.636	1.170	0.138					2.326	normal	normal
Selenium, total	4	44	0.091	1.805	1.440					2.326	normal	nonpar
Silver, total	0	44	0.000									nonpar
Thallium, total	1	44	0.023									nonpar
Vanadium, total	0	44	0.000									nonpar
Zinc, total	9	44	0.205	0.367	0.864					2.326	normal	nonpar

* - Distribution override for that constituent.

Fit to distribution is confirmed if G <= critical value.

Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	1	44					4.0000	nonpar		0.99
Arsenic, total	ug/L	1	44					6.3000	nonpar		0.99
Barium, total	ug/L	44	44					108.0000	nonpar		0.99
Beryllium, total	ug/L	0	44					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	6	44					3.8000	nonpar		0.99
Chromium, total	ug/L	0	44					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	33	43	6.3279	5.6776	0.0100	2.4463	20.2173	normal		
Copper, total	ug/L	4	44					8.9000	nonpar		0.99
Lead, total	ug/L	0	44					4.0000	nonpar	***	0.99
Nickel, total	ug/L	28	44	18.9068	17.8226	0.0100	2.4435	62.4558	normal		
Selenium, total	ug/L	4	44					9.7000	nonpar		0.99
Silver, total	ug/L	0	44					4.0000	nonpar	***	0.99
Thallium, total	ug/L	1	44					4.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	44					20.0000	nonpar	***	0.99
Zinc, total	ug/L	9	44					24.9000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

For transformed data, mean and SD in transformed units and prediction limit in original units.

All sample sizes and statistics are based on outlier free data.

For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 8

**Historical Downgradient Data for Constituent-Well Combinations
that Failed the Current Statistical Evaluation or
are in Verification Resampling Mode**

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-33	06/12/2009		5.1800	6.3000
Arsenic, total	ug/L	MW-33	07/02/2009		4.7400	6.3000
Arsenic, total	ug/L	MW-33	09/17/2009		3.0400	6.3000
Arsenic, total	ug/L	MW-33	03/22/2010		6.7500 *	6.3000
Arsenic, total	ug/L	MW-33	09/07/2010	ND	5.0000	6.3000
Arsenic, total	ug/L	MW-33	03/03/2011		5.3300	6.3000
Arsenic, total	ug/L	MW-33	09/20/2011		6.0900	6.3000
Arsenic, total	ug/L	MW-33	03/19/2012		12.7000 *	6.3000
Arsenic, total	ug/L	MW-33	09/06/2012		12.8000 *	6.3000
Arsenic, total	ug/L	MW-33	02/01/2013		5.8500	6.3000
Arsenic, total	ug/L	MW-33	09/27/2013		4.7800	6.3000
Arsenic, total	ug/L	MW-33	03/13/2014		5.7100	6.3000
Arsenic, total	ug/L	MW-33	09/30/2014		11.4000 *	6.3000
Arsenic, total	ug/L	MW-33	03/19/2015		11.9000 *	6.3000
Arsenic, total	ug/L	MW-33	08/26/2015		6.6000 *	6.3000
Arsenic, total	ug/L	MW-33	03/09/2016		6.2000	6.3000
Arsenic, total	ug/L	MW-33	09/14/2016		4.6000	6.3000
Arsenic, total	ug/L	MW-33	03/07/2017		7.8000 *	6.3000
Arsenic, total	ug/L	MW-33	09/11/2017		5.2000	6.3000
Arsenic, total	ug/L	MW-33	03/07/2018	ND	4.0000	6.3000
Arsenic, total	ug/L	MW-33	09/05/2018		7.8000 *	6.3000
Arsenic, total	ug/L	MW-33	04/01/2019		7.1000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2019		4.5000	6.3000
Arsenic, total	ug/L	MW-33	03/10/2020		5.9000	6.3000
Arsenic, total	ug/L	MW-33	09/14/2020		11.2000 *	6.3000
Arsenic, total	ug/L	MW-33	03/04/2021		7.0000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2021		15.3000 *	6.3000
Arsenic, total	ug/L	MW-33	03/24/2022		7.3000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2022		16.9000 *	6.3000
Arsenic, total	ug/L	MW-33	03/01/2023		5.4000	6.3000
Arsenic, total	ug/L	MW-33	09/07/2023		4.3000	6.3000
Arsenic, total	ug/L	MW-33	03/06/2024		4.5000	6.3000
Arsenic, total	ug/L	MW-33	09/04/2024	ND	4.0000	6.3000
Arsenic, total	ug/L	MW-33	03/10/2025		11.0000 *	6.3000
Cobalt, total	ug/L	MW-33	06/12/2009		53.1000 *	20.2173
Cobalt, total	ug/L	MW-33	07/02/2009		33.7000 *	20.2173
Cobalt, total	ug/L	MW-33	09/17/2009		36.3000 *	20.2173
Cobalt, total	ug/L	MW-33	03/22/2010		55.8000 *	20.2173
Cobalt, total	ug/L	MW-33	09/07/2010		40.8000 *	20.2173
Cobalt, total	ug/L	MW-33	03/03/2011		23.5000 *	20.2173
Cobalt, total	ug/L	MW-33	09/20/2011		28.6000 *	20.2173
Cobalt, total	ug/L	MW-33	03/19/2012		21.7000 *	20.2173
Cobalt, total	ug/L	MW-33	09/06/2012		26.1000 *	20.2173
Cobalt, total	ug/L	MW-33	02/01/2013		29.6000 *	20.2173
Cobalt, total	ug/L	MW-33	09/27/2013		47.5000 *	20.2173
Cobalt, total	ug/L	MW-33	03/13/2014		27.8000 *	20.2173
Cobalt, total	ug/L	MW-33	09/30/2014		29.7000 *	20.2173
Cobalt, total	ug/L	MW-33	03/19/2015		24.9000 *	20.2173
Cobalt, total	ug/L	MW-33	08/26/2015		14.3000	20.2173
Cobalt, total	ug/L	MW-33	03/09/2016		13.3000	20.2173
Cobalt, total	ug/L	MW-33	09/14/2016		15.8000	20.2173
Cobalt, total	ug/L	MW-33	03/07/2017		11.5000	20.2173
Cobalt, total	ug/L	MW-33	09/11/2017		10.8000	20.2173
Cobalt, total	ug/L	MW-33	03/07/2018		14.3000	20.2173
Cobalt, total	ug/L	MW-33	09/05/2018		15.6000	20.2173
Cobalt, total	ug/L	MW-33	04/01/2019		17.8000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2019		13.0000	20.2173
Cobalt, total	ug/L	MW-33	03/10/2020		18.1000	20.2173
Cobalt, total	ug/L	MW-33	09/14/2020		23.0000 *	20.2173
Cobalt, total	ug/L	MW-33	03/04/2021		2.8000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2021		2.0000	20.2173
Cobalt, total	ug/L	MW-33	03/24/2022		1.3000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2022		19.8000	20.2173
Cobalt, total	ug/L	MW-33	03/01/2023		1.4000	20.2173
Cobalt, total	ug/L	MW-33	09/07/2023		7.3000	20.2173
Cobalt, total	ug/L	MW-33	03/06/2024		2.9000	20.2173
Cobalt, total	ug/L	MW-33	09/04/2024		2.8000	20.2173
Cobalt, total	ug/L	MW-33	03/10/2025		21.0000 *	20.2173

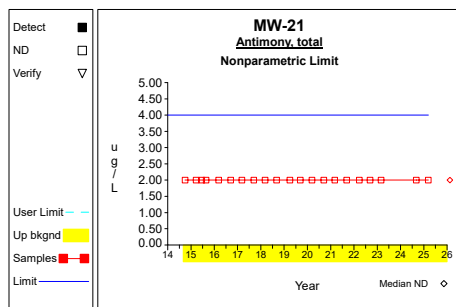
* - Significantly increased over background.

** - Detect at limit for 100% NDs in background (NPPL only).

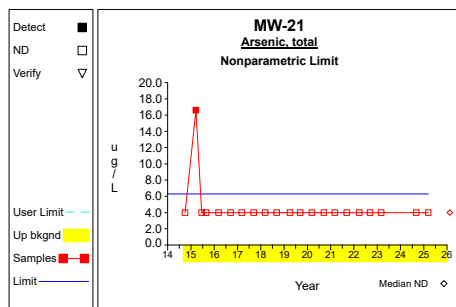
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

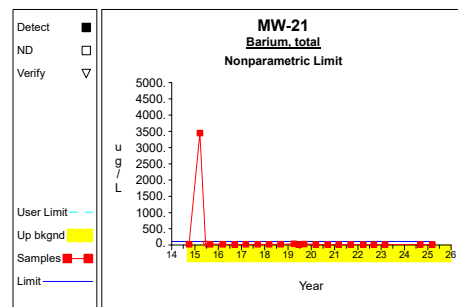
Up vs. Down Prediction Limits



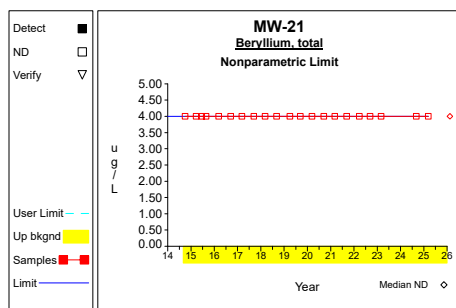
Graph 1



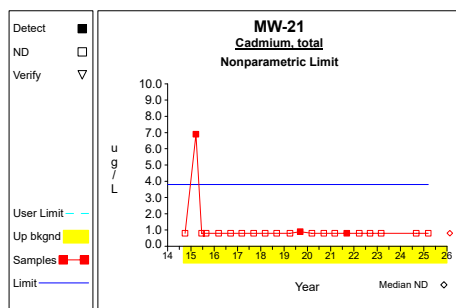
Graph 2



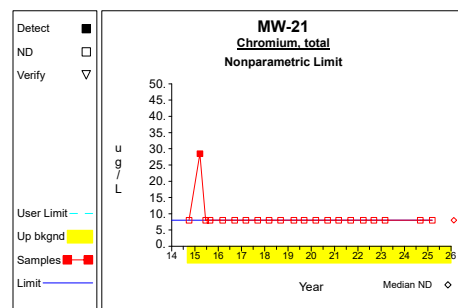
Graph 3



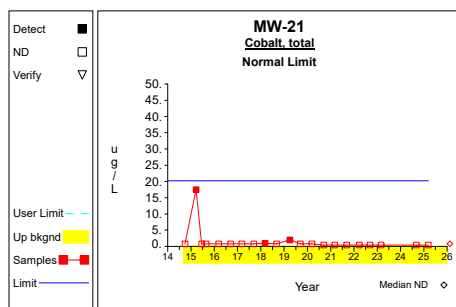
Graph 4



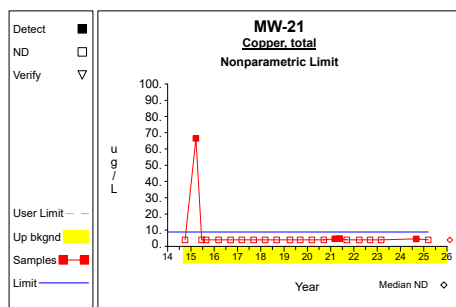
Graph 5



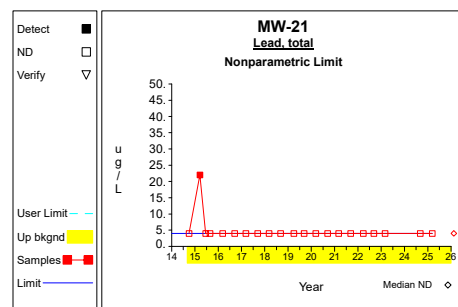
Graph 6



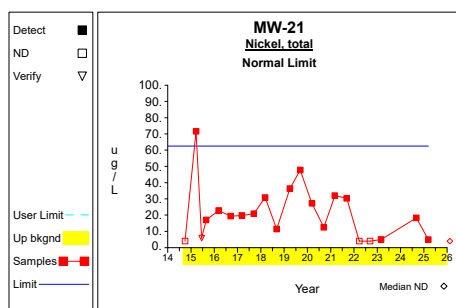
Graph 7



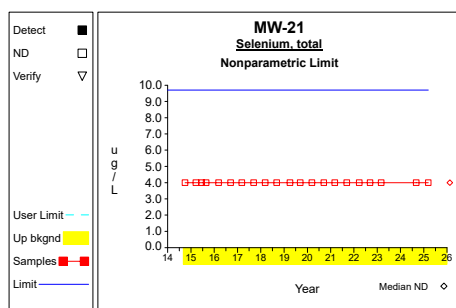
Graph 8



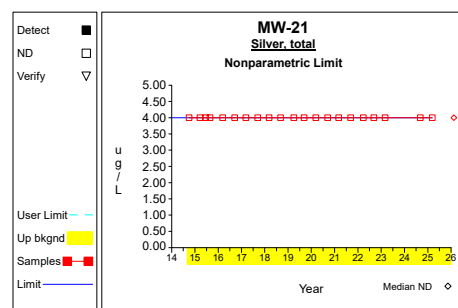
Graph 9



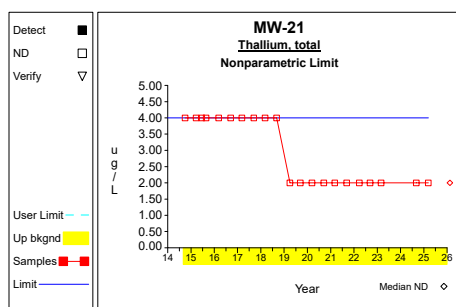
Graph 10



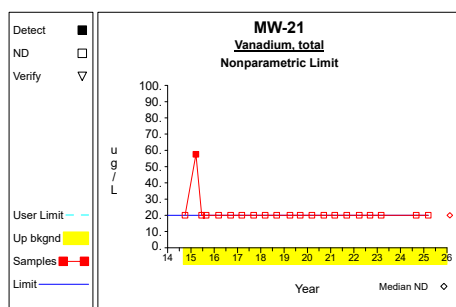
Graph 11



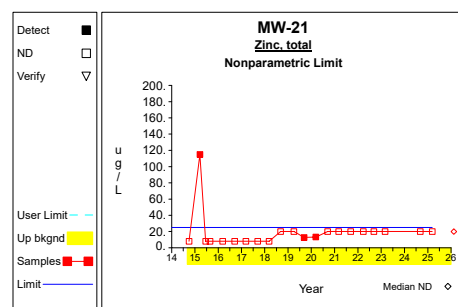
Graph 12



Graph 13

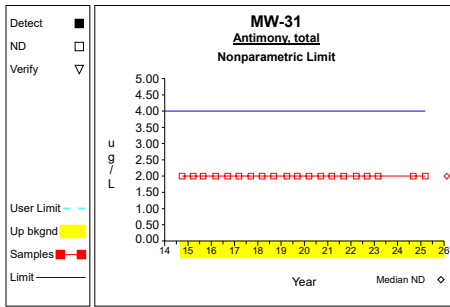


Graph 14

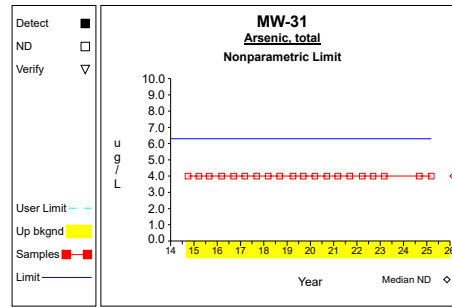


Graph 15

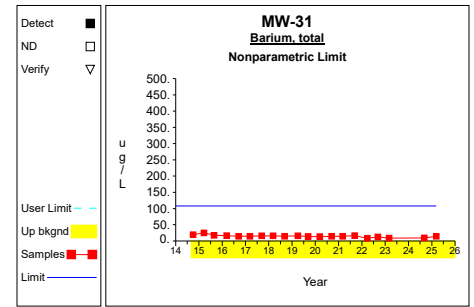
Up vs. Down Prediction Limits



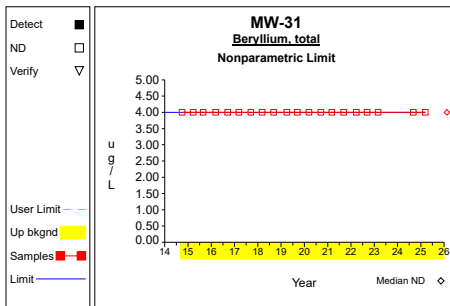
Graph 16



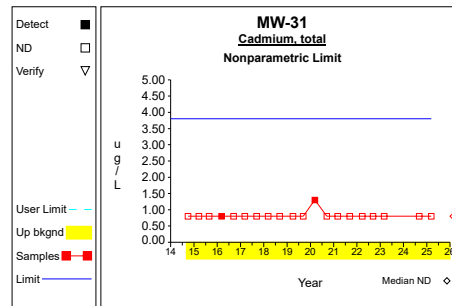
Graph 17



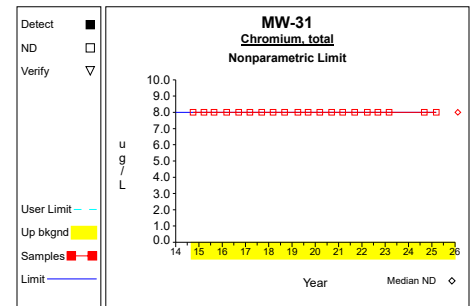
Graph 18



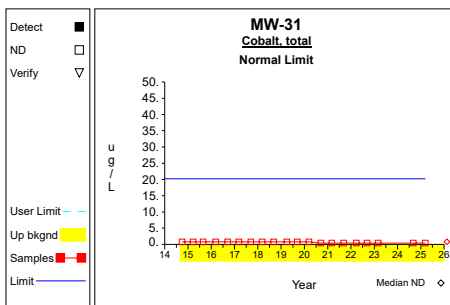
Graph 19



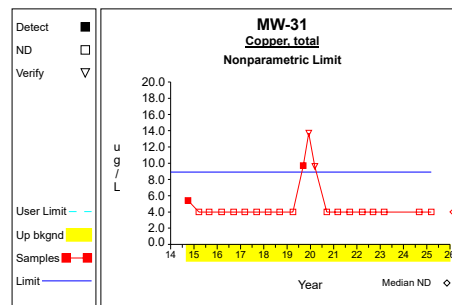
Graph 20



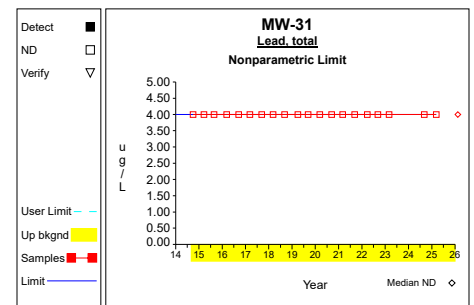
Graph 21



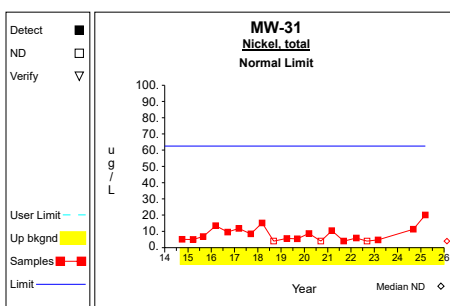
Graph 22



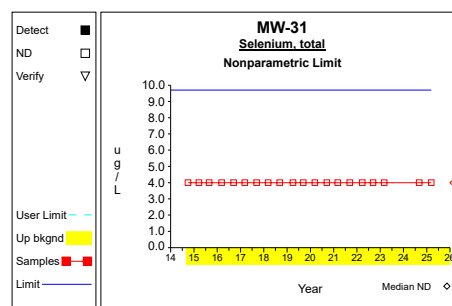
Graph 23



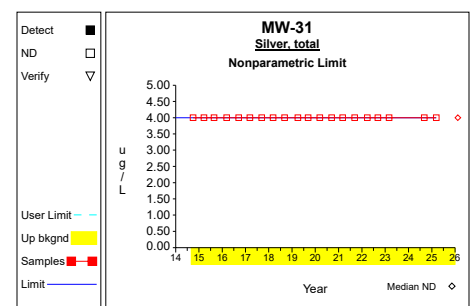
Graph 24



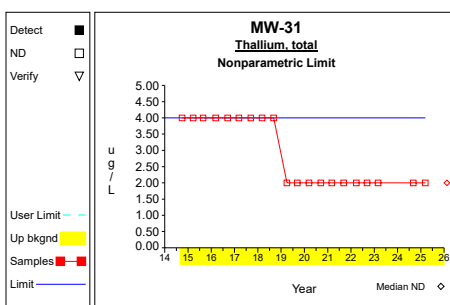
Graph 25



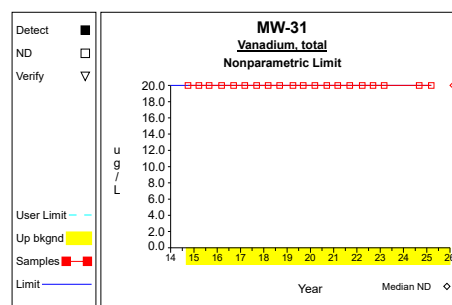
Graph 26



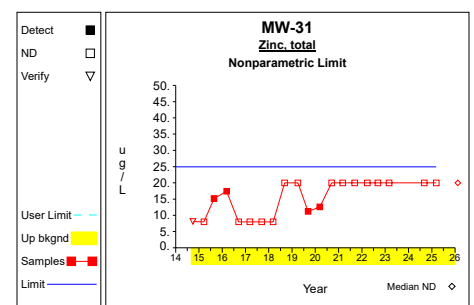
Graph 27



Graph 28

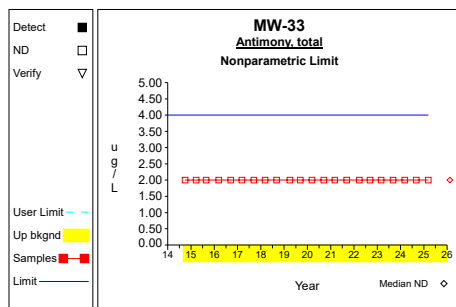


Graph 29

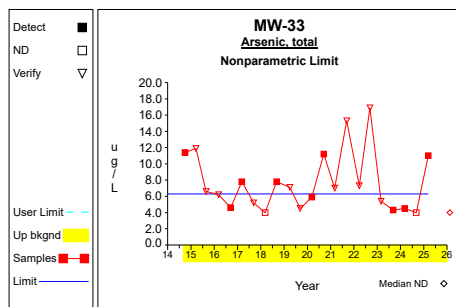


Graph 30

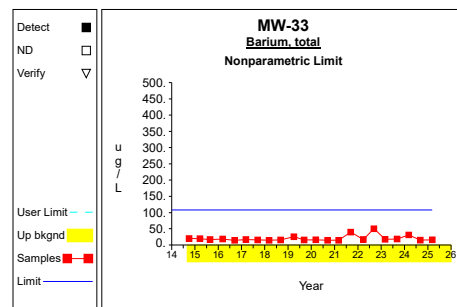
Up vs. Down Prediction Limits



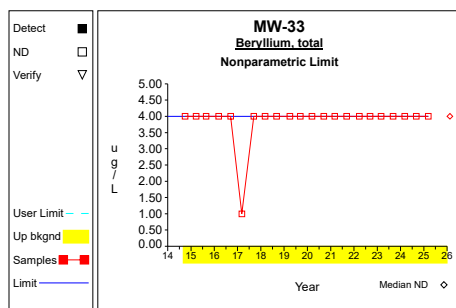
Graph 31



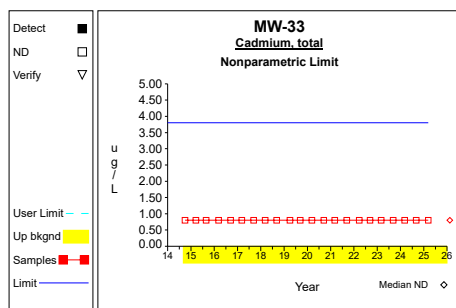
Graph 32



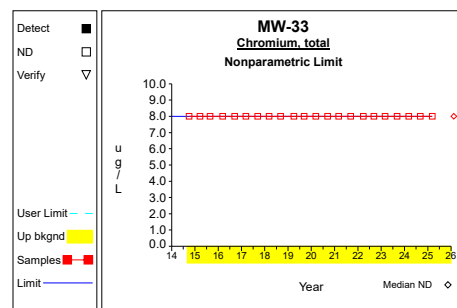
Graph 33



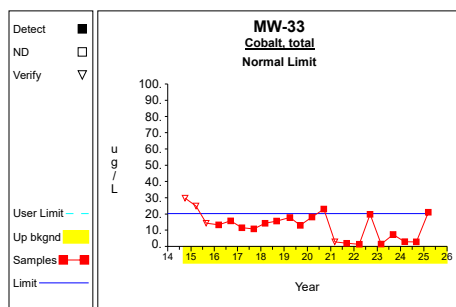
Graph 34



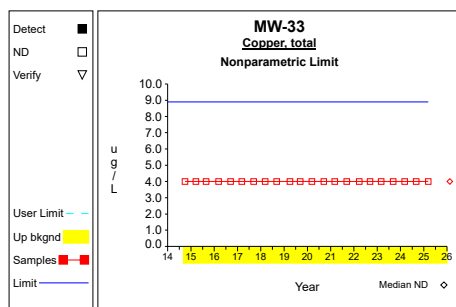
Graph 35



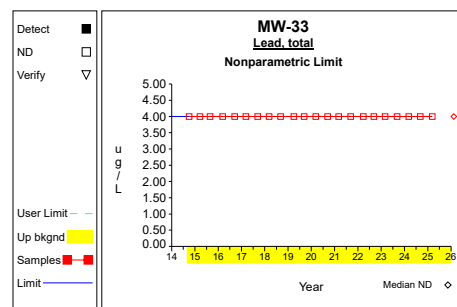
Graph 36



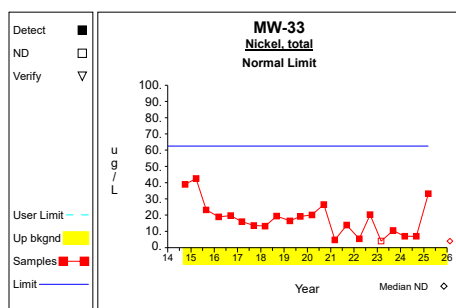
Graph 37



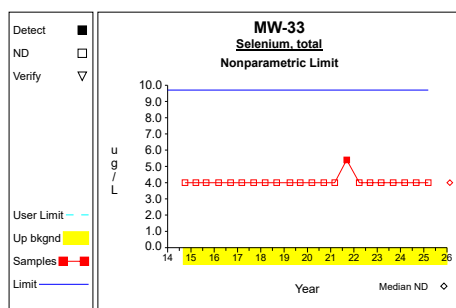
Graph 38



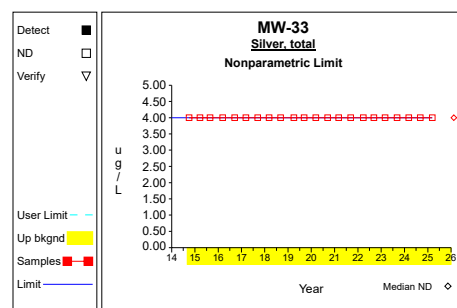
Graph 39



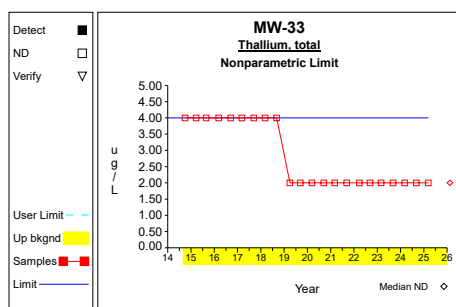
Graph 40



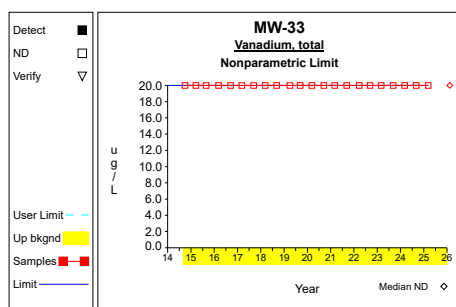
Graph 41



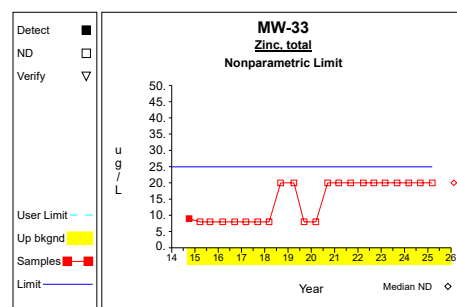
Graph 42



Graph 43

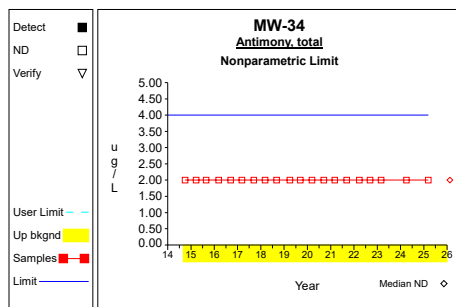


Graph 44

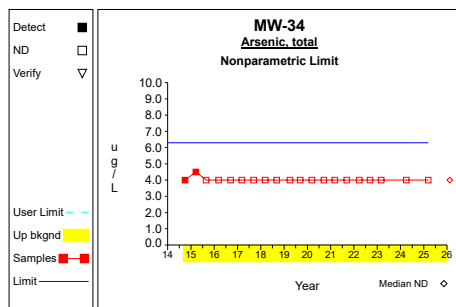


Graph 45

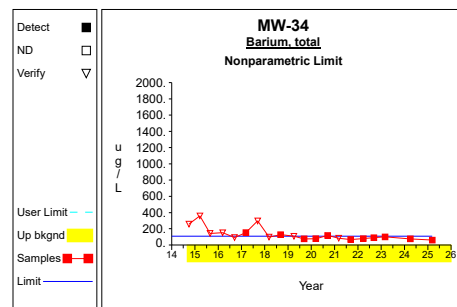
Up vs. Down Prediction Limits



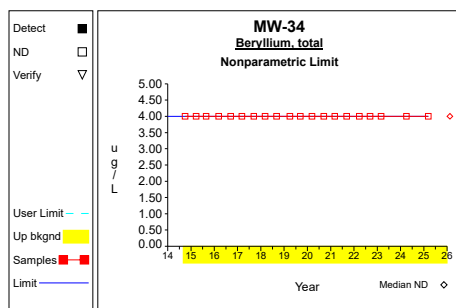
Graph 46



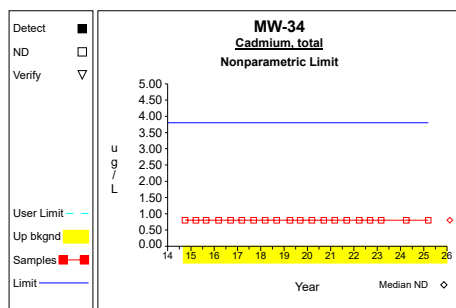
Graph 47



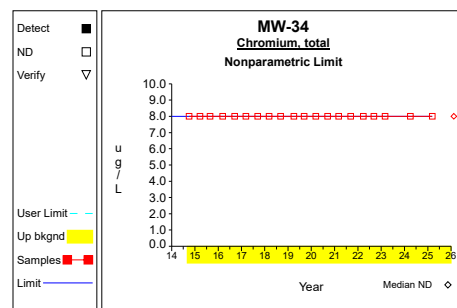
Graph 48



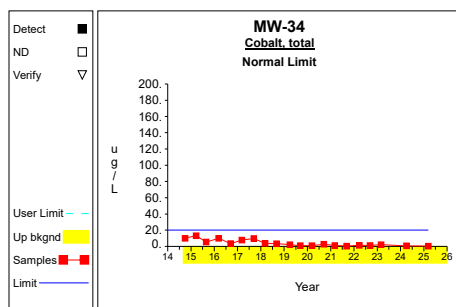
Graph 49



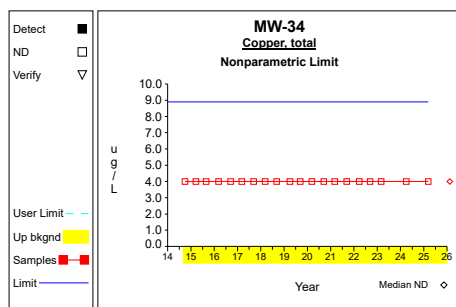
Graph 50



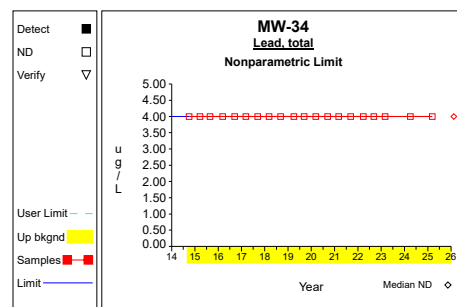
Graph 51



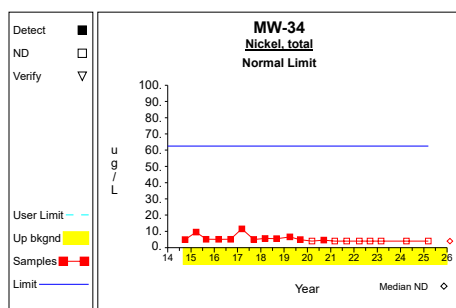
Graph 52



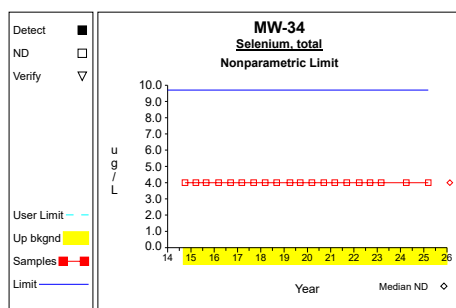
Graph 53



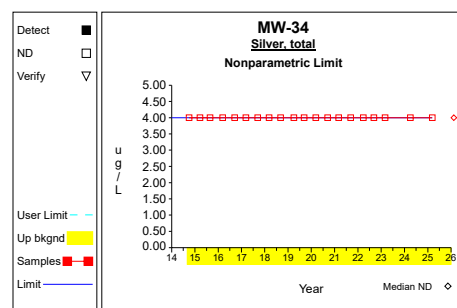
Graph 54



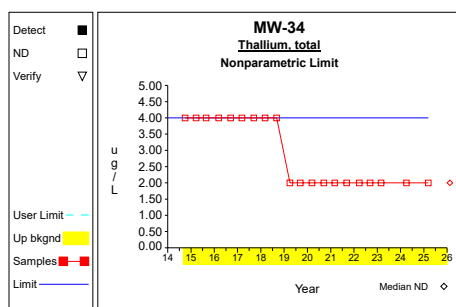
Graph 55



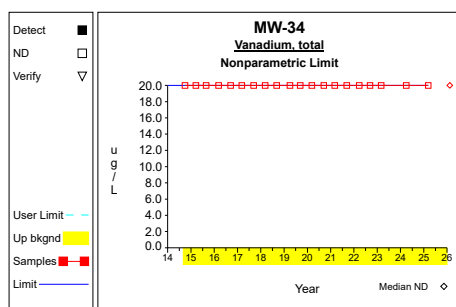
Graph 56



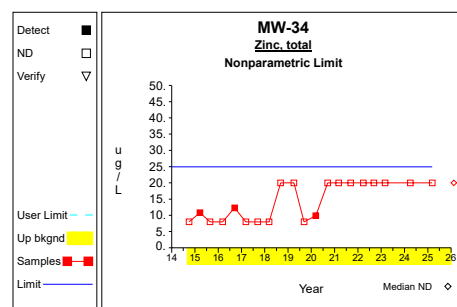
Graph 57



Graph 58

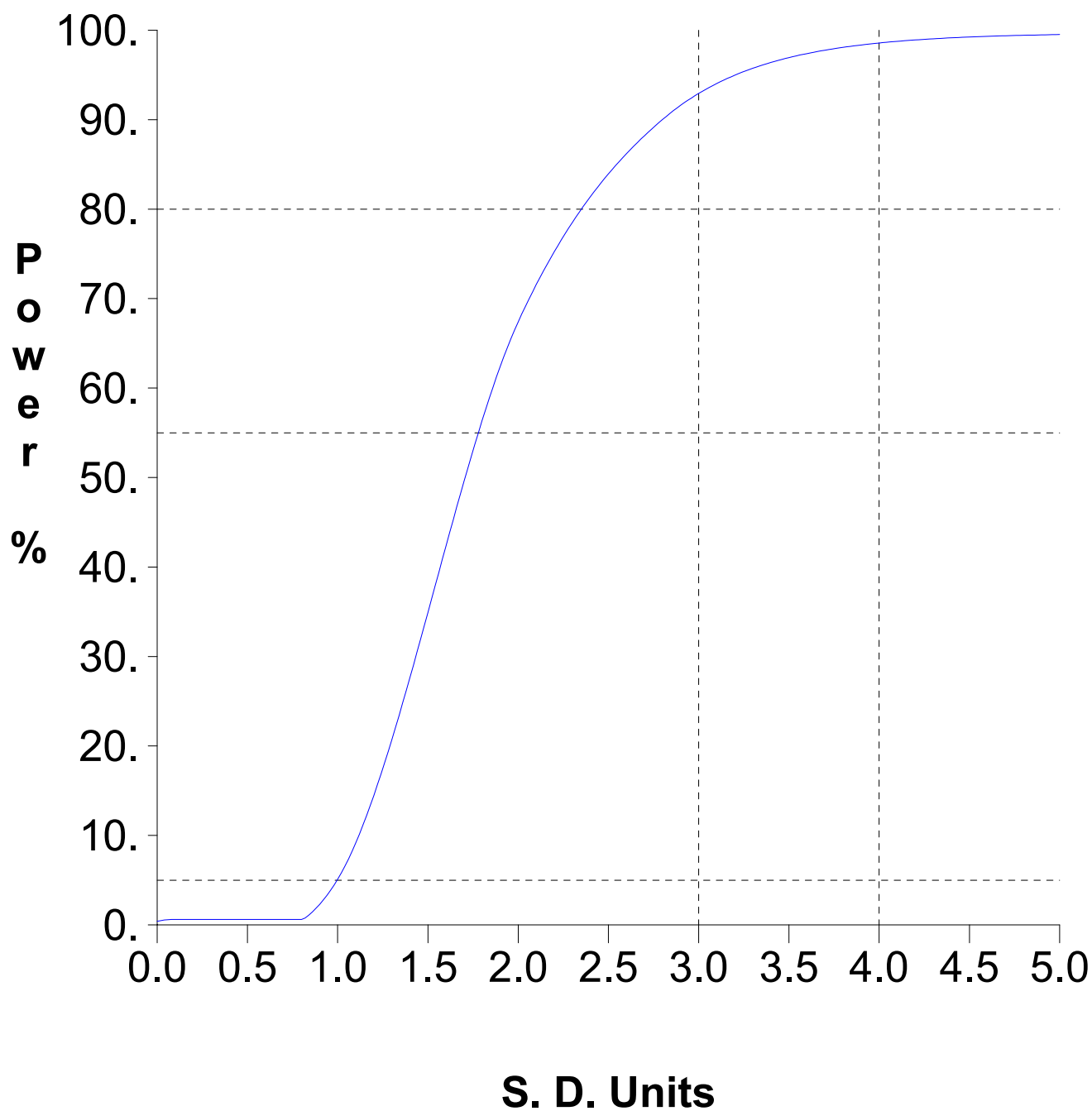


Graph 59



Graph 60

False Positive and False Negative Rates for Current Upgradient vs. Downgradient Monitoring Program



Attachment C

Assessment Statistics for Trace Metals - South Site Shallow Wells

Table 1

**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-33	4	5.450	3.870	1.176	0.898	10.002	10.000	
Cobalt, total	ug/L	MW-33	4	8.500	8.593	1.176	0.000	18.608	2.100	

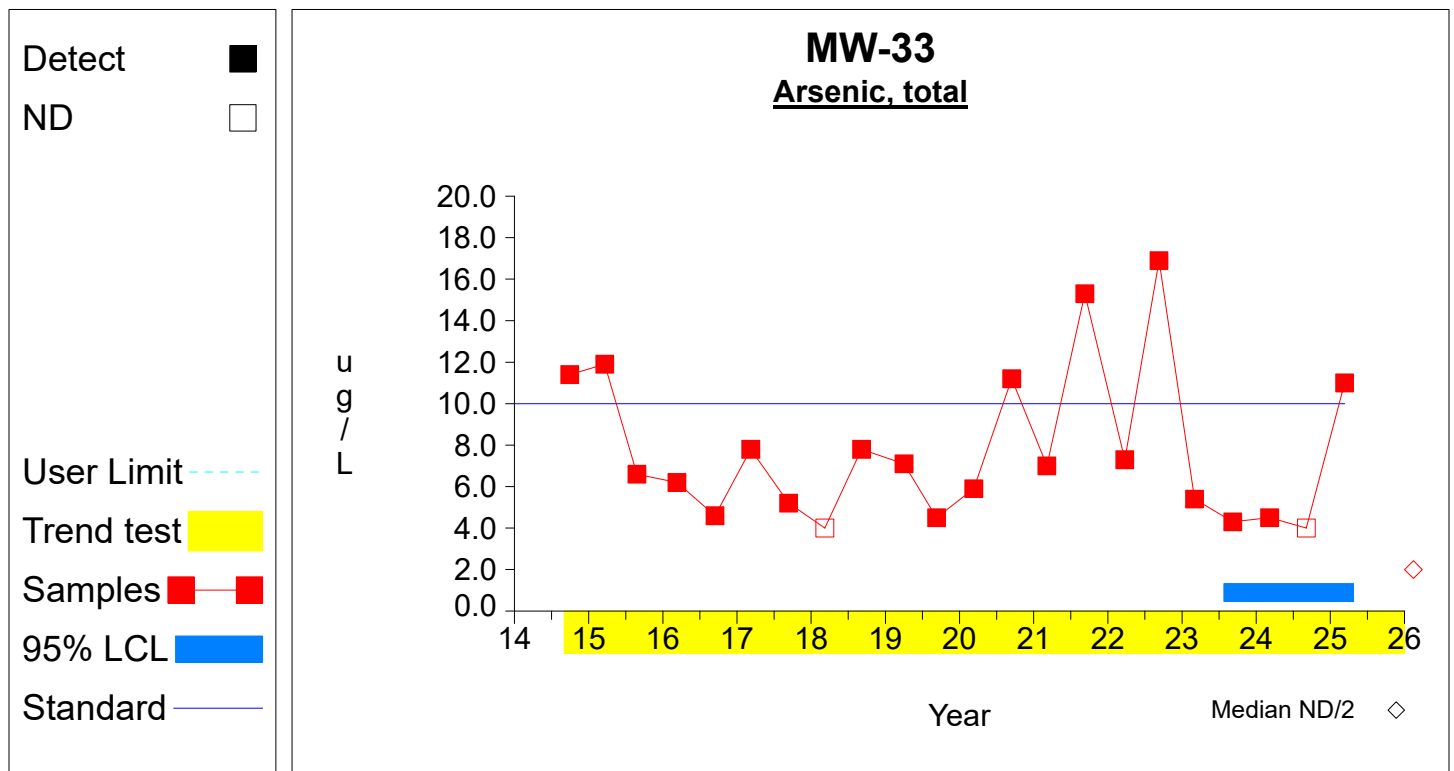
* - Insufficient Data

** - Significant Exceedance

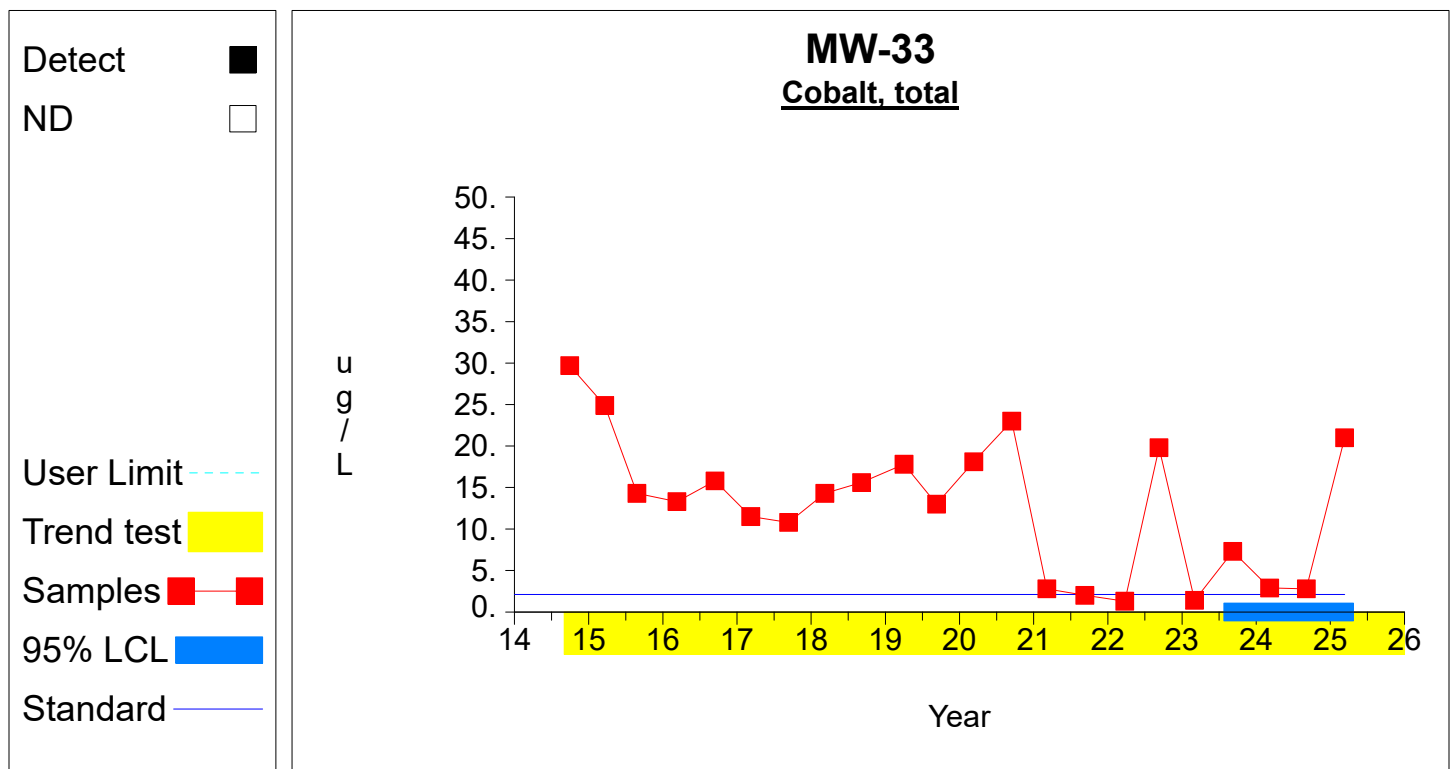
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)



Graph 1



Graph 2

Attachment D

Summary Tables and Graphs for the Interwell Comparisons - South Site Deep Wells

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-28	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-28	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-28	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-28	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-28	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-28	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-28	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-28	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-28	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-28	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-28	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-28	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-28	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-28	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-28	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-28	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-28	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-28	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-28	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-28	09/29/2014		5.7000		
Arsenic, total	ug/L	MW-28	11/24/2014		4.0000		
Arsenic, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-28	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-28	09/29/2014		22.9000		
Barium, total	ug/L	MW-28	11/24/2014		29.1000		
Barium, total	ug/L	MW-28	03/19/2015		29.6000		
Barium, total	ug/L	MW-28	08/26/2015		51.7000		
Barium, total	ug/L	MW-28	03/09/2016		26.0000		
Barium, total	ug/L	MW-28	09/14/2016		20.7000		
Barium, total	ug/L	MW-28	03/07/2017		37.1000		
Barium, total	ug/L	MW-28	09/11/2017		24.9000		
Barium, total	ug/L	MW-28	03/07/2018		35.2000		
Barium, total	ug/L	MW-28	09/05/2018		79.1000		
Barium, total	ug/L	MW-28	04/01/2019		83.0000		
Barium, total	ug/L	MW-28	09/09/2019		47.5000		
Barium, total	ug/L	MW-28	03/10/2020		68.0000		
Barium, total	ug/L	MW-28	09/14/2020		58.5000		
Barium, total	ug/L	MW-28	03/04/2021		20.3000		
Barium, total	ug/L	MW-28	09/09/2021		64.2000		
Barium, total	ug/L	MW-28	03/24/2022		85.6000		
Barium, total	ug/L	MW-28	09/09/2022		69.5000		
Barium, total	ug/L	MW-28	03/01/2023		59.5000		
Barium, total	ug/L	MW-28	09/04/2024		75.7000		
Barium, total	ug/L	MW-28	03/10/2025		109.0000		
Beryllium, total	ug/L	MW-28	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-28	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-28	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/07/2017	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-28	04/01/2019	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-28	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-28	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-28	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/19/2015	ND	0.8000		
Cadmium, total	ug/L	MW-28	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/07/2017		0.9000		
Cadmium, total	ug/L	MW-28	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/07/2018	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/05/2018		2.1000		
Cadmium, total	ug/L	MW-28	04/01/2019		1.3000		
Cadmium, total	ug/L	MW-28	09/09/2019		1.6000		
Cadmium, total	ug/L	MW-28	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/14/2020	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/09/2022		1.0000		
Cadmium, total	ug/L	MW-28	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-28	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-28	03/10/2025		1.5000		
Chromium, total	ug/L	MW-28	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-28	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-28	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-28	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-28	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-28	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-28	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-28	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-28	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-28	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-28	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-28	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-28	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-28	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-28	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-28	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-28	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-28	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-28	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-28	09/29/2014		12.5000		
Cobalt, total	ug/L	MW-28	11/24/2014		17.6000		
Cobalt, total	ug/L	MW-28	03/19/2015		6.3000		
Cobalt, total	ug/L	MW-28	08/26/2015		5.9000		
Cobalt, total	ug/L	MW-28	03/09/2016		3.9000		
Cobalt, total	ug/L	MW-28	09/14/2016		1.2000		
Cobalt, total	ug/L	MW-28	03/07/2017		6.7000		
Cobalt, total	ug/L	MW-28	09/11/2017		1.1000		
Cobalt, total	ug/L	MW-28	03/07/2018		4.5000		
Cobalt, total	ug/L	MW-28	09/05/2018		15.4000		
Cobalt, total	ug/L	MW-28	04/01/2019		7.3000		
Cobalt, total	ug/L	MW-28	09/09/2019		5.9000		
Cobalt, total	ug/L	MW-28	03/10/2020		5.8000		
Cobalt, total	ug/L	MW-28	09/14/2020		2.5000		
Cobalt, total	ug/L	MW-28	03/04/2021		1.2000		
Cobalt, total	ug/L	MW-28	09/09/2021		3.7000		
Cobalt, total	ug/L	MW-28	03/24/2022		5.5000		
Cobalt, total	ug/L	MW-28	09/09/2022		10.2000		
Cobalt, total	ug/L	MW-28	03/01/2023		2.8000		
Cobalt, total	ug/L	MW-28	09/04/2024		1.6000		
Cobalt, total	ug/L	MW-28	03/10/2025		12.7000		
Copper, total	ug/L	MW-28	09/29/2014	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-28	11/24/2014		5.4000		
Copper, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-28	08/26/2015		6.2000		
Copper, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-28	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-28	03/07/2017		4.0000		
Copper, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-28	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-28	09/05/2018		7.7000		
Copper, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-28	09/09/2019	ND	4.0000		
Copper, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-28	03/04/2021		4.7000		
Copper, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-28	09/09/2022		5.1000		
Copper, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Copper, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Lead, total	ug/L	MW-28	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-28	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-28	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-28	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-28	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-28	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-28	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-28	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-28	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-28	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-28	09/29/2014		34.1000		
Nickel, total	ug/L	MW-28	11/24/2014		37.8000		
Nickel, total	ug/L	MW-28	03/19/2015		28.9000		
Nickel, total	ug/L	MW-28	08/26/2015		19.5000		
Nickel, total	ug/L	MW-28	03/09/2016		14.1000		
Nickel, total	ug/L	MW-28	09/14/2016		9.4000		
Nickel, total	ug/L	MW-28	03/07/2017		31.4000		
Nickel, total	ug/L	MW-28	09/11/2017		9.4000		
Nickel, total	ug/L	MW-28	03/07/2018		21.7000		
Nickel, total	ug/L	MW-28	09/05/2018		62.7000		
Nickel, total	ug/L	MW-28	04/01/2019		41.8000		
Nickel, total	ug/L	MW-28	09/09/2019		33.5000		
Nickel, total	ug/L	MW-28	03/10/2020		22.0000		
Nickel, total	ug/L	MW-28	09/14/2020		13.5000		
Nickel, total	ug/L	MW-28	03/04/2021		12.7000		
Nickel, total	ug/L	MW-28	09/09/2021		9.5000		
Nickel, total	ug/L	MW-28	03/24/2022		16.9000		
Nickel, total	ug/L	MW-28	09/09/2022		21.6000		
Nickel, total	ug/L	MW-28	03/01/2023		8.5000		
Nickel, total	ug/L	MW-28	09/04/2024		13.2000		
Nickel, total	ug/L	MW-28	03/10/2025		48.2000		
Selenium, total	ug/L	MW-28	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-28	11/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-28	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-28	09/14/2016		4.2000		
Selenium, total	ug/L	MW-28	03/07/2017		4.4000		
Selenium, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-28	03/07/2018		5.3000		
Selenium, total	ug/L	MW-28	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-28	09/09/2019	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-28	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-28	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-28	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-28	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-28	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-28	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-28	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-28	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-28	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-28	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-28	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-28	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-28	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-28	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-28	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-28	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-28	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-28	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-28	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-28	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-28	03/01/2023	ND	4.0000		
Silver, total	ug/L	MW-28	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-28	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-28	09/29/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	11/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/19/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	08/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/09/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/07/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	09/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	03/07/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	09/05/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-28	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-28	09/09/2019	ND	2.0000		
Thallium, total	ug/L	MW-28	03/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	09/14/2020	ND	2.0000		
Thallium, total	ug/L	MW-28	03/04/2021	ND	2.0000		
Thallium, total	ug/L	MW-28	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-28	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-28	09/09/2022	ND	2.0000		
Thallium, total	ug/L	MW-28	03/01/2023	ND	2.0000		
Thallium, total	ug/L	MW-28	09/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-28	03/10/2025	ND	2.0000		
Vanadium, total	ug/L	MW-28	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-28	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-28	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/07/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-28	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-28	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-28	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-28	09/29/2014		9.3000		
Zinc, total	ug/L	MW-28	11/24/2014		16.1000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-28	03/19/2015		12.7000		
Zinc, total	ug/L	MW-28	08/26/2015		19.2000		
Zinc, total	ug/L	MW-28	03/09/2016		13.5000		
Zinc, total	ug/L	MW-28	09/14/2016		10.8000		
Zinc, total	ug/L	MW-28	03/07/2017		17.3000		
Zinc, total	ug/L	MW-28	09/11/2017		8.0000		
Zinc, total	ug/L	MW-28	03/07/2018		10.9000		
Zinc, total	ug/L	MW-28	09/05/2018		38.2000		
Zinc, total	ug/L	MW-28	04/01/2019		20.0000		
Zinc, total	ug/L	MW-28	09/09/2019		22.0000		
Zinc, total	ug/L	MW-28	03/10/2020		14.8000		
Zinc, total	ug/L	MW-28	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-28	03/04/2021		47.1000		
Zinc, total	ug/L	MW-28	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-28	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-28	09/09/2022		21.6000		
Zinc, total	ug/L	MW-28	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-28	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-28	03/10/2025	ND	20.0000		
Antimony, total	ug/L	MW-29	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-29	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-29	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-29	06/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-29	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-29	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-29	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-29	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-29	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-29	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-29	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-29	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-29	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-29	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-29	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-29	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-29	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-29	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-29	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-29	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-29	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-29	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Arsenic, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-29	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-29	09/29/2014		20.9000		
Barium, total	ug/L	MW-29	11/24/2014		19.8000		
Barium, total	ug/L	MW-29	03/19/2015		22.3000		
Barium, total	ug/L	MW-29	06/17/2015		17.5000		
Barium, total	ug/L	MW-29	08/26/2015		19.2000		
Barium, total	ug/L	MW-29	03/09/2016		16.8000		
Barium, total	ug/L	MW-29	09/14/2016		26.9000		
Barium, total	ug/L	MW-29	03/07/2017		21.0000		
Barium, total	ug/L	MW-29	09/11/2017		18.1000		
Barium, total	ug/L	MW-29	03/07/2018		14.2000		
Barium, total	ug/L	MW-29	09/05/2018		27.3000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-29	04/01/2019		18.7000		
Barium, total	ug/L	MW-29	09/09/2019		23.6000		
Barium, total	ug/L	MW-29	03/10/2020		24.9000		
Barium, total	ug/L	MW-29	09/14/2020		29.5000		
Barium, total	ug/L	MW-29	03/04/2021		21.1000		
Barium, total	ug/L	MW-29	09/09/2021		31.9000		
Barium, total	ug/L	MW-29	03/24/2022		22.6000		
Barium, total	ug/L	MW-29	09/09/2022		20.3000		
Barium, total	ug/L	MW-29	03/01/2023		22.7000		
Barium, total	ug/L	MW-29	09/04/2024		60.4000		
Barium, total	ug/L	MW-29	03/10/2025		28.0000		
Beryllium, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-29	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-29	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-29	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/19/2015	ND	0.8000		
Cadmium, total	ug/L	MW-29	06/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-29	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/07/2017	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/07/2018	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/05/2018	ND	0.8000		
Cadmium, total	ug/L	MW-29	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/09/2019	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/14/2020	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-29	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-29	03/10/2025	ND	0.8000		
Chromium, total	ug/L	MW-29	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-29	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-29	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-29	06/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-29	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-29	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-29	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-29	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-29	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-29	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-29	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-29	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-29	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-29	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-29	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-29	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-29	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-29	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-29	09/09/2022	ND	8.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-29	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-29	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-29	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-29	09/29/2014		2.9000		
Cobalt, total	ug/L	MW-29	11/24/2014		2.2000		
Cobalt, total	ug/L	MW-29	03/19/2015		5.6000		
Cobalt, total	ug/L	MW-29	06/17/2015		1.8000		
Cobalt, total	ug/L	MW-29	08/26/2015	ND	0.8000		
Cobalt, total	ug/L	MW-29	03/09/2016	ND	0.8000		
Cobalt, total	ug/L	MW-29	09/14/2016		1.0000		
Cobalt, total	ug/L	MW-29	03/07/2017	ND	0.8000		
Cobalt, total	ug/L	MW-29	09/11/2017	ND	0.8000		
Cobalt, total	ug/L	MW-29	03/07/2018	ND	0.8000		
Cobalt, total	ug/L	MW-29	09/05/2018	ND	0.8000		
Cobalt, total	ug/L	MW-29	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-29	09/09/2019	ND	0.8000		
Cobalt, total	ug/L	MW-29	03/10/2020	ND	0.8000		
Cobalt, total	ug/L	MW-29	09/14/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-29	03/04/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-29	09/09/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-29	03/24/2022		0.5000		
Cobalt, total	ug/L	MW-29	09/09/2022		0.5000		
Cobalt, total	ug/L	MW-29	03/01/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-29	09/04/2024		0.4000		
Cobalt, total	ug/L	MW-29	03/10/2025	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Copper, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Copper, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Copper, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Copper, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-29	09/14/2016		13.6000		
Copper, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Copper, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-29	09/05/2018		4.4000		
Copper, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Copper, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Copper, total	ug/L	MW-29	09/04/2024		5.4000		
Copper, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Lead, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Lead, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-29	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-29	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-29	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-29	09/29/2014		8.2000		
Nickel, total	ug/L	MW-29	11/24/2014		7.6000		
Nickel, total	ug/L	MW-29	03/19/2015		10.1000		
Nickel, total	ug/L	MW-29	06/17/2015		4.8000		
Nickel, total	ug/L	MW-29	08/26/2015		4.9000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-29	03/09/2016		8.1000		
Nickel, total	ug/L	MW-29	09/14/2016		6.9000		
Nickel, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Nickel, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Nickel, total	ug/L	MW-29	09/05/2018		4.3000		
Nickel, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Nickel, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Nickel, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Nickel, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Nickel, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Nickel, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Nickel, total	ug/L	MW-29	09/04/2024		4.1000		
Nickel, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Selenium, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-29	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Selenium, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Selenium, total	ug/L	MW-29	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-29	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-29	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-29	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-29	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-29	06/17/2015	ND	4.0000		
Silver, total	ug/L	MW-29	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-29	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-29	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-29	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-29	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-29	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-29	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-29	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-29	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-29	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-29	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-29	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-29	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-29	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-29	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-29	03/01/2023	ND	4.0000		
Silver, total	ug/L	MW-29	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-29	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-29	09/29/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	11/24/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	03/19/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	06/17/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	08/26/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	03/09/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	03/07/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	09/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	03/07/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	09/05/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-29	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-29	09/09/2019	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-29	03/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-29	09/14/2020	ND	2.0000		
Thallium, total	ug/L	MW-29	03/04/2021	ND	2.0000		
Thallium, total	ug/L	MW-29	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-29	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-29	09/09/2022	ND	2.0000		
Thallium, total	ug/L	MW-29	03/01/2023	ND	2.0000		
Thallium, total	ug/L	MW-29	09/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-29	03/10/2025	ND	2.0000		
Vanadium, total	ug/L	MW-29	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-29	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-29	06/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-29	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/07/2018	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-29	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-29	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-29	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-29	09/29/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	11/24/2014		9.0000		
Zinc, total	ug/L	MW-29	03/19/2015		14.1000		
Zinc, total	ug/L	MW-29	06/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	08/26/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	03/09/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	09/14/2016		55.9000		
Zinc, total	ug/L	MW-29	03/07/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	09/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	03/07/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	09/05/2018	ND	20.0000		
Zinc, total	ug/L	MW-29	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-29	09/09/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	03/10/2020	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-29	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-29	03/04/2021	ND	20.0000		
Zinc, total	ug/L	MW-29	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-29	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-29	09/09/2022	ND	20.0000		
Zinc, total	ug/L	MW-29	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-29	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-29	03/10/2025	ND	20.0000		
Antimony, total	ug/L	MW-36	09/29/2014		15.3000		*
Antimony, total	ug/L	MW-36	03/19/2015		5.0000		*
Antimony, total	ug/L	MW-36	08/26/2015		10.2000		*
Antimony, total	ug/L	MW-36	11/10/2015		8.0000		*
Antimony, total	ug/L	MW-36	03/09/2016		5.2000		
Antimony, total	ug/L	MW-36	09/14/2016		3.2000		
Antimony, total	ug/L	MW-36	09/11/2017		3.5000		
Antimony, total	ug/L	MW-36	03/07/2018		7.9000		
Antimony, total	ug/L	MW-36	09/05/2018		2.9000		
Antimony, total	ug/L	MW-36	04/01/2019		2.1000		
Antimony, total	ug/L	MW-36	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-36	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-36	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-36	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-36	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-36	03/24/2022		4.4000		
Antimony, total	ug/L	MW-36	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-36	03/01/2023		2.4000		
Antimony, total	ug/L	MW-36	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-36	03/10/2025		3.3000		
Arsenic, total	ug/L	MW-36	09/29/2014		28.5000		*

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW-36	03/19/2015		7.7000		*
Arsenic, total	ug/L	MW-36	08/26/2015		4.5000		*
Arsenic, total	ug/L	MW-36	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/11/2017		4.4000		
Arsenic, total	ug/L	MW-36	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-36	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-36	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-36	09/29/2014		18.0000		*
Barium, total	ug/L	MW-36	03/19/2015		17.4000		*
Barium, total	ug/L	MW-36	08/26/2015		12.5000		*
Barium, total	ug/L	MW-36	03/09/2016		12.2000		
Barium, total	ug/L	MW-36	09/14/2016		10.4000		
Barium, total	ug/L	MW-36	09/11/2017		17.7000		
Barium, total	ug/L	MW-36	03/07/2018		12.8000		
Barium, total	ug/L	MW-36	09/05/2018		10.8000		
Barium, total	ug/L	MW-36	04/01/2019		11.2000		
Barium, total	ug/L	MW-36	09/09/2019		9.5000		
Barium, total	ug/L	MW-36	03/10/2020		11.5000		
Barium, total	ug/L	MW-36	09/14/2020		8.1000		
Barium, total	ug/L	MW-36	03/04/2021		10.0000		
Barium, total	ug/L	MW-36	09/09/2021		10.4000		
Barium, total	ug/L	MW-36	03/24/2022		10.4000		
Barium, total	ug/L	MW-36	09/09/2022		7.9000		
Barium, total	ug/L	MW-36	03/01/2023		11.7000		
Barium, total	ug/L	MW-36	09/04/2024		10.5000		
Barium, total	ug/L	MW-36	03/10/2025		10.0000		
Beryllium, total	ug/L	MW-36	09/29/2014	ND	4.0000		*
Beryllium, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Beryllium, total	ug/L	MW-36	08/26/2015	ND	4.0000		*
Beryllium, total	ug/L	MW-36	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-36	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-36	09/29/2014		7.9000		*
Cadmium, total	ug/L	MW-36	03/19/2015		1.1000		*
Cadmium, total	ug/L	MW-36	08/26/2015		12.3000		*
Cadmium, total	ug/L	MW-36	11/10/2015		3.3000		*
Cadmium, total	ug/L	MW-36	03/09/2016		6.8000		
Cadmium, total	ug/L	MW-36	09/14/2016		2.5000		
Cadmium, total	ug/L	MW-36	09/11/2017		1.5000		
Cadmium, total	ug/L	MW-36	03/07/2018		2.1000		
Cadmium, total	ug/L	MW-36	09/05/2018		0.9000		
Cadmium, total	ug/L	MW-36	04/01/2019		0.9000		
Cadmium, total	ug/L	MW-36	09/09/2019		0.9000		
Cadmium, total	ug/L	MW-36	03/10/2020		1.0000		
Cadmium, total	ug/L	MW-36	09/14/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	03/24/2022		0.9000		
Cadmium, total	ug/L	MW-36	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	03/01/2023	ND	0.8000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-36	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-36	03/10/2025		1.0000		
Chromium, total	ug/L	MW-36	09/29/2014		42.7000		*
Chromium, total	ug/L	MW-36	03/19/2015		12.3000		*
Chromium, total	ug/L	MW-36	08/26/2015	ND	8.0000		*
Chromium, total	ug/L	MW-36	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-36	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-36	09/29/2014		23.6000		*
Cobalt, total	ug/L	MW-36	03/19/2015		7.3000		*
Cobalt, total	ug/L	MW-36	08/26/2015		0.8000		*
Cobalt, total	ug/L	MW-36	03/09/2016		2.8000		
Cobalt, total	ug/L	MW-36	09/14/2016		6.6000		
Cobalt, total	ug/L	MW-36	09/11/2017		12.5000		
Cobalt, total	ug/L	MW-36	03/07/2018		2.2000		
Cobalt, total	ug/L	MW-36	09/05/2018		6.2000		
Cobalt, total	ug/L	MW-36	04/01/2019		2.3000		
Cobalt, total	ug/L	MW-36	09/09/2019		4.4000		
Cobalt, total	ug/L	MW-36	03/10/2020		8.2000		
Cobalt, total	ug/L	MW-36	09/14/2020		10.2000		
Cobalt, total	ug/L	MW-36	03/04/2021		14.6000		
Cobalt, total	ug/L	MW-36	09/09/2021		6.7000		
Cobalt, total	ug/L	MW-36	03/24/2022		6.2000		
Cobalt, total	ug/L	MW-36	09/09/2022		9.4000		
Cobalt, total	ug/L	MW-36	03/01/2023		9.4000		
Cobalt, total	ug/L	MW-36	09/04/2024		6.5000		
Cobalt, total	ug/L	MW-36	03/10/2025		2.7000		
Copper, total	ug/L	MW-36	09/29/2014		27.1000		*
Copper, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Copper, total	ug/L	MW-36	08/26/2015	ND	4.0000		*
Copper, total	ug/L	MW-36	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-36	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-36	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-36	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Copper, total	ug/L	MW-36	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Copper, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-36	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Copper, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Lead, total	ug/L	MW-36	09/29/2014		29.5000		*
Lead, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Lead, total	ug/L	MW-36	08/26/2015	ND	4.0000		*
Lead, total	ug/L	MW-36	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-36	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-36	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-36	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-36	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-36	03/24/2022	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-36	09/29/2014		124.0000		*
Nickel, total	ug/L	MW-36	03/19/2015		41.6000		*
Nickel, total	ug/L	MW-36	08/26/2015		23.0000		*
Nickel, total	ug/L	MW-36	03/09/2016		28.0000		
Nickel, total	ug/L	MW-36	09/14/2016		44.1000		
Nickel, total	ug/L	MW-36	09/11/2017		66.0000		
Nickel, total	ug/L	MW-36	03/07/2018		34.8000		
Nickel, total	ug/L	MW-36	09/05/2018		48.1000		
Nickel, total	ug/L	MW-36	04/01/2019		25.1000		
Nickel, total	ug/L	MW-36	09/09/2019		41.7000		
Nickel, total	ug/L	MW-36	03/10/2020		39.5000		
Nickel, total	ug/L	MW-36	09/14/2020		46.5000		
Nickel, total	ug/L	MW-36	03/04/2021		40.1000		
Nickel, total	ug/L	MW-36	09/09/2021		28.5000		
Nickel, total	ug/L	MW-36	03/24/2022		33.2000		
Nickel, total	ug/L	MW-36	09/09/2022		35.7000		
Nickel, total	ug/L	MW-36	03/01/2023		31.4000		
Nickel, total	ug/L	MW-36	09/04/2024		29.9000		
Nickel, total	ug/L	MW-36	03/10/2025		26.8000		
Selenium, total	ug/L	MW-36	09/29/2014		10.7000		*
Selenium, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Selenium, total	ug/L	MW-36	08/26/2015		12.3000		*
Selenium, total	ug/L	MW-36	11/10/2015		4.0000		*
Selenium, total	ug/L	MW-36	03/09/2016		9.1000		
Selenium, total	ug/L	MW-36	09/14/2016		9.5000		
Selenium, total	ug/L	MW-36	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	03/07/2018		14.4000		
Selenium, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	04/01/2019		5.1000		
Selenium, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-36	09/29/2014	ND	4.0000		*
Silver, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Silver, total	ug/L	MW-36	08/26/2015	ND	4.0000		*
Silver, total	ug/L	MW-36	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-36	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-36	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-36	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-36	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-36	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-36	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-36	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-36	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-36	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-36	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-36	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-36	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-36	03/01/2023	ND	4.0000		
Silver, total	ug/L	MW-36	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-36	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-36	09/29/2014	ND	4.0000		*
Thallium, total	ug/L	MW-36	03/19/2015	ND	4.0000		*
Thallium, total	ug/L	MW-36	08/26/2015	ND	4.0000		*
Thallium, total	ug/L	MW-36	03/09/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	09/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	09/11/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	03/07/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	09/05/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/01/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	09/09/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	03/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	09/14/2020	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-36	03/04/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	09/09/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	03/24/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	09/09/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	03/01/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	09/04/2024	ND	2.0000		
Thallium, total	ug/L	MW-36	03/10/2025	ND	2.0000		
Vanadium, total	ug/L	MW-36	09/29/2014		191.0000		*
Vanadium, total	ug/L	MW-36	03/19/2015		47.1000		*
Vanadium, total	ug/L	MW-36	08/26/2015	ND	20.0000		*
Vanadium, total	ug/L	MW-36	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/07/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-36	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-36	09/29/2014		266.0000		*
Zinc, total	ug/L	MW-36	03/19/2015		50.4000		*
Zinc, total	ug/L	MW-36	08/26/2015		160.0000		*
Zinc, total	ug/L	MW-36	03/09/2016		86.0000		
Zinc, total	ug/L	MW-36	09/14/2016		61.0000		
Zinc, total	ug/L	MW-36	09/11/2017		75.8000		
Zinc, total	ug/L	MW-36	03/07/2018		75.0000		
Zinc, total	ug/L	MW-36	09/05/2018		60.1000		
Zinc, total	ug/L	MW-36	04/01/2019		42.7000		
Zinc, total	ug/L	MW-36	09/09/2019		49.5000		
Zinc, total	ug/L	MW-36	03/10/2020		52.0000		
Zinc, total	ug/L	MW-36	09/14/2020		55.9000		
Zinc, total	ug/L	MW-36	03/04/2021		45.5000		
Zinc, total	ug/L	MW-36	09/09/2021		31.1000		
Zinc, total	ug/L	MW-36	03/24/2022		48.4000		
Zinc, total	ug/L	MW-36	09/09/2022		40.3000		
Zinc, total	ug/L	MW-36	03/01/2023		35.4000		
Zinc, total	ug/L	MW-36	09/04/2024		38.3000		
Zinc, total	ug/L	MW-36	03/10/2025		48.4000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result	Pred. Limit
Antimony, total	ug/L	MW-22	03/10/2025	ND	2.0000	7.9000
Arsenic, total	ug/L	MW-22	03/10/2025	ND	4.0000	5.7000
Barium, total	ug/L	MW-22	03/10/2025		20.6000	109.0000
Beryllium, total	ug/L	MW-22	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-22	03/10/2025	ND	0.8000	6.8000
Chromium, total	ug/L	MW-22	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-22	03/10/2025		1.5000	15.3211
Copper, total	ug/L	MW-22	03/10/2025	ND	4.0000	13.6000
Lead, total	ug/L	MW-22	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-22	03/10/2025	ND	4.0000	62.4296
Selenium, total	ug/L	MW-22	03/10/2025	ND	4.0000	14.4000
Silver, total	ug/L	MW-22	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-22	03/10/2025	ND	2.0000	2.0000
Vanadium, total	ug/L	MW-22	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-22	03/10/2025	ND	20.0000	474.1207
Antimony, total	ug/L	MW-32	03/10/2025	ND	2.0000	7.9000
Arsenic, total	ug/L	MW-32	03/10/2025	ND	4.0000	5.7000
Barium, total	ug/L	MW-32	03/10/2025		12.9000	109.0000
Beryllium, total	ug/L	MW-32	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-32	03/10/2025	ND	0.8000	6.8000
Chromium, total	ug/L	MW-32	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-32	03/10/2025	ND	0.4000	15.3211
Copper, total	ug/L	MW-32	03/10/2025	ND	4.0000	13.6000
Lead, total	ug/L	MW-32	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-32	03/10/2025	ND	4.0000	62.4296
Selenium, total	ug/L	MW-32	03/10/2025	ND	4.0000	14.4000
Silver, total	ug/L	MW-32	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-32	03/10/2025	ND	2.0000	2.0000
Vanadium, total	ug/L	MW-32	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-32	03/10/2025	ND	20.0000	474.1207
Antimony, total	ug/L	MW-37	03/10/2025	ND	2.0000	7.9000
Arsenic, total	ug/L	MW-37	03/10/2025	ND	4.0000	5.7000
Barium, total	ug/L	MW-37	03/10/2025		21.9000	109.0000
Beryllium, total	ug/L	MW-37	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-37	03/10/2025	ND	0.8000	6.8000
Chromium, total	ug/L	MW-37	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-37	03/10/2025		9.6000	15.3211
Copper, total	ug/L	MW-37	03/10/2025	ND	4.0000	13.6000
Lead, total	ug/L	MW-37	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-37	03/10/2025		14.3000	62.4296
Selenium, total	ug/L	MW-37	03/10/2025	ND	4.0000	14.4000
Silver, total	ug/L	MW-37	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-37	03/10/2025	ND	2.0000	2.0000
Vanadium, total	ug/L	MW-37	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-37	03/10/2025	ND	20.0000	474.1207
Antimony, total	ug/L	MW-38	03/10/2025	ND	2.0000	7.9000
Arsenic, total	ug/L	MW-38	03/10/2025		10.8000 *	5.7000
Barium, total	ug/L	MW-38	03/10/2025		20.6000	109.0000
Beryllium, total	ug/L	MW-38	03/10/2025	ND	4.0000	4.0000
Cadmium, total	ug/L	MW-38	03/10/2025	ND	0.8000	6.8000
Chromium, total	ug/L	MW-38	03/10/2025	ND	8.0000	8.0000
Cobalt, total	ug/L	MW-38	03/10/2025		4.4000	15.3211
Copper, total	ug/L	MW-38	03/10/2025	ND	4.0000	13.6000
Lead, total	ug/L	MW-38	03/10/2025	ND	4.0000	4.0000
Nickel, total	ug/L	MW-38	03/10/2025		6.3000	62.4296
Selenium, total	ug/L	MW-38	03/10/2025	ND	4.0000	14.4000
Silver, total	ug/L	MW-38	03/10/2025	ND	4.0000	4.0000
Thallium, total	ug/L	MW-38	03/10/2025	ND	2.0000	2.0000
Vanadium, total	ug/L	MW-38	03/10/2025	ND	20.0000	20.0000
Zinc, total	ug/L	MW-38	03/10/2025	ND	20.0000	474.1207

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	9	59	0.153	0	50	0.000
Arsenic, total	3	59	0.051	8	51	0.157
Barium, total	59	59	1.000	51	51	1.000
Beryllium, total	0	59	0.000	0	50	0.000
Cadmium, total	16	59	0.271	0	50	0.000
Chromium, total	0	59	0.000	1	51	0.020
Cobalt, total	45	59	0.763	38	50	0.760
Copper, total	9	59	0.153	5	51	0.098
Lead, total	0	59	0.000	1	51	0.020
Nickel, total	46	59	0.780	17	50	0.340
Selenium, total	7	59	0.119	0	50	0.000
Silver, total	0	59	0.000	0	50	0.000
Thallium, total	0	59	0.000	0	50	0.000
Vanadium, total	0	59	0.000	1	51	0.020
Zinc, total	34	59	0.576	10	50	0.200

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	9	59	0.153	1.406	0.595					2.326	normal	nonpar
Arsenic, total	3	59	0.051									nonpar
Barium, total	59	59	1.000	4.799	2.686					2.326	non-norm	nonpar
Beryllium, total	0	59	0.000									nonpar
Cadmium, total	16	59	0.271	2.341	1.010					2.326	lognor	nonpar
Chromium, total	0	59	0.000									nonpar
Cobalt, total	45	59	0.763	2.270	0.934					2.326	normal	normal
Copper, total	9	59	0.153	0.121	1.062					2.326	normal	nonpar
Lead, total	0	59	0.000									nonpar
Nickel, total	46	59	0.780	2.252	0.239					2.326	normal	normal
Selenium, total	7	59	0.119	0.138	0.106					2.326	normal	nonpar
Silver, total	0	59	0.000									nonpar
Thallium, total	0	59	0.000									nonpar
Vanadium, total	0	59	0.000									nonpar
Zinc, total	34	59	0.576	2.352	0.832					2.326	lognor	lognor

* - Distribution override for that constituent.

Fit to distribution is confirmed if G <= critical value.

Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	9	59					7.9000	nonpar		0.99
Arsenic, total	ug/L	3	59					5.7000	nonpar		0.99
Barium, total	ug/L	59	59					109.0000	nonpar		0.99
Beryllium, total	ug/L	0	59					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	16	59					6.8000	nonpar		0.99
Chromium, total	ug/L	0	59					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	45	59	4.4085	4.5233	0.0100	2.4125	15.3211	normal		
Copper, total	ug/L	9	59					13.6000	nonpar		0.99
Lead, total	ug/L	0	59					4.0000	nonpar	***	0.99
Nickel, total	ug/L	46	59	19.8102	17.6659	0.0100	2.4125	62.4296	normal		
Selenium, total	ug/L	7	59					14.4000	nonpar		0.99
Silver, total	ug/L	0	59					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	59					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	59					20.0000	nonpar	***	0.99
Zinc, total	ug/L	34	59	1.9302	1.7539	0.0100	2.4125	474.1207	lognor		

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

For transformed data, mean and SD in transformed units and prediction limit in original units.

All sample sizes and statistics are based on outlier free data.

For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 8

**Historical Downgradient Data for Constituent-Well Combinations
that Failed the Current Statistical Evaluation or
are in Verification Resampling Mode**

Constituent	Units	Well	Date	Result		Pred. Limit
Arsenic, total	ug/L	MW-38	10/11/2021	5.3000		5.7000
Arsenic, total	ug/L	MW-38	03/24/2022	4.0000		5.7000
Arsenic, total	ug/L	MW-38	09/09/2022	5.6000		5.7000
Arsenic, total	ug/L	MW-38	03/01/2023	19.7000	*	5.7000
Arsenic, total	ug/L	MW-38	05/09/2023	23.7000	*	5.7000
Arsenic, total	ug/L	MW-38	06/03/2024	5.2000		5.7000
Arsenic, total	ug/L	MW-38	03/10/2025	10.8000	*	5.7000

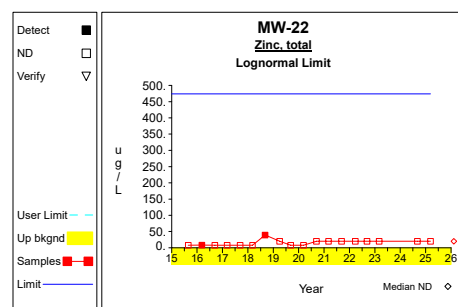
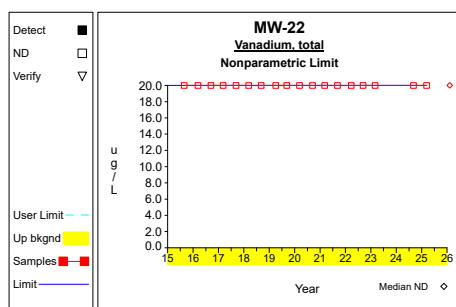
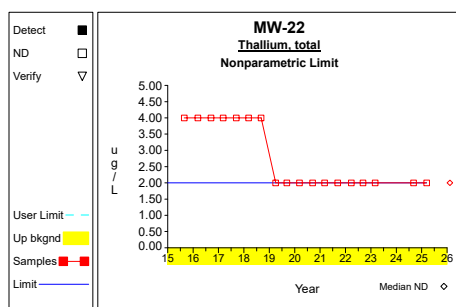
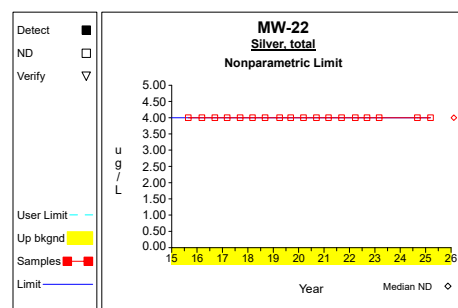
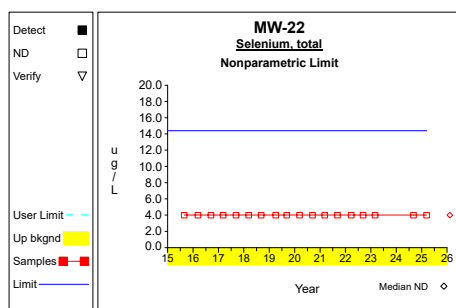
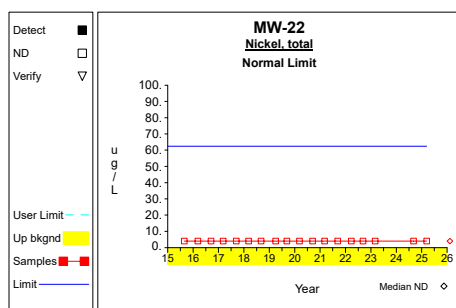
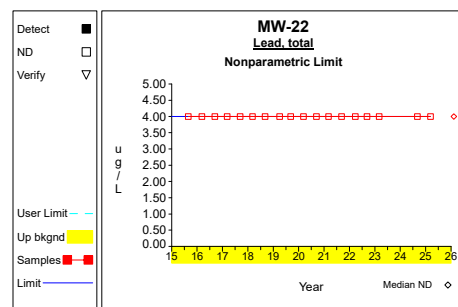
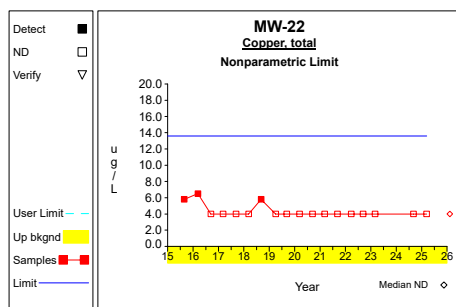
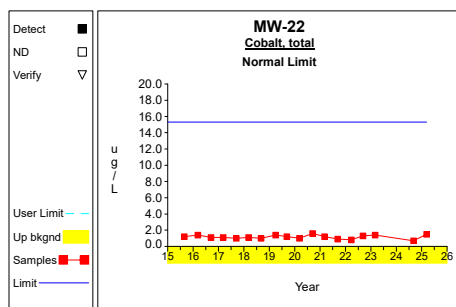
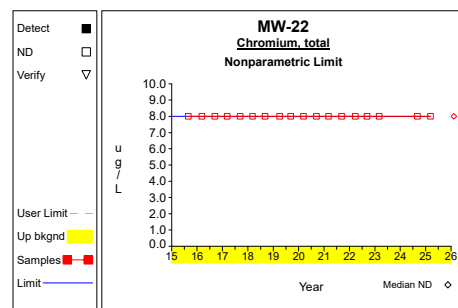
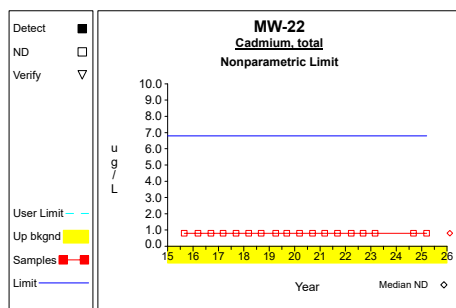
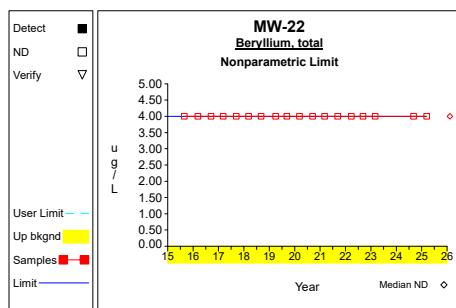
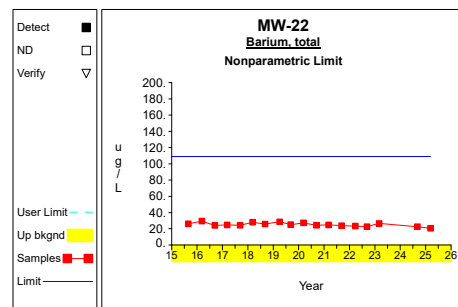
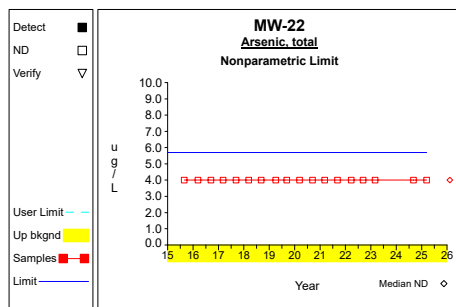
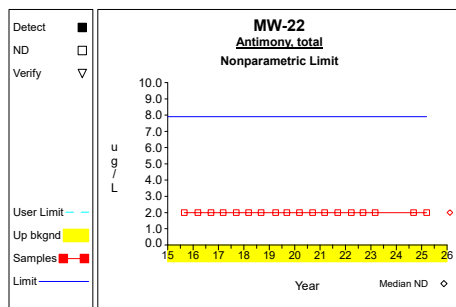
* - Significantly increased over background.

** - Detect at limit for 100% NDs in background (NPPL only).

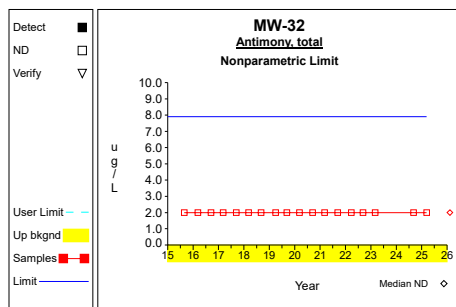
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

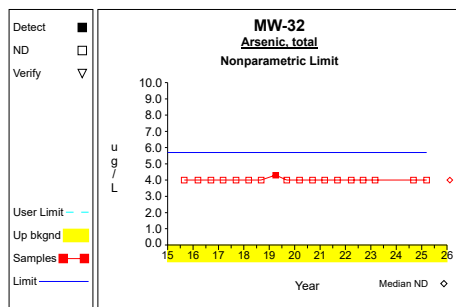
Up vs. Down Prediction Limits



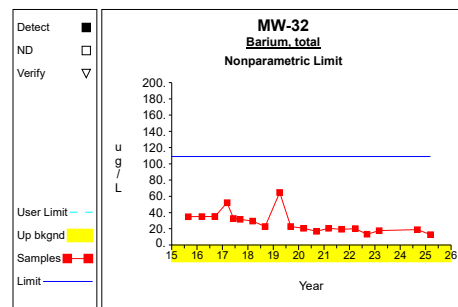
Up vs. Down Prediction Limits



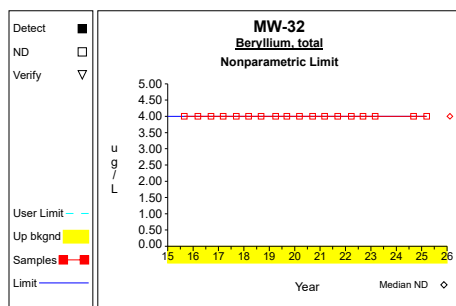
Graph 16



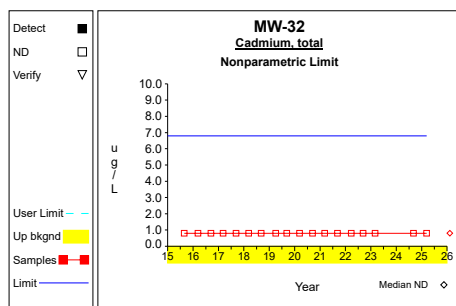
Graph 17



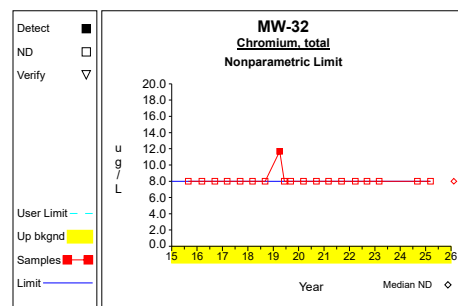
Graph 18



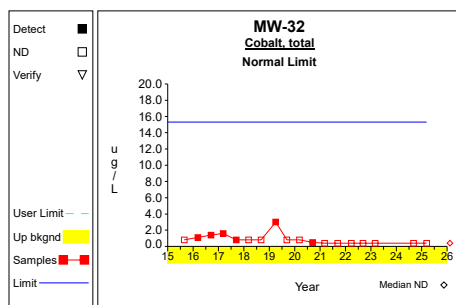
Graph 19



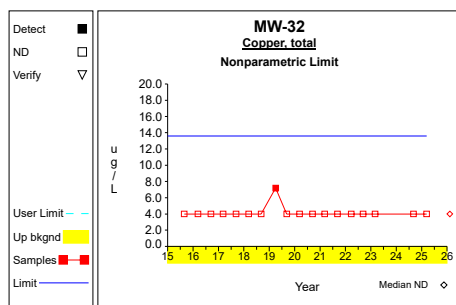
Graph 20



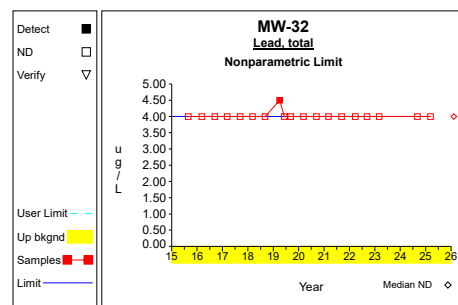
Graph 21



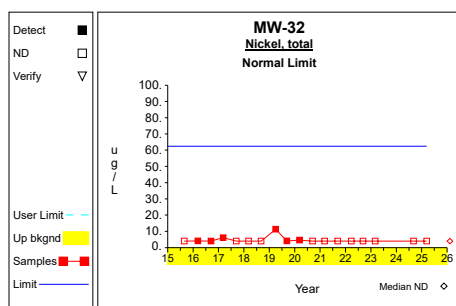
Graph 22



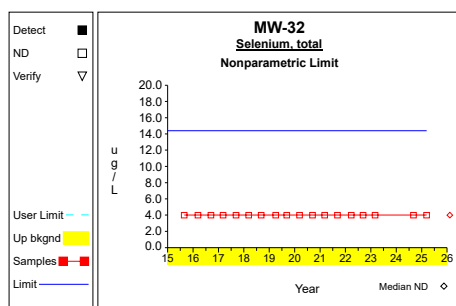
Graph 23



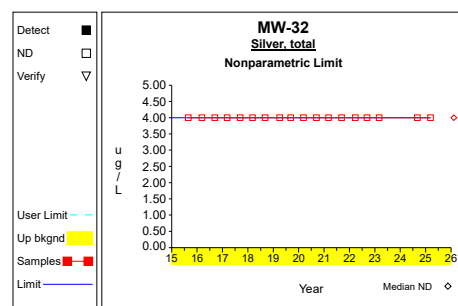
Graph 24



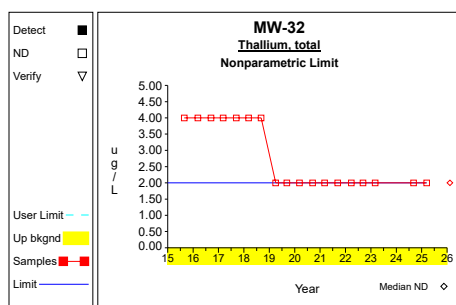
Graph 25



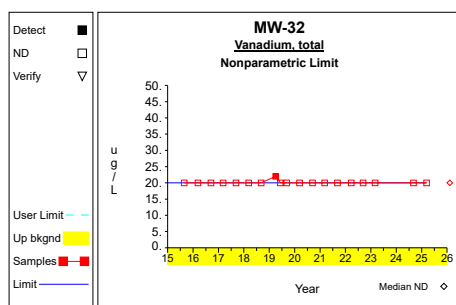
Graph 26



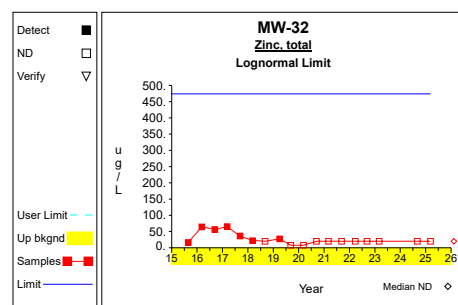
Graph 27



Graph 28

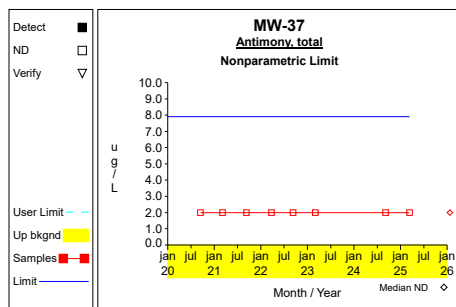


Graph 29

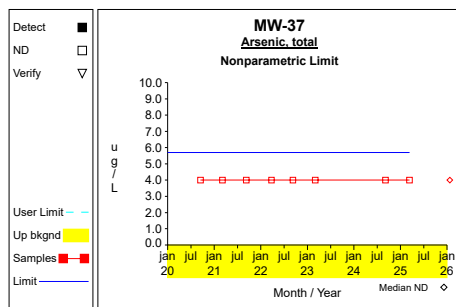


Graph 30

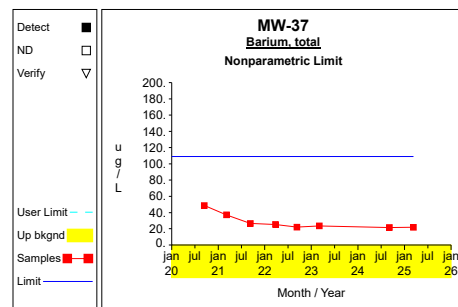
Up vs. Down Prediction Limits



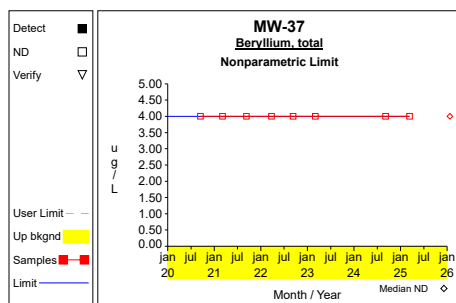
Graph 31



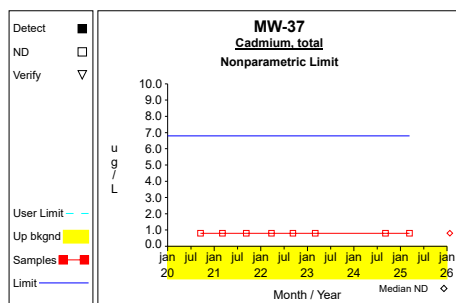
Graph 32



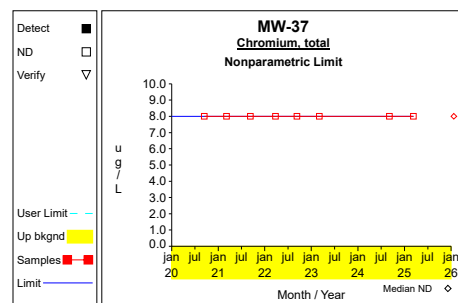
Graph 33



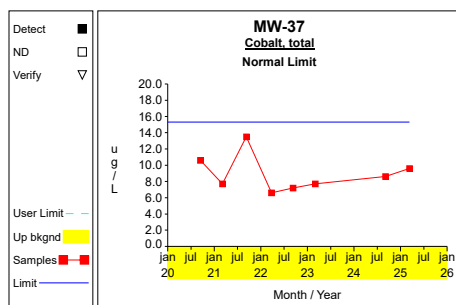
Graph 34



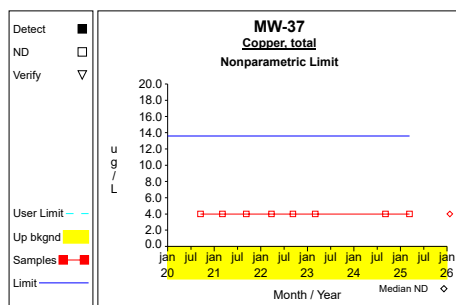
Graph 35



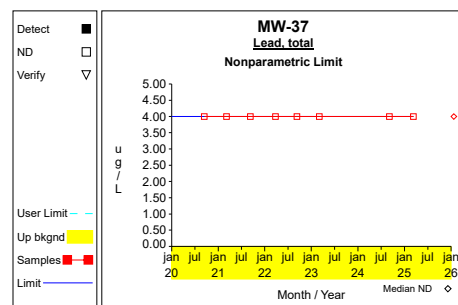
Graph 36



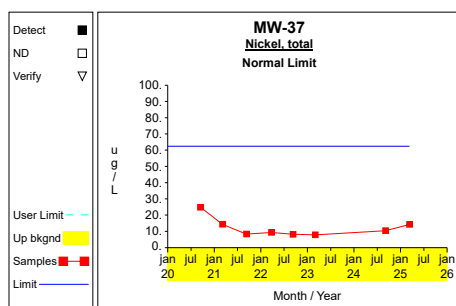
Graph 37



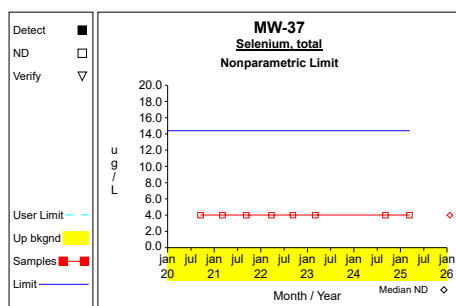
Graph 38



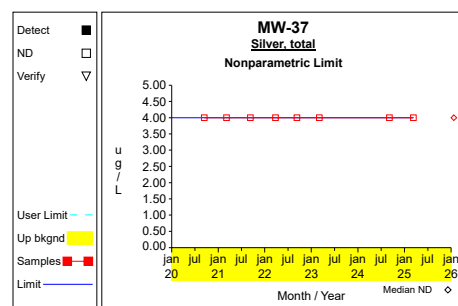
Graph 39



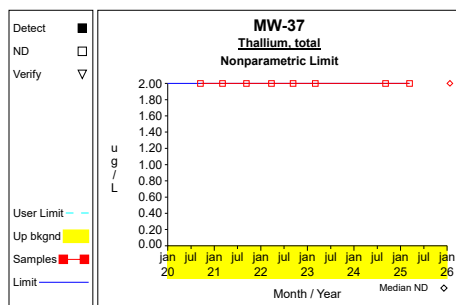
Graph 40



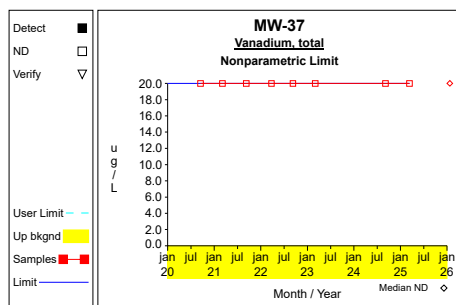
Graph 41



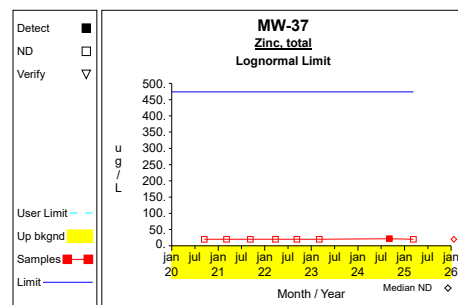
Graph 42



Graph 43

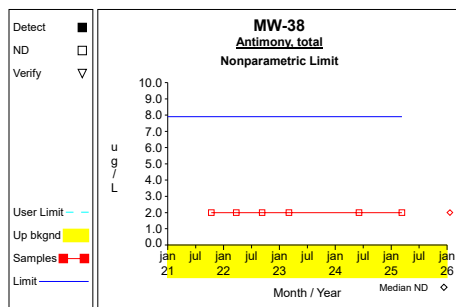


Graph 44

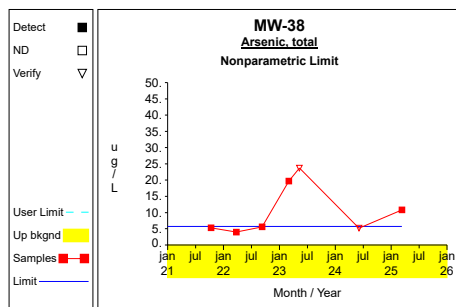


Graph 45

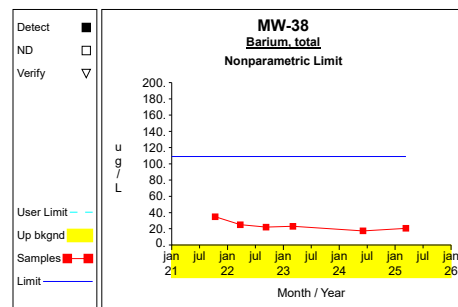
Up vs. Down Prediction Limits



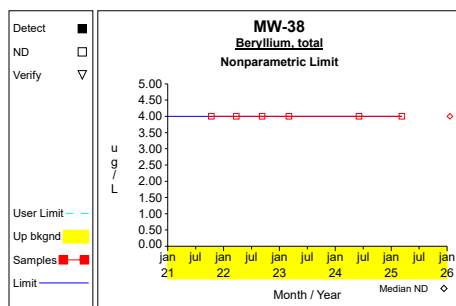
Graph 46



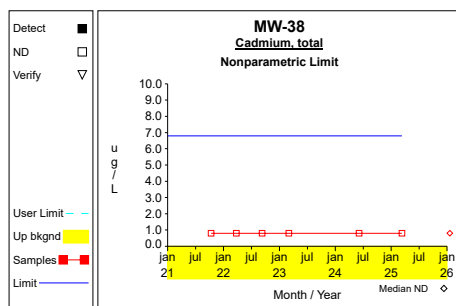
Graph 47



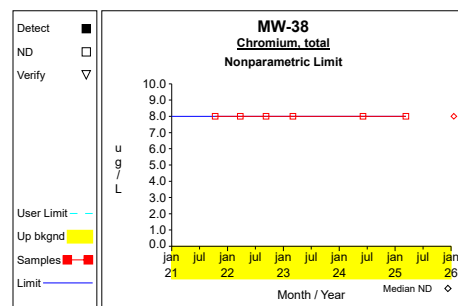
Graph 48



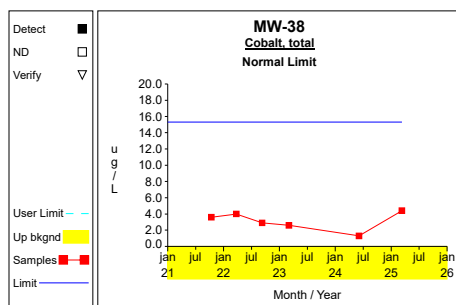
Graph 49



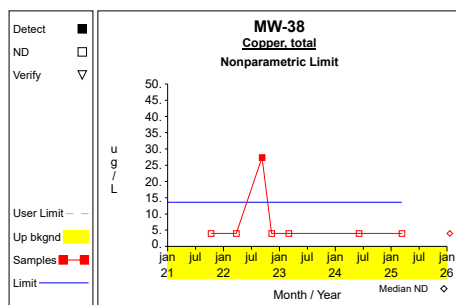
Graph 50



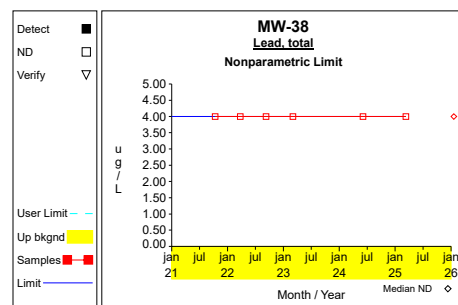
Graph 51



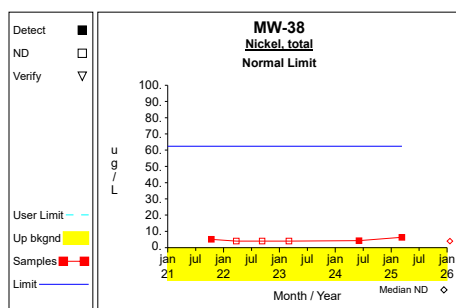
Graph 52



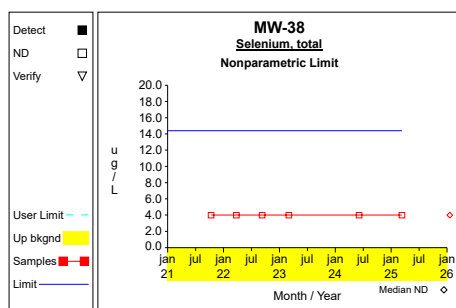
Graph 53



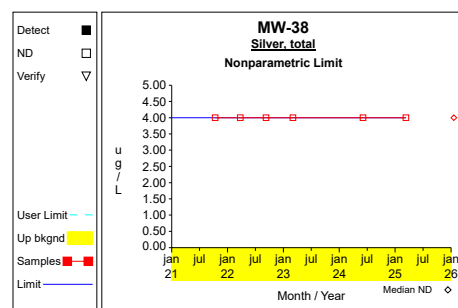
Graph 54



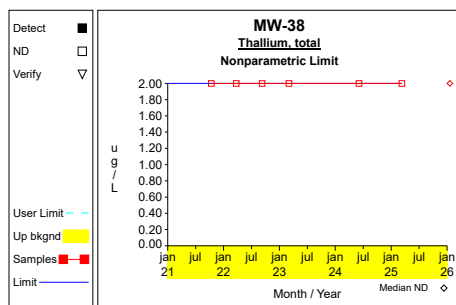
Graph 55



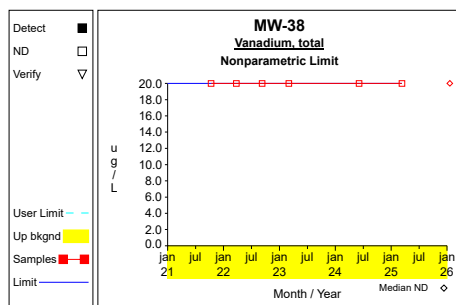
Graph 56



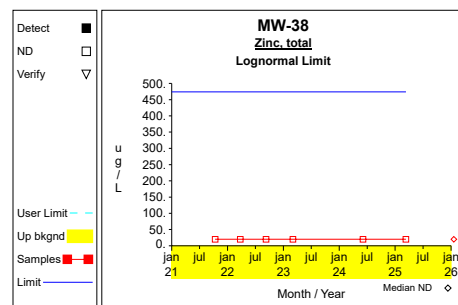
Graph 57



Graph 58

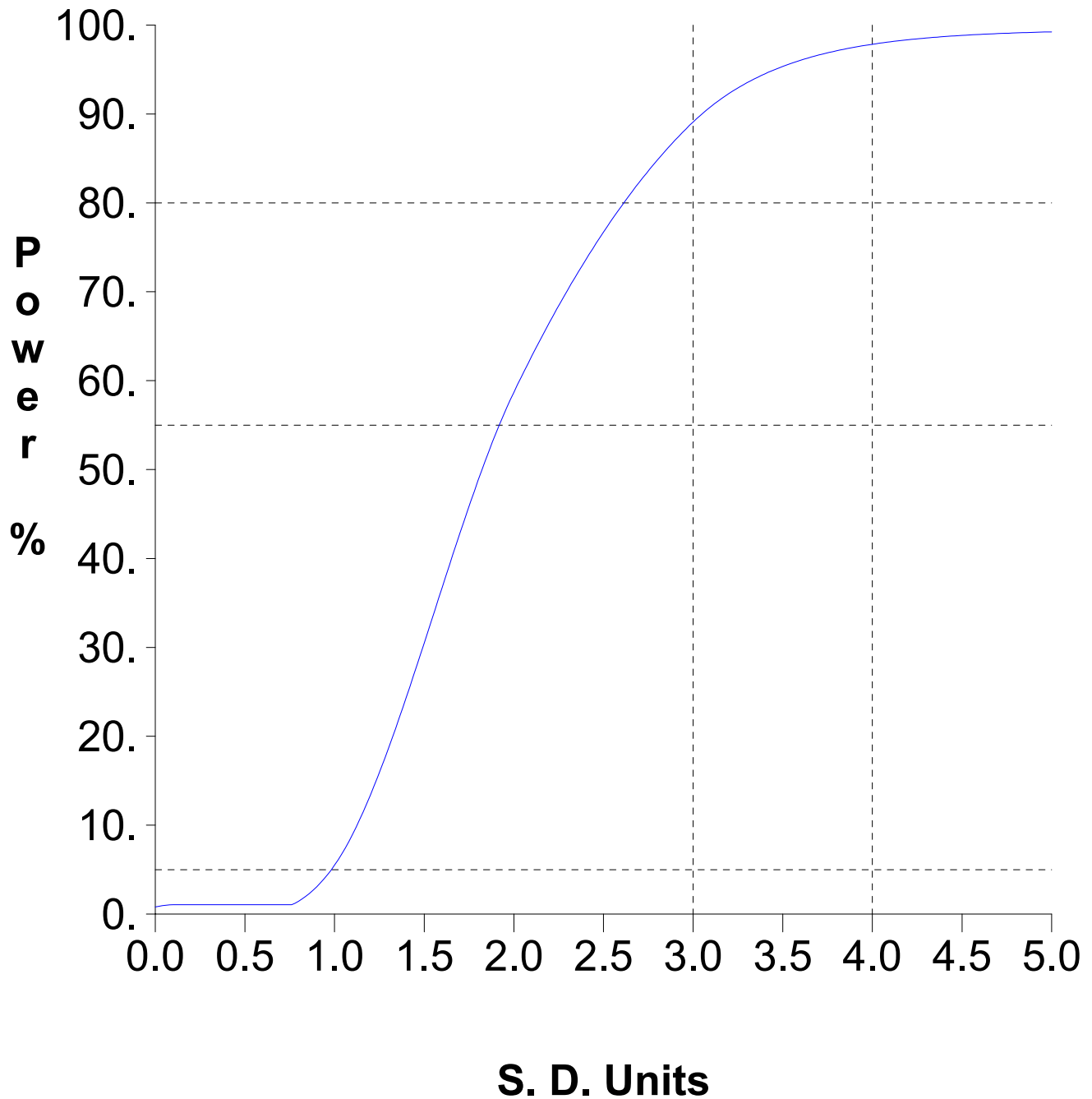


Graph 59



Graph 60

False Positive and False Negative Rates for Current Upgradient vs. Downgradient Monitoring Program



Attachment E

Assessment Statistics for Trace Metals - South Site Deep Wells

Table 1

**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cobalt, total	ug/L	MW-37	4	8.275	1.056	1.176	7.032	9.518	2.100		**

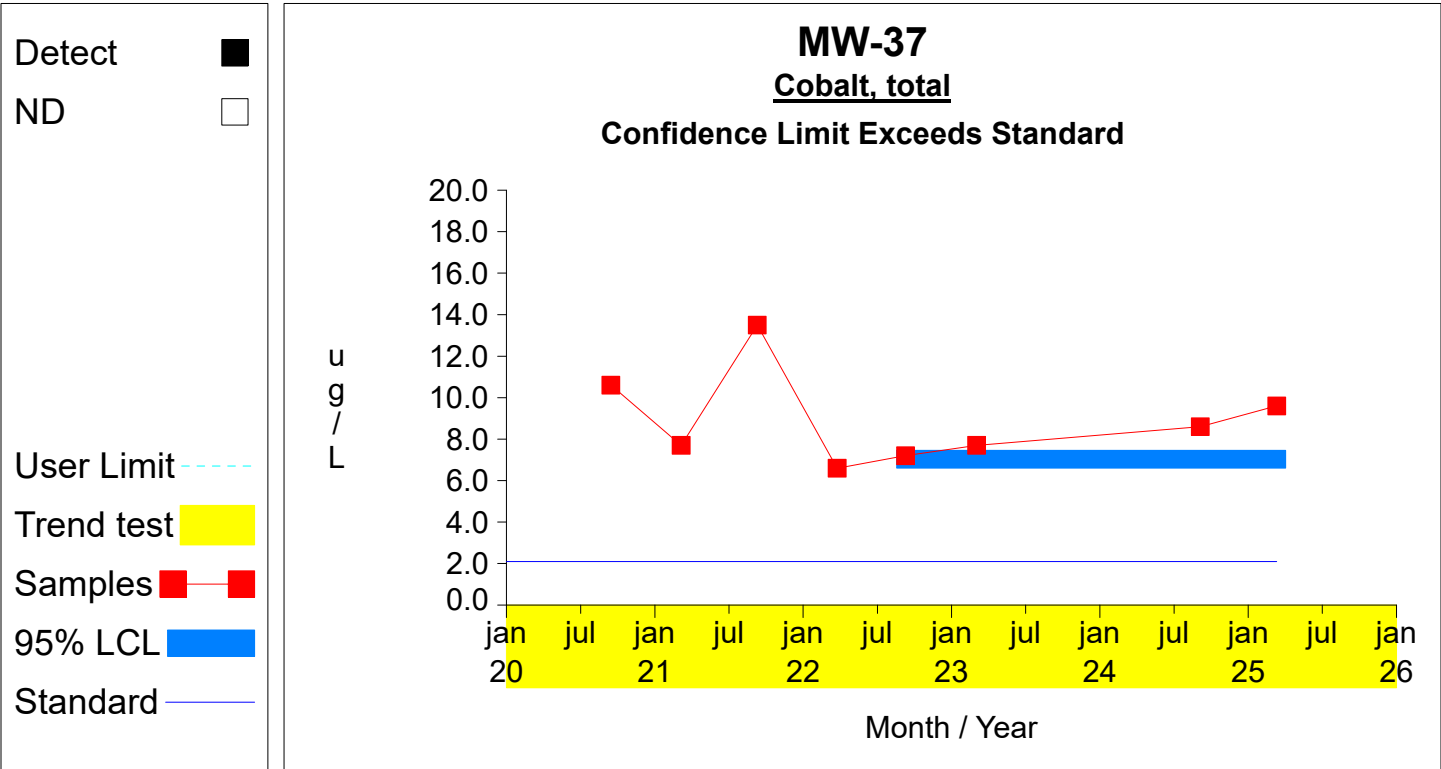
* - Insufficient Data

** - Significant Exceedance

LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)



Graph 1

Table 1

**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-38	4	14.850	8.394	1.176	4.976	24.724	10.000	
Cobalt, total	ug/L	MW-38	4	2.800	1.273	1.176	1.303	4.297	2.100	

* - Insufficient Data

** - Significant Exceedance

LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)

Detect

ND

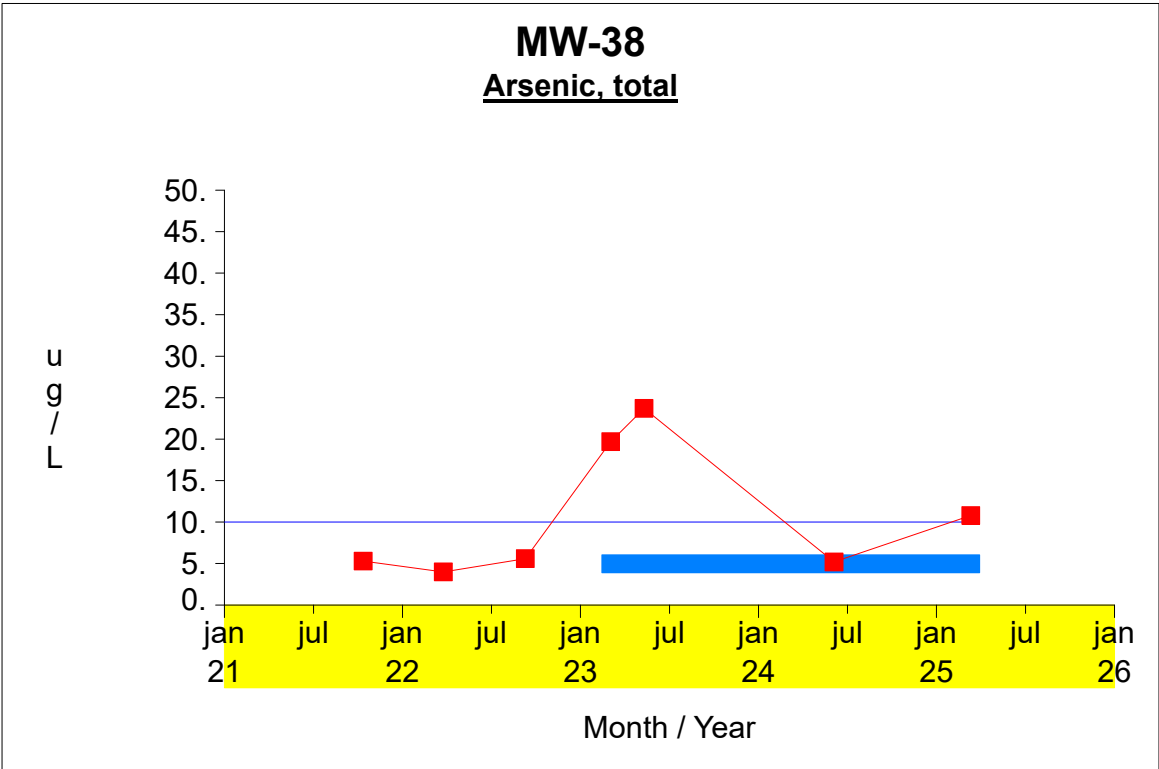
User Limit

Trend test

Samples

95% LCL

Standard



Graph 1

Detect

ND

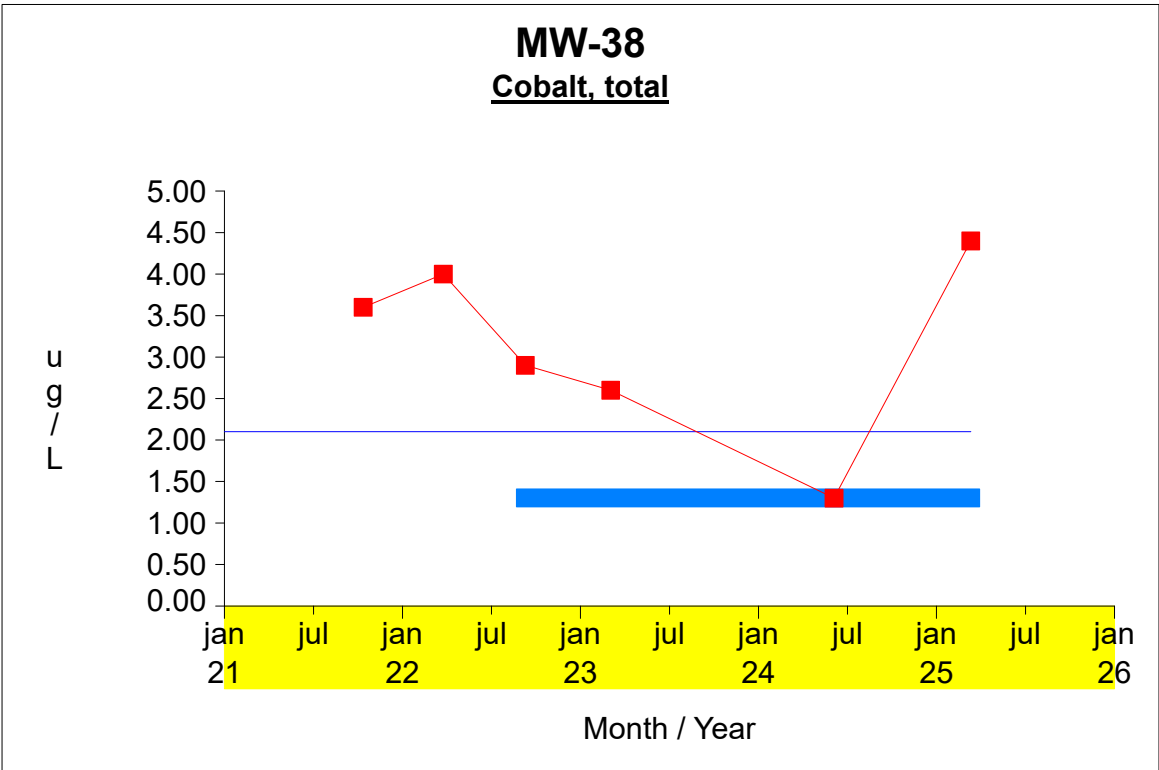
User Limit

Trend test

Samples

95% LCL

Standard



Graph 2

Attachment F

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-10	3/19/2012		1.9	1.0	ug/L
1,2-dichloropropane	MW-10	3/19/2012		10.3	1.0	ug/L
2-butanone	MW-10	7/08/2008		8.10	.91	ug/L
Acetone	MW-10	9/08/2008		47.0	10.0	ug/L
Acetone	MW-10	3/19/2012		38.1	10.0	ug/L
Acetone	MW-10	6/20/2012		44.4	10.0	ug/L
Acetone	MW-10	3/10/2016		22.2	10.0	ug/L
Aldrin	MW-10	6/20/2012		.0651	.0337	ug/L
Benzene	MW-10	9/08/2008		.17	.10	ug/L
Benzene	MW-10	3/19/2012		.70	.10	ug/L
Bis(2-ethylhexyl)phthalate	MW-10	9/05/2018		27	6	ug/L
Carbon disulfide	MW-10	9/08/2008		.34	.10	ug/L
Carbon disulfide	MW-10	6/20/2012		23.30	1.00	ug/L
Chloroethane	MW-10	4/29/2008		.557	.100	ug/L
Chloroform	MW-10	6/20/2012		13.3	1.0	ug/L
Chloromethane	MW-10	2/19/2008		.24	.10	ug/L
Chloromethane	MW-10	7/08/2008		.26	.10	ug/L
Cis-1,2-dichloroethene	MW-10	3/19/2012		6.3	1.0	ug/L
Methylene chloride	MW-10	7/08/2008		.51	.10	ug/L
Tetrachloroethene	MW-10	2/19/2008		.480	.400	ug/L
Tetrachloroethene	MW-10	4/29/2008		.568	.400	ug/L
Toluene	MW-10	2/01/2013		16.1	1.0	ug/L
1,2-dibromo-3-chloropropane	MW-21	9/06/2012		.60	.12	ug/L
1,2-dibromoethane	MW-21	9/06/2012		.13	.13	ug/L
Bis(2-ethylhexyl)phthalate	MW-21	9/09/2022		9	6	ug/L
Carbon disulfide	MW-21	3/09/2009		1.12	.10	ug/L
Carbon disulfide	MW-21	9/06/2012		1.47	1.00	ug/L
Acetone	MW-23	9/11/2017		14.1	10.0	ug/L
Carbon disulfide	MW-23	4/29/2008		.214	.100	ug/L
Carbon disulfide	MW-23	9/08/2008		.270	.100	ug/L
Chloroethane	MW-23	9/08/2008		1.02	.10	ug/L
Methylene chloride	MW-23	9/08/2008		.55	.10	ug/L
Acetone	MW-27	9/11/2017		15.5	10.0	ug/L
Acetone	MW-28	9/11/2017		13.8	10.0	ug/L
Trans-1,4-dichloro-2-butene	MW-28	3/09/2016		33	5	ug/L
Toluene	MW-29	11/24/2014		1.1	1.0	ug/L
Trichloroethene	MW-29	11/24/2014		1.8	1.0	ug/L
1,2-dibromo-3-chloropropane	MW-31	9/06/2012		.15	.12	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	3/04/2021		34	6	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	9/09/2021		33	6	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	9/09/2022		97	6	ug/L
Chloromethane	MW-31	2/19/2008		.26	.10	ug/L
Chloromethane	MW-31	7/08/2008		.24	.10	ug/L
Methylene chloride	MW-31	7/08/2008		.48	.10	ug/L
Tetrachloroethene	MW-31	4/29/2008		.396	.400	ug/L
1,1-dichloroethane	MW-33	9/17/2009		1.37	1.00	ug/L
1,1-dichloroethane	MW-33	3/22/2010		2.24	1.00	ug/L
1,1-dichloroethane	MW-33	9/07/2010		2.00	1.00	ug/L
1,1-dichloroethane	MW-33	3/03/2011		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	9/20/2011		1.75	1.00	ug/L
1,1-dichloroethane	MW-33	3/19/2012		1.80	1.00	ug/L
1,1-dichloroethane	MW-33	9/06/2012		1.89	1.00	ug/L
1,1-dichloroethane	MW-33	2/01/2013		2.19	1.00	ug/L
1,1-dichloroethane	MW-33	9/27/2013		1.43	1.00	ug/L
1,1-dichloroethane	MW-33	3/13/2014		2.05	1.00	ug/L
1,1-dichloroethane	MW-33	9/30/2014		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	3/19/2015		2.10	1.00	ug/L
1,1-dichloroethane	MW-33	8/26/2015		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	3/09/2016		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	9/14/2016		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	3/07/2017		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	9/05/2018		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	4/01/2019		2.00	1.00	ug/L
1,1-dichloroethane	MW-33	9/14/2020		1.10	1.00	ug/L
1,1-dichloroethane	MW-33	3/04/2021		1.90	1.00	ug/L
1,1-dichloroethane	MW-33	9/09/2021		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/24/2022		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	9/09/2022		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/01/2023		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	3/06/2024		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	9/04/2024		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/10/2025		1.20	1.00	ug/L
1,2-dichloropropane	MW-33	6/12/2009		3.22	1.00	ug/L
1,2-dichloropropane	MW-33	7/02/2009		6.29	1.00	ug/L
1,2-dichloropropane	MW-33	9/17/2009		12.60	1.00	ug/L
1,2-dichloropropane	MW-33	3/22/2010		20.40	1.00	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloropropane	MW-33	9/07/2010		15.70	1.00	ug/L
1,2-dichloropropane	MW-33	3/03/2011		6.67	1.00	ug/L
1,2-dichloropropane	MW-33	9/20/2011		9.88	1.00	ug/L
1,2-dichloropropane	MW-33	3/19/2012		9.40	1.00	ug/L
1,2-dichloropropane	MW-33	9/06/2012		9.84	1.00	ug/L
1,2-dichloropropane	MW-33	2/01/2013		9.51	1.00	ug/L
1,2-dichloropropane	MW-33	9/27/2013		9.28	1.00	ug/L
1,2-dichloropropane	MW-33	3/13/2014		9.43	1.00	ug/L
1,2-dichloropropane	MW-33	9/30/2014		6.40	1.00	ug/L
1,2-dichloropropane	MW-33	8/26/2015		5.20	1.00	ug/L
1,2-dichloropropane	MW-33	3/09/2016		2.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/14/2016		2.40	1.00	ug/L
1,2-dichloropropane	MW-33	3/07/2017		5.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/11/2017		4.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/05/2018		5.40	1.00	ug/L
1,2-dichloropropane	MW-33	4/01/2019		8.80	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2019		1.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/14/2020		1.80	1.00	ug/L
1,2-dichloropropane	MW-33	3/04/2021		3.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2021		5.10	1.00	ug/L
1,2-dichloropropane	MW-33	3/24/2022		3.40	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2022		5.40	1.00	ug/L
1,2-dichloropropane	MW-33	3/01/2023		4.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/07/2023		1.00	1.00	ug/L
1,2-dichloropropane	MW-33	3/06/2024		7.80	1.00	ug/L
1,2-dichloropropane	MW-33	9/04/2024		5.10	1.00	ug/L
1,2-dichloropropane	MW-33	3/10/2025		3.00	1.00	ug/L
Acetone	MW-33	3/19/2012		91.9	10.0	ug/L
Acetone	MW-33	9/06/2012		20.2	10.0	ug/L
Acetone	MW-33	9/27/2013		48.0	10.0	ug/L
Acetone	MW-33	9/30/2014		14.8	10.0	ug/L
Acetone	MW-33	3/19/2015		21.3	10.0	ug/L
Benzene	MW-33	7/02/2009		.520	.100	ug/L
Benzene	MW-33	9/17/2009		.870	.100	ug/L
Benzene	MW-33	3/22/2010		1.230	.100	ug/L
Benzene	MW-33	9/07/2010		1.250	.100	ug/L
Benzene	MW-33	3/03/2011		.570	.100	ug/L
Benzene	MW-33	9/20/2011		.980	.100	ug/L
Benzene	MW-33	3/19/2012		.600	.100	ug/L
Benzene	MW-33	9/06/2012		.770	.100	ug/L
Benzene	MW-33	2/01/2013		.884	.100	ug/L
Benzene	MW-33	9/27/2013		.746	.100	ug/L
Benzene	MW-33	3/13/2014		.903	.100	ug/L
Carbon disulfide	MW-33	9/06/2012		5.64	1.00	ug/L
Carbon disulfide	MW-33	9/30/2014		5.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	6/12/2009		2.10	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	7/02/2009		4.11	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/17/2009		7.48	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/22/2010		12.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/07/2010		11.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/03/2011		4.80	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/20/2011		7.37	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/19/2012		5.80	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/06/2012		6.48	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	2/01/2013		7.23	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/27/2013		6.63	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/13/2014		8.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/30/2014		4.60	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/19/2015		3.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	8/26/2015		4.40	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/09/2016		2.70	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/14/2016		2.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/07/2017		4.40	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/11/2017		3.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/07/2018		2.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/05/2018		5.10	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	4/01/2019		8.20	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2019		3.50	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/14/2020		1.70	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/04/2021		3.60	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2021		5.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/24/2022		2.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2022		4.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/01/2023		4.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/07/2023		1.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/06/2024		6.60	1.00	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethene	MW-33	9/04/2024		3.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/10/2025		3.30	1.00	ug/L
Dichlorodifluoromethane	MW-33	9/14/2016		1.6	1.0	ug/L
Dichlorodifluoromethane	MW-33	11/09/2016		1.9	1.0	ug/L
Endosulfan i	MW-33	9/07/2010		.0708	.0320	ug/L
Endosulfan i	MW-33	9/06/2012		.0846	.0200	ug/L
Endosulfan i	MW-33	2/01/2013		.1230	.0200	ug/L
Endosulfan i	MW-33	9/27/2013		.0725	.0200	ug/L
Endosulfan i	MW-33	3/13/2014		.1010	.0200	ug/L
Endosulfan i	MW-33	3/07/2017		.0600	.0500	ug/L
Trichloroethene	MW-33	3/22/2010		1.68	1.00	ug/L
Trichloroethene	MW-33	9/07/2010		1.60	1.00	ug/L
Trichloroethene	MW-33	9/20/2011		1.08	1.00	ug/L
Trichloroethene	MW-33	9/06/2012		1.20	1.00	ug/L
Trichloroethene	MW-33	3/13/2014		1.06	1.00	ug/L
Acetone	MW-34	9/11/2017		11	10	ug/L
Benzene	MW-34	5/27/2009		.77	.10	ug/L
1,1-dichloroethane	MW-35	11/24/2014		2.2	1.0	ug/L
Bis(2-ethylhexyl)phthalate	MW-35	9/05/2018		8	6	ug/L
Chloroethane	MW-35	11/24/2014		1.7	1.0	ug/L
Chloroethane	MW-35	9/14/2020		1.4	1.0	ug/L
Methane	MW-35	7/06/2020		6.560	.925	mg/L
Vinyl chloride	MW-35	11/24/2014		2.2	1.0	ug/L
Carbon disulfide	MW-38	10/11/2021		2.4	1.0	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Attachment G

Assessment Statistics for VOCs

Table 1

**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

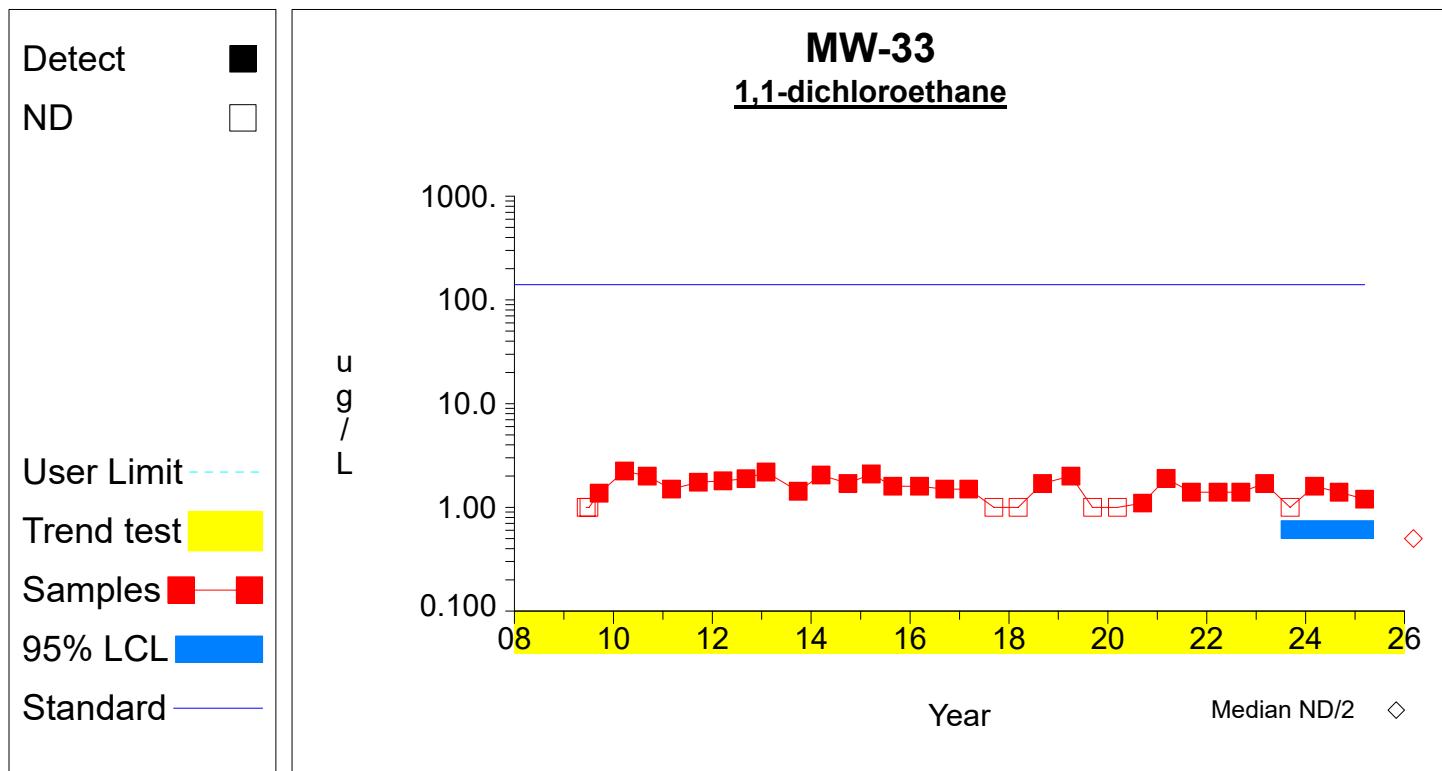
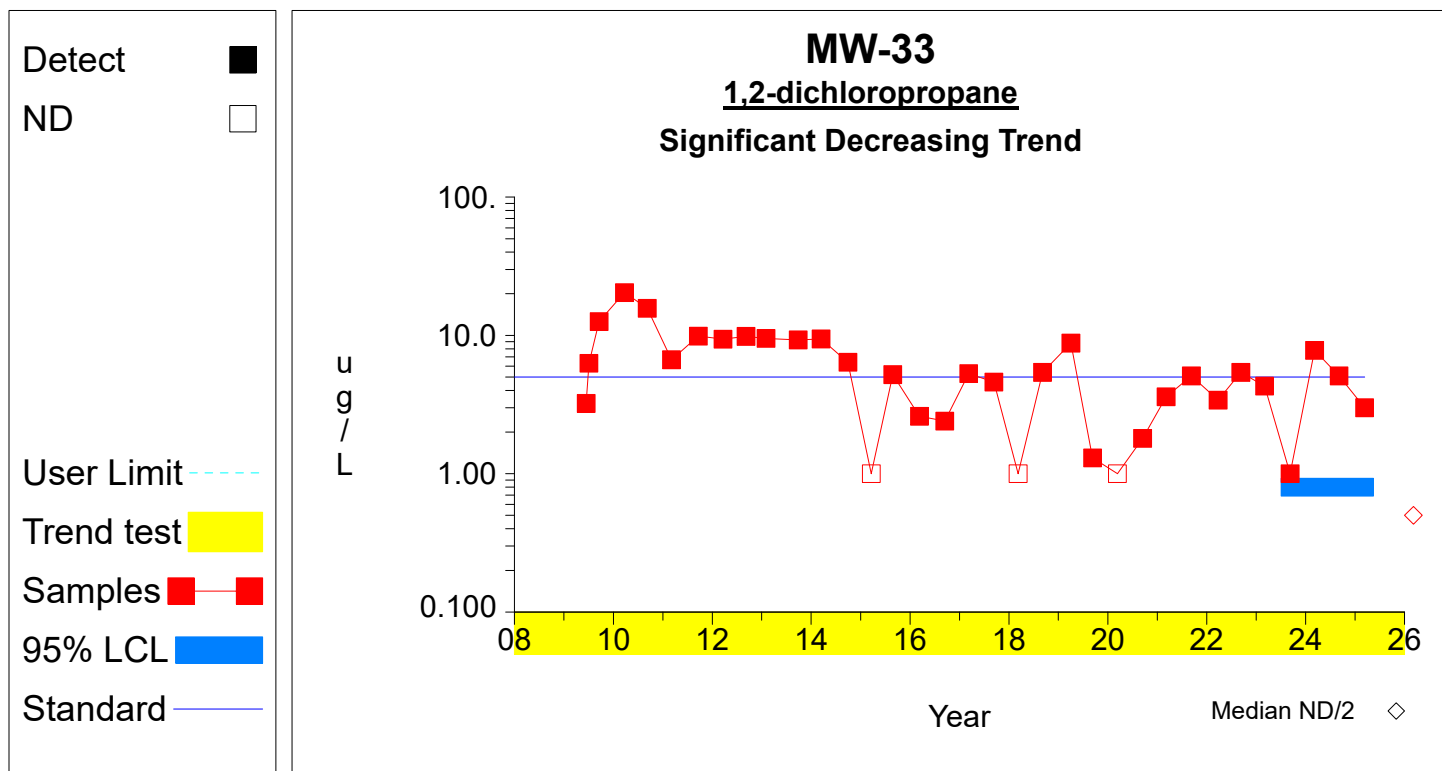
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-dichloroethane	ug/L	MW-33	4	1.175	0.479	1.176	0.612	1.738	140.000	dec
1,2-dichloropropane	ug/L	MW-33	4	4.225	2.912	1.176	0.799	7.651	5.000	
Cis-1,2-dichloroethene	ug/L	MW-33	4	3.700	2.302	1.176	0.992	6.408	70.000	

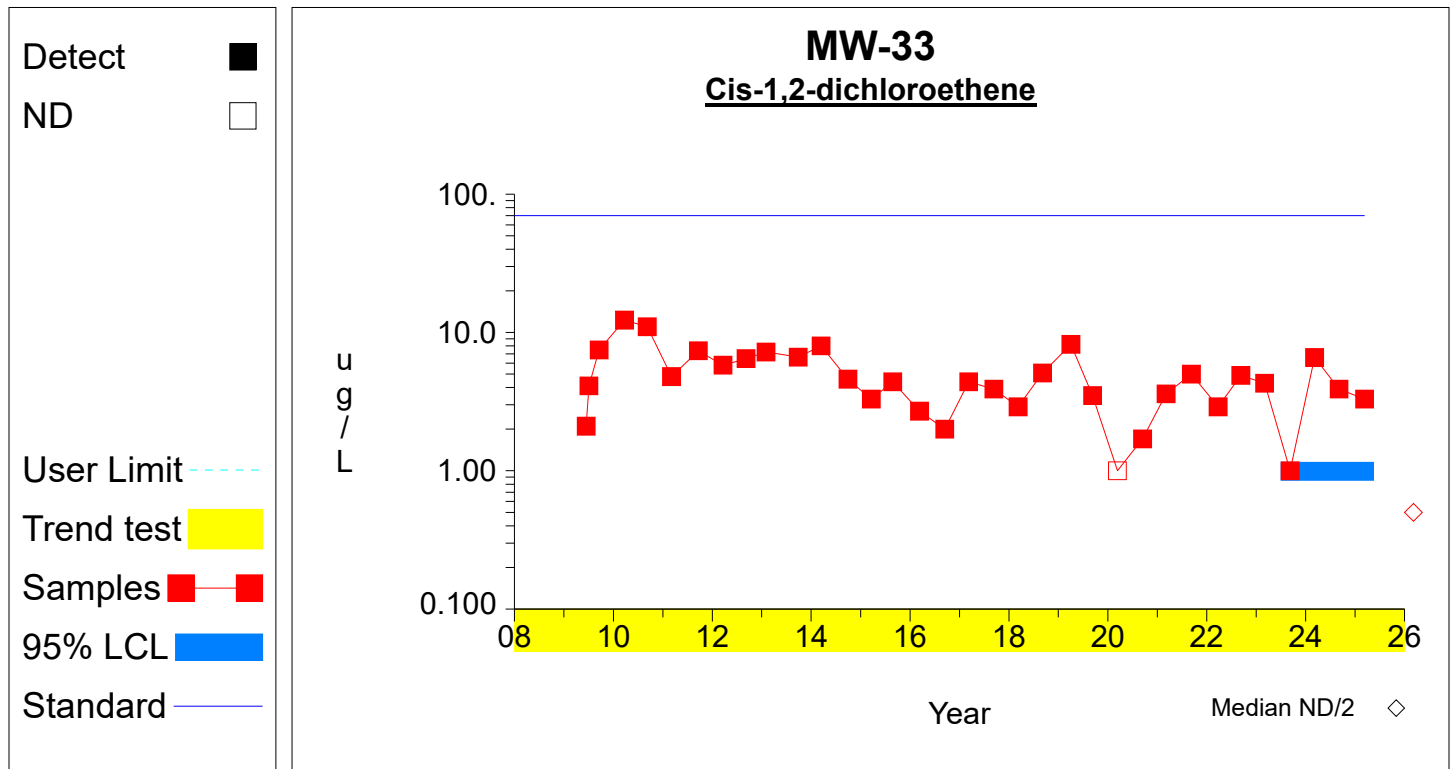
* - Insufficient Data

** - Significant Exceedance

LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)**Graph 1****Graph 2**

Confidence Limits (Assessment)**Graph 3**

**Results of the Ground Water Statistics
for Clarke County Sanitary Landfill**

Second Semi-Annual Monitoring Event in 2025

Prepared for:
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INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2025 at Clarke County Sanitary Landfill in Osceola, Iowa. The ground water monitoring well network for the south site at Clarke County Sanitary Landfill includes MW-21, MW-23 (upgradient), MW-27 (upgradient), MW-31, MW-33, and MW-34 in the shallow glacial till aquifer and MW-22, MW-28 (upgradient), MW-29 (upgradient), MW-32, MW-36 (upgradient), MW-37, and MW-38 in the deep limestone aquifer. Only MW-33 was required to be sampled during the second semi-annual monitoring event in 2025.

The statistical plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Clarke County Sanitary Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA guidance document (*“Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance”*, March 2009).

Ground Water Monitoring Program

The south site groundwater monitoring wells are sampled at annually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized below. MW-33 is semi-annually monitored.

Detection monitoring constituents listed in Appendix I of IAC 567, Chapter 113.

Organic Compounds:

Acetone	<i>trans</i> -1,4-Dichloro-2-butene	Iodomethane
Acrylonitrile	1,1-Dichloroethane	4-Methyl-2-pentanone
Benzene	1,2-Dichloroethane	Styrene
Bromochloromethane	1,1-Dichloroethene	1,1,1,2-Tetrachloroethane
Bromodichloromethane	<i>cis</i> -1,2-Dichloroethene	1,1,2,2-Tetrachloroethane
Bromoform	<i>trans</i> -1,2-Dichloroethene	Tetrachloroethene
Carbon disulfide	1,2-Dichloropropane	Toluene
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropene	1,1,1-Trichloroethane
Chlorobenzene	<i>trans</i> -1,3-Dichloropropene	1,1,2-Trichloroethane
Chloroethane	Ethylbenzene	Trichloroethene
Chloroform	2-Hexanone	Trichlorofluoromethane
Dibromochloromethane	Bromomethane	1,2,3-Trichloropropane
1,2-Dibromo-3-chloropropane	Chloromethane	Vinyl acetate
1,2-Dibromoethane	Dibromomethane	Vinyl chloride
1,2-Dichlorobenzene	Methylene chloride	Xylenes (Total)
1,4-Dichlorobenzene	2-Butanone	

Inorganic constituents:

Antimony, Total	Chromium, Total	Selenium, Total
Arsenic, Total	Cobalt, Total	Silver, Total
Barium, Total	Copper, Total	Thallium, Total
Beryllium, Total	Lead, Total	Vanadium, Total
Cadmium, Total	Nickel, Total	Zinc, Total

The ground water data obtained during the second semi-annual monitoring event in 2025 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

IAC 567, Chapter 113.10(4) provides several options for statistically evaluating the ground water data at those wells that monitor the open cells or contiguous MSWLF units. The preferred methods for comparing ground water data are using either prediction limits or using control charts. The interwell method using site prediction limits was applied to the Clarke County Sanitary Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in “Statistical Methods for Groundwater Monitoring” by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance. Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

Interwell statistics are appropriate when the upgradient and downgradient wells monitor the same ground water formation and there is similar variability in the upgradient and downgradient zones. Site prediction limits are determined by pooling the historical ground water data from hydraulically upgradient wells. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. The type of prediction limit utilized (e.g., parametric or nonparametric) is based on the detection frequency and the data distribution of each parameter in the background data. The distribution of the background data is tested for normality using the Shapiro-Wilk test (Gibbons, 1994 and USEPA 1992). If the constituent is normally distributed, a normal prediction limit is used. If normality is rejected by the Shapiro-Wilk test, the background data is transformed by taking the natural logarithm. The Shapiro-Wilk test is then reapplied on the transformed data. If it is not rejected, lognormal prediction limits are used. If after transforming the data, normality is still rejected, nonparametric prediction limits are used for that analyte. The nonparametric prediction limit is the largest determination in the background measurements. For constituents where the background detection frequency is greater than 0% but less than 50%, nonparametric prediction limits will be used. If the detection frequency is 0% after thirteen samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit.

Results of the Interwell Statistics

South Landfill - Shallow Wells

The background data used in the statistical analysis of the shallow wells includes the ground water data collected from ground water wells MW-23 and MW-27 during the period from September 2014 through the current data. A summary of the background data from monitoring wells MW-23 and MW-27 used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient well MW-33 compared to the site prediction limits. Prediction limit exceedances would be flagged with asterisks. For the most current data, there are no site prediction limit exceedances detected. Previous exceedances for arsenic and cobalt at MW-33 were not confirmed by the current data.

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics

and prediction limits determined for the metals. For nonparametric cases, the prediction limit given indicates the highest concentration determined historically at MW-23 or MW-27 once outliers have been excluded. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 1% and the test becomes sensitive to 4 standard deviation unit increases over background.

The current and previous verified exceedances and ground water protection standard (GWPS) exceedances were evaluated against the GWPS using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, USEPA, March 2009 (Attachment C). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The calculated 95% LCLs for arsenic and cobalt at MW-33 do not exceed GWPS.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Clarke County Sanitary Landfill during the second semi-annual monitoring event in 2025 are summarized below. Historical VOC detections are summarized in Attachment D.

VOCs Detected during the Second Semi-Annual Monitoring Event in 2025

Sample Point	VOC	Result	Reporting Limit	Verified/Awaiting Verification	GWPS
MW-33	1,1-Dichloroethane	1.1	1	Verified	140 ^b
	1,2-Dichloropropane	5.0	1	Verified	5 ^a
	cis-1,2-Dichloroethene	4.2	1	Verified	70 ^a

a - USEPA MCL, b – Iowa Statewide Standard

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits (Attachment E). The calculated LCLs for verified VOCs are below the respective GWPS.

Attachment A

Ground Water Data obtained during the Second Semi-Annual Monitoring Event in 2025

Table 1

Analytical Data Summary for 9/5/2025

Constituents	Units	MW-33
1,1,1,2-tetrachloroethane	ug/L	<1
1,1,1-trichloroethane	ug/L	<1
1,1,2,2-tetrachloroethane	ug/L	<1
1,1,2-trichloroethane	ug/L	<1
1,1-dichloroethane	ug/L	1.3
1,1-dichloroethene	ug/L	<1
1,2,3-trichloropropane	ug/L	<1
1,2-dibromo-3-chloropropane	ug/L	<5
1,2-dibromoethane	ug/L	<1
1,2-dichlorobenzene	ug/L	<1
1,2-dichloroethane	ug/L	<1
1,2-dichloropropane	ug/L	5
1,4-dichlorobenzene	ug/L	<1
2-butanone	ug/L	<10
2-hexanone	ug/L	<5
4-methyl-2-pentanone	ug/L	<5
Acetone	ug/L	<10
Antimony, total	ug/L	<1
Arsenic, total	ug/L	2.1
Barium, total	ug/L	25.4
Benzene	ug/L	<1
Beryllium, total	ug/L	<.5
Bromochloromethane	ug/L	<1
Bromodichloromethane	ug/L	<1
Bromoform	ug/L	<1
Bromomethane	ug/L	<1
Cadmium, total	ug/L	2.1
Carbon disulfide	ug/L	<1
Carbon tetrachloride	ug/L	<1
Chlorobenzene	ug/L	<1
Chloroethane	ug/L	<1
Chloroform	ug/L	<1
Chloromethane	ug/L	<1
Chromium, total	ug/L	1
Cis-1,2-dichloroethene	ug/L	4.2
Cis-1,3-dichloropropene	ug/L	<1
Cobalt, total	ug/L	15.7
Copper, total	ug/L	<5
Dibromochloromethane	ug/L	<1
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Iodomethane	ug/L	<1
Lead, total	ug/L	<1
Methylene chloride	ug/L	<5
Nickel, total	ug/L	23.8
Selenium, total	ug/L	<2
Silver, total	ug/L	<5
Styrene	ug/L	<1
Sulfide, total	mg/L	<.1
Tetrachloroethene	ug/L	<1
Thallium, total	ug/L	<.5
Toluene	ug/L	<1
Trans-1,2-dichloroethene	ug/L	<1
Trans-1,3-dichloropropene	ug/L	<1
Trans-1,4-dichloro-2-butene	ug/L	<5
Trichloroethene	ug/L	<1
Trichlorofluoromethane	ug/L	<1
Vanadium, total	ug/L	<2
Vinyl acetate	ug/L	<5
Vinyl chloride	ug/L	<1
Xylenes, total	ug/L	<2
Zinc, total	ug/L	10

* - The displayed value is the arithmetic mean of multiple database matches.

Attachment B

Summary Tables and Graphs for the Interwell Comparisons - South Site Shallow Wells

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-23	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-23	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-23	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	06/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-23	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-23	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-23	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-23	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-23	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-23	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-23	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-23	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-23	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-23	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2021	ND	2.0000		
Antimony, total	ug/L	MW-23	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-23	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-23	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-23	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-23	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Arsenic, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-23	09/29/2014		15.5000		
Barium, total	ug/L	MW-23	11/24/2014		22.1000		
Barium, total	ug/L	MW-23	03/19/2015		21.5000		
Barium, total	ug/L	MW-23	06/17/2015		17.0000		
Barium, total	ug/L	MW-23	08/26/2015		18.1000		
Barium, total	ug/L	MW-23	03/09/2016		17.5000		
Barium, total	ug/L	MW-23	09/14/2016		15.9000		
Barium, total	ug/L	MW-23	03/07/2017		16.7000		
Barium, total	ug/L	MW-23	09/11/2017		17.0000		
Barium, total	ug/L	MW-23	03/07/2018		19.0000		
Barium, total	ug/L	MW-23	09/05/2018		15.7000		
Barium, total	ug/L	MW-23	04/01/2019		17.3000		
Barium, total	ug/L	MW-23	09/09/2019		19.0000		
Barium, total	ug/L	MW-23	03/10/2020		16.5000		
Barium, total	ug/L	MW-23	09/14/2020		16.0000		
Barium, total	ug/L	MW-23	03/04/2021		18.3000		
Barium, total	ug/L	MW-23	09/09/2021		18.0000		
Barium, total	ug/L	MW-23	03/24/2022		16.3000		
Barium, total	ug/L	MW-23	09/09/2022		16.0000		
Barium, total	ug/L	MW-23	03/01/2023		17.8000		
Barium, total	ug/L	MW-23	09/04/2024		16.3000		
Barium, total	ug/L	MW-23	03/10/2025		20.5000		
Beryllium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/07/2017	ND	1.0000	4.0000	**

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-23	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-23	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/19/2015		1.1000		
Cadmium, total	ug/L	MW-23	06/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-23	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/07/2017	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/07/2018		1.1000		
Cadmium, total	ug/L	MW-23	09/05/2018	ND	0.8000		
Cadmium, total	ug/L	MW-23	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2019	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/14/2020		1.3500		
Cadmium, total	ug/L	MW-23	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2021	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-23	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-23	03/10/2025		1.4000		
Chromium, total	ug/L	MW-23	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-23	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-23	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	06/17/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-23	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-23	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-23	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-23	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-23	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-23	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-23	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-23	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-23	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-23	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-23	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-23	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-23	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-23	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-23	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-23	09/29/2014		13.2000		
Cobalt, total	ug/L	MW-23	11/24/2014		24.5000		*
Cobalt, total	ug/L	MW-23	03/19/2015		16.2000		
Cobalt, total	ug/L	MW-23	06/17/2015		13.1000		
Cobalt, total	ug/L	MW-23	08/26/2015		16.6000		
Cobalt, total	ug/L	MW-23	03/09/2016		10.3000		
Cobalt, total	ug/L	MW-23	09/14/2016		11.9000		
Cobalt, total	ug/L	MW-23	03/07/2017		10.0000		
Cobalt, total	ug/L	MW-23	09/11/2017		10.8000		
Cobalt, total	ug/L	MW-23	03/07/2018		10.2000		
Cobalt, total	ug/L	MW-23	09/05/2018		12.1000		
Cobalt, total	ug/L	MW-23	04/01/2019		13.7000		
Cobalt, total	ug/L	MW-23	09/09/2019		12.4000		
Cobalt, total	ug/L	MW-23	03/10/2020		9.0000		
Cobalt, total	ug/L	MW-23	09/14/2020		9.5000		
Cobalt, total	ug/L	MW-23	03/04/2021		10.9000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-23	09/09/2021		13.6000		
Cobalt, total	ug/L	MW-23	03/24/2022		8.5000		
Cobalt, total	ug/L	MW-23	09/09/2022		10.0000		
Cobalt, total	ug/L	MW-23	03/01/2023		11.0000		
Cobalt, total	ug/L	MW-23	09/04/2024		7.0000		
Cobalt, total	ug/L	MW-23	03/10/2025		15.1000		
Copper, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Copper, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Copper, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Copper, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Copper, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Copper, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Copper, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Copper, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Copper, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Copper, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Lead, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Lead, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-23	09/29/2014		42.5000		
Nickel, total	ug/L	MW-23	11/24/2014		51.3000		
Nickel, total	ug/L	MW-23	03/19/2015		51.9000		
Nickel, total	ug/L	MW-23	06/17/2015		41.9000		
Nickel, total	ug/L	MW-23	08/26/2015		39.4000		
Nickel, total	ug/L	MW-23	03/09/2016		37.3000		
Nickel, total	ug/L	MW-23	09/14/2016		43.3000		
Nickel, total	ug/L	MW-23	03/07/2017		38.1000		
Nickel, total	ug/L	MW-23	09/11/2017		37.7000		
Nickel, total	ug/L	MW-23	03/07/2018		41.4000		
Nickel, total	ug/L	MW-23	09/05/2018		30.2000		
Nickel, total	ug/L	MW-23	04/01/2019		34.4000		
Nickel, total	ug/L	MW-23	09/09/2019		30.6000		
Nickel, total	ug/L	MW-23	03/10/2020		32.3000		
Nickel, total	ug/L	MW-23	09/14/2020		30.6000		
Nickel, total	ug/L	MW-23	03/04/2021		28.8000		
Nickel, total	ug/L	MW-23	09/09/2021		26.6000		
Nickel, total	ug/L	MW-23	03/24/2022		28.3000		
Nickel, total	ug/L	MW-23	09/09/2022		28.1000		
Nickel, total	ug/L	MW-23	03/01/2023		26.6000		
Nickel, total	ug/L	MW-23	09/04/2024		27.7000		
Nickel, total	ug/L	MW-23	03/10/2025		30.4000		
Selenium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-23	11/24/2014	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Selenium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Selenium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Selenium, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Silver, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-23	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-23	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-23	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-23	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-23	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-23	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-23	03/01/2023	ND	4.0000		
Silver, total	ug/L	MW-23	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-23	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-23	09/29/2014	ND	4.0000		
Thallium, total	ug/L	MW-23	11/24/2014	ND	4.0000		
Thallium, total	ug/L	MW-23	03/19/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	06/17/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	08/26/2015	ND	4.0000		
Thallium, total	ug/L	MW-23	03/09/2016	ND	4.0000		
Thallium, total	ug/L	MW-23	09/14/2016	ND	4.0000		
Thallium, total	ug/L	MW-23	03/07/2017	ND	4.0000		
Thallium, total	ug/L	MW-23	09/11/2017	ND	4.0000		
Thallium, total	ug/L	MW-23	03/07/2018	ND	4.0000		
Thallium, total	ug/L	MW-23	09/05/2018	ND	4.0000		
Thallium, total	ug/L	MW-23	04/01/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/10/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/14/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/04/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/24/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/09/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/01/2023	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	09/04/2024	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-23	03/10/2025	ND	2.0000	4.0000	**
Vanadium, total	ug/L	MW-23	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-23	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	06/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/07/2018	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-23	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-23	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-23	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-23	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-23	09/29/2014		8.1000		
Zinc, total	ug/L	MW-23	11/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	03/19/2015		16.3000		
Zinc, total	ug/L	MW-23	06/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	08/26/2015		11.6000		
Zinc, total	ug/L	MW-23	03/09/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	03/07/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-23	09/11/2017		24.9000		
Zinc, total	ug/L	MW-23	03/07/2018		13.8000		
Zinc, total	ug/L	MW-23	09/05/2018	ND	20.0000		
Zinc, total	ug/L	MW-23	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2019		9.6000		
Zinc, total	ug/L	MW-23	03/10/2020		13.1000		
Zinc, total	ug/L	MW-23	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-23	03/04/2021	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-23	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-23	09/09/2022	ND	20.0000		
Zinc, total	ug/L	MW-23	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-23	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-23	03/10/2025		22.6000		
Antimony, total	ug/L	MW-27	09/29/2014	ND	2.0000		
Antimony, total	ug/L	MW-27	11/24/2014	ND	2.0000		
Antimony, total	ug/L	MW-27	03/19/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	06/17/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	08/26/2015	ND	2.0000		
Antimony, total	ug/L	MW-27	03/09/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	09/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	09/11/2017	ND	2.0000		
Antimony, total	ug/L	MW-27	03/07/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	09/05/2018	ND	2.0000		
Antimony, total	ug/L	MW-27	04/01/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2019	ND	2.0000		
Antimony, total	ug/L	MW-27	03/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	09/14/2020	ND	2.0000		
Antimony, total	ug/L	MW-27	03/04/2021	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2021		4.0000		
Antimony, total	ug/L	MW-27	03/24/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	09/09/2022	ND	2.0000		
Antimony, total	ug/L	MW-27	03/01/2023	ND	2.0000		
Antimony, total	ug/L	MW-27	09/04/2024	ND	2.0000		
Antimony, total	ug/L	MW-27	03/10/2025	ND	2.0000		
Arsenic, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Arsenic, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Arsenic, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/09/2021		6.3000		
Arsenic, total	ug/L	MW-27	03/24/2022	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Arsenic, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Arsenic, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Barium, total	ug/L	MW-27	09/29/2014		38.4000		
Barium, total	ug/L	MW-27	11/24/2014		26.6000		
Barium, total	ug/L	MW-27	03/19/2015		24.4000		
Barium, total	ug/L	MW-27	06/17/2015		25.4000		
Barium, total	ug/L	MW-27	08/26/2015		18.7000		
Barium, total	ug/L	MW-27	03/09/2016		18.2000		
Barium, total	ug/L	MW-27	09/14/2016		24.9000		
Barium, total	ug/L	MW-27	03/07/2017		17.2000		
Barium, total	ug/L	MW-27	09/11/2017		27.8000		
Barium, total	ug/L	MW-27	03/07/2018		22.3000		
Barium, total	ug/L	MW-27	09/05/2018		30.1000		
Barium, total	ug/L	MW-27	04/01/2019		30.5000		
Barium, total	ug/L	MW-27	09/09/2019		39.2000		
Barium, total	ug/L	MW-27	03/10/2020		30.4000		
Barium, total	ug/L	MW-27	09/14/2020		23.9000		
Barium, total	ug/L	MW-27	03/04/2021		17.1000		
Barium, total	ug/L	MW-27	09/09/2021		70.7000		
Barium, total	ug/L	MW-27	03/24/2022		28.2000		
Barium, total	ug/L	MW-27	09/09/2022		19.6000		
Barium, total	ug/L	MW-27	03/01/2023		54.6000		
Barium, total	ug/L	MW-27	09/04/2024		47.7000		
Barium, total	ug/L	MW-27	03/10/2025		108.0000		
Beryllium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Beryllium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Beryllium, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Beryllium, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Beryllium, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Cadmium, total	ug/L	MW-27	09/29/2014	ND	0.8000		
Cadmium, total	ug/L	MW-27	11/24/2014	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/19/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	06/17/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	08/26/2015	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/09/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/11/2017	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/07/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/05/2018	ND	0.8000		
Cadmium, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2019	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/14/2020	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/04/2021	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2021		3.8000		
Cadmium, total	ug/L	MW-27	03/24/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/09/2022	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/01/2023	ND	0.8000		
Cadmium, total	ug/L	MW-27	09/04/2024	ND	0.8000		
Cadmium, total	ug/L	MW-27	03/10/2025		1.6000		
Chromium, total	ug/L	MW-27	09/29/2014	ND	8.0000		
Chromium, total	ug/L	MW-27	11/24/2014	ND	8.0000		
Chromium, total	ug/L	MW-27	03/19/2015	ND	8.0000		
Chromium, total	ug/L	MW-27	06/17/2015	ND	8.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Chromium, total	ug/L	MW-27	08/26/2015	ND	8.0000		
Chromium, total	ug/L	MW-27	03/09/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	09/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	09/11/2017	ND	8.0000		
Chromium, total	ug/L	MW-27	03/07/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	09/05/2018	ND	8.0000		
Chromium, total	ug/L	MW-27	04/01/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2019	ND	8.0000		
Chromium, total	ug/L	MW-27	03/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	09/14/2020	ND	8.0000		
Chromium, total	ug/L	MW-27	03/04/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2021	ND	8.0000		
Chromium, total	ug/L	MW-27	03/24/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	09/09/2022	ND	8.0000		
Chromium, total	ug/L	MW-27	03/01/2023	ND	8.0000		
Chromium, total	ug/L	MW-27	09/04/2024	ND	8.0000		
Chromium, total	ug/L	MW-27	03/10/2025	ND	8.0000		
Cobalt, total	ug/L	MW-27	09/29/2014		3.7000		
Cobalt, total	ug/L	MW-27	11/24/2014		0.9000		
Cobalt, total	ug/L	MW-27	03/19/2015		3.5000		
Cobalt, total	ug/L	MW-27	06/17/2015		4.4000		
Cobalt, total	ug/L	MW-27	08/26/2015	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/09/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/07/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/11/2017	ND	0.8000		
Cobalt, total	ug/L	MW-27	03/07/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/05/2018	ND	0.8000		
Cobalt, total	ug/L	MW-27	04/01/2019	ND	0.8000		
Cobalt, total	ug/L	MW-27	09/09/2019		2.0000		
Cobalt, total	ug/L	MW-27	03/10/2020		3.2000		
Cobalt, total	ug/L	MW-27	09/14/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-27	03/04/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-27	09/09/2021		0.4000		
Cobalt, total	ug/L	MW-27	03/24/2022		0.5000		
Cobalt, total	ug/L	MW-27	09/09/2022		0.9000		
Cobalt, total	ug/L	MW-27	03/01/2023		0.9000		
Cobalt, total	ug/L	MW-27	09/04/2024		3.6000		
Cobalt, total	ug/L	MW-27	03/10/2025		3.0000		
Copper, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Copper, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Copper, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Copper, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Copper, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Copper, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Copper, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Copper, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Copper, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Copper, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Copper, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2019		4.0000		
Copper, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Copper, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Copper, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2021		8.9000		
Copper, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Copper, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Copper, total	ug/L	MW-27	03/01/2023		4.8000		
Copper, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Copper, total	ug/L	MW-27	03/10/2025		4.3000		
Lead, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Lead, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Lead, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Lead, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Lead, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Lead, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Lead, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Lead, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Lead, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Lead, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Lead, total	ug/L	MW-27	04/01/2019	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Lead, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Lead, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Lead, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Lead, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Lead, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Lead, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Lead, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Lead, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Lead, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Nickel, total	ug/L	MW-27	09/29/2014		6.9000		
Nickel, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Nickel, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Nickel, total	ug/L	MW-27	06/17/2015		8.0000		
Nickel, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Nickel, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Nickel, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Nickel, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Nickel, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Nickel, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2021		10.6000		
Nickel, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Nickel, total	ug/L	MW-27	03/01/2023		5.8000		
Nickel, total	ug/L	MW-27	09/04/2024		8.1000		
Nickel, total	ug/L	MW-27	03/10/2025		13.1000		
Selenium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Selenium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Selenium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Selenium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Selenium, total	ug/L	MW-27	09/14/2016		5.5000		
Selenium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Selenium, total	ug/L	MW-27	03/07/2018		4.8000		
Selenium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Selenium, total	ug/L	MW-27	04/01/2019		4.7000		
Selenium, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Selenium, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Selenium, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Selenium, total	ug/L	MW-27	09/09/2021		9.7000		
Selenium, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Selenium, total	ug/L	MW-27	03/01/2023	ND	4.0000		
Selenium, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Selenium, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Silver, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Silver, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Silver, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Silver, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Silver, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Silver, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Silver, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Silver, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Silver, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Silver, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Silver, total	ug/L	MW-27	04/01/2019	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2019	ND	4.0000		
Silver, total	ug/L	MW-27	03/10/2020	ND	4.0000		
Silver, total	ug/L	MW-27	09/14/2020	ND	4.0000		
Silver, total	ug/L	MW-27	03/04/2021	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2021	ND	4.0000		
Silver, total	ug/L	MW-27	03/24/2022	ND	4.0000		
Silver, total	ug/L	MW-27	09/09/2022	ND	4.0000		
Silver, total	ug/L	MW-27	03/01/2023	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-27	09/04/2024	ND	4.0000		
Silver, total	ug/L	MW-27	03/10/2025	ND	4.0000		
Thallium, total	ug/L	MW-27	09/29/2014	ND	4.0000		
Thallium, total	ug/L	MW-27	11/24/2014	ND	4.0000		
Thallium, total	ug/L	MW-27	03/19/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	06/17/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	08/26/2015	ND	4.0000		
Thallium, total	ug/L	MW-27	03/09/2016	ND	4.0000		
Thallium, total	ug/L	MW-27	09/14/2016	ND	4.0000		
Thallium, total	ug/L	MW-27	03/07/2017	ND	4.0000		
Thallium, total	ug/L	MW-27	09/11/2017	ND	4.0000		
Thallium, total	ug/L	MW-27	03/07/2018	ND	4.0000		
Thallium, total	ug/L	MW-27	09/05/2018	ND	4.0000		
Thallium, total	ug/L	MW-27	04/01/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2019	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/10/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/14/2020	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/04/2021	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2021		3.5000		
Thallium, total	ug/L	MW-27	03/24/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/09/2022	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/01/2023	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	09/04/2024	ND	2.0000	4.0000	**
Thallium, total	ug/L	MW-27	03/10/2025	ND	2.0000	4.0000	**
Vanadium, total	ug/L	MW-27	09/29/2014	ND	20.0000		
Vanadium, total	ug/L	MW-27	11/24/2014	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/19/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	06/17/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	08/26/2015	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/09/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/11/2017	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/07/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/05/2018	ND	20.0000		
Vanadium, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2019	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/14/2020	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/04/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2021	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/24/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/09/2022	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/01/2023	ND	20.0000		
Vanadium, total	ug/L	MW-27	09/04/2024	ND	20.0000		
Vanadium, total	ug/L	MW-27	03/10/2025	ND	20.0000		
Zinc, total	ug/L	MW-27	09/29/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	11/24/2014	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/19/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	06/17/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	08/26/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/09/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/07/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/11/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	03/07/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/05/2018	ND	20.0000		
Zinc, total	ug/L	MW-27	04/01/2019	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2019		10.5000		
Zinc, total	ug/L	MW-27	03/10/2020	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-27	09/14/2020	ND	20.0000		
Zinc, total	ug/L	MW-27	03/04/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2021	ND	20.0000		
Zinc, total	ug/L	MW-27	03/24/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	09/09/2022	ND	20.0000		
Zinc, total	ug/L	MW-27	03/01/2023	ND	20.0000		
Zinc, total	ug/L	MW-27	09/04/2024	ND	20.0000		
Zinc, total	ug/L	MW-27	03/10/2025	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-33	09/05/2025	ND	1.0000		4.0000
Arsenic, total	ug/L	MW-33	09/05/2025		2.1000	**	6.3000
Barium, total	ug/L	MW-33	09/05/2025		25.4000		108.0000
Beryllium, total	ug/L	MW-33	09/05/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-33	09/05/2025		2.1000		3.8000
Chromium, total	ug/L	MW-33	09/05/2025		1.0000		8.0000
Cobalt, total	ug/L	MW-33	09/05/2025		15.7000	**	20.2173
Copper, total	ug/L	MW-33	09/05/2025	ND	5.0000		8.9000
Lead, total	ug/L	MW-33	09/05/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-33	09/05/2025		23.8000		62.4558
Selenium, total	ug/L	MW-33	09/05/2025	ND	2.0000		9.7000
Silver, total	ug/L	MW-33	09/05/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-33	09/05/2025	ND	0.5000		4.0000
Vanadium, total	ug/L	MW-33	09/05/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-33	09/05/2025		10.0000		24.9000

* - Current value failed - awaiting verification.

** - Current value passed - previous exceedance not verified.

*** - Current value failed - exceedance verified.

**** - Current value passed - awaiting one more verification.

***** - Insufficient background data to compute prediction limit.

ND = Not Detected, Result = detection limit.

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	1	44	0.023	2	35	0.057
Arsenic, total	1	44	0.023	32	35	0.914
Barium, total	44	44	1.000	35	35	1.000
Beryllium, total	0	44	0.000	3	35	0.086
Cadmium, total	6	44	0.136	10	35	0.286
Chromium, total	0	44	0.000	2	35	0.057
Cobalt, total	33	43	0.767	35	35	1.000
Copper, total	4	44	0.091	2	35	0.057
Lead, total	0	44	0.000	7	35	0.200
Nickel, total	28	44	0.636	28	35	0.800
Selenium, total	4	44	0.091	1	35	0.029
Silver, total	0	44	0.000	0	35	0.000
Thallium, total	1	44	0.023	0	35	0.000
Vanadium, total	0	44	0.000	1	35	0.029
Zinc, total	9	44	0.205	11	35	0.314

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	1	44	0.023									nonpar
Arsenic, total	1	44	0.023									nonpar
Barium, total	44	44	1.000	4.691	2.564					2.326	non-norm	nonpar
Beryllium, total	0	44	0.000									nonpar
Cadmium, total	6	44	0.136	1.268	1.328					2.326	normal	nonpar
Chromium, total	0	44	0.000									nonpar
Cobalt, total	33	43	0.767	0.380	0.043					2.326	normal	normal
Copper, total	4	44	0.091	1.698	1.210					2.326	normal	nonpar
Lead, total	0	44	0.000									nonpar
Nickel, total	28	44	0.636	1.170	0.138					2.326	normal	normal
Selenium, total	4	44	0.091	1.805	1.440					2.326	normal	nonpar
Silver, total	0	44	0.000									nonpar
Thallium, total	1	44	0.023									nonpar
Vanadium, total	0	44	0.000									nonpar
Zinc, total	9	44	0.205	0.367	0.864					2.326	normal	nonpar

* - Distribution override for that constituent.

Fit to distribution is confirmed if G <= critical value.

Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	1	44					4.0000	nonpar		0.99
Arsenic, total	ug/L	1	44					6.3000	nonpar		0.99
Barium, total	ug/L	44	44					108.0000	nonpar		0.99
Beryllium, total	ug/L	0	44					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	6	44					3.8000	nonpar		0.99
Chromium, total	ug/L	0	44					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	33	43	6.3279	5.6776	0.0100	2.4463	20.2173	normal		
Copper, total	ug/L	4	44					8.9000	nonpar		0.99
Lead, total	ug/L	0	44					4.0000	nonpar	***	0.99
Nickel, total	ug/L	28	44	18.9068	17.8226	0.0100	2.4435	62.4558	normal		
Selenium, total	ug/L	4	44					9.7000	nonpar		0.99
Silver, total	ug/L	0	44					4.0000	nonpar	***	0.99
Thallium, total	ug/L	1	44					4.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	44					20.0000	nonpar	***	0.99
Zinc, total	ug/L	9	44					24.9000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

For transformed data, mean and SD in transformed units and prediction limit in original units.

All sample sizes and statistics are based on outlier free data.

For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 6**Dixon's Test Outliers
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value

N = Total number of independent measurements in background at each well.

Date Range = Dates of the first and last measurements included in background at each well.

Critical Value depends on the significance level and on N-1 when the two most extreme values are tested or N for the most extreme value.

Table 8

**Historical Downgradient Data for Constituent-Well Combinations
that Failed the Current Statistical Evaluation or
are in Verification Resampling Mode**

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-33	06/12/2009		5.1800	6.3000
Arsenic, total	ug/L	MW-33	07/02/2009		4.7400	6.3000
Arsenic, total	ug/L	MW-33	09/17/2009		3.0400	6.3000
Arsenic, total	ug/L	MW-33	03/22/2010		6.7500 *	6.3000
Arsenic, total	ug/L	MW-33	09/07/2010	ND	5.0000	6.3000
Arsenic, total	ug/L	MW-33	03/03/2011		5.3300	6.3000
Arsenic, total	ug/L	MW-33	09/20/2011		6.0900	6.3000
Arsenic, total	ug/L	MW-33	03/19/2012		12.7000 *	6.3000
Arsenic, total	ug/L	MW-33	09/06/2012		12.8000 *	6.3000
Arsenic, total	ug/L	MW-33	02/01/2013		5.8500	6.3000
Arsenic, total	ug/L	MW-33	09/27/2013		4.7800	6.3000
Arsenic, total	ug/L	MW-33	03/13/2014		5.7100	6.3000
Arsenic, total	ug/L	MW-33	09/30/2014		11.4000 *	6.3000
Arsenic, total	ug/L	MW-33	03/19/2015		11.9000 *	6.3000
Arsenic, total	ug/L	MW-33	08/26/2015		6.6000 *	6.3000
Arsenic, total	ug/L	MW-33	03/09/2016		6.2000	6.3000
Arsenic, total	ug/L	MW-33	09/14/2016		4.6000	6.3000
Arsenic, total	ug/L	MW-33	03/07/2017		7.8000 *	6.3000
Arsenic, total	ug/L	MW-33	09/11/2017		5.2000	6.3000
Arsenic, total	ug/L	MW-33	03/07/2018	ND	4.0000	6.3000
Arsenic, total	ug/L	MW-33	09/05/2018		7.8000 *	6.3000
Arsenic, total	ug/L	MW-33	04/01/2019		7.1000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2019		4.5000	6.3000
Arsenic, total	ug/L	MW-33	03/10/2020		5.9000	6.3000
Arsenic, total	ug/L	MW-33	09/14/2020		11.2000 *	6.3000
Arsenic, total	ug/L	MW-33	03/04/2021		7.0000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2021		15.3000 *	6.3000
Arsenic, total	ug/L	MW-33	03/24/2022		7.3000 *	6.3000
Arsenic, total	ug/L	MW-33	09/09/2022		16.9000 *	6.3000
Arsenic, total	ug/L	MW-33	03/01/2023		5.4000	6.3000
Arsenic, total	ug/L	MW-33	09/07/2023		4.3000	6.3000
Arsenic, total	ug/L	MW-33	03/06/2024		4.5000	6.3000
Arsenic, total	ug/L	MW-33	09/04/2024	ND	4.0000	6.3000
Arsenic, total	ug/L	MW-33	03/10/2025		11.0000 *	6.3000
Arsenic, total	ug/L	MW-33	09/05/2025		2.1000	6.3000
Cobalt, total	ug/L	MW-33	06/12/2009		53.1000 *	20.2173
Cobalt, total	ug/L	MW-33	07/02/2009		33.7000 *	20.2173
Cobalt, total	ug/L	MW-33	09/17/2009		36.3000 *	20.2173
Cobalt, total	ug/L	MW-33	03/22/2010		55.8000 *	20.2173
Cobalt, total	ug/L	MW-33	09/07/2010		40.8000 *	20.2173
Cobalt, total	ug/L	MW-33	03/03/2011		23.5000 *	20.2173
Cobalt, total	ug/L	MW-33	09/20/2011		28.6000 *	20.2173
Cobalt, total	ug/L	MW-33	03/19/2012		21.7000 *	20.2173
Cobalt, total	ug/L	MW-33	09/06/2012		26.1000 *	20.2173
Cobalt, total	ug/L	MW-33	02/01/2013		29.6000 *	20.2173
Cobalt, total	ug/L	MW-33	09/27/2013		47.5000 *	20.2173
Cobalt, total	ug/L	MW-33	03/13/2014		27.8000 *	20.2173
Cobalt, total	ug/L	MW-33	09/30/2014		29.7000 *	20.2173
Cobalt, total	ug/L	MW-33	03/19/2015		24.9000 *	20.2173
Cobalt, total	ug/L	MW-33	08/26/2015		14.3000	20.2173
Cobalt, total	ug/L	MW-33	03/09/2016		13.3000	20.2173
Cobalt, total	ug/L	MW-33	09/14/2016		15.8000	20.2173
Cobalt, total	ug/L	MW-33	03/07/2017		11.5000	20.2173
Cobalt, total	ug/L	MW-33	09/11/2017		10.8000	20.2173
Cobalt, total	ug/L	MW-33	03/07/2018		14.3000	20.2173
Cobalt, total	ug/L	MW-33	09/05/2018		15.6000	20.2173
Cobalt, total	ug/L	MW-33	04/01/2019		17.8000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2019		13.0000	20.2173
Cobalt, total	ug/L	MW-33	03/10/2020		18.1000	20.2173
Cobalt, total	ug/L	MW-33	09/14/2020		23.0000 *	20.2173
Cobalt, total	ug/L	MW-33	03/04/2021		2.8000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2021		2.0000	20.2173
Cobalt, total	ug/L	MW-33	03/24/2022		1.3000	20.2173
Cobalt, total	ug/L	MW-33	09/09/2022		19.8000	20.2173
Cobalt, total	ug/L	MW-33	03/01/2023		1.4000	20.2173
Cobalt, total	ug/L	MW-33	09/07/2023		7.3000	20.2173
Cobalt, total	ug/L	MW-33	03/06/2024		2.9000	20.2173
Cobalt, total	ug/L	MW-33	09/04/2024		2.8000	20.2173
Cobalt, total	ug/L	MW-33	03/10/2025		21.0000 *	20.2173
Cobalt, total	ug/L	MW-33	09/05/2025		15.7000	20.2173

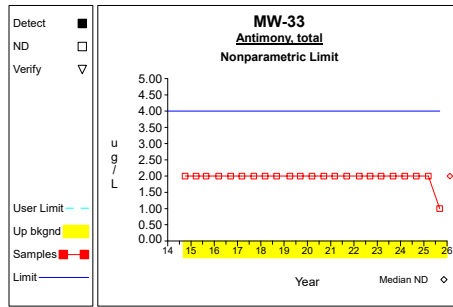
* - Significantly increased over background.

** - Detect at limit for 100% NDs in background (NPPL only).

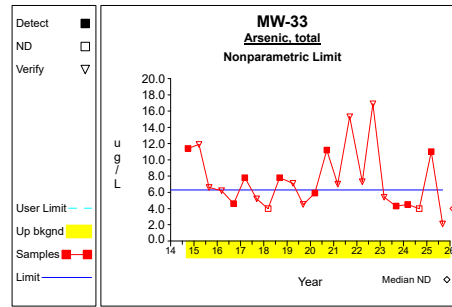
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

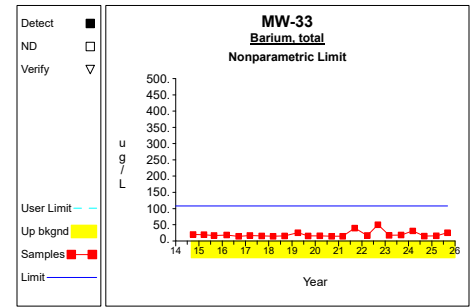
Up vs. Down Prediction Limits



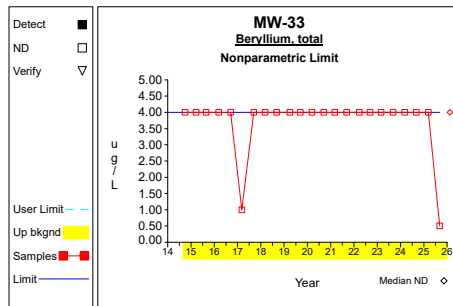
Graph 1



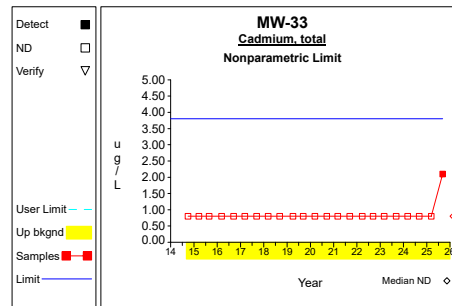
Graph 2



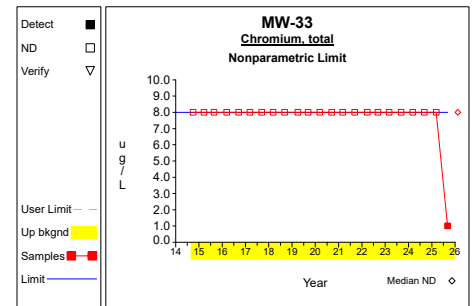
Graph 3



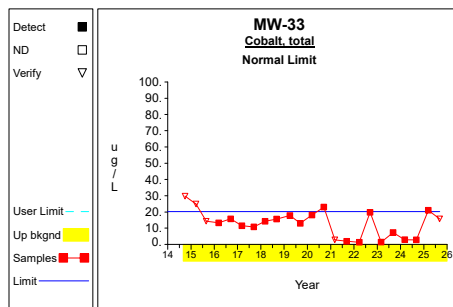
Graph 4



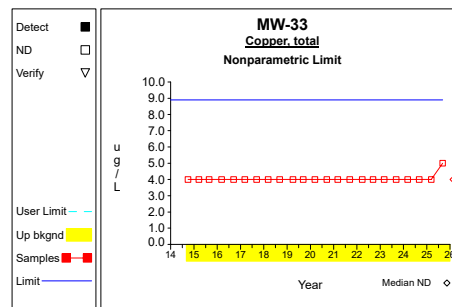
Graph 5



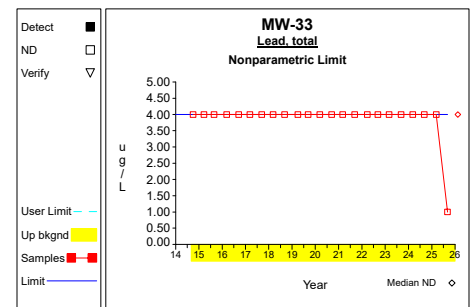
Graph 6



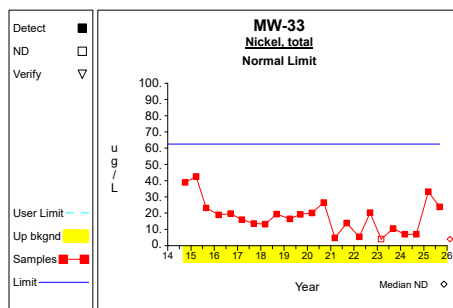
Graph 7



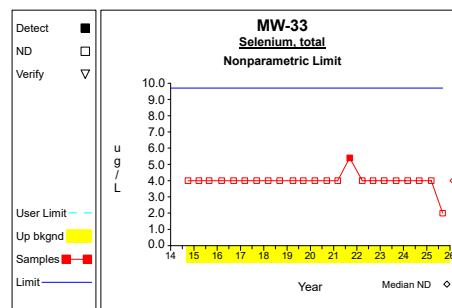
Graph 8



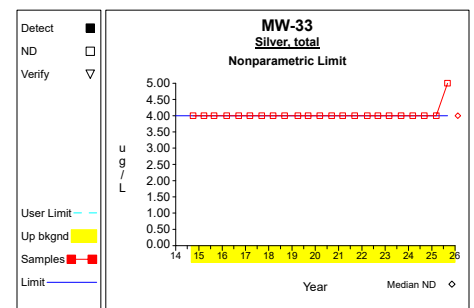
Graph 9



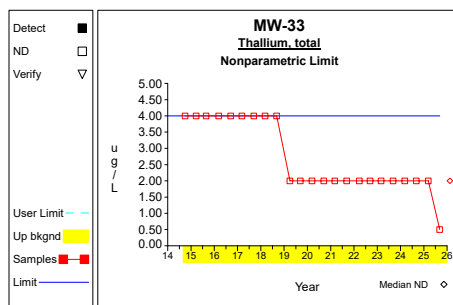
Graph 10



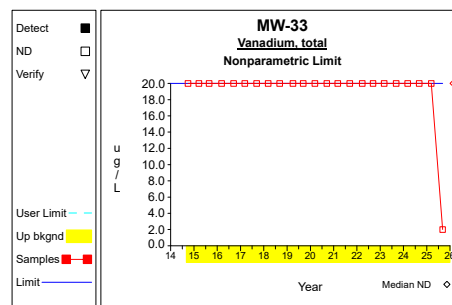
Graph 11



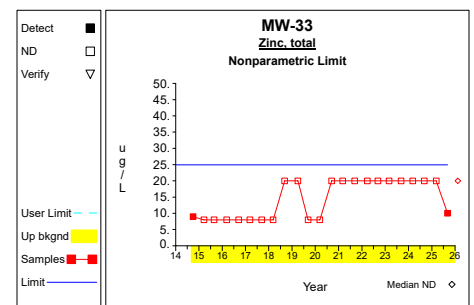
Graph 12



Graph 13

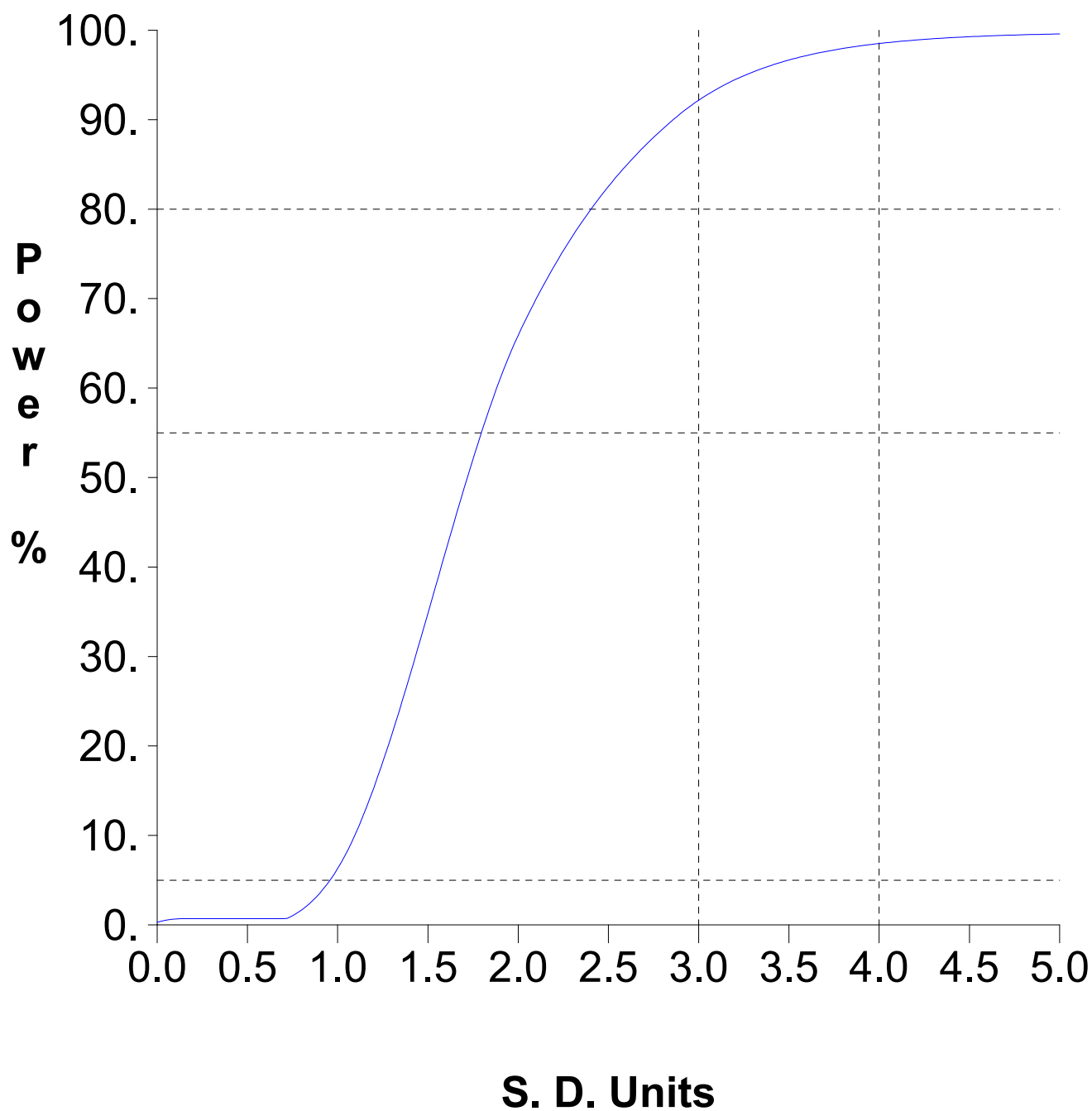


Graph 14



Graph 15

False Positive and False Negative Rates for Current Upgradient vs. Downgradient Monitoring Program



Worksheet 1 - Upgradient vs. Downgradient Comparisons**Antimony, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Arsenic, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 6.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Barium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 108.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Beryllium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Cadmium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 3.8	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Chromium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 8.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Cobalt, total (ug/L)****Normal Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X}_1 = \text{sum}[X_1] / N_1$ $= 272.1 / 33$ $= 8.245$	Compute mean of N_1 detected measurements.
2	$S_1 = ((\text{sum}[X_1^2] - \text{sum}[X_1]^2 / N_1) / (N_1 - 1))^{1/2}$ $= ((3069.71 - 74038.41 / 33) / (33 - 1))^{1/2}$ $= 5.081$	Compute sd of N_1 detected measurements.
3	$\bar{X} = (1 - N_0 / N) \bar{X}_1$ $= (1 - 10 / 43) 8.245$ $= 6.328$	Use Aitchison's method to adjust mean for presence of nondetects.
4	$S = [(1 - N_0 / N) * S_1^2 + (N_0 / N) (1 - (N_0 - 1) / (N - 1)) \bar{X}_1^2]^{1/2}$ $= [(1 - 10 / 43) * 5.081^2 + (10 / 43) (1 - (10 - 1) / (43 - 1)) 8.245^2]^{1/2}$ $= 5.678$	Use Aitchison's method to adjust sd for presence of nondetects.
5	$\alpha = \min[(1 - .95^{1/K})^{1/2}, .01]$ $= \min[(1 - .95^{1/15})^{1/2}, .01]$ $= 0.01$	Adjusted per comparison false positive rate. Pass initial or 1 resample.
6	$PL = \bar{X} + tS(1 + 1/N)^{1/2}$ $= 6.328$ $+ (2.418 * 5.678)(1 + 1/43)^{1/2}$ $= 20.217$	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Copper, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$PL = \max(X)$ $= 8.9$	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Lead, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Nickel, total (ug/L)****Normal Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X}_1 = \text{sum}[X_1] / N_1$ = 831.9 / 28 = 29.711	Compute mean of N_1 detected measurements.
2	$S_1 = ((\text{sum}[X_1^2] - \text{sum}[X_1]^2 / N_1) / (N_1 - 1))^{1/2}$ = ((29325.31 - 692057.61 / 28) / (28 - 1))^{1/2} = 13.065	Compute sd of N_1 detected measurements.
3	$\bar{X} = (1 - N_0/N) \bar{X}_1$ = (1 - 16/44) 29.711 = 18.907	Use Aitchison's method to adjust mean for presence of nondetects.
4	$S = [(1 - N_0/N) * S_1^2 + (N_0/N) (1 - (N_0 - 1)/(N - 1)) \bar{X}_1^2]^{1/2}$ = [(1 - 16/44) * 13.065^2 + (16/44) (1 - (16 - 1)/(44 - 1)) 29.711^2]^{1/2} = 17.823	Use Aitchison's method to adjust sd for presence of nondetects.
5	alpha = min[(1 - .95^{1/K})^{1/2}, .01] = min[(1 - .95^{1/15})^{1/2}, .01] = 0.01	Adjusted per comparison false positive rate. Pass initial or 1 resample.
6	PL = $\bar{X} + tS(1 + 1/N)^{1/2}$ = 18.907 + (2.416 * 17.823) (1 + 1/44)^{1/2} = 62.456	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Selenium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 9.7	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Silver, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Thallium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Vanadium, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 20.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 1 - Upgradient vs. Downgradient Comparisons**Zinc, total (ug/L)****Nonparametric Prediction Limit**

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 24.9	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Attachment C

Assessment Statistics for Trace Metals - South Site Shallow Wells

Table 1**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

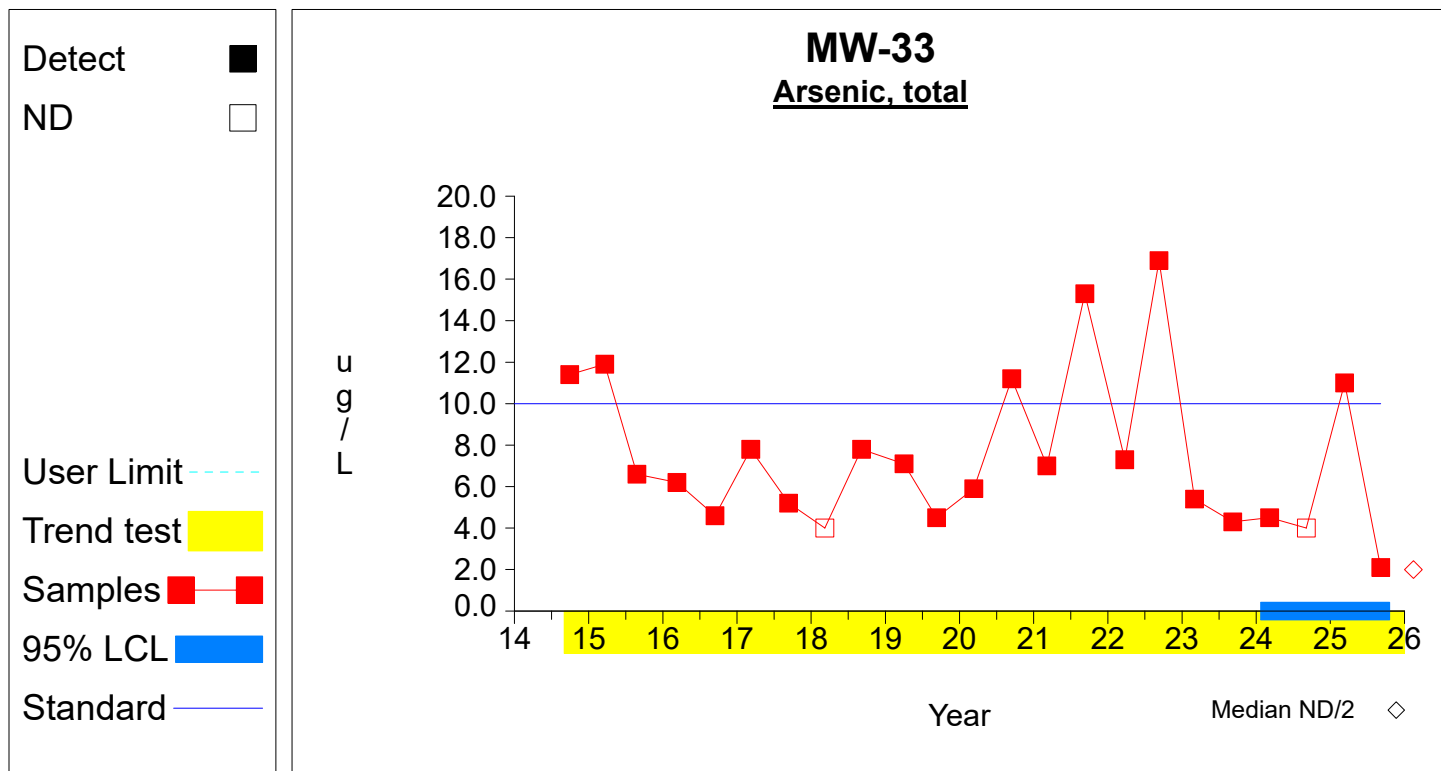
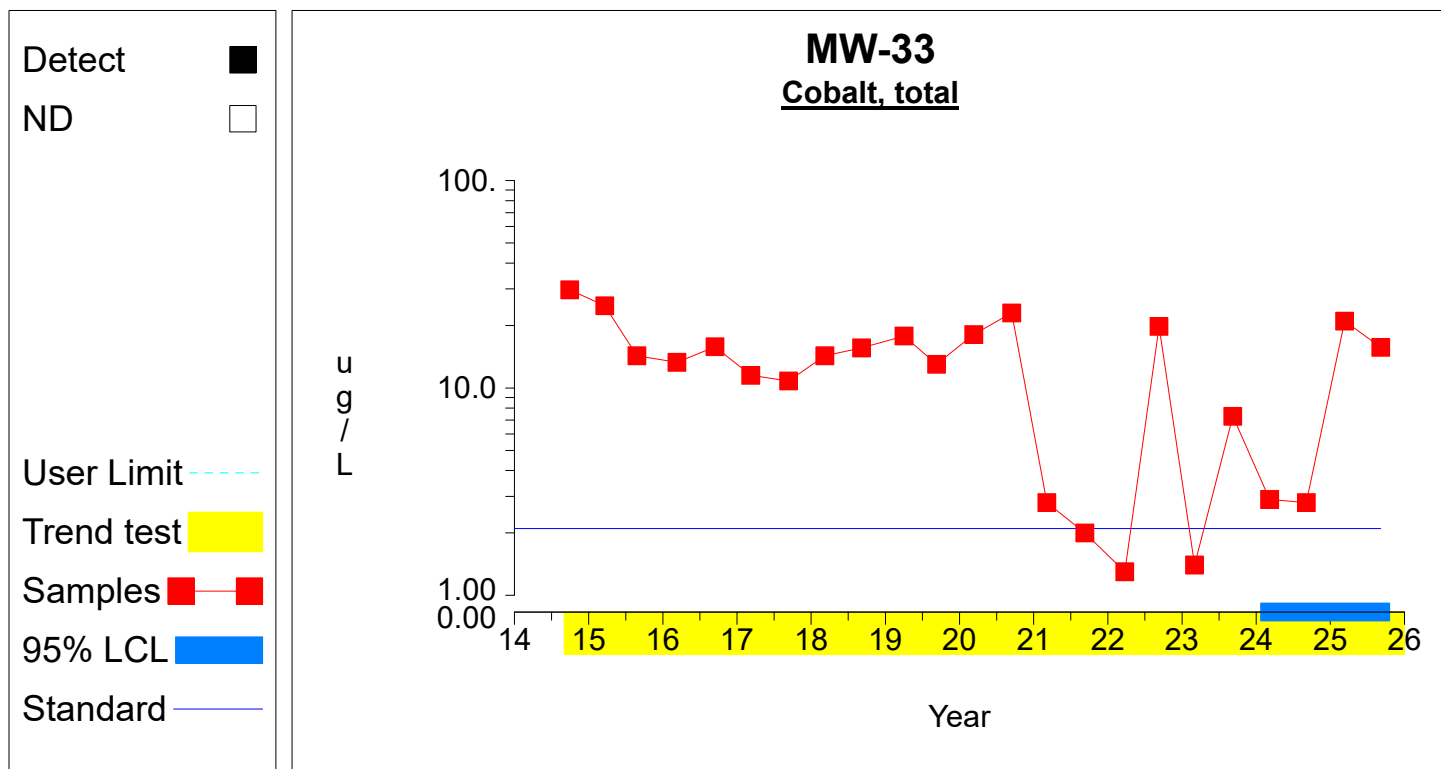
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Arsenic, total	ug/L	MW-33	4	4.900	4.228	1.176	0.000	9.873	10.000	
Cobalt, total	ug/L	MW-33	4	10.600	9.207	1.176	0.000	21.430	2.100	

* - Insufficient Data

** - Significant Exceedance

LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

Confidence Limits (Assessment)**Graph 1****Graph 2**

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-33

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 19.6 / 4$ $= 4.9$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((149.66 - 384.16/4) / (4-1))^{1/2}$ $= 4.228$	Compute sd of the last 4 measurements.
3	$LCL = \bar{X} - tS/N^{1/2}$ $= 4.9 - 2.353 * 4.228/4^{1/2}$ $= 0.0$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$UCL = \bar{X} + tS/N^{1/2}$ $= 4.9 + 2.353 * 4.228/4^{1/2}$ $= 9.873$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 23 * (23-1) / 2$ $= 253$	Number of sample pairs during trend detection period.
6	$S = -0.253$	Sen's estimator of trend.
7	$\text{var}(S) = 1430.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (253 \pm 2.576 * 1430.667^{1/2}) / 2$ $= [77.782, 175.218]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$CL(S) = [-0.873, 0.489]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-33

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 42.4 / 4$ $= 10.6$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((703.74 - 1797.76/4) / (4-1))^{1/2}$ $= 9.207$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 10.6 - 2.353 * 9.207/4^{1/2}$ $= 0.0$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 10.6 + 2.353 * 9.207/4^{1/2}$ $= 21.43$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 23 * (23-1) / 2$ $= 253$	Number of sample pairs during trend detection period.
6	$S = -1.246$	Sen's estimator of trend.
7	$\text{var}(S) = 1431.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (253 \pm 2.576 * 1431.667^{1/2}) / 2$ $= [77.765, 175.235]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-2.343, 0.585]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Attachment D

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-10	3/19/2012		1.9	1.0	ug/L
1,2-dichloropropane	MW-10	3/19/2012		10.3	1.0	ug/L
2-butanone	MW-10	7/08/2008		8.10	.91	ug/L
Acetone	MW-10	9/08/2008		47.0	10.0	ug/L
Acetone	MW-10	3/19/2012		38.1	10.0	ug/L
Acetone	MW-10	6/20/2012		44.4	10.0	ug/L
Acetone	MW-10	3/10/2016		22.2	10.0	ug/L
Aldrin	MW-10	6/20/2012		.0651	.0337	ug/L
Benzene	MW-10	9/08/2008		.17	.10	ug/L
Benzene	MW-10	3/19/2012		.70	.10	ug/L
Bis(2-ethylhexyl)phthalate	MW-10	9/05/2018		27	6	ug/L
Carbon disulfide	MW-10	9/08/2008		.34	.10	ug/L
Carbon disulfide	MW-10	6/20/2012		23.30	1.00	ug/L
Chloroethane	MW-10	4/29/2008		.557	.100	ug/L
Chloroform	MW-10	6/20/2012		13.3	1.0	ug/L
Chloromethane	MW-10	2/19/2008		.24	.10	ug/L
Chloromethane	MW-10	7/08/2008		.26	.10	ug/L
Cis-1,2-dichloroethene	MW-10	3/19/2012		6.3	1.0	ug/L
Methylene chloride	MW-10	7/08/2008		.51	.10	ug/L
Tetrachloroethene	MW-10	2/19/2008		.480	.400	ug/L
Tetrachloroethene	MW-10	4/29/2008		.568	.400	ug/L
Toluene	MW-10	2/01/2013		16.1	1.0	ug/L
1,2-dibromo-3-chloropropane	MW-21	9/06/2012		.60	.12	ug/L
1,2-dibromoethane	MW-21	9/06/2012		.13	.13	ug/L
Bis(2-ethylhexyl)phthalate	MW-21	9/09/2022		9	6	ug/L
Carbon disulfide	MW-21	3/09/2009		1.12	.10	ug/L
Carbon disulfide	MW-21	9/06/2012		1.47	1.00	ug/L
Acetone	MW-23	9/11/2017		14.1	10.0	ug/L
Carbon disulfide	MW-23	4/29/2008		.214	.100	ug/L
Carbon disulfide	MW-23	9/08/2008		.270	.100	ug/L
Chloroethane	MW-23	9/08/2008		1.02	.10	ug/L
Methylene chloride	MW-23	9/08/2008		.55	.10	ug/L
Acetone	MW-27	9/11/2017		15.5	10.0	ug/L
Acetone	MW-28	9/11/2017		13.8	10.0	ug/L
Trans-1,4-dichloro-2-butene	MW-28	3/09/2016		33	5	ug/L
Toluene	MW-29	11/24/2014		1.1	1.0	ug/L
Trichloroethene	MW-29	11/24/2014		1.8	1.0	ug/L
1,2-dibromo-3-chloropropane	MW-31	9/06/2012		.15	.12	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	3/04/2021		34	6	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	9/09/2021		33	6	ug/L
Bis(2-ethylhexyl)phthalate	MW-31	9/09/2022		97	6	ug/L
Chloromethane	MW-31	2/19/2008		.26	.10	ug/L
Chloromethane	MW-31	7/08/2008		.24	.10	ug/L
Methylene chloride	MW-31	7/08/2008		.48	.10	ug/L
Tetrachloroethene	MW-31	4/29/2008		.396	.400	ug/L
1,1-dichloroethane	MW-33	9/17/2009		1.37	1.00	ug/L
1,1-dichloroethane	MW-33	3/22/2010		2.24	1.00	ug/L
1,1-dichloroethane	MW-33	9/07/2010		2.00	1.00	ug/L
1,1-dichloroethane	MW-33	3/03/2011		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	9/20/2011		1.75	1.00	ug/L
1,1-dichloroethane	MW-33	3/19/2012		1.80	1.00	ug/L
1,1-dichloroethane	MW-33	9/06/2012		1.89	1.00	ug/L
1,1-dichloroethane	MW-33	2/01/2013		2.19	1.00	ug/L
1,1-dichloroethane	MW-33	9/27/2013		1.43	1.00	ug/L
1,1-dichloroethane	MW-33	3/13/2014		2.05	1.00	ug/L
1,1-dichloroethane	MW-33	9/30/2014		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	3/19/2015		2.10	1.00	ug/L
1,1-dichloroethane	MW-33	8/26/2015		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	3/09/2016		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	9/14/2016		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	3/07/2017		1.50	1.00	ug/L
1,1-dichloroethane	MW-33	9/05/2018		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	4/01/2019		2.00	1.00	ug/L
1,1-dichloroethane	MW-33	9/14/2020		1.10	1.00	ug/L
1,1-dichloroethane	MW-33	3/04/2021		1.90	1.00	ug/L
1,1-dichloroethane	MW-33	9/09/2021		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/24/2022		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	9/09/2022		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/01/2023		1.70	1.00	ug/L
1,1-dichloroethane	MW-33	3/06/2024		1.60	1.00	ug/L
1,1-dichloroethane	MW-33	9/04/2024		1.40	1.00	ug/L
1,1-dichloroethane	MW-33	3/10/2025		1.20	1.00	ug/L
1,1-dichloroethane	MW-33	9/05/2025		1.30	1.00	ug/L
1,2-dichloropropane	MW-33	6/12/2009		3.22	1.00	ug/L
1,2-dichloropropane	MW-33	7/02/2009		6.29	1.00	ug/L
1,2-dichloropropane	MW-33	9/17/2009		12.60	1.00	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloropropane	MW-33	3/22/2010		20.40	1.00	ug/L
1,2-dichloropropane	MW-33	9/07/2010		15.70	1.00	ug/L
1,2-dichloropropane	MW-33	3/03/2011		6.67	1.00	ug/L
1,2-dichloropropane	MW-33	9/20/2011		9.88	1.00	ug/L
1,2-dichloropropane	MW-33	3/19/2012		9.40	1.00	ug/L
1,2-dichloropropane	MW-33	9/06/2012		9.84	1.00	ug/L
1,2-dichloropropane	MW-33	2/01/2013		9.51	1.00	ug/L
1,2-dichloropropane	MW-33	9/27/2013		9.28	1.00	ug/L
1,2-dichloropropane	MW-33	3/13/2014		9.43	1.00	ug/L
1,2-dichloropropane	MW-33	9/30/2014		6.40	1.00	ug/L
1,2-dichloropropane	MW-33	8/26/2015		5.20	1.00	ug/L
1,2-dichloropropane	MW-33	3/09/2016		2.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/14/2016		2.40	1.00	ug/L
1,2-dichloropropane	MW-33	3/07/2017		5.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/11/2017		4.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/05/2018		5.40	1.00	ug/L
1,2-dichloropropane	MW-33	4/01/2019		8.80	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2019		1.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/14/2020		1.80	1.00	ug/L
1,2-dichloropropane	MW-33	3/04/2021		3.60	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2021		5.10	1.00	ug/L
1,2-dichloropropane	MW-33	3/24/2022		3.40	1.00	ug/L
1,2-dichloropropane	MW-33	9/09/2022		5.40	1.00	ug/L
1,2-dichloropropane	MW-33	3/01/2023		4.30	1.00	ug/L
1,2-dichloropropane	MW-33	9/07/2023		1.00	1.00	ug/L
1,2-dichloropropane	MW-33	3/06/2024		7.80	1.00	ug/L
1,2-dichloropropane	MW-33	9/04/2024		5.10	1.00	ug/L
1,2-dichloropropane	MW-33	3/10/2025		3.00	1.00	ug/L
1,2-dichloropropane	MW-33	9/05/2025		5.00	1.00	ug/L
Acetone	MW-33	3/19/2012		91.9	10.0	ug/L
Acetone	MW-33	9/06/2012		20.2	10.0	ug/L
Acetone	MW-33	9/27/2013		48.0	10.0	ug/L
Acetone	MW-33	9/30/2014		14.8	10.0	ug/L
Acetone	MW-33	3/19/2015		21.3	10.0	ug/L
Benzene	MW-33	7/02/2009		.520	.100	ug/L
Benzene	MW-33	9/17/2009		.870	.100	ug/L
Benzene	MW-33	3/22/2010		1.230	.100	ug/L
Benzene	MW-33	9/07/2010		1.250	.100	ug/L
Benzene	MW-33	3/03/2011		.570	.100	ug/L
Benzene	MW-33	9/20/2011		.980	.100	ug/L
Benzene	MW-33	3/19/2012		.600	.100	ug/L
Benzene	MW-33	9/06/2012		.770	.100	ug/L
Benzene	MW-33	2/01/2013		.884	.100	ug/L
Benzene	MW-33	9/27/2013		.746	.100	ug/L
Benzene	MW-33	3/13/2014		.903	.100	ug/L
Carbon disulfide	MW-33	9/06/2012		5.64	1.00	ug/L
Carbon disulfide	MW-33	9/30/2014		5.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	6/12/2009		2.10	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	7/02/2009		4.11	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/17/2009		7.48	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/22/2010		12.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/07/2010		11.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/03/2011		4.80	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/20/2011		7.37	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/19/2012		5.80	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/06/2012		6.48	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	2/01/2013		7.23	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/27/2013		6.63	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/13/2014		8.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/30/2014		4.60	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/19/2015		3.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	8/26/2015		4.40	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/09/2016		2.70	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/14/2016		2.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/07/2017		4.40	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/11/2017		3.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/07/2018		2.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/05/2018		5.10	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	4/01/2019		8.20	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2019		3.50	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/14/2020		1.70	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/04/2021		3.60	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2021		5.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/24/2022		2.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/09/2022		4.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/01/2023		4.30	1.00	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethene	MW-33	9/07/2023		1.00	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/06/2024		6.60	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/04/2024		3.90	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	3/10/2025		3.30	1.00	ug/L
Cis-1,2-dichloroethene	MW-33	9/05/2025		4.20	1.00	ug/L
Dichlorodifluoromethane	MW-33	9/14/2016		1.6	1.0	ug/L
Dichlorodifluoromethane	MW-33	11/09/2016		1.9	1.0	ug/L
Endosulfan i	MW-33	9/07/2010		.0708	.0320	ug/L
Endosulfan i	MW-33	9/06/2012		.0846	.0200	ug/L
Endosulfan i	MW-33	2/01/2013		.1230	.0200	ug/L
Endosulfan i	MW-33	9/27/2013		.0725	.0200	ug/L
Endosulfan i	MW-33	3/13/2014		.1010	.0200	ug/L
Endosulfan i	MW-33	3/07/2017		.0600	.0500	ug/L
Trichloroethene	MW-33	3/22/2010		1.68	1.00	ug/L
Trichloroethene	MW-33	9/07/2010		1.60	1.00	ug/L
Trichloroethene	MW-33	9/20/2011		1.08	1.00	ug/L
Trichloroethene	MW-33	9/06/2012		1.20	1.00	ug/L
Trichloroethene	MW-33	3/13/2014		1.06	1.00	ug/L
Acetone	MW-34	9/11/2017		11	10	ug/L
Benzene	MW-34	5/27/2009		.77	.10	ug/L
1,1-dichloroethane	MW-35	11/24/2014		2.2	1.0	ug/L
Bis(2-ethylhexyl)phthalate	MW-35	9/05/2018		8	6	ug/L
Chloroethane	MW-35	11/24/2014		1.7	1.0	ug/L
Chloroethane	MW-35	9/14/2020		1.4	1.0	ug/L
Methane	MW-35	7/06/2020		6.560	.925	mg/L
Vinyl chloride	MW-35	11/24/2014		2.2	1.0	ug/L
Carbon disulfide	MW-38	10/11/2021		2.4	1.0	ug/L

Detections are shown for the constituents and sample points selected for the analysis
The Limit column refers to the laboratory reporting limit

Attachment E

Assessment Statistics for VOCs

Table 1

**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-dichloroethane	ug/L	MW-33	4	1.375	0.171	1.176	1.174	1.576	140.000	dec
1,2-dichloropropane	ug/L	MW-33	4	5.225	1.970	1.176	2.907	7.543	5.000	
Cis-1,2-dichloroethene	ug/L	MW-33	4	4.500	1.449	1.176	2.795	6.205	70.000	

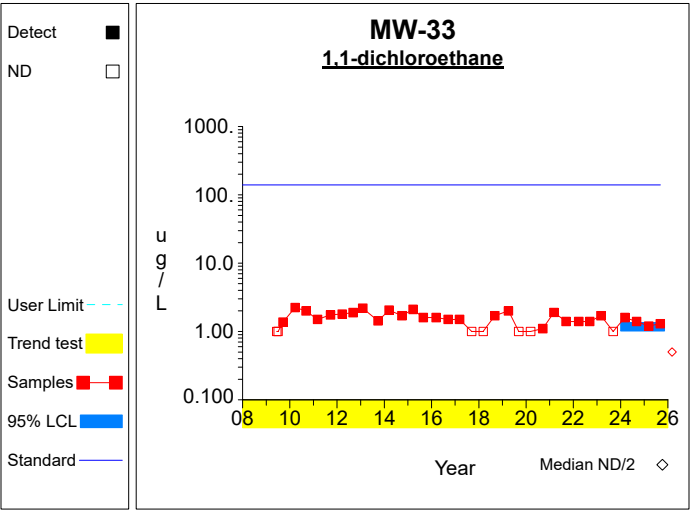
* - Insufficient Data

** - Significant Exceedance

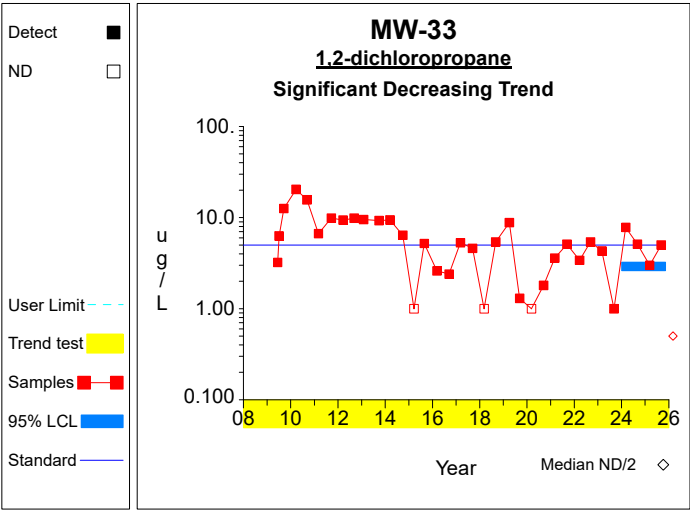
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

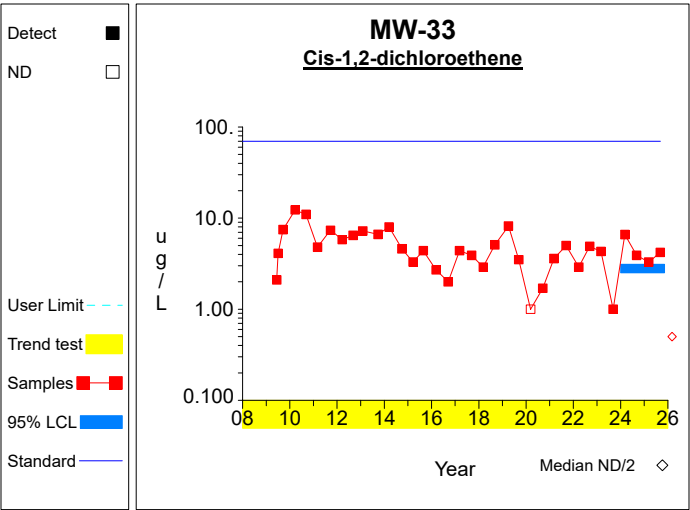
Confidence Limits (Assessment)



Graph 1



Graph 2



Graph 3

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-33

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 5.5 / 4$ $= 1.375$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((7.65 - 30.25/4) / (4-1))^{1/2}$ $= 0.171$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.375 - 2.353 * 0.171/4^{1/2}$ $= 1.174$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.375 + 2.353 * 0.171/4^{1/2}$ $= 1.576$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 35 * (35-1) / 2$ $= 595$	Number of sample pairs during trend detection period.
6	$S = -0.027$	Sen's estimator of trend.
7	$\text{var}(S) = 4893.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (595 \pm 2.576 * 4893.333^{1/2}) / 2$ $= [207.401, 387.599]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.069, 0.012]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,2-dichloropropane (ug/L) at MW-33

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 20.9 / 4$ $= 5.225$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((120.85 - 436.81/4) / (4-1))^{1/2}$ $= 1.97$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 5.225 - 2.353 * 1.97/4^{1/2}$ $= 2.907$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 5.225 + 2.353 * 1.97/4^{1/2}$ $= 7.543$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 35 * (35-1) / 2$ $= 595$	Number of sample pairs during trend detection period.
6	$S = -0.382$	Sen's estimator of trend.
7	$\text{var}(S) = 4952.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (595 \pm 2.576 * 4952.667^{1/2}) / 2$ $= [206.857, 388.143]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.785, -0.085]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethene (ug/L) at MW-33

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 18.0 / 4$ $= 4.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((87.3 - 324.0/4) / (4-1))^{1/2}$ $= 1.449$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 4.5 - 2.353 * 1.449/4^{1/2}$ $= 2.795$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 4.5 + 2.353 * 1.449/4^{1/2}$ $= 6.205$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 35 * (35-1) / 2$ $= 595$	Number of sample pairs during trend detection period.
6	$S = -0.215$	Sen's estimator of trend.
7	$\text{var}(S) = 4954.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (595 \pm 2.576 * 4954.333^{1/2}) / 2$ $= [206.842, 388.158]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.463, 0.009]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Appendix D

Laboratory Reports for Reporting Period *With Chain of Custody*



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0696

Project Description

6037

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Tuesday, April 1, 2025

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc., Newton. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0696

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6037

Project / PO Number: 050312
Received: 03/11/2025
Reported: 04/01/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-33	1IC0696-01	Aqueous	GRAB		03/10/25 09:47	03/11/25 10:35
MW-23 (B)	1IC0696-02	Aqueous	GRAB		03/10/25 08:03	03/11/25 10:35
MW-27 (B)	1IC0696-03	Aqueous	GRAB		03/10/25 08:47	03/11/25 10:35
MW-21	1IC0696-04	Aqueous	GRAB		03/10/25 10:32	03/11/25 10:35
MW-31	1IC0696-05	Aqueous	GRAB		03/10/25 11:15	03/11/25 10:35
MW-28 (B)	1IC0696-06	Aqueous	GRAB		03/10/25 08:57	03/11/25 10:35
MW-29 (B)	1IC0696-07	Aqueous	GRAB		03/10/25 08:38	03/11/25 10:35
MW-36 (B)	1IC0696-08	Aqueous	GRAB		03/10/25 07:45	03/11/25 10:35
MW-37	1IC0696-09	Aqueous	GRAB		03/10/25 09:24	03/11/25 10:35
MW-22	1IC0696-10	Aqueous	GRAB		03/10/25 10:40	03/11/25 10:35
MW-32	1IC0696-11	Aqueous	GRAB		03/10/25 11:24	03/11/25 10:35
Field Duplicate	1IC0696-12	Aqueous	GRAB		03/10/25 00:00	03/11/25 10:35
MW-38	1IC0696-13	Aqueous	GRAB		03/10/25 11:42	03/11/25 10:35
MW-34	1IC0696-14	Aqueous	GRAB		03/10/25 10:53	03/11/25 10:35



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0696

Analytical Testing Parameters

Client Sample ID: MW-33
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 9:47

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1-Dichloroethane	1.2	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
cis-1,2-Dichloroethylene	3.3	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2-Dichloropropane	3.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-33
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 9:47

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: Dibromofluoromethane	90.0	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: Dibromofluoromethane	90.0	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: 1,2-Dichloroethane-d4	84.7	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: 1,2-Dichloroethane-d4	84.7	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2044	BDF
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2044	BDF

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst

EPA 376.2

Sulfide, total	<0.10	0.10	mg/L	1	M2		03/17/25 0928	AKK

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst

EPA 3005A/EPA 6020A

Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Arsenic, total	0.0110	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Barium, total	0.0163	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Cobalt, total	0.0210	0.0004	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Nickel, total	0.0332	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2251	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2251	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-23 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-02

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:03

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-23 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-02

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:03

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: Dibromofluoromethane	88.1	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: Dibromofluoromethane	88.1	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: 1,2-Dichloroethane-d4	86.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: 1,2-Dichloroethane-d4	86.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2106	BDF
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2106	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Barium, total	0.0205	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Cadmium, total	0.0014	0.0008	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Cobalt, total	0.0151	0.0004	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Nickel, total	0.0304	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2315	RVV
Zinc, total	0.0226	0.0200	mg/L	4		03/12/25 1403	03/13/25 2315	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-27 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-03

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:47

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-27 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-03

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:47

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: Dibromofluoromethane	87.9	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: Dibromofluoromethane	87.9	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: 1,2-Dichloroethane-d4	84.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: 1,2-Dichloroethane-d4	84.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2129	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2129	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Barium, total	0.108	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Cadmium, total	0.0016	0.0008	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Cobalt, total	0.0030	0.0004	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Copper, total	0.0043	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Nickel, total	0.0131	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2322	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2322	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-04

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-21
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-04

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:32

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: Dibromofluoromethane	85.9	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: Dibromofluoromethane	85.9	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: 1,2-Dichloroethane-d4	80.4	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: 1,2-Dichloroethane-d4	80.4	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: 4-Bromofluorobenzene	95.8	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2151	BDF
Surrogate: 4-Bromofluorobenzene	95.8	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2151	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Barium, total	0.0160	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Nickel, total	0.0049	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2328	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2328	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-31
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-05

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-31
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-05

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: Dibromofluoromethane	85.0	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: Dibromofluoromethane	85.0	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: 1,2-Dichloroethane-d4	79.3	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: 1,2-Dichloroethane-d4	79.3	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: 4-Bromofluorobenzene	97.6	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2214	BDF
Surrogate: 4-Bromofluorobenzene	97.6	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2214	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Barium, total	0.0143	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Nickel, total	0.0201	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2334	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2334	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-28 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-06

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:57

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-28 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-06

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:57

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: Dibromofluoromethane	85.6	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: Dibromofluoromethane	85.6	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: 1,2-Dichloroethane-d4	81.5	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: 1,2-Dichloroethane-d4	81.5	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2236	BDF
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2236	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Barium, total	0.109	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Cadmium, total	0.0015	0.0008	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Cobalt, total	0.0127	0.0004	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Nickel, total	0.0482	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2340	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2340	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-29 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-07

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:38

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-29 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-07

Collected By: Whipple, Todd
Collection Date: 03/10/2025 8:38

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: Dibromofluoromethane	80.0	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: Dibromofluoromethane	80.0	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: 1,2-Dichloroethane-d4	77.4	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: 1,2-Dichloroethane-d4	77.4	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: 4-Bromofluorobenzene	97.4	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2258	BDF
Surrogate: 4-Bromofluorobenzene	97.4	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2258	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Barium, total	0.0280	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2358	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/13/25 2358	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-36 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-08

Collected By: Whipple, Todd
Collection Date: 03/10/2025 7:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-36 (B)
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-08

Collected By: Whipple, Todd
Collection Date: 03/10/2025 7:45

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: Dibromofluoromethane	85.1	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: Dibromofluoromethane	85.1	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: 1,2-Dichloroethane-d4	79.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: 1,2-Dichloroethane-d4	79.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: 4-Bromofluorobenzene	98.0	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2321	BDF
Surrogate: 4-Bromofluorobenzene	98.0	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2321	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	0.0033	0.0020	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Barium, total	0.0100	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Cadmium, total	0.0010	0.0008	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Cobalt, total	0.0027	0.0004	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Nickel, total	0.0268	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 1048	RVV
Zinc, total	0.0484	0.0200	mg/L	4		03/12/25 1403	03/14/25 1048	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-37
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-09

Collected By: Whipple, Todd
Collection Date: 03/10/2025 9:24

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-37
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-09

Collected By: Whipple, Todd
Collection Date: 03/10/2025 9:24

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: Dibromofluoromethane	82.8	Limit: 57-134	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: Dibromofluoromethane	82.8	Limit: 75-136	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: 1,2-Dichloroethane-d4	79.1	Limit: 53-140	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: 1,2-Dichloroethane-d4	79.1	Limit: 61-142	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 78-121	% Rec	1		03/17/25 0000	03/17/25 2343	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 80-116	% Rec	1		03/17/25 0000	03/17/25 2343	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Barium, total	0.0219	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Cobalt, total	0.0096	0.0004	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Nickel, total	0.0143	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0011	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0011	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-10

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:40

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-10

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:40

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: Dibromofluoromethane	84.0	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: Dibromofluoromethane	84.0	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: 1,2-Dichloroethane-d4	80.2	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: 1,2-Dichloroethane-d4	80.2	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: 4-Bromofluorobenzene	96.3	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0005	BDF
Surrogate: 4-Bromofluorobenzene	96.3	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0005	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Barium, total	0.0206	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Cobalt, total	0.0015	0.0004	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0017	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0017	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-32
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-11

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:24

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-32
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-11

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:24

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: Dibromofluoromethane	79.7	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: Dibromofluoromethane	79.7	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: 1,2-Dichloroethane-d4	75.9	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: 1,2-Dichloroethane-d4	75.9	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: Toluene-d8	104	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0028	BDF
Surrogate: 4-Bromofluorobenzene	96.4	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0028	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Barium, total	0.0129	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 1054	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 1054	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID:	Field Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	03/10/2025
Lab Sample ID:	11C0696-12		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	0.0035	0.0020	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Barium, total	0.0126	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Cadmium, total	0.0010	0.0008	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Cobalt, total	0.0031	0.0004	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Nickel, total	0.0295	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Selenium, total	0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0029	RVV
Zinc, total	0.0509	0.0200	mg/L	4		03/12/25 1403	03/14/25 0029	RVV

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Acrolein	<10.0	10.0	ug/L	1	AC, H	03/17/25 0000	03/18/25 0050	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Methyl Iodide	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Acetonitrile	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Acrylonitrile	<5.0	5.0	ug/L	1	AC, H	03/17/25 0000	03/18/25 0050	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
2,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
2-Butanone (MEK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Ethyl Methacrylate	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,3-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0050	BDF
Allyl chloride	<1.0	1.0	ug/L	1		03/24/25 0000	03/24/25 1650	RAF
Chloroprene	<1.0	1.0	ug/L	1		03/24/25 0000	03/24/25 1650	RAF
Methacrylonitrile	<1.0	1.0	ug/L	1		03/24/25 0000	03/24/25 1650	RAF
Methyl Methacrylate	<1.0	1.0	ug/L	1		03/24/25 0000	03/24/25 1650	RAF
Propionitrile	<10.0	10.0	ug/L	1		03/24/25 0000	03/24/25 1650	RAF
Surrogate: Dibromofluoromethane	94.8	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0050	BDF
Surrogate: Dibromofluoromethane	102	Limit: 57-134	% Rec	1		03/24/25 0000	03/24/25 1650	RAF
Surrogate: 1,2-Dichloroethane-d4	91.7	Limit: 53-140	% Rec	1	AC, H	03/17/25 0000	03/18/25 0050	BDF
Surrogate: 1,2-Dichloroethane-d4	91.7	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0050	BDF
Surrogate: 1,2-Dichloroethane-d4	99.3	Limit: 53-140	% Rec	1		03/24/25 0000	03/24/25 1650	RAF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1	AC, H	03/17/25 0000	03/18/25 0050	BDF
Surrogate: Toluene-d8	103	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0050	BDF
Surrogate: Toluene-d8	99.8	Limit: 86-114	% Rec	1		03/24/25 0000	03/24/25 1650	RAF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1	AC, H	03/17/25 0000	03/18/25 0050	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0050	BDF
Surrogate: 4-Bromofluorobenzene	99.1	Limit: 78-121	% Rec	1		03/24/25 0000	03/24/25 1650	RAF

Determination of General Solvents	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		03/21/25 1147	03/22/25 2359	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Phenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP



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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Chlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Benzyl Alcohol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Acetophenone	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
o-Toluidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Hexachloroethane	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Nitrobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Isophorone	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Nitrophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Naphthalene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Chloroaniline	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Hexachloropropene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Hexachlorobutadiene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Methylnaphthalene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Isosafrole	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Safrole	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Chloronaphthalene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Nitroaniline	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Dimethylphthalate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Acenaphthylene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
3-Nitroaniline	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Acenaphthene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Nitrophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Dibenzofuran	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Pentachlorobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1-Naphthylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Naphthylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Diethyl Phthalate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Fluorene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Nitroaniline	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Diphenylamine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Azobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Diallate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Phenacetin	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
4-Aminobiphenyl	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Pentachlorophenol	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Pronamide	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Phenanthrene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Anthracene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Methapyrilene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Fluoranthene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Isodrin	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Chlorobenzilate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Pyrene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Benzo(a)anthracene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Chrysene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Kepone	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
3,3'-Dichlorobenzidine	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
2-Acetylaminofluorene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Benzo(b)Fluoranthene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
3-Methylcholanthrene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: 2-Fluorophenol	65.7	Limit: 10-149	% Rec	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: Phenol-d6	66.3	Limit: 10-143	% Rec	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: Nitrobenzene-d5	70.3	Limit: 20-149	% Rec	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: 2-Fluorobiphenyl	70.0	Limit: 11-146	% Rec	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: 2,4,6-Tribromophenol	84.5	Limit: 10-153	% Rec	1		03/17/25 1417	03/24/25 1955	EPP
Surrogate: Terphenyl-dl4	73.5	Limit: 27-155	% Rec	1		03/17/25 1417	03/24/25 1955	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Thionazin	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Phorate	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Dimethoate	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Disulfoton	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Parathion	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Famphur	<0.4	0.4	ug/L	1		03/17/25 1427	03/24/25 1701	EPP
Surrogate: 2-Nitro-m-xylene	67.2	Limit: 15-154	% Rec	1		03/17/25 1427	03/24/25 1701	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		03/14/25 1557	03/21/25 1754	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		03/14/25 1557	03/21/25 1754	EPP
2,4,5-T	<0.5	0.5	ug/L	1		03/14/25 1557	03/21/25 1754	EPP
Dinoseb	<0.5	0.5	ug/L	1		03/14/25 1557	03/21/25 1754	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	111	Limit: 36-159	% Rec	1		03/14/25 1557	03/21/25 1754	EPP

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Beta-BHC	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Heptachlor	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-38
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-13

Collected By: Whipple, Todd
Collection Date: 03/10/2025 11:42

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Delta-BHC	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Aldrin	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Endosulfan I	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
4,4'-DDE	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Dieldrin	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Endrin	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
4,4'-DDD	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Endosulfan II	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
4,4'-DDT	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Methoxychlor	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Chlordane	<0.10	0.10	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Toxaphene	<0.20	0.20	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		03/17/25 1421	03/21/25 1243	EPP
Surrogate: Tetrachloro-m-xylene	81.9	Limit: 40-116	% Rec	1		03/17/25 1421	03/21/25 1243	EPP

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		03/17/25 1424	03/21/25 1243	EPP
Surrogate: Tetrachloro-m-xylene	81.9	Limit: 37-120	% Rec	1		03/17/25 1424	03/21/25 1243	EPP
Surrogate: Decachlorobiphenyl	61.7	Limit: 22-116	% Rec	1		03/17/25 1424	03/21/25 1243	EPP

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 376.2								
Sulfide, total	<0.10	0.10	mg/L	1			03/17/25 0928	AKK
EPA 9014								
Cyanide, total	<0.010	0.010	mg/L	1		03/12/25 0748	03/14/25 0853	CES

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Arsenic, total	0.0108	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Barium, total	0.0206	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV

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CERTIFICATE OF ANALYSIS

1IC0696

Client Sample ID:	MW-38	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	03/10/2025 11:42
Lab Sample ID:	1IC0696-13		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Cobalt, total	0.0044	0.0004	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Nickel, total	0.0063	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Tin, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0035	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1		03/20/25 1533	03/21/25 1320	JAR

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-34
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-14

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D								
Chloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Bromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Chloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Acetone	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Chloroform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Benzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Dibromomethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Toluene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Xylenes, total	<2.0	2.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Styrene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Bromoform	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF

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CERTIFICATE OF ANALYSIS

11C0696

Client Sample ID: MW-34
Sample Matrix: Aqueous
Lab Sample ID: 11C0696-14

Collected By: Whipple, Todd
Collection Date: 03/10/2025 10:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: Dibromofluoromethane	89.9	Limit: 75-136	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: Dibromofluoromethane	89.9	Limit: 57-134	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: 1,2-Dichloroethane-d4	87.3	Limit: 53-140	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: 1,2-Dichloroethane-d4	87.3	Limit: 61-142	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: Toluene-d8	105	Limit: 86-114	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: Toluene-d8	105	Limit: 82-121	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: 4-Bromofluorobenzene	97.5	Limit: 78-121	% Rec	1		03/17/25 0000	03/18/25 0112	BDF
Surrogate: 4-Bromofluorobenzene	97.5	Limit: 80-116	% Rec	1		03/17/25 0000	03/18/25 0112	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Barium, total	0.0611	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Cobalt, total	0.0004	0.0004	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Copper, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Lead, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Silver, total	<0.0040	0.0040	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0041	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/12/25 1403	03/14/25 0041	RVV

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CERTIFICATE OF ANALYSIS

1IC0696

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 9014	1IC0503	1IC0503-MSD1	1IC0696-13
		1IC0503-MS1	1IC0696-13
		1IC0503-BS1	
		1IC0503-BLK1	
		1IC0696-13	MW-38
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IC0555	1IC0555-BLK1	
		1IC0555-BS1	
		1IC0696-01	MW-33
		1IC0555-MS1	1IC0696-01
		1IC0555-MSD1	1IC0696-01
		1IC0555-PS1	1IC0696-01
		1IC0696-02	MW-23 (B)
		1IC0696-03	MW-27 (B)
		1IC0696-04	MW-21
		1IC0696-05	MW-31
		1IC0696-06	MW-28 (B)
		1IC0696-07	MW-29 (B)
		1IC0696-09	MW-37
		1IC0696-10	MW-22
		1IC0696-12	Field Duplicate
		1IC0696-13	MW-38
		1IC0696-14	MW-34
EPA 8151A	1IC0735	1IC0696-08	MW-36 (B)
		1IC0696-11	MW-32
Method	Batch	Laboratory ID	Client / Source ID
EPA 8151A	1IC0735	1IC0735-BLK1	
		1IC0696-13	MW-38
		1IC0735-BS1	
		1IC0735-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1IC0760	1IC0696-13	MW-38
		1IC0760-BLK1	
		1IC0696-01	MW-33
		1IC0760-BS1	
		1IC0760-MSD1	1IC0696-01
EPA 376.2	1IC0760	1IC0760-MS1	1IC0696-01

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CERTIFICATE OF ANALYSIS

1IC0696

Method	Batch	Laboratory ID	Client / Source ID
EPA 8081	1IC0789	1IC0789-BLK1	MW-38
		1IC0789-BS1	
		1IC0789-BSD1	
		1IC0696-13	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8082	1IC0790	1IC0790-BLK1	MW-38
		1IC0790-BS1	
		1IC0790-BSD1	
		1IC0696-13	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1IC0791	1IC0791-BLK1	MW-38
		1IC0791-BS1	
		1IC0791-BSD1	
		1IC0791-SRM1	
		1IC0696-13	MW-38
Method	Batch	Laboratory ID	Client / Source ID
EPA 8141	1IC0795	1IC0795-BLK1	MW-38
		1IC0696-13	
		1IC0795-BS1	
		1IC0795-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IC0807	1IC0807-BS1	
		1IC0807-BLK1	
		1IC0696-01	
		1IC0696-02	
		1IC0696-03	
		1IC0696-04	
		1IC0696-05	
		1IC0696-06	
		1IC0696-07	
		1IC0696-08	
		1IC0696-09	
		1IC0696-10	
		1IC0696-11	
		1IC0696-13	
		1IC0696-14	
		1IC0807-MS1	
		1IC0807-MSD1	

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CERTIFICATE OF ANALYSIS

1IC0696

EPA 8260D	1IC0807	1IC0807-BS2	
		1IC0807-BSD2	
		1IC0807-MS2	1IC0854-15
		1IC0807-MSD2	1IC0854-15
		1IC0807-BLK2	

Method	Batch	Laboratory ID	Client / Source ID
EPA 7470A	1IC1059	1IC1059-BLK1	
		1IC1059-BS1	
		1IC1059-MS1	1IC0688-01
		1IC1059-MSD1	1IC0688-01
		1IC0696-13	MW-38

Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1IC1088	1IC1088-BS1	
		1IC1088-BLK1	
		1IC0696-13	MW-38
		1IC1088-MS1	1IC0851-01
		1IC1088-MSD1	1IC0851-01
		1IC1088-BLK2	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IC1200	1IC1200-BS1	
		1IC1200-BSD1	
		1IC1200-BLK1	
		1IC0696-13	MW-38
		1IC1200-MS1	1IC0851-21
		1IC1200-MSD1	1IC0851-21

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21						
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Blank (11C0807-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21						
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<2.0	2.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Acetonitrile	<10.0	10.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21						
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 20:21						
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	43.6		ug/L	50.2		86.8	57-134			
Surrogate: Dibromofluoromethane	43.6		ug/L	50.2		86.8	57-134			
Surrogate: Dibromofluoromethane	43.6		ug/L	50.2		86.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	41.0		ug/L	50.1		81.8	61-142			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	86-114			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	86-114			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	86-114			
Surrogate: Toluene-d8	51.8		ug/L	50.4		103	82-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	80-116			
Blank (1IC0807-BLK2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10						
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<2.0	2.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Acetonitrile	<10.0	10.0	ug/L							

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10						
Methylene Chloride	<5.0	5.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Blank (1IC0807-BLK2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10						
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	39.5		ug/L	50.2		78.7	57-134			
Surrogate: Dibromofluoromethane	39.5		ug/L	50.2		78.7	57-134			
Surrogate: Dibromofluoromethane	39.5		ug/L	50.2		78.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	37.2		ug/L	50.1		74.2	53-140			

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Blank (11C0807-BLK2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 07:10						
Surrogate: 1,2-Dichloroethane-d4	37.2		ug/L	50.1		74.2	53-140			
Surrogate: 1,2-Dichloroethane-d4	37.2		ug/L	50.1		74.2	53-140			
Surrogate: 1,2-Dichloroethane-d4	37.2		ug/L	50.1		74.2	61-142			
Surrogate: Toluene-d8	52.7		ug/L	50.4		105	86-114			
Surrogate: Toluene-d8	52.7		ug/L	50.4		105	86-114			
Surrogate: Toluene-d8	52.7		ug/L	50.4		105	86-114			
Surrogate: Toluene-d8	52.7		ug/L	50.4		105	82-121			
Surrogate: 4-Bromofluorobenzene	49.5		ug/L	50.1		98.7	78-121			
Surrogate: 4-Bromofluorobenzene	49.5		ug/L	50.1		98.7	78-121			
Surrogate: 4-Bromofluorobenzene	49.5		ug/L	50.1		98.7	78-121			
Surrogate: 4-Bromofluorobenzene	49.5		ug/L	50.1		98.7	80-116			
LCS (11C0807-BS1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01						
Dichlorodifluoromethane	27.37	1.0	ug/L	30.3		90.4	49-138			
Chloromethane	31.99	1.0	ug/L	30.3		106	60-141			
Chloromethane	31.99	1.0	ug/L	30.3		106	63-155			
Vinyl Chloride	30.87	1.0	ug/L	30.2		102	65-137			
Vinyl Chloride	30.87	1.0	ug/L	30.2		102	70-154			
Bromomethane	28.22	1.0	ug/L	30.1		93.7	47-173			
Bromomethane	28.22	1.0	ug/L	30.1		93.7	52-176			
Chloroethane	31.66	1.0	ug/L	30.3		104	67-145			
Chloroethane	31.66	1.0	ug/L	30.3		104	72-148			
Trichlorofluoromethane	29.32	1.0	ug/L	30.3		96.7	63-127			
Trichlorofluoromethane	29.32	1.0	ug/L	30.3		96.7	70-152			
Acrolein	87.00	10.0	ug/L	50.4		173	21-142			Q2
1,1-Dichloroethylene	56.32	1.0	ug/L	50.1		112	69-136			
1,1-Dichloroethylene	56.32	1.0	ug/L	50.1		112	70-148			
Acetone	130.6	10.0	ug/L	100		131	45-153			
Acetone	130.6	10.0	ug/L	100		131	43-172			
Methyl Iodide	105.7	2.0	ug/L	100		106	58-156			
Methyl Iodide	105.7	1.0	ug/L	100		106	69-170			
Carbon Disulfide	103.6	1.0	ug/L	100		104	68-128			
Carbon Disulfide	103.6	1.0	ug/L	100		104	72-162			
Acetonitrile	129.7	10.0	ug/L	100		130	35-177			
Methylene Chloride	52.46	5.0	ug/L	50.1		105	65-124			
Methylene Chloride	52.46	5.0	ug/L	50.1		105	68-142			
Acrylonitrile	128.1	5.0	ug/L	50.2		255	56-135			Q4
Acrylonitrile	128.1	5.0	ug/L	50.2		255	56-135			Q2
trans-1,2-Dichloroethylene	56.56	1.0	ug/L	50.1		113	74-126			
trans-1,2-Dichloroethylene	56.56	1.0	ug/L	50.1		113	66-148			
1,1-Dichloroethane	56.01	1.0	ug/L	50.1		112	73-122			
1,1-Dichloroethane	56.01	1.0	ug/L	50.1		112	66-143			
Vinyl Acetate	182.9	5.0	ug/L	140		131	24-171			
Vinyl Acetate	182.9	5.0	ug/L	140		131	43-153			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS (1IC0807-BS1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01						
2,2-Dichloropropane	55.82	1.0	ug/L	50.3		111	68-120			
cis-1,2-Dichloroethylene	56.29	1.0	ug/L	50.4		112	65-149			
cis-1,2-Dichloroethylene	56.29	1.0	ug/L	50.4		112	71-149			
2-Butanone (MEK)	108.2	5.0	ug/L	100		108	57-147			
2-Butanone (MEK)	108.2	10.0	ug/L	100		108	52-159			
Bromochloromethane	57.54	1.0	ug/L	50.4		114	76-125			
Bromochloromethane	57.54	1.0	ug/L	50.4		114	69-143			
Chloroform	55.06	1.0	ug/L	50.1		110	71-125			
Chloroform	55.06	1.0	ug/L	50.1		110	69-144			
1,1,1-Trichloroethane	55.17	1.0	ug/L	50.1		110	66-118			
1,1,1-Trichloroethane	55.17	1.0	ug/L	50.1		110	62-129			
1,1-Dichloropropene	54.00	1.0	ug/L	50.5		107	69-130			
Carbon Tetrachloride	55.05	1.0	ug/L	50.1		110	68-126			
Carbon Tetrachloride	55.05	1.0	ug/L	50.1		110	63-141			
Benzene	49.00	1.0	ug/L	50.4		97.2	81-123			
Benzene	49.00	1.0	ug/L	50.4		97.2	71-134			
1,2-Dichloroethane	55.01	1.0	ug/L	50.1		110	70-130			
1,2-Dichloroethane	55.01	1.0	ug/L	50.1		110	72-132			
Trichloroethylene	50.10	1.0	ug/L	50.1		100	84-118			
Trichloroethylene	50.10	1.0	ug/L	50.1		100	71-135			
1,2-Dichloropropane	51.79	1.0	ug/L	50.1		103	87-118			
1,2-Dichloropropane	51.79	1.0	ug/L	50.1		103	69-136			
Dibromomethane	55.44	1.0	ug/L	50.4		110	82-126			
Dibromomethane	55.44	1.0	ug/L	50.4		110	73-147			
Bromodichloromethane	54.46	1.0	ug/L	50.1		109	80-116			
Bromodichloromethane	54.46	1.0	ug/L	50.1		109	68-129			
cis-1,3-Dichloropropene	54.03	1.0	ug/L	50.1		108	83-116			
cis-1,3-Dichloropropene	54.03	1.0	ug/L	50.1		108	65-134			
4-Methyl-2-pentanone (MIBK)	112.0	5.0	ug/L	100		112	74-138			
4-Methyl-2-pentanone (MIBK)	112.0	5.0	ug/L	100		112	58-147			
Toluene	52.24	1.0	ug/L	50.5		103	78-123			
Toluene	52.24	1.0	ug/L	50.5		103	72-133			
trans-1,3-Dichloropropene	54.08	1.0	ug/L	50.1		108	75-120			
trans-1,3-Dichloropropene	54.08	1.0	ug/L	50.1		108	67-130			
Ethyl Methacrylate	110.9	10.0	ug/L	100		111	77-129			
1,1,2-Trichloroethane	51.16	1.0	ug/L	50.1		102	81-121			
1,1,2-Trichloroethane	51.16	1.0	ug/L	50.1		102	69-135			
Tetrachloroethylene	48.66	1.0	ug/L	50.1		97.1	76-120			
Tetrachloroethylene	48.66	1.0	ug/L	50.1		97.1	69-130			
1,3-Dichloropropane	59.73	1.0	ug/L	50.4		118	86-131			
2-Hexanone (MBK)	121.3	5.0	ug/L	100		121	76-139			
2-Hexanone (MBK)	121.3	5.0	ug/L	100		121	55-144			
Dibromochloromethane	55.26	1.0	ug/L	50.1		110	83-123			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS (1IC0807-BS1)				Prepared: 03/17/25 00:00 Analyzed: 03/17/25 19:01						
Dibromochloromethane	55.26	1.0	ug/L	50.1		110	73-127			
1,2-Dibromoethane	55.88	1.0	ug/L	50.2		111	86-115			
1,2-Dibromoethane	55.88	1.0	ug/L	50.2		111	67-132			
Chlorobenzene	48.27	1.0	ug/L	50.1		96.4	82-117			
Chlorobenzene	48.27	1.0	ug/L	50.1		96.4	72-123			
1,1,1,2-Tetrachloroethane	50.14	1.0	ug/L	50.3		99.6	86-119			
1,1,1,2-Tetrachloroethane	50.14	1.0	ug/L	50.3		99.6	73-127			
Ethylbenzene	51.97	1.0	ug/L	50.2		104	80-122			
Ethylbenzene	51.97	1.0	ug/L	50.2		104	71-127			
Xylenes, total	160.4	2.0	ug/L	151		106	81-122			
Xylenes, total	160.4	2.0	ug/L	151		106	74-127			
Styrene	55.39	1.0	ug/L	50.4		110	85-118			
Styrene	55.39	1.0	ug/L	50.4		110	66-126			
Bromoform	55.24	1.0	ug/L	50.1		110	80-123			
Bromoform	55.24	1.0	ug/L	50.1		110	68-130			
1,2,3-Trichloropropane	49.38	1.0	ug/L	50.3		98.1	83-126			
1,2,3-Trichloropropane	49.38	1.0	ug/L	50.3		98.1	63-136			
trans-1,4-Dichloro-2-butene	110.5	5.0	ug/L	100		111	67-118			
trans-1,4-Dichloro-2-butene	110.5	5.0	ug/L	100		111	54-134			
1,1,2,2-Tetrachloroethane	51.21	1.0	ug/L	50.1		102	81-124			
1,1,2,2-Tetrachloroethane	51.21	1.0	ug/L	50.1		102	61-131			
1,3-Dichlorobenzene	53.00	1.0	ug/L	50.1		106	83-114			
1,4-Dichlorobenzene	49.20	1.0	ug/L	50.1		98.2	83-117			
1,4-Dichlorobenzene	49.20	1.0	ug/L	50.1		98.2	70-129			
1,2-Dichlorobenzene	54.00	1.0	ug/L	50.1		108	83-116			
1,2-Dichlorobenzene	54.00	1.0	ug/L	50.1		108	69-126			
1,2-Dibromo-3-chloropropane	59.61	1.0	ug/L	50.1		119	77-128			
1,2-Dibromo-3-chloropropane	59.61	5.0	ug/L	50.1		119	50-143			
1,2,4-Trichlorobenzene	69.15	1.0	ug/L	50.4		137	66-134			Q2
Surrogate: Dibromofluoromethane	55.3		ug/L	50.2		110	57-134			
Surrogate: Dibromofluoromethane	55.3		ug/L	50.2		110	57-134			
Surrogate: Dibromofluoromethane	55.3		ug/L	50.2		110	75-136			
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.2		ug/L	50.1		110	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	78-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	78-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	78-121			
Surrogate: 4-Bromofluorobenzene	53.0		ug/L	50.1		106	80-116			

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS (11C0807-BS2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:19						
Dichlorodifluoromethane	34.61	1.0	ug/L	30.3		114	49-138			
Chloromethane	32.41	1.0	ug/L	30.3		107	60-141			
Chloromethane	32.41	1.0	ug/L	30.3		107	63-155			
Vinyl Chloride	32.87	1.0	ug/L	30.2		109	65-137			
Vinyl Chloride	32.87	1.0	ug/L	30.2		109	70-154			
Bromomethane	30.60	1.0	ug/L	30.1		102	47-173			
Bromomethane	30.60	1.0	ug/L	30.1		102	52-176			
Chloroethane	31.37	1.0	ug/L	30.3		103	67-145			
Chloroethane	31.37	1.0	ug/L	30.3		103	72-148			
Trichlorofluoromethane	33.69	1.0	ug/L	30.3		111	63-127			
Trichlorofluoromethane	33.69	1.0	ug/L	30.3		111	70-152			
Acrolein	59.50	10.0	ug/L	50.4		118	21-142			
1,1-Dichloroethylene	56.66	1.0	ug/L	50.1		113	69-136			
1,1-Dichloroethylene	56.66	1.0	ug/L	50.1		113	70-148			
Acetone	132.7	10.0	ug/L	100		133	45-153			
Acetone	132.7	10.0	ug/L	100		133	43-172			
Methyl Iodide	100.7	2.0	ug/L	100		101	58-156			
Methyl Iodide	100.7	1.0	ug/L	100		101	69-170			
Carbon Disulfide	103.5	1.0	ug/L	100		104	68-128			
Carbon Disulfide	103.5	1.0	ug/L	100		104	72-162			
Acetonitrile	125.2	10.0	ug/L	100		125	35-177			
Methylene Chloride	49.57	5.0	ug/L	50.1		98.9	65-124			
Methylene Chloride	49.57	5.0	ug/L	50.1		98.9	68-142			
Acrylonitrile	57.03	5.0	ug/L	50.2		114	56-135			
Acrylonitrile	57.03	5.0	ug/L	50.2		114	56-135			
trans-1,2-Dichloroethylene	56.18	1.0	ug/L	50.1		112	74-126			
trans-1,2-Dichloroethylene	56.18	1.0	ug/L	50.1		112	66-148			
1,1-Dichloroethane	56.08	1.0	ug/L	50.1		112	73-122			
1,1-Dichloroethane	56.08	1.0	ug/L	50.1		112	66-143			
Vinyl Acetate	172.8	5.0	ug/L	140		123	24-171			
Vinyl Acetate	172.8	5.0	ug/L	140		123	43-153			
2,2-Dichloropropane	42.68	1.0	ug/L	50.3		84.8	68-120			
cis-1,2-Dichloroethylene	56.61	1.0	ug/L	50.4		112	65-149			
cis-1,2-Dichloroethylene	56.61	1.0	ug/L	50.4		112	71-149			
2-Butanone (MEK)	111.6	5.0	ug/L	100		112	57-147			
2-Butanone (MEK)	111.6	10.0	ug/L	100		112	52-159			
Bromochloromethane	56.23	1.0	ug/L	50.4		112	76-125			
Bromochloromethane	56.23	1.0	ug/L	50.4		112	69-143			
Chloroform	56.17	1.0	ug/L	50.1		112	71-125			
Chloroform	56.17	1.0	ug/L	50.1		112	69-144			
1,1,1-Trichloroethane	56.43	1.0	ug/L	50.1		113	66-118			
1,1,1-Trichloroethane	56.43	1.0	ug/L	50.1		113	62-129			
1,1-Dichloropropene	57.72	1.0	ug/L	50.5		114	69-130			

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS (11C0807-BS2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:19						
Carbon Tetrachloride	55.95	1.0	ug/L	50.1		112	68-126			
Carbon Tetrachloride	55.95	1.0	ug/L	50.1		112	63-141			
Benzene	50.09	1.0	ug/L	50.4		99.3	81-123			
Benzene	50.09	1.0	ug/L	50.4		99.3	71-134			
1,2-Dichloroethane	53.51	1.0	ug/L	50.1		107	70-130			
1,2-Dichloroethane	53.51	1.0	ug/L	50.1		107	72-132			
Trichloroethylene	51.60	1.0	ug/L	50.1		103	84-118			
Trichloroethylene	51.60	1.0	ug/L	50.1		103	71-135			
1,2-Dichloropropane	52.02	1.0	ug/L	50.1		104	87-118			
1,2-Dichloropropane	52.02	1.0	ug/L	50.1		104	69-136			
Dibromomethane	54.39	1.0	ug/L	50.4		108	82-126			
Dibromomethane	54.39	1.0	ug/L	50.4		108	73-147			
Bromodichloromethane	54.07	1.0	ug/L	50.1		108	80-116			
Bromodichloromethane	54.07	1.0	ug/L	50.1		108	68-129			
cis-1,3-Dichloropropene	51.63	1.0	ug/L	50.1		103	83-116			
cis-1,3-Dichloropropene	51.63	1.0	ug/L	50.1		103	65-134			
4-Methyl-2-pentanone (MIBK)	112.6	5.0	ug/L	100		113	74-138			
4-Methyl-2-pentanone (MIBK)	112.6	5.0	ug/L	100		113	58-147			
Toluene	53.33	1.0	ug/L	50.5		106	78-123			
Toluene	53.33	1.0	ug/L	50.5		106	72-133			
trans-1,3-Dichloropropene	50.10	1.0	ug/L	50.1		100	75-120			
trans-1,3-Dichloropropene	50.10	1.0	ug/L	50.1		100	67-130			
Ethyl Methacrylate	107.8	10.0	ug/L	100		108	77-129			
1,1,2-Trichloroethane	52.01	1.0	ug/L	50.1		104	81-121			
1,1,2-Trichloroethane	52.01	1.0	ug/L	50.1		104	69-135			
Tetrachloroethylene	49.42	1.0	ug/L	50.1		98.6	76-120			
Tetrachloroethylene	49.42	1.0	ug/L	50.1		98.6	69-130			
1,3-Dichloropropane	53.38	1.0	ug/L	50.4		106	86-131			
2-Hexanone (MBK)	114.2	5.0	ug/L	100		114	76-139			
2-Hexanone (MBK)	114.2	5.0	ug/L	100		114	55-144			
Dibromochloromethane	55.13	1.0	ug/L	50.1		110	83-123			
Dibromochloromethane	55.13	1.0	ug/L	50.1		110	73-127			
1,2-Dibromoethane	53.91	1.0	ug/L	50.2		107	86-115			
1,2-Dibromoethane	53.91	1.0	ug/L	50.2		107	67-132			
Chlorobenzene	49.01	1.0	ug/L	50.1		97.9	82-117			
Chlorobenzene	49.01	1.0	ug/L	50.1		97.9	72-123			
1,1,1,2-Tetrachloroethane	48.88	1.0	ug/L	50.3		97.1	86-119			
1,1,1,2-Tetrachloroethane	48.88	1.0	ug/L	50.3		97.1	73-127			
Ethylbenzene	52.41	1.0	ug/L	50.2		104	80-122			
Ethylbenzene	52.41	1.0	ug/L	50.2		104	71-127			
Xylenes, total	158.3	2.0	ug/L	151		105	81-122			
Xylenes, total	158.3	2.0	ug/L	151		105	74-127			
Styrene	54.76	1.0	ug/L	50.4		109	85-118			

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS (11C0807-BS2)										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:19										
Styrene	54.76	1.0	ug/L	50.4		109	66-126			
Bromoform	56.81	1.0	ug/L	50.1		113	80-123			
Bromoform	56.81	1.0	ug/L	50.1		113	68-130			
1,2,3-Trichloropropane	50.18	1.0	ug/L	50.3		99.7	83-126			
1,2,3-Trichloropropane	50.18	1.0	ug/L	50.3		99.7	63-136			
trans-1,4-Dichloro-2-butene	96.39	5.0	ug/L	100		96.4	67-118			
trans-1,4-Dichloro-2-butene	96.39	5.0	ug/L	100		96.4	54-134			
1,1,2,2-Tetrachloroethane	49.19	1.0	ug/L	50.1		98.2	81-124			
1,1,2,2-Tetrachloroethane	49.19	1.0	ug/L	50.1		98.2	61-131			
1,3-Dichlorobenzene	50.62	1.0	ug/L	50.1		101	83-114			
1,4-Dichlorobenzene	47.98	1.0	ug/L	50.1		95.7	83-117			
1,4-Dichlorobenzene	47.98	1.0	ug/L	50.1		95.7	70-129			
1,2-Dichlorobenzene	51.40	1.0	ug/L	50.1		103	83-116			
1,2-Dichlorobenzene	51.40	1.0	ug/L	50.1		103	69-126			
1,2-Dibromo-3-chloropropane	56.43	1.0	ug/L	50.1		113	77-128			
1,2-Dibromo-3-chloropropane	56.43	5.0	ug/L	50.1		113	50-143			
1,2,4-Trichlorobenzene	61.34	1.0	ug/L	50.4		122	66-134			
Surrogate: Dibromofluoromethane	56.0		ug/L	50.2		112	57-134			
Surrogate: Dibromofluoromethane	56.0		ug/L	50.2		112	57-134			
Surrogate: Dibromofluoromethane	56.0		ug/L	50.2		112	75-136			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/L	50.1		111	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	86-114			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	82-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	78-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	78-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	78-121			
Surrogate: 4-Bromofluorobenzene	52.2		ug/L	50.1		104	80-116			
LCS Dup (11C0807-BS2)										
Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41										
Dichlorodifluoromethane	31.52	1.0	ug/L	30.3		104	49-138	9.35	22	
Chloromethane	30.24	1.0	ug/L	30.3		99.7	60-141	6.93	30	
Chloromethane	30.24	1.0	ug/L	30.3		99.7	63-155	6.93	24	
Vinyl Chloride	30.29	1.0	ug/L	30.2		100	65-137	8.17	20	
Vinyl Chloride	30.29	1.0	ug/L	30.2		100	70-154	8.17	25	
Bromomethane	29.35	1.0	ug/L	30.1		97.4	47-173	4.17	17	
Bromomethane	29.35	1.0	ug/L	30.1		97.4	52-176	4.17	27	
Chloroethane	29.21	1.0	ug/L	30.3		96.3	67-145	7.13	30	
Chloroethane	29.21	1.0	ug/L	30.3		96.3	72-148	7.13	25	
Trichlorofluoromethane	31.08	1.0	ug/L	30.3		103	63-127	8.06	15	
Trichlorofluoromethane	31.08	1.0	ug/L	30.3		103	70-152	8.06	26	

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS Dup (11C0807-BSD2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41						
Acrolein	57.54	10.0	ug/L	50.4		114	21-142	3.35	18	
1,1-Dichloroethylene	53.21	1.0	ug/L	50.1		106	69-136	6.28	30	
1,1-Dichloroethylene	53.21	1.0	ug/L	50.1		106	70-148	6.28	24	
Acetone	128.2	10.0	ug/L	100		128	45-153	3.43	23	
Acetone	128.2	10.0	ug/L	100		128	43-172	3.43	30	
Methyl Iodide	95.17	2.0	ug/L	100		95.2	58-156	5.65	17	
Methyl Iodide	95.17	1.0	ug/L	100		95.2	69-170	5.65	30	
Carbon Disulfide	97.35	1.0	ug/L	100		97.4	68-128	6.13	30	
Carbon Disulfide	97.35	1.0	ug/L	100		97.4	72-162	6.13	24	
Acetonitrile	121.2	10.0	ug/L	100		121	35-177	3.20	30	
Methylene Chloride	47.40	5.0	ug/L	50.1		94.6	65-124	4.48	30	
Methylene Chloride	47.40	5.0	ug/L	50.1		94.6	68-142	4.48	21	
Acrylonitrile	55.77	5.0	ug/L	50.2		111	56-135	2.23	16	
Acrylonitrile	55.77	5.0	ug/L	50.2		111	56-135	2.23	16	
trans-1,2-Dichloroethylene	53.13	1.0	ug/L	50.1		106	74-126	5.58	30	
trans-1,2-Dichloroethylene	53.13	1.0	ug/L	50.1		106	66-148	5.58	27	
1,1-Dichloroethane	53.13	1.0	ug/L	50.1		106	73-122	5.40	30	
1,1-Dichloroethane	53.13	1.0	ug/L	50.1		106	66-143	5.40	24	
Vinyl Acetate	170.5	5.0	ug/L	140		122	24-171	1.36	30	
Vinyl Acetate	170.5	5.0	ug/L	140		122	43-153	1.36	30	
2,2-Dichloropropane	39.68	1.0	ug/L	50.3		78.8	68-120	7.29	14	
cis-1,2-Dichloroethylene	53.57	1.0	ug/L	50.4		106	65-149	5.52	30	
cis-1,2-Dichloroethylene	53.57	1.0	ug/L	50.4		106	71-149	5.52	26	
2-Butanone (MEK)	104.5	5.0	ug/L	100		105	57-147	6.53	18	
2-Butanone (MEK)	104.5	10.0	ug/L	100		105	52-159	6.53	27	
Bromochloromethane	55.07	1.0	ug/L	50.4		109	76-125	2.08	30	
Bromochloromethane	55.07	1.0	ug/L	50.4		109	69-143	2.08	23	
Chloroform	52.62	1.0	ug/L	50.1		105	71-125	6.53	30	
Chloroform	52.62	1.0	ug/L	50.1		105	69-144	6.53	23	
1,1,1-Trichloroethane	53.00	1.0	ug/L	50.1		106	66-118	6.27	30	
1,1,1-Trichloroethane	53.00	1.0	ug/L	50.1		106	62-129	6.27	24	
1,1-Dichloropropene	53.92	1.0	ug/L	50.5		107	69-130	6.81	30	
Carbon Tetrachloride	52.13	1.0	ug/L	50.1		104	68-126	7.07	13	
Carbon Tetrachloride	52.13	1.0	ug/L	50.1		104	63-141	7.07	25	
Benzene	48.15	1.0	ug/L	50.4		95.5	81-123	3.95	30	
Benzene	48.15	1.0	ug/L	50.4		95.5	71-134	3.95	24	
1,2-Dichloroethane	52.28	1.0	ug/L	50.1		104	70-130	2.33	30	
1,2-Dichloroethane	52.28	1.0	ug/L	50.1		104	72-132	2.33	24	
Trichloroethylene	47.77	1.0	ug/L	50.1		95.4	84-118	7.71	30	
Trichloroethylene	47.77	1.0	ug/L	50.1		95.4	71-135	7.71	24	
1,2-Dichloropropane	49.87	1.0	ug/L	50.1		99.6	87-118	4.22	30	
1,2-Dichloropropane	49.87	1.0	ug/L	50.1		99.6	69-136	4.22	24	
Dibromomethane	53.04	1.0	ug/L	50.4		105	82-126	2.51	30	

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
LCS Dup (1IC0807-BSD2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41						
Dibromomethane	53.04	1.0	ug/L	50.4		105	73-147	2.51	25	
Bromodichloromethane	52.72	1.0	ug/L	50.1		105	80-116	2.53	30	
Bromodichloromethane	52.72	1.0	ug/L	50.1		105	68-129	2.53	22	
cis-1,3-Dichloropropene	49.96	1.0	ug/L	50.1		99.8	83-116	3.29	30	
cis-1,3-Dichloropropene	49.96	1.0	ug/L	50.1		99.8	65-134	3.29	23	
4-Methyl-2-pentanone (MIBK)	112.4	5.0	ug/L	100		112	74-138	0.204	30	
4-Methyl-2-pentanone (MIBK)	112.4	5.0	ug/L	100		112	58-147	0.204	27	
Toluene	50.54	1.0	ug/L	50.5		100	78-123	5.37	30	
Toluene	50.54	1.0	ug/L	50.5		100	72-133	5.37	24	
trans-1,3-Dichloropropene	48.04	1.0	ug/L	50.1		95.9	75-120	4.20	30	
trans-1,3-Dichloropropene	48.04	1.0	ug/L	50.1		95.9	67-130	4.20	24	
Ethyl Methacrylate	106.5	10.0	ug/L	100		106	77-129	1.20	30	
1,1,2-Trichloroethane	50.12	1.0	ug/L	50.1		100	81-121	3.70	30	
1,1,2-Trichloroethane	50.12	1.0	ug/L	50.1		100	69-135	3.70	23	
Tetrachloroethylene	47.42	1.0	ug/L	50.1		94.7	76-120	4.13	30	
Tetrachloroethylene	47.42	1.0	ug/L	50.1		94.7	69-130	4.13	25	
1,3-Dichloropropane	52.54	1.0	ug/L	50.4		104	86-131	1.59	30	
2-Hexanone (MBK)	115.0	5.0	ug/L	100		115	76-139	0.733	15	
2-Hexanone (MBK)	115.0	5.0	ug/L	100		115	55-144	0.733	25	
Dibromochloromethane	52.89	1.0	ug/L	50.1		106	83-123	4.15	15	
Dibromochloromethane	52.89	1.0	ug/L	50.1		106	73-127	4.15	22	
1,2-Dibromoethane	53.48	1.0	ug/L	50.2		106	86-115	0.801	30	
1,2-Dibromoethane	53.48	1.0	ug/L	50.2		106	67-132	0.801	24	
Chlorobenzene	47.03	1.0	ug/L	50.1		93.9	82-117	4.12	30	
Chlorobenzene	47.03	1.0	ug/L	50.1		93.9	72-123	4.12	23	
1,1,1,2-Tetrachloroethane	47.80	1.0	ug/L	50.3		94.9	86-119	2.23	30	
1,1,1,2-Tetrachloroethane	47.80	1.0	ug/L	50.3		94.9	73-127	2.23	24	
Ethylbenzene	50.17	1.0	ug/L	50.2		100	80-122	4.37	30	
Ethylbenzene	50.17	1.0	ug/L	50.2		100	71-127	4.37	26	
Xylenes, total	151.9	2.0	ug/L	151		101	81-122	4.17	30	
Xylenes, total	151.9	2.0	ug/L	151		101	74-127	4.17	25	
Styrene	53.03	1.0	ug/L	50.4		105	85-118	3.21	30	
Styrene	53.03	1.0	ug/L	50.4		105	66-126	3.21	23	
Bromoform	53.13	1.0	ug/L	50.1		106	80-123	6.69	30	
Bromoform	53.13	1.0	ug/L	50.1		106	68-130	6.69	23	
1,2,3-Trichloropropane	49.89	1.0	ug/L	50.3		99.1	83-126	0.580	30	
1,2,3-Trichloropropane	49.89	1.0	ug/L	50.3		99.1	63-136	0.580	24	
trans-1,4-Dichloro-2-butene	93.88	5.0	ug/L	100		93.9	67-118	2.64	10	
trans-1,4-Dichloro-2-butene	93.88	5.0	ug/L	100		93.9	54-134	2.64	27	
1,1,2,2-Tetrachloroethane	49.88	1.0	ug/L	50.1		99.6	81-124	1.39	30	
1,1,2,2-Tetrachloroethane	49.88	1.0	ug/L	50.1		99.6	61-131	1.39	29	
1,3-Dichlorobenzene	49.34	1.0	ug/L	50.1		98.5	83-114	2.56	30	
1,4-Dichlorobenzene	46.49	1.0	ug/L	50.1		92.7	83-117	3.15	30	

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
LCS Dup (11C0807-BSD2)				Prepared: 03/17/25 00:00 Analyzed: 03/18/25 05:41						
1,4-Dichlorobenzene	46.49	1.0	ug/L	50.1		92.7	70-129	3.15	24	
1,2-Dichlorobenzene	49.89	1.0	ug/L	50.1		99.6	83-116	2.98	30	
1,2-Dichlorobenzene	49.89	1.0	ug/L	50.1		99.6	69-126	2.98	26	
1,2-Dibromo-3-chloropropane	55.27	1.0	ug/L	50.1		110	77-128	2.08	30	
1,2-Dibromo-3-chloropropane	55.27	5.0	ug/L	50.1		110	50-143	2.08	30	
1,2,4-Trichlorobenzene	56.38	1.0	ug/L	50.4		112	66-134	8.43	30	
Surrogate: Dibromofluoromethane	54.1		ug/L	50.2		108	57-134			
Surrogate: Dibromofluoromethane	54.1		ug/L	50.2		108	57-134			
Surrogate: Dibromofluoromethane	54.1		ug/L	50.2		108	75-136			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	54.7		ug/L	50.1		109	61-142			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	86-114			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	86-114			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	86-114			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	78-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	78-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	78-121			
Surrogate: 4-Bromofluorobenzene	51.8		ug/L	50.1		103	80-116			
Matrix Spike (11C0807-MS1)				Source: 11C0696-04	Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49					
Dichlorodifluoromethane	361.0	10.0	ug/L	303	ND	119	37-140			
Chloromethane	329.9	10.0	ug/L	303	ND	109	47-147			
Chloromethane	329.9	10.0	ug/L	303	ND	109	61-152			
Vinyl Chloride	342.5	10.0	ug/L	302	ND	113	55-142			
Vinyl Chloride	342.5	10.0	ug/L	302	ND	113	66-149			
Bromomethane	311.5	10.0	ug/L	301	ND	103	34-160			
Bromomethane	311.5	10.0	ug/L	301	ND	103	43-171			
Chloroethane	331.4	10.0	ug/L	303	ND	109	54-154			
Chloroethane	331.4	10.0	ug/L	303	ND	109	69-148			
Trichlorofluoromethane	350.6	10.0	ug/L	303	ND	116	49-131			
Trichlorofluoromethane	350.6	10.0	ug/L	303	ND	116	62-163			
Acrolein	603.3	100	ug/L	504	ND	120	22-138			
1,1-Dichloroethylene	583.7	10.0	ug/L	501	ND	116	57-143			
1,1-Dichloroethylene	583.7	10.0	ug/L	501	ND	116	70-148			
Acetone	2086	100	ug/L	1000	ND	209	27-173			M1
Acetone	2086	100	ug/L	1000	ND	209	45-173			M1
Methyl Iodide	1021	20.0	ug/L	1000	ND	102	39-157			
Methyl Iodide	1021	10.0	ug/L	1000	ND	102	62-167			
Carbon Disulfide	1071	10.0	ug/L	1000	ND	107	53-136			
Carbon Disulfide	1071	10.0	ug/L	1000	ND	107	71-163			
Acetonitrile	1292	100	ug/L	1000	ND	129	11-189			
Methylene Chloride	503.7	50.0	ug/L	501	ND	101	57-128			

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike (11C0807-MS1)	Source: 11C0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49						
Methylene Chloride	503.7	50.0	ug/L	501	ND	101	69-140			
Acrylonitrile	592.1	50.0	ug/L	502	ND	118	38-147			
Acrylonitrile	592.1	50.0	ug/L	502	ND	118	38-147			
trans-1,2-Dichloroethylene	565.4	10.0	ug/L	501	ND	113	61-135			
trans-1,2-Dichloroethylene	565.4	10.0	ug/L	501	ND	113	69-144			
1,1-Dichloroethane	569.7	10.0	ug/L	501	ND	114	60-131			
1,1-Dichloroethane	569.7	10.0	ug/L	501	ND	114	70-138			
Vinyl Acetate	1710	50.0	ug/L	1400	ND	122	24-163			
Vinyl Acetate	1710	50.0	ug/L	1400	ND	122	58-142			
2,2-Dichloropropane	445.4	10.0	ug/L	503	ND	88.5	37-112			
cis-1,2-Dichloroethylene	575.6	10.0	ug/L	504	ND	114	47-162			
cis-1,2-Dichloroethylene	575.6	10.0	ug/L	504	ND	114	68-151			
2-Butanone (MEK)	1091	50.0	ug/L	1000	ND	109	45-156			
2-Butanone (MEK)	1091	100	ug/L	1000	ND	109	50-160			
Bromochloromethane	575.2	10.0	ug/L	504	ND	114	55-132			
Bromochloromethane	575.2	10.0	ug/L	504	ND	114	65-143			
Chloroform	562.3	10.0	ug/L	501	ND	112	45-142			
Chloroform	562.3	10.0	ug/L	501	ND	112	71-143			
1,1,1-Trichloroethane	568.3	10.0	ug/L	501	ND	113	52-128			
1,1,1-Trichloroethane	568.3	10.0	ug/L	501	ND	113	63-133			
1,1-Dichloropropene	587.6	10.0	ug/L	505	ND	116	49-138			
Carbon Tetrachloride	569.5	10.0	ug/L	501	ND	114	56-132			
Carbon Tetrachloride	569.5	10.0	ug/L	501	ND	114	63-142			
Benzene	504.3	10.0	ug/L	504	ND	100	77-124			
Benzene	504.3	10.0	ug/L	504	ND	100	69-133			
1,2-Dichloroethane	530.4	10.0	ug/L	501	ND	106	67-130			
1,2-Dichloroethane	530.4	10.0	ug/L	501	ND	106	63-138			
Trichloroethylene	517.5	10.0	ug/L	501	ND	103	75-123			
Trichloroethylene	517.5	10.0	ug/L	501	ND	103	71-133			
1,2-Dichloropropane	514.7	10.0	ug/L	501	ND	103	75-126			
1,2-Dichloropropane	514.7	10.0	ug/L	501	ND	103	69-132			
Dibromomethane	549.4	10.0	ug/L	504	ND	109	72-131			
Dibromomethane	549.4	10.0	ug/L	504	ND	109	70-147			
Bromodichloromethane	537.5	10.0	ug/L	501	ND	107	70-123			
Bromodichloromethane	537.5	10.0	ug/L	501	ND	107	67-130			
cis-1,3-Dichloropropene	502.0	10.0	ug/L	501	ND	100	68-119			
cis-1,3-Dichloropropene	502.0	10.0	ug/L	501	ND	100	61-126			
4-Methyl-2-pentanone (MIBK)	1126	50.0	ug/L	1000	ND	113	57-153			
4-Methyl-2-pentanone (MIBK)	1126	50.0	ug/L	1000	ND	113	55-147			
Toluene	542.8	10.0	ug/L	505	ND	108	63-131			
Toluene	542.8	10.0	ug/L	505	ND	108	71-133			
trans-1,3-Dichloropropene	477.5	10.0	ug/L	501	ND	95.4	65-121			
trans-1,3-Dichloropropene	477.5	10.0	ug/L	501	ND	95.4	63-124			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0807-MS1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49						
Ethyl Methacrylate	1070	100	ug/L	1000	ND	107	62-137			
1,1,2-Trichloroethane	533.4	10.0	ug/L	501	ND	106	76-124			
1,1,2-Trichloroethane	533.4	10.0	ug/L	501	ND	106	69-133			
Tetrachloroethylene	498.5	10.0	ug/L	501	ND	99.5	77-117			
Tetrachloroethylene	498.5	10.0	ug/L	501	ND	99.5	70-124			
1,3-Dichloropropane	546.4	10.0	ug/L	504	ND	108	81-132			
2-Hexanone (MBK)	1154	50.0	ug/L	1000	ND	115	63-152			
2-Hexanone (MBK)	1154	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	543.7	10.0	ug/L	501	ND	109	77-124			
Dibromochloromethane	543.7	10.0	ug/L	501	ND	109	74-122			
1,2-Dibromoethane	543.0	10.0	ug/L	502	ND	108	82-117			
1,2-Dibromoethane	543.0	10.0	ug/L	502	ND	108	66-127			
Chlorobenzene	491.2	10.0	ug/L	501	ND	98.1	82-114			
Chlorobenzene	491.2	10.0	ug/L	501	ND	98.1	76-116			
1,1,1,2-Tetrachloroethane	503.0	10.0	ug/L	503	ND	99.9	82-118			
1,1,1,2-Tetrachloroethane	503.0	10.0	ug/L	503	ND	99.9	77-121			
Ethylbenzene	530.2	10.0	ug/L	502	ND	106	80-119			
Ethylbenzene	530.2	10.0	ug/L	502	ND	106	73-124			
Xylenes, total	1615	20.0	ug/L	1510	ND	107	81-119			
Xylenes, total	1615	20.0	ug/L	1510	ND	107	75-123			
Styrene	550.2	10.0	ug/L	504	ND	109	81-119			
Styrene	550.2	10.0	ug/L	504	ND	109	70-120			
Bromoform	530.5	10.0	ug/L	501	ND	106	74-122			
Bromoform	530.5	10.0	ug/L	501	ND	106	70-124			
1,2,3-Trichloropropane	527.4	10.0	ug/L	503	ND	105	72-138			
1,2,3-Trichloropropane	527.4	10.0	ug/L	503	ND	105	62-135			
trans-1,4-Dichloro-2-butene	1015	50.0	ug/L	1000	ND	101	56-116			
trans-1,4-Dichloro-2-butene	1015	50.0	ug/L	1000	ND	101	50-120			
1,1,2,2-Tetrachloroethane	511.0	10.0	ug/L	501	ND	102	78-126			
1,1,2,2-Tetrachloroethane	511.0	10.0	ug/L	501	ND	102	63-126			
1,3-Dichlorobenzene	508.8	10.0	ug/L	501	ND	102	81-113			
1,4-Dichlorobenzene	491.5	10.0	ug/L	501	ND	98.1	81-116			
1,4-Dichlorobenzene	491.5	10.0	ug/L	501	ND	98.1	72-119			
1,2-Dichlorobenzene	510.9	10.0	ug/L	501	ND	102	81-116			
1,2-Dichlorobenzene	510.9	10.0	ug/L	501	ND	102	71-117			
1,2-Dibromo-3-chloropropane	594.5	10.0	ug/L	501	ND	119	63-138			
1,2-Dibromo-3-chloropropane	594.5	50.0	ug/L	501	ND	119	49-134			
1,2,4-Trichlorobenzene	549.6	10.0	ug/L	504	ND	109	65-132			
Surrogate: Dibromofluoromethane	561		ug/L	502		112	57-134			
Surrogate: Dibromofluoromethane	561		ug/L	502		112	57-134			
Surrogate: Dibromofluoromethane	561		ug/L	502		112	75-136			
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	53-140			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0807-MS1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 03:49						
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	53-140			
Surrogate: 1,2-Dichloroethane-d4	545		ug/L	501		109	61-142			
Surrogate: Toluene-d8	502		ug/L	504		99.7	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.7	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.7	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.7	82-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	78-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	78-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	78-121			
Surrogate: 4-Bromofluorobenzene	512		ug/L	501		102	80-116			
Matrix Spike (1IC0807-MS2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:03						
Dichlorodifluoromethane	303.4	10.0	ug/L	303		100	37-140			
Chloromethane	308.2	10.0	ug/L	303		102	47-147			
Chloromethane	308.2	10.0	ug/L	303	ND	102	61-152			
Vinyl Chloride	313.4	10.0	ug/L	302		104	55-142			
Vinyl Chloride	313.4	10.0	ug/L	302	ND	104	66-149			
Bromomethane	292.8	10.0	ug/L	301		97.2	34-160			
Bromomethane	292.8	10.0	ug/L	301	ND	97.2	43-171			
Chloroethane	304.3	10.0	ug/L	303		100	54-154			
Chloroethane	304.3	10.0	ug/L	303	ND	100	69-148			
Trichlorofluoromethane	324.5	10.0	ug/L	303		107	49-131			
Trichlorofluoromethane	324.5	10.0	ug/L	303	ND	107	62-163			
Acrolein	604.4	100	ug/L	504		120	22-138			
1,1-Dichloroethylene	563.7	10.0	ug/L	501		112	57-143			
1,1-Dichloroethylene	563.7	10.0	ug/L	501	ND	112	70-148			
Acetone	1331	100	ug/L	1000		133	27-173			
Acetone	1331	100	ug/L	1000	ND	133	45-173			
Methyl Iodide	977.5	20.0	ug/L	1000		97.8	39-157			
Methyl Iodide	977.5	10.0	ug/L	1000	ND	97.8	62-167			
Carbon Disulfide	1019	10.0	ug/L	1000		102	53-136			
Carbon Disulfide	1019	10.0	ug/L	1000	ND	102	71-163			
Acetonitrile	1204	100	ug/L	1000		120	11-189			
Methylene Chloride	480.2	50.0	ug/L	501		95.8	57-128			
Methylene Chloride	480.2	50.0	ug/L	501	ND	95.8	69-140			
Acrylonitrile	580.7	50.0	ug/L	502	ND	116	38-147			
Acrylonitrile	580.7	50.0	ug/L	502		116	38-147			
trans-1,2-Dichloroethylene	560.3	10.0	ug/L	501		112	61-135			
trans-1,2-Dichloroethylene	560.3	10.0	ug/L	501	ND	112	69-144			
1,1-Dichloroethane	561.0	10.0	ug/L	501		112	60-131			
1,1-Dichloroethane	561.0	10.0	ug/L	501	ND	112	70-138			
Vinyl Acetate	1732	50.0	ug/L	1400		124	24-163			
Vinyl Acetate	1732	50.0	ug/L	1400	ND	124	58-142			
2,2-Dichloropropane	415.1	10.0	ug/L	503		82.5	37-112			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0807-MS2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:03						
cis-1,2-Dichloroethylene	563.5	10.0	ug/L	504		112	47-162			
cis-1,2-Dichloroethylene	563.5	10.0	ug/L	504	ND	112	68-151			
2-Butanone (MEK)	1128	50.0	ug/L	1000		113	45-156			
2-Butanone (MEK)	1128	100	ug/L	1000	ND	113	50-160			
Bromochloromethane	565.7	10.0	ug/L	504		112	55-132			
Bromochloromethane	565.7	10.0	ug/L	504	ND	112	65-143			
Chloroform	553.5	10.0	ug/L	501		111	45-142			
Chloroform	553.5	10.0	ug/L	501	ND	111	71-143			
1,1,1-Trichloroethane	560.7	10.0	ug/L	501		112	52-128			
1,1,1-Trichloroethane	560.7	10.0	ug/L	501	ND	112	63-133			
1,1-Dichloropropene	564.7	10.0	ug/L	505		112	49-138			
Carbon Tetrachloride	553.3	10.0	ug/L	501		110	56-132			
Carbon Tetrachloride	553.3	10.0	ug/L	501	ND	110	63-142			
Benzene	484.7	10.0	ug/L	504		96.1	77-124			
Benzene	484.7	10.0	ug/L	504	ND	96.1	69-133			
1,2-Dichloroethane	527.5	10.0	ug/L	501		105	67-130			
1,2-Dichloroethane	527.5	10.0	ug/L	501	ND	105	63-138			
Trichloroethylene	505.1	10.0	ug/L	501		101	75-123			
Trichloroethylene	505.1	10.0	ug/L	501	ND	101	71-133			
1,2-Dichloropropane	506.4	10.0	ug/L	501		101	75-126			
1,2-Dichloropropane	506.4	10.0	ug/L	501	ND	101	69-132			
Dibromomethane	525.4	10.0	ug/L	504		104	72-131			
Dibromomethane	525.4	10.0	ug/L	504	ND	104	70-147			
Bromodichloromethane	529.9	10.0	ug/L	501		106	70-123			
Bromodichloromethane	529.9	10.0	ug/L	501	ND	106	67-130			
cis-1,3-Dichloropropene	503.5	10.0	ug/L	501		101	68-119			
cis-1,3-Dichloropropene	503.5	10.0	ug/L	501	ND	101	61-126			
4-Methyl-2-pentanone (MIBK)	1105	50.0	ug/L	1000		111	57-153			
4-Methyl-2-pentanone (MIBK)	1105	50.0	ug/L	1000	ND	111	55-147			
Toluene	513.9	10.0	ug/L	505		102	63-131			
Toluene	513.9	10.0	ug/L	505	ND	102	71-133			
trans-1,3-Dichloropropene	479.2	10.0	ug/L	501		95.7	65-121			
trans-1,3-Dichloropropene	479.2	10.0	ug/L	501	ND	95.7	63-124			
Ethyl Methacrylate	1030	100	ug/L	1000		103	62-137			
1,1,2-Trichloroethane	505.3	10.0	ug/L	501		101	76-124			
1,1,2-Trichloroethane	505.3	10.0	ug/L	501	ND	101	69-133			
Tetrachloroethylene	486.6	10.0	ug/L	501		97.1	77-117			
Tetrachloroethylene	486.6	10.0	ug/L	501	ND	97.1	70-124			
1,3-Dichloropropane	546.4	10.0	ug/L	504		108	81-132			
2-Hexanone (MBK)	1154	50.0	ug/L	1000		115	63-152			
2-Hexanone (MBK)	1154	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	544.9	10.0	ug/L	501		109	77-124			
Dibromochloromethane	544.9	10.0	ug/L	501	ND	109	74-122			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike (1IC0807-MS2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:03						
1,2-Dibromoethane	535.3	10.0	ug/L	502		107	82-117			
1,2-Dibromoethane	535.3	10.0	ug/L	502	ND	107	66-127			
Chlorobenzene	483.8	10.0	ug/L	501		96.6	82-114			
Chlorobenzene	483.8	10.0	ug/L	501	ND	96.6	76-116			
1,1,1,2-Tetrachloroethane	493.2	10.0	ug/L	503		98.0	82-118			
1,1,1,2-Tetrachloroethane	493.2	10.0	ug/L	503	ND	98.0	77-121			
Ethylbenzene	516.5	10.0	ug/L	502		103	80-119			
Ethylbenzene	516.5	10.0	ug/L	502	ND	103	73-124			
Xylenes, total	1550	20.0	ug/L	1510		103	81-119			
Xylenes, total	1550	20.0	ug/L	1510	ND	103	75-123			
Styrene	543.6	10.0	ug/L	504		108	81-119			
Styrene	543.6	10.0	ug/L	504	ND	108	70-120			
Bromoform	537.0	10.0	ug/L	501		107	74-122			
Bromoform	537.0	10.0	ug/L	501	ND	107	70-124			
1,2,3-Trichloropropane	485.3	10.0	ug/L	503		96.4	72-138			
1,2,3-Trichloropropane	485.3	10.0	ug/L	503	ND	96.4	62-135			
trans-1,4-Dichloro-2-butene	944.2	50.0	ug/L	1000		94.4	56-116			
trans-1,4-Dichloro-2-butene	944.2	50.0	ug/L	1000	ND	94.4	50-120			
1,1,2,2-Tetrachloroethane	486.8	10.0	ug/L	501		97.2	78-126			
1,1,2,2-Tetrachloroethane	486.8	10.0	ug/L	501	ND	97.2	63-126			
1,3-Dichlorobenzene	491.3	10.0	ug/L	501		98.1	81-113			
1,4-Dichlorobenzene	459.4	10.0	ug/L	501		91.7	81-116			
1,4-Dichlorobenzene	459.4	10.0	ug/L	501	ND	91.7	72-119			
1,2-Dichlorobenzene	490.7	10.0	ug/L	501		98.0	81-116			
1,2-Dichlorobenzene	490.7	10.0	ug/L	501	ND	98.0	71-117			
1,2-Dibromo-3-chloropropane	553.9	10.0	ug/L	501		110	63-138			
1,2-Dibromo-3-chloropropane	553.9	50.0	ug/L	501	ND	110	49-134			
1,2,4-Trichlorobenzene	567.8	10.0	ug/L	504		113	65-132			
Surrogate: Dibromofluoromethane	566		ug/L	502		113	57-134			
Surrogate: Dibromofluoromethane	566		ug/L	502		113	57-134			
Surrogate: Dibromofluoromethane	566		ug/L	502		113	75-136			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	53-140			
Surrogate: 1,2-Dichloroethane-d4	558		ug/L	501		111	61-142			
Surrogate: Toluene-d8	490		ug/L	504		97.3	86-114			
Surrogate: Toluene-d8	490		ug/L	504		97.3	86-114			
Surrogate: Toluene-d8	490		ug/L	504		97.3	86-114			
Surrogate: Toluene-d8	490		ug/L	504		97.3	82-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	78-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	78-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	78-121			
Surrogate: 4-Bromofluorobenzene	518		ug/L	501		103	80-116			
Matrix Spike Dup (1IC0807-MSD1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0807-MSD1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						
Dichlorodifluoromethane	296.6	10.0	ug/L	303	ND	97.9	37-140	19.6	18	R1
Chloromethane	300.6	10.0	ug/L	303	ND	99.1	47-147	9.29	18	
Chloromethane	300.6	10.0	ug/L	303	ND	99.1	61-152	9.29	26	
Vinyl Chloride	301.0	10.0	ug/L	302	ND	99.5	55-142	12.9	20	
Vinyl Chloride	301.0	10.0	ug/L	302	ND	99.5	66-149	12.9	23	
Bromomethane	287.6	10.0	ug/L	301	ND	95.5	34-160	7.98	22	
Bromomethane	287.6	10.0	ug/L	301	ND	95.5	43-171	7.98	29	
Chloroethane	298.5	10.0	ug/L	303	ND	98.5	54-154	10.4	20	
Chloroethane	298.5	10.0	ug/L	303	ND	98.5	69-148	10.4	25	
Trichlorofluoromethane	309.9	10.0	ug/L	303	ND	102	49-131	12.3	14	
Trichlorofluoromethane	309.9	10.0	ug/L	303	ND	102	62-163	12.3	25	
Acrolein	578.9	100	ug/L	504	ND	115	22-138	4.13	30	
1,1-Dichloroethylene	528.3	10.0	ug/L	501	ND	105	57-143	9.96	15	
1,1-Dichloroethylene	528.3	10.0	ug/L	501	ND	105	70-148	9.96	22	
Acetone	1332	100	ug/L	1000	ND	133	27-173	44.1	30	R1
Acetone	1332	100	ug/L	1000	ND	133	45-173	44.1	30	R1
Methyl Iodide	931.5	20.0	ug/L	1000	ND	93.2	39-157	9.19	12	
Methyl Iodide	931.5	10.0	ug/L	1000	ND	93.2	62-167	9.19	24	
Carbon Disulfide	972.3	10.0	ug/L	1000	ND	97.2	53-136	9.65	20	
Carbon Disulfide	972.3	10.0	ug/L	1000	ND	97.2	71-163	9.65	22	
Acetonitrile	1239	100	ug/L	1000	ND	124	11-189	4.21	24	
Methylene Chloride	475.7	50.0	ug/L	501	ND	94.9	57-128	5.72	14	
Methylene Chloride	475.7	50.0	ug/L	501	ND	94.9	69-140	5.72	19	
Acrylonitrile	593.1	50.0	ug/L	502	ND	118	38-147	0.169	30	
Acrylonitrile	593.1	50.0	ug/L	502	ND	118	38-147	0.169	30	
trans-1,2-Dichloroethylene	530.2	10.0	ug/L	501	ND	106	61-135	6.43	12	
trans-1,2-Dichloroethylene	530.2	10.0	ug/L	501	ND	106	69-144	6.43	22	
1,1-Dichloroethane	536.5	10.0	ug/L	501	ND	107	60-131	6.00	15	
1,1-Dichloroethane	536.5	10.0	ug/L	501	ND	107	70-138	6.00	20	
Vinyl Acetate	1680	50.0	ug/L	1400	ND	120	24-163	1.83	16	
Vinyl Acetate	1680	50.0	ug/L	1400	ND	120	58-142	1.83	24	
2,2-Dichloropropane	409.6	10.0	ug/L	503	ND	81.4	37-112	8.37	13	
cis-1,2-Dichloroethylene	540.0	10.0	ug/L	504	ND	107	47-162	6.38	22	
cis-1,2-Dichloroethylene	540.0	10.0	ug/L	504	ND	107	68-151	6.38	22	
2-Butanone (MEK)	1050	50.0	ug/L	1000	ND	105	45-156	3.88	20	
2-Butanone (MEK)	1050	100	ug/L	1000	ND	105	50-160	3.88	23	
Bromochloromethane	552.7	10.0	ug/L	504	ND	110	55-132	3.99	15	
Bromochloromethane	552.7	10.0	ug/L	504	ND	110	65-143	3.99	22	
Chloroform	527.0	10.0	ug/L	501	ND	105	45-142	6.48	12	
Chloroform	527.0	10.0	ug/L	501	ND	105	71-143	6.48	21	
1,1,1-Trichloroethane	525.2	10.0	ug/L	501	ND	105	52-128	7.88	14	
1,1,1-Trichloroethane	525.2	10.0	ug/L	501	ND	105	63-133	7.88	23	
1,1-Dichloropropene	531.1	10.0	ug/L	505	ND	105	49-138	10.1	12	

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11C0807-MSD1)	Source: 11C0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						
Carbon Tetrachloride	520.7	10.0	ug/L	501	ND	104	56-132	8.95	12	
Carbon Tetrachloride	520.7	10.0	ug/L	501	ND	104	63-142	8.95	22	
Benzene	471.2	10.0	ug/L	504	ND	93.4	77-124	6.79	12	
Benzene	471.2	10.0	ug/L	504	ND	93.4	69-133	6.79	18	
1,2-Dichloroethane	517.3	10.0	ug/L	501	ND	103	67-130	2.50	13	
1,2-Dichloroethane	517.3	10.0	ug/L	501	ND	103	63-138	2.50	20	
Trichloroethylene	477.4	10.0	ug/L	501	ND	95.3	75-123	8.06	11	
Trichloroethylene	477.4	10.0	ug/L	501	ND	95.3	71-133	8.06	23	
1,2-Dichloropropane	502.4	10.0	ug/L	501	ND	100	75-126	2.42	11	
1,2-Dichloropropane	502.4	10.0	ug/L	501	ND	100	69-132	2.42	20	
Dibromomethane	525.8	10.0	ug/L	504	ND	104	72-131	4.39	12	
Dibromomethane	525.8	10.0	ug/L	504	ND	104	70-147	4.39	22	
Bromodichloromethane	515.4	10.0	ug/L	501	ND	103	70-123	4.20	10	
Bromodichloromethane	515.4	10.0	ug/L	501	ND	103	67-130	4.20	21	
cis-1,3-Dichloropropene	492.3	10.0	ug/L	501	ND	98.3	68-119	1.95	10	
cis-1,3-Dichloropropene	492.3	10.0	ug/L	501	ND	98.3	61-126	1.95	21	
4-Methyl-2-pentanone (MIBK)	1102	50.0	ug/L	1000	ND	110	57-153	2.13	11	
4-Methyl-2-pentanone (MIBK)	1102	50.0	ug/L	1000	ND	110	55-147	2.13	23	
Toluene	502.2	10.0	ug/L	505	ND	99.5	63-131	7.77	15	
Toluene	502.2	10.0	ug/L	505	ND	99.5	71-133	7.77	19	
trans-1,3-Dichloropropene	472.1	10.0	ug/L	501	ND	94.3	65-121	1.14	14	
trans-1,3-Dichloropropene	472.1	10.0	ug/L	501	ND	94.3	63-124	1.14	21	
Ethyl Methacrylate	1028	100	ug/L	1000	ND	103	62-137	4.07	10	
1,1,2-Trichloroethane	500.0	10.0	ug/L	501	ND	99.8	76-124	6.46	12	
1,1,2-Trichloroethane	500.0	10.0	ug/L	501	ND	99.8	69-133	6.46	19	
Tetrachloroethylene	454.7	10.0	ug/L	501	ND	90.8	77-117	9.19	12	
Tetrachloroethylene	454.7	10.0	ug/L	501	ND	90.8	70-124	9.19	24	
1,3-Dichloropropane	521.9	10.0	ug/L	504	ND	103	81-132	4.59	12	
2-Hexanone (MBK)	1127	50.0	ug/L	1000	ND	113	63-152	2.33	19	
2-Hexanone (MBK)	1127	50.0	ug/L	1000	ND	113	53-141	2.33	24	
Dibromochloromethane	535.5	10.0	ug/L	501	ND	107	77-124	1.52	17	
Dibromochloromethane	535.5	10.0	ug/L	501	ND	107	74-122	1.52	21	
1,2-Dibromoethane	539.7	10.0	ug/L	502	ND	107	82-117	0.610	14	
1,2-Dibromoethane	539.7	10.0	ug/L	502	ND	107	66-127	0.610	23	
Chlorobenzene	462.4	10.0	ug/L	501	ND	92.3	82-114	6.04	11	
Chlorobenzene	462.4	10.0	ug/L	501	ND	92.3	76-116	6.04	21	
1,1,1,2-Tetrachloroethane	481.3	10.0	ug/L	503	ND	95.6	82-118	4.41	15	
1,1,1,2-Tetrachloroethane	481.3	10.0	ug/L	503	ND	95.6	77-121	4.41	25	
Ethylbenzene	489.2	10.0	ug/L	502	ND	97.5	80-119	8.04	11	
Ethylbenzene	489.2	10.0	ug/L	502	ND	97.5	73-124	8.04	20	
Xylenes, total	1490	20.0	ug/L	1510	ND	98.6	81-119	8.06	11	
Xylenes, total	1490	20.0	ug/L	1510	ND	98.6	75-123	8.06	20	
Styrene	522.0	10.0	ug/L	504	ND	104	81-119	5.26	12	

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0807-MSD1)	Source: 1IC0696-04			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 04:12						
Styrene	522.0	10.0	ug/L	504	ND	104	70-120	5.26	23	
Bromoform	524.0	10.0	ug/L	501	ND	105	74-122	1.23	12	
Bromoform	524.0	10.0	ug/L	501	ND	105	70-124	1.23	22	
1,2,3-Trichloropropane	466.8	10.0	ug/L	503	ND	92.7	72-138	12.2	14	
1,2,3-Trichloropropane	466.8	10.0	ug/L	503	ND	92.7	62-135	12.2	28	
trans-1,4-Dichloro-2-butene	963.4	50.0	ug/L	1000	ND	96.3	56-116	5.18	10	
trans-1,4-Dichloro-2-butene	963.4	50.0	ug/L	1000	ND	96.3	50-120	5.18	26	
1,1,2,2-Tetrachloroethane	500.4	10.0	ug/L	501	ND	99.9	78-126	2.10	13	
1,1,2,2-Tetrachloroethane	500.4	10.0	ug/L	501	ND	99.9	63-126	2.10	24	
1,3-Dichlorobenzene	485.2	10.0	ug/L	501	ND	96.9	81-113	4.75	14	
1,4-Dichlorobenzene	463.7	10.0	ug/L	501	ND	92.5	81-116	5.82	14	
1,4-Dichlorobenzene	463.7	10.0	ug/L	501	ND	92.5	72-119	5.82	24	
1,2-Dichlorobenzene	490.6	10.0	ug/L	501	ND	97.9	81-116	4.05	13	
1,2-Dichlorobenzene	490.6	10.0	ug/L	501	ND	97.9	71-117	4.05	24	
1,2-Dibromo-3-chloropropane	600.0	10.0	ug/L	501	ND	120	63-138	0.921	17	
1,2-Dibromo-3-chloropropane	600.0	50.0	ug/L	501	ND	120	49-134	0.921	28	
1,2,4-Trichlorobenzene	577.1	10.0	ug/L	504	ND	115	65-132	4.88	15	
Surrogate: Dibromofluoromethane	545		ug/L	502		109	57-134			
Surrogate: Dibromofluoromethane	545		ug/L	502		109	57-134			
Surrogate: Dibromofluoromethane	545		ug/L	502		109	75-136			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	53-140			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	53-140			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	53-140			
Surrogate: 1,2-Dichloroethane-d4	573		ug/L	501		114	61-142			
Surrogate: Toluene-d8	496		ug/L	504		98.5	86-114			
Surrogate: Toluene-d8	496		ug/L	504		98.5	86-114			
Surrogate: Toluene-d8	496		ug/L	504		98.5	86-114			
Surrogate: Toluene-d8	496		ug/L	504		98.5	82-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	80-116			
Matrix Spike Dup (1IC0807-MSD2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
Dichlorodifluoromethane	291.1	10.0	ug/L	303		96.1	37-140	4.14	18	
Chloromethane	289.8	10.0	ug/L	303		95.6	47-147	6.15	18	
Chloromethane	289.8	10.0	ug/L	303	ND	95.6	61-152	6.15	26	
Vinyl Chloride	288.9	10.0	ug/L	302		95.5	55-142	8.14	20	
Vinyl Chloride	288.9	10.0	ug/L	302	ND	95.5	66-149	8.14	23	
Bromomethane	276.2	10.0	ug/L	301		91.7	34-160	5.83	22	
Bromomethane	276.2	10.0	ug/L	301	ND	91.7	43-171	5.83	29	
Chloroethane	288.5	10.0	ug/L	303		95.2	54-154	5.33	20	
Chloroethane	288.5	10.0	ug/L	303	ND	95.2	69-148	5.33	25	
Trichlorofluoromethane	286.9	10.0	ug/L	303		94.7	49-131	12.3	14	
Trichlorofluoromethane	286.9	10.0	ug/L	303	ND	94.7	62-163	12.3	25	

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11C0807-MSD2)	Source: 11C0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
Acrolein	504.5	100	ug/L	504		100	22-138	18.0	30	
1,1-Dichloroethylene	497.8	10.0	ug/L	501		99.3	57-143	12.4	15	
1,1-Dichloroethylene	497.8	10.0	ug/L	501	ND	99.3	70-148	12.4	22	
Acetone	1176	100	ug/L	1000		118	27-173	12.3	30	
Acetone	1176	100	ug/L	1000	ND	118	45-173	12.3	30	
Methyl Iodide	913.8	20.0	ug/L	1000		91.4	39-157	6.74	12	
Methyl Iodide	913.8	10.0	ug/L	1000	ND	91.4	62-167	6.74	24	
Carbon Disulfide	929.9	10.0	ug/L	1000		93.0	53-136	9.10	20	
Carbon Disulfide	929.9	10.0	ug/L	1000	ND	93.0	71-163	9.10	22	
Acetonitrile	1170	100	ug/L	1000		117	11-189	2.86	24	
Methylene Chloride	448.3	50.0	ug/L	501		89.5	57-128	6.87	14	
Methylene Chloride	448.3	50.0	ug/L	501	ND	89.5	69-140	6.87	19	
Acrylonitrile	541.9	50.0	ug/L	502	ND	108	38-147	6.91	30	
Acrylonitrile	541.9	50.0	ug/L	502		108	38-147	6.91	30	
trans-1,2-Dichloroethylene	491.6	10.0	ug/L	501		98.1	61-135	13.1	12	R1
trans-1,2-Dichloroethylene	491.6	10.0	ug/L	501	ND	98.1	69-144	13.1	22	
1,1-Dichloroethane	488.8	10.0	ug/L	501		97.6	60-131	13.8	15	
1,1-Dichloroethane	488.8	10.0	ug/L	501	ND	97.6	70-138	13.8	20	
Vinyl Acetate	1556	50.0	ug/L	1400		111	24-163	10.7	16	
Vinyl Acetate	1556	50.0	ug/L	1400	ND	111	58-142	10.7	24	
2,2-Dichloropropane	371.9	10.0	ug/L	503		73.9	37-112	11.0	13	
cis-1,2-Dichloroethylene	496.4	10.0	ug/L	504		98.6	47-162	12.7	22	
cis-1,2-Dichloroethylene	496.4	10.0	ug/L	504	ND	98.6	68-151	12.7	22	
2-Butanone (MEK)	1031	50.0	ug/L	1000		103	45-156	8.98	20	
2-Butanone (MEK)	1031	100	ug/L	1000	ND	103	50-160	8.98	23	
Bromochloromethane	506.1	10.0	ug/L	504		100	55-132	11.1	15	
Bromochloromethane	506.1	10.0	ug/L	504	ND	100	65-143	11.1	22	
Chloroform	488.0	10.0	ug/L	501		97.4	45-142	12.6	12	R1
Chloroform	488.0	10.0	ug/L	501	ND	97.4	71-143	12.6	21	
1,1,1-Trichloroethane	501.4	10.0	ug/L	501		100	52-128	11.2	14	
1,1,1-Trichloroethane	501.4	10.0	ug/L	501	ND	100	63-133	11.2	23	
1,1-Dichloropropene	508.5	10.0	ug/L	505		101	49-138	10.5	12	
Carbon Tetrachloride	496.6	10.0	ug/L	501		99.1	56-132	10.8	12	
Carbon Tetrachloride	496.6	10.0	ug/L	501	ND	99.1	63-142	10.8	22	
Benzene	448.0	10.0	ug/L	504		88.8	77-124	7.87	12	
Benzene	448.0	10.0	ug/L	504	ND	88.8	69-133	7.87	18	
1,2-Dichloroethane	482.7	10.0	ug/L	501		96.4	67-130	8.87	13	
1,2-Dichloroethane	482.7	10.0	ug/L	501	ND	96.4	63-138	8.87	20	
Trichloroethylene	463.1	10.0	ug/L	501		92.4	75-123	8.68	11	
Trichloroethylene	463.1	10.0	ug/L	501	ND	92.4	71-133	8.68	23	
1,2-Dichloropropane	470.2	10.0	ug/L	501		93.9	75-126	7.41	11	
1,2-Dichloropropane	470.2	10.0	ug/L	501	ND	93.9	69-132	7.41	20	
Dibromomethane	489.1	10.0	ug/L	504		97.1	72-131	7.16	12	

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11C0807-MSD2)	Source: 11C0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
Dibromomethane	489.1	10.0	ug/L	504	ND	97.1	70-147	7.16	22	
Bromodichloromethane	483.2	10.0	ug/L	501		96.5	70-123	9.22	10	
Bromodichloromethane	483.2	10.0	ug/L	501	ND	96.5	67-130	9.22	21	
cis-1,3-Dichloropropene	464.4	10.0	ug/L	501		92.7	68-119	8.08	10	
cis-1,3-Dichloropropene	464.4	10.0	ug/L	501	ND	92.7	61-126	8.08	21	
4-Methyl-2-pentanone (MIBK)	1055	50.0	ug/L	1000		106	57-153	4.63	11	
4-Methyl-2-pentanone (MIBK)	1055	50.0	ug/L	1000	ND	106	55-147	4.63	23	
Toluene	493.3	10.0	ug/L	505		97.7	63-131	4.09	15	
Toluene	493.3	10.0	ug/L	505	ND	97.7	71-133	4.09	19	
trans-1,3-Dichloropropene	451.6	10.0	ug/L	501		90.2	65-121	5.93	14	
trans-1,3-Dichloropropene	451.6	10.0	ug/L	501	ND	90.2	63-124	5.93	21	
Ethyl Methacrylate	1013	100	ug/L	1000		101	62-137	1.65	10	
1,1,2-Trichloroethane	480.8	10.0	ug/L	501		96.0	76-124	4.97	12	
1,1,2-Trichloroethane	480.8	10.0	ug/L	501	ND	96.0	69-133	4.97	19	
Tetrachloroethylene	433.8	10.0	ug/L	501		86.6	77-117	11.5	12	
Tetrachloroethylene	433.8	10.0	ug/L	501	ND	86.6	70-124	11.5	24	
1,3-Dichloropropane	493.8	10.0	ug/L	504		97.9	81-132	10.1	12	
2-Hexanone (MBK)	1090	50.0	ug/L	1000		109	63-152	5.72	19	
2-Hexanone (MBK)	1090	50.0	ug/L	1000	ND	109	53-141	5.72	24	
Dibromochloromethane	503.0	10.0	ug/L	501		100	77-124	8.00	17	
Dibromochloromethane	503.0	10.0	ug/L	501	ND	100	74-122	8.00	21	
1,2-Dibromoethane	497.4	10.0	ug/L	502		99.0	82-117	7.34	14	
1,2-Dibromoethane	497.4	10.0	ug/L	502	ND	99.0	66-127	7.34	23	
Chlorobenzene	446.0	10.0	ug/L	501		89.1	82-114	8.13	11	
Chlorobenzene	446.0	10.0	ug/L	501	ND	89.1	76-116	8.13	21	
1,1,1,2-Tetrachloroethane	447.3	10.0	ug/L	503		88.8	82-118	9.76	15	
1,1,1,2-Tetrachloroethane	447.3	10.0	ug/L	503	ND	88.8	77-121	9.76	25	
Ethylbenzene	476.4	10.0	ug/L	502		95.0	80-119	8.08	11	
Ethylbenzene	476.4	10.0	ug/L	502	ND	95.0	73-124	8.08	20	
Xylenes, total	1451	20.0	ug/L	1510		96.1	81-119	6.60	11	
Xylenes, total	1451	20.0	ug/L	1510	ND	96.1	75-123	6.60	20	
Styrene	504.2	10.0	ug/L	504		100	81-119	7.52	12	
Styrene	504.2	10.0	ug/L	504	ND	100	70-120	7.52	23	
Bromoform	513.9	10.0	ug/L	501		103	74-122	4.40	12	
Bromoform	513.9	10.0	ug/L	501	ND	103	70-124	4.40	22	
1,2,3-Trichloropropane	451.0	10.0	ug/L	503		89.6	72-138	7.33	14	
1,2,3-Trichloropropane	451.0	10.0	ug/L	503	ND	89.6	62-135	7.33	28	
trans-1,4-Dichloro-2-butene	921.8	50.0	ug/L	1000		92.2	56-116	2.40	10	
trans-1,4-Dichloro-2-butene	921.8	50.0	ug/L	1000	ND	92.2	50-120	2.40	26	
1,1,2,2-Tetrachloroethane	472.3	10.0	ug/L	501		94.3	78-126	3.02	13	
1,1,2,2-Tetrachloroethane	472.3	10.0	ug/L	501	ND	94.3	63-126	3.02	24	
1,3-Dichlorobenzene	475.1	10.0	ug/L	501		94.9	81-113	3.35	14	
1,4-Dichlorobenzene	449.6	10.0	ug/L	501		89.7	81-116	2.16	14	

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0807 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IC0807-MSD2)	Source: 1IC0854-15			Prepared: 03/17/25 00:00 Analyzed: 03/18/25 06:26						
1,4-Dichlorobenzene	449.6	10.0	ug/L	501	ND	89.7	72-119	2.16	24	
1,2-Dichlorobenzene	483.1	10.0	ug/L	501		96.4	81-116	1.56	13	
1,2-Dichlorobenzene	483.1	10.0	ug/L	501	ND	96.4	71-117	1.56	24	
1,2-Dibromo-3-chloropropane	572.5	10.0	ug/L	501		114	63-138	3.30	17	
1,2-Dibromo-3-chloropropane	572.5	50.0	ug/L	501	ND	114	49-134	3.30	28	
1,2,4-Trichlorobenzene	571.4	10.0	ug/L	504		113	65-132	0.632	15	
Surrogate: Dibromofluoromethane	530		ug/L	502		106	57-134			
Surrogate: Dibromofluoromethane	530		ug/L	502		106	57-134			
Surrogate: Dibromofluoromethane	530		ug/L	502		106	75-136			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	53-140			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	53-140			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	53-140			
Surrogate: 1,2-Dichloroethane-d4	518		ug/L	501		103	61-142			
Surrogate: Toluene-d8	502		ug/L	504		99.6	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.6	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.6	86-114			
Surrogate: Toluene-d8	502		ug/L	504		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	80-116			
Batch 1IC1200 - EPA 5030B - EPA 8260D										
Blank (1IC1200-BLK1)	Prepared: 03/24/25 00:00 Analyzed: 03/24/25 15:06									
Allyl chloride	<1.0	1.0	ug/L							
Chloroprene	<1.0	1.0	ug/L							
Methacrylonitrile	<1.0	1.0	ug/L							
Methyl Methacrylate	<1.0	1.0	ug/L							
Propionitrile	<10.0	10.0	ug/L							
Surrogate: Dibromofluoromethane	54.6		ug/L	50.2		109	57-134			
Surrogate: 1,2-Dichloroethane-d4	50.9		ug/L	50.1		102	53-140			
Surrogate: Toluene-d8	50.0		ug/L	50.4		99.3	86-114			
Surrogate: 4-Bromofluorobenzene	47.5		ug/L	50.1		94.8	78-121			
LCS (1IC1200-BS1)										
Prepared: 03/24/25 00:00 Analyzed: 03/24/25 13:45										
Allyl chloride	58.92	1.0	ug/L	50.0		118	40-154			
Chloroprene	57.29	1.0	ug/L	50.0		115	57-134			
Methacrylonitrile	52.85	1.0	ug/L	50.0		106	59-124			
Methyl Methacrylate	49.26	1.0	ug/L	50.0		98.5	64-130			
Propionitrile	57.84	10.0	ug/L	50.0		116	32-180			
Surrogate: Dibromofluoromethane	52.9		ug/L	50.2		105	57-134			
Surrogate: 1,2-Dichloroethane-d4	50.7		ug/L	50.1		101	53-140			
Surrogate: Toluene-d8	49.3		ug/L	50.4		97.8	86-114			
Surrogate: 4-Bromofluorobenzene	49.3		ug/L	50.1		98.3	78-121			

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1IC1200 - EPA 5030B - EPA 8260D										
LCS (1IC1200-BS1)				Prepared: 03/24/25 00:00 Analyzed: 03/24/25 13:45						
LCS Dup (1IC1200-BSD1)				Prepared: 03/24/25 00:00 Analyzed: 03/24/25 14:08						
Allyl chloride	57.53	1.0	ug/L	50.0		115	40-154	2.39	16	
Chloroprene	54.49	1.0	ug/L	50.0		109	57-134	5.01	15	
Methacrylonitrile	48.49	1.0	ug/L	50.0		97.0	59-124	8.60	17	
Methyl Methacrylate	46.60	1.0	ug/L	50.0		93.2	64-130	5.55	17	
Propionitrile	52.83	10.0	ug/L	50.0		106	32-180	9.05	21	
Surrogate: Dibromofluoromethane	52.5		ug/L	50.2		105	57-134			
Surrogate: 1,2-Dichloroethane-d4	48.9		ug/L	50.1		97.6	53-140			
Surrogate: Toluene-d8	49.4		ug/L	50.4		98.1	86-114			
Surrogate: 4-Bromofluorobenzene	48.6		ug/L	50.1		97.0	78-121			
Matrix Spike (1IC1200-MS1)				Source: 1IC0851-21		Prepared: 03/24/25 00:00 Analyzed: 03/25/25 09:18				
Allyl chloride	513.7	10.0	ug/L	500	ND	103	60-140			
Chloroprene	448.8	10.0	ug/L	500	ND	89.8	62-121			
Methacrylonitrile	534.2	10.0	ug/L	500	ND	107	60-140			
Methyl Methacrylate	491.7	10.0	ug/L	500	ND	98.3	60-140			
Propionitrile	552.8	100	ug/L	500	ND	111	60-140			
Surrogate: Dibromofluoromethane	521		ug/L	502		104	57-134			
Surrogate: 1,2-Dichloroethane-d4	510		ug/L	501		102	53-140			
Surrogate: Toluene-d8	495		ug/L	504		98.3	86-114			
Surrogate: 4-Bromofluorobenzene	492		ug/L	501		98.2	78-121			
Matrix Spike Dup (1IC1200-MSD1)				Source: 1IC0851-21		Prepared: 03/24/25 00:00 Analyzed: 03/25/25 10:47				
Allyl chloride	551.3	10.0	ug/L	500	ND	110	60-140	7.06	30	
Chloroprene	521.9	10.0	ug/L	500	ND	104	62-121	15.1	30	
Methacrylonitrile	469.7	10.0	ug/L	500	ND	93.9	60-140	12.8	30	
Methyl Methacrylate	496.6	10.0	ug/L	500	ND	99.3	60-140	0.992	30	
Propionitrile	520.9	100	ug/L	500	ND	104	60-140	5.94	30	
Surrogate: Dibromofluoromethane	536		ug/L	502		107	57-134			
Surrogate: 1,2-Dichloroethane-d4	508		ug/L	501		102	53-140			
Surrogate: Toluene-d8	500		ug/L	504		99.3	86-114			
Surrogate: 4-Bromofluorobenzene	508		ug/L	501		101	78-121			
Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1IC1088 - Semi-Vol GC - EPA 8015C										
Blank (1IC1088-BLK1)				Prepared: 03/21/25 11:47 Analyzed: 03/22/25 23:21						
Isobutanol	<1.0	1.0	mg/L							
Blank (1IC1088-BLK2)				Prepared: 03/21/25 11:47 Analyzed: 03/23/25 11:24						
Isobutanol	<1.0	1.0	mg/L							

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Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1088 - Semi-Vol GC - EPA 8015C										
LCS (1IC1088-BS1)				Prepared: 03/21/25 11:47 Analyzed: 03/22/25 19:32						
Isobutanol	24.07	1.0	mg/L	24.0		100	77-128			
Matrix Spike (1IC1088-MS1)				Source: 1IC0851-01 Prepared: 03/21/25 11:47 Analyzed: 03/23/25 06:20						
Isobutanol	25.21	1.0	mg/L	24.0	ND	105	63-135			
Matrix Spike Dup (1IC1088-MSD1)				Source: 1IC0851-01 Prepared: 03/21/25 11:47 Analyzed: 03/23/25 06:58						
Isobutanol	25.27	1.0	mg/L	24.0	ND	105	63-135	0.238	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0791 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1IC0791-BLK1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 16:38						
N-Nitrosodimethylamine	<8	8	ug/L							
Methyl Methanesulfonate	<8	8	ug/L							
N-Nitrosodiethylamine	<8	8	ug/L							
N-Nitrosomethylethylamine	<8	8	ug/L							
Ethyl Methanesulfonate	<8	8	ug/L							
Phenol	<8	8	ug/L							
Bis(2-Chloroethyl) Ether	<8	8	ug/L							
2-Chlorophenol	<8	8	ug/L							
Benzyl Alcohol	<8	8	ug/L							
2-Methylphenol (o-Cresol)	<8	8	ug/L							
Bis[2-Chloroisopropyl]ether	<8	8	ug/L							
n-Nitroso-di-n-propylamine	<8	8	ug/L							
N-Nitrosopyrrolidine	<8	8	ug/L							
Acetophenone	<8	8	ug/L							
o-Toluidine	<8	8	ug/L							
(3 & 4)-Methylphenol	<8	8	ug/L							
Hexachloroethane	<8	8	ug/L							
Nitrobenzene	<8	8	ug/L							
N-Nitrosopiperidine	<8	8	ug/L							
Isophorone	<8	8	ug/L							
2-Nitrophenol	<8	8	ug/L							
2,4-Dimethylphenol	<8	8	ug/L							
Bis (2-Chloroethoxy) Methane	<8	8	ug/L							
2,4-Dichlorophenol	<8	8	ug/L							
Naphthalene	<8	8	ug/L							
4-Chloroaniline	<8	8	ug/L							
2,6-Dichlorophenol	<8	8	ug/L							
Hexachloropropene	<8	8	ug/L							
Hexachlorobutadiene	<8	8	ug/L							
N-Nitrosodi-n-butylamine	<8	8	ug/L							



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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
Blank (11C0791-BLK1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 16:38					
1,4-Phenylenediamine	<8	8	ug/L						
4-Chloro-3-methylphenol	<8	8	ug/L						
2-Methylnaphthalene	<8	8	ug/L						
Isosafrole	<8	8	ug/L						
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L						
Hexachlorocyclopentadiene	<8	8	ug/L						
2,4,6-Trichlorophenol	<8	8	ug/L						
2,4,5-Trichlorophenol	<8	8	ug/L						
Safrole	<8	8	ug/L						
2-Chloronaphthalene	<8	8	ug/L						
2-Nitroaniline	<8	8	ug/L						
1,4-Naphthoquinone	<8	8	ug/L						
Dimethylphthalate	<8	8	ug/L						
1,3-Dinitrobenzene	<8	8	ug/L						
1,2-Dinitrobenzene	<8	8	ug/L						
2,6-Dinitrotoluene	<8	8	ug/L						
Acenaphthylene	<8	8	ug/L						
3-Nitroaniline	<8	8	ug/L						
Acenaphthene	<8	8	ug/L						
2,4-Dinitrophenol	<8	8	ug/L						
4-Nitrophenol	<8	8	ug/L						
Dibenzofuran	<8	8	ug/L						
2,4-Dinitrotoluene	<8	8	ug/L						
2,3,4,6-Tetrachlorophenol	<8	8	ug/L						
Pentachlorobenzene	<8	8	ug/L						
1-Naphthylamine	<8	8	ug/L						
2-Naphthylamine	<8	8	ug/L						
Diethyl Phthalate	<8	8	ug/L						
Fluorene	<8	8	ug/L						
4-Chlorophenyl Phenyl Ether	<8	8	ug/L						
4-Nitroaniline	<8	8	ug/L						
5-Nitro-o-toluidine	<8	8	ug/L						
4,6-Dinitro-2-methylphenol	<8	8	ug/L						
N-Nitrosodiphenylamine	<8	8	ug/L						
Diphenylamine	<8	8	ug/L						
Azobenzene	<8	8	ug/L						
Diallate	<8	8	ug/L						
1,3,5-Trinitrobenzene	<8	8	ug/L						
Phenacetin	<8	8	ug/L						
4-Bromophenyl Phenyl Ether	<8	8	ug/L						
4-Aminobiphenyl	<8	8	ug/L						
Pentachlorophenol	<8	8	ug/L						

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
Blank (11C0791-BLK1)									
Prepared: 03/17/25 14:17 Analyzed: 03/24/25 16:38									
Pronamide	<8	8	ug/L						
Pentachloronitrobenzene (PCNB)	<8	8	ug/L						
Phenanthrene	<8	8	ug/L						
Anthracene	<8	8	ug/L						
Di-n-butyl Phthalate	<8	8	ug/L						
Methapyriline	<8	8	ug/L						
Fluoranthene	<8	8	ug/L						
Isodrin	<8	8	ug/L						
Chlorobenzilate	<8	8	ug/L						
Pyrene	<8	8	ug/L						
p-(Dimethylamino)azobenzene	<8	8	ug/L						
3,3-Dimethylbenzidine	<8	8	ug/L						
Butyl Benzyl Phthalate	<8	8	ug/L						
Benzo(a)anthracene	<8	8	ug/L						
Chrysene	<8	8	ug/L						
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L						
Kepone	<8	8	ug/L						
3,3'-Dichlorobenzidine	<8	8	ug/L						
2-Acetylaminofluorene	<8	8	ug/L						
Di-n-octyl Phthalate	<8	8	ug/L						
Benzo(b)Fluoranthene	<8	8	ug/L						
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L						
Benzo(k)Fluoranthene	<8	8	ug/L						
Benzo(a)Pyrene	<8	8	ug/L						
3-Methylcholanthrene	<8	8	ug/L						
Dibenzo(a,h)anthracene	<8	8	ug/L						
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L						
Benzo(g,h,i)perylene	<8	8	ug/L						
Surrogate: 2-Fluorophenol	13.1		ug/L	20.6		63.5		10-149	
Surrogate: Phenol-d6	12.8		ug/L	19.6		65.4		10-143	
Surrogate: Nitrobenzene-d5	13.9		ug/L	20.6		67.7		20-149	
Surrogate: 2-Fluorobiphenyl	14.0		ug/L	19.5		71.6		11-146	
Surrogate: 2,4,6-Tribromophenol	16.6		ug/L	20.0		82.8		10-153	
Surrogate: Terphenyl-d14	17.6		ug/L	20.6		85.3		27-155	
LCS (11C0791-BS1)									
Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:03									
N-Nitrosodimethylamine	<8	8	ug/L	10.0		69.6		22-124	
Methyl Methanesulfonate	<8	8	ug/L	10.0		71.5		25-115	
N-Nitrosodiethylamine	<8	8	ug/L	10.0		72.7		19-133	
N-Nitrosomethylethylamine	<8	8	ug/L	10.0		70.4		10-149	
Ethyl Methanesulfonate	<8	8	ug/L	10.0		74.7		29-118	
Phenol	<8	8	ug/L	10.0		72.0		19-130	
Bis(2-Chloroethyl) Ether	<8	8	ug/L	10.0		74.7		23-131	

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
LCS (11C0791-BS1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:03					
2-Chlorophenol	<8	8	ug/L	10.0		73.6	20-159		
Benzyl Alcohol	<8	8	ug/L	10.0		56.3	17-138		
2-Methylphenol (o-Cresol)	<8	8	ug/L	10.0		76.5	29-130		
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	10.0		75.2	29-121		
n-Nitroso-di-n-propylamine	<8	8	ug/L	10.0		76.0	33-130		
N-Nitrosopyrrolidine	8.2	8	ug/L	10.0		82.2	24-135		
Acetophenone	<8	8	ug/L	10.0		76.3	35-129		
o-Toluidine	<8	8	ug/L	10.0		69.1	10-119		
(3 & 4)-Methylphenol	<8	8	ug/L	10.0		74.0	27-136		
Hexachloroethane	<8	8	ug/L	10.0		66.4	18-88		
Nitrobenzene	<8	8	ug/L	10.0		77.5	32-133		
N-Nitrosopiperidine	<8	8	ug/L	10.0		76.6	24-134		
Isophorone	<8	8	ug/L	10.0		77.2	37-131		
2-Nitrophenol	<8	8	ug/L	10.0		73.9	41-127		
2,4-Dimethylphenol	<8	8	ug/L	10.0		75.2	34-133		
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	10.0		60.1	29-117		
2,4-Dichlorophenol	<8	8	ug/L	10.0		76.8	41-134		
Naphthalene	<8	8	ug/L	10.0		71.4	31-107		
2,6-Dichlorophenol	<8	8	ug/L	10.0		77.7	21-151		
Hexachloropropene	<8	8	ug/L	10.0		36.5	19-70		
Hexachlorobutadiene	<8	8	ug/L	10.0		63.5	12-100		
N-Nitrosodi-n-butylamine	<8	8	ug/L	10.0		70.1	13-144		
4-Chloro-3-methylphenol	<8	8	ug/L	10.0		78.8	46-141		
2-Methylnaphthalene	<8	8	ug/L	10.0		71.8	35-110		
Isosafrole	<8	8	ug/L	10.0		67.3	38-122		
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	10.0		58.7	31-102		
Hexachlorocyclopentadiene	<8	8	ug/L	10.0		62.0	10-113		
2,4,6-Trichlorophenol	<8	8	ug/L	10.0		76.9	41-146		
2,4,5-Trichlorophenol	8.2	8	ug/L	10.0		81.7	45-149		
Safrole	<8	8	ug/L	10.0		65.5	36-122		
2-Chloronaphthalene	<8	8	ug/L	10.0		70.5	20-146		
2-Nitroaniline	<8	8	ug/L	10.0		71.6	38-149		
1,4-Naphthoquinone	<8	8	ug/L	10.0		75.5	45-170		
Dimethylphthalate	8.1	8	ug/L	10.0		80.8	40-149		
1,3-Dinitrobenzene	8.1	8	ug/L	10.0		81.1	30-171		
1,2-Dinitrobenzene	8.0	8	ug/L	10.0		79.9	35-159		
2,6-Dinitrotoluene	8.0	8	ug/L	10.0		80.5	40-148		
Acenaphthylene	<8	8	ug/L	10.0		68.0	35-128		
Acenaphthene	<8	8	ug/L	10.0		72.4	34-132		
2,4-Dinitrophenol	9.6	8	ug/L	10.0		95.5	27-165		
4-Nitrophenol	8.1	8	ug/L	10.0		81.0	35-159		
Dibenzofuran	<8	8	ug/L	10.0		76.0	37-136		

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
LCS (11C0791-BS1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:03					
2,4-Dinitrotoluene	8.3	8	ug/L	10.0		82.8	42-154		
2,3,4,6-Tetrachlorophenol	8.8	8	ug/L	10.0		87.6	29-163		
Pentachlorobenzene	<8	8	ug/L	10.0		71.0	53-128		
Diethyl Phthalate	8.6	8	ug/L	10.0		85.6	39-156		
Fluorene	<8	8	ug/L	10.0		76.3	34-139		
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	10.0		76.3	39-138		
4,6-Dinitro-2-methylphenol	<8	8	ug/L	10.0		69.4	36-161		
N-Nitrosodiphenylamine	<8	8	ug/L	10.0		26.7	56-108		Q3
Diphenylamine	<8	8	ug/L	10.0		26.7	20-160		
Azobenzene	<8	8	ug/L	10.0		67.4	31-153		
Diallate	8.4	8	ug/L	10.0		83.9	43-167		
1,3,5-Trinitrobenzene	8.6	8	ug/L	10.0		85.5	50-167		
Phenacetin	8.6	8	ug/L	10.0		86.4	55-146		
4-Bromophenyl Phenyl Ether	<8	8	ug/L	10.0		79.3	31-156		
Pentachlorophenol	10.0	8	ug/L	10.0		100	13-159		
Pronamide	<8	8	ug/L	10.0		57.9	53-139		
Pentachloronitrobenzene (PCNB)	8.4	8	ug/L	10.0		84.1	56-165		
Phenanthrene	8.2	8	ug/L	10.0		81.6	35-147		
Anthracene	<8	8	ug/L	10.0		74.1	36-146		
Di-n-butyl Phthalate	8.5	8	ug/L	10.0		85.4	37-164		
Fluoranthene	8.4	8	ug/L	10.0		84.4	38-155		
Isodrin	8.1	8	ug/L	10.0		80.6	34-148		
Chlorobenzilate	<8	8	ug/L	10.0		60.4	60-136		
Pyrene	8.0	8	ug/L	10.0		80.2	37-157		
Butyl Benzyl Phthalate	8.2	8	ug/L	10.0		81.9	52-150		
Benzo(a)anthracene	<8	8	ug/L	10.0		79.4	39-149		
Chrysene	8.3	8	ug/L	10.0		83.2	39-149		
Bis(2-Ethylhexyl) Phthalate	10.5	6	ug/L	10.0		105	27-186		
2-Acetylaminofluorene	12.3	8	ug/L	10.0		123	20-171		
Di-n-octyl Phthalate	14.4	8	ug/L	10.0		144	39-171		
Benzo(b)Fluoranthene	13.3	8	ug/L	10.0		133	39-165		
7,12-Dimethylbenz [a] anthracene	8.9	8	ug/L	10.0		89.4	22-155		
Benzo(k)Fluoranthene	13.4	8	ug/L	10.0		134	41-160		
Benzo(a)Pyrene	10.7	8	ug/L	10.0		107	37-151		
3-Methylcholanthrene	<8	8	ug/L	10.0		34.2	28-140		
Dibenzo(a,h)anthracene	13.3	8	ug/L	10.0		133	17-178		
Indeno(1,2,3-cd)Pyrene	12.5	8	ug/L	10.0		125	18-176		
Benzo(g,h,i)perylene	12.2	8	ug/L	10.0		122	11-179		
Surrogate: 2-Fluorophenol	14.2		ug/L	20.6		69.0	10-149		
Surrogate: Phenol-d6	14.1		ug/L	19.6		71.9	10-143		
Surrogate: Nitrobenzene-d5	15.5		ug/L	20.6		75.2	31-137		
Surrogate: 2-Fluorobiphenyl	14.2		ug/L	19.5		72.7	29-131		

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
LCS (11C0791-BS1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:03					
Surrogate: 2,4,6-Tribromophenol	17.9		ug/L	20.0		89.1	10-153		
Surrogate: Terphenyl-d14	17.8		ug/L	20.6		86.2	30-142		
LCS Dup (11C0791-BSD1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:27					
N-Nitrosodimethylamine	<8	8	ug/L	10.0		72.7	22-124	4.36	27
Methyl Methanesulfonate	<8	8	ug/L	10.0		74.6	25-115	4.24	16
N-Nitrosodiethylamine	<8	8	ug/L	10.0		73.1	19-133	0.549	30
N-Nitrosomethylethylamine	<8	8	ug/L	10.0		70.4	10-149	0.00	30
Ethyl Methanesulfonate	<8	8	ug/L	10.0		74.8	29-118	0.134	17
Phenol	<8	8	ug/L	10.0		74.3	19-130	3.14	30
Bis(2-Chloroethyl) Ether	<8	8	ug/L	10.0		75.6	23-131	1.20	24
2-Chlorophenol	<8	8	ug/L	10.0		75.6	20-159	2.68	30
Benzyl Alcohol	<8	8	ug/L	10.0		42.2	17-138	28.6	30
2-Methylphenol (o-Cresol)	<8	8	ug/L	10.0		78.2	29-130	2.20	30
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	10.0		78.0	29-121	3.66	26
n-Nitroso-di-n-propylamine	<8	8	ug/L	10.0		77.3	33-130	1.70	21
N-Nitrosopyrrolidine	<8	8	ug/L	10.0		77.5	24-135	5.89	30
Acetophenone	<8	8	ug/L	10.0		78.8	35-129	3.22	22
o-Toluidine	<8	8	ug/L	10.0		72.1	10-119	4.25	30
(3 & 4)-Methylphenol	<8	8	ug/L	10.0		77.2	27-136	4.23	30
Hexachloroethane	<8	8	ug/L	10.0		69.7	18-88	4.85	30
Nitrobenzene	8.1	8	ug/L	10.0		80.6	32-133	3.92	26
N-Nitrosopiperidine	<8	8	ug/L	10.0		75.6	24-134	1.31	30
Isophorone	<8	8	ug/L	10.0		77.4	37-131	0.259	28
2-Nitrophenol	<8	8	ug/L	10.0		76.8	41-127	3.85	30
2,4-Dimethylphenol	<8	8	ug/L	10.0		77.3	34-133	2.75	30
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	10.0		67.0	29-117	10.9	30
2,4-Dichlorophenol	<8	8	ug/L	10.0		79.0	41-134	2.82	30
Naphthalene	<8	8	ug/L	10.0		72.6	31-107	1.67	30
2,6-Dichlorophenol	8.1	8	ug/L	10.0		81.0	21-151	4.16	30
Hexachloropropene	<8	8	ug/L	10.0		40.0	19-70	9.15	30
Hexachlorobutadiene	<8	8	ug/L	10.0		65.5	12-100	3.10	30
N-Nitrosodi-n-butylamine	<8	8	ug/L	10.0		68.5	13-144	2.31	30
4-Chloro-3-methylphenol	<8	8	ug/L	10.0		77.4	46-141	1.79	30
2-Methylnaphthalene	<8	8	ug/L	10.0		73.3	35-110	2.07	30
Isosafrole	<8	8	ug/L	10.0		69.8	38-122	3.65	29
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	10.0		58.9	31-102	0.340	30
Hexachlorocyclopentadiene	<8	8	ug/L	10.0		64.5	10-113	3.95	30
2,4,6-Trichlorophenol	8.1	8	ug/L	10.0		80.8	41-146	4.95	30
2,4,5-Trichlorophenol	8.2	8	ug/L	10.0		82.5	45-149	0.974	30
Safrole	<8	8	ug/L	10.0		69.4	36-122	5.78	30
2-Chloronaphthalene	<8	8	ug/L	10.0		71.3	20-146	1.13	30

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CERTIFICATE OF ANALYSIS

11C0696

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (11C0791-BSD1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:27						
2-Nitroaniline	<8	8	ug/L	10.0		71.6	38-149	0.00	30	
1,4-Naphthoquinone	<8	8	ug/L	10.0		73.6	45-170	2.55	30	
Dimethylphthalate	8.2	8	ug/L	10.0		82.4	40-149	1.96	23	
1,3-Dinitrobenzene	8.6	8	ug/L	10.0		85.7	30-171	5.52	26	
1,2-Dinitrobenzene	8.2	8	ug/L	10.0		82.4	35-159	3.08	26	
2,6-Dinitrotoluene	8.4	8	ug/L	10.0		83.7	40-148	3.90	30	
Acenaphthylene	<8	8	ug/L	10.0		70.9	35-128	4.18	30	
Acenaphthene	<8	8	ug/L	10.0		75.1	34-132	3.66	30	
2,4-Dinitrophenol	9.5	8	ug/L	10.0		95.4	27-165	0.105	30	
4-Nitrophenol	8.2	8	ug/L	10.0		81.5	35-159	0.615	30	
Dibenzofuran	<8	8	ug/L	10.0		77.3	37-136	1.70	30	
2,4-Dinitrotoluene	8.3	8	ug/L	10.0		83.0	42-154	0.241	30	
2,3,4,6-Tetrachlorophenol	9.0	8	ug/L	10.0		90.0	29-163	2.70	30	
Pentachlorobenzene	<8	8	ug/L	10.0		68.8	53-128	3.15	30	
Diethyl Phthalate	8.8	8	ug/L	10.0		88.0	39-156	2.76	30	
Fluorene	<8	8	ug/L	10.0		77.8	34-139	1.95	30	
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	10.0		76.8	39-138	0.653	30	
4,6-Dinitro-2-methylphenol	<8	8	ug/L	10.0		77.0	36-161	10.4	30	
N-Nitrosodiphenylamine	<8	8	ug/L	10.0		31.0	56-108	14.9	30	Q3
Diphenylamine	<8	8	ug/L	10.0		31.0	20-160	14.9	30	
Azobenzene	<8	8	ug/L	10.0		73.2	31-153	8.25	30	
Diallate	8.5	8	ug/L	10.0		85.2	43-167	1.54	30	
1,3,5-Trinitrobenzene	8.7	8	ug/L	10.0		86.6	50-167	1.28	30	
Phenacetin	9.0	8	ug/L	10.0		89.6	55-146	3.64	24	
4-Bromophenyl Phenyl Ether	8.0	8	ug/L	10.0		80.2	31-156	1.13	30	
Pentachlorophenol	10.0	8	ug/L	10.0		99.7	13-159	0.600	30	
Pronamide	<8	8	ug/L	10.0		62.8	53-139	8.12	30	
Pentachloronitrobenzene (PCNB)	8.6	8	ug/L	10.0		86.3	56-165	2.58	30	
Phenanthrene	8.4	8	ug/L	10.0		83.7	35-147	2.54	30	
Anthracene	<8	8	ug/L	10.0		76.6	36-146	3.32	30	
Di-n-butyl Phthalate	8.8	8	ug/L	10.0		87.9	37-164	2.89	30	
Fluoranthene	8.6	8	ug/L	10.0		85.9	38-155	1.76	30	
Isodrin	8.5	8	ug/L	10.0		85.3	34-148	5.67	30	
Chlorobenzilate	<8	8	ug/L	10.0		62.2	60-136	2.94	30	
Pyrene	8.2	8	ug/L	10.0		82.5	37-157	2.83	30	
Butyl Benzyl Phthalate	8.3	8	ug/L	10.0		83.3	52-150	1.69	30	
Benzo(a)anthracene	8.0	8	ug/L	10.0		80.4	39-149	1.25	30	
Chrysene	8.3	8	ug/L	10.0		83.4	39-149	0.240	30	
Bis(2-Ethylhexyl) Phthalate	11.9	6	ug/L	10.0		119	27-186	12.4	30	
2-Acetylaminofluorene	11.8	8	ug/L	10.0		118	20-171	4.65	30	
Di-n-octyl Phthalate	14.4	8	ug/L	10.0		144	39-171	0.208	30	
Benzo(b)Fluoranthene	13.3	8	ug/L	10.0		133	39-165	0.300	30	

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
LCS Dup (11C0791-BSD1)									
				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:27					
7,12-Dimethylbenz [a] anthracene	9.1	8	ug/L	10.0		91.2	22-155	1.99	30
Benzo(k)Fluoranthene	13.5	8	ug/L	10.0		135	41-160	1.04	30
Benzo(a)Pyrene	10.7	8	ug/L	10.0		107	37-151	0.468	30
3-Methylcholanthrene	<8	8	ug/L	10.0		38.5	28-140	11.8	30
Dibenzo(a,h)anthracene	13.2	8	ug/L	10.0		132	17-178	0.908	30
Indeno(1,2,3-cd)Pyrene	12.4	8	ug/L	10.0		124	18-176	0.886	30
Benzo(g,h,i)perylene	12.0	8	ug/L	10.0		120	11-179	1.49	30
Surrogate: 2-Fluorophenol									
	14.9		ug/L	20.6		72.1	10-149		
Surrogate: Phenol-d6									
	14.6		ug/L	19.6		74.3	10-143		
Surrogate: Nitrobenzene-d5									
	15.6		ug/L	20.6		76.1	31-137		
Surrogate: 2-Fluorobiphenyl									
	14.6		ug/L	19.5		74.8	29-131		
Surrogate: 2,4,6-Tribromophenol									
	17.7		ug/L	20.0		88.5	10-153		
Surrogate: Terphenyl-d14									
	18.3		ug/L	20.6		88.8	30-142		
Reference (11C0791-SRM1)									
				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:52					
N-Nitrosodimethylamine	8.6	8	ug/L	10.0		85.8	80-120		
Methyl Methanesulfonate	9.4	8	ug/L	10.0		93.6	80-120		
N-Nitrosodiethylamine	8.4	8	ug/L	10.0		83.5	80-120		
N-Nitrosomethylethylamine	8.4	8	ug/L	10.0		83.6	80-120		
Ethyl Methanesulfonate	9.3	8	ug/L	10.0		93.2	80-120		
Phenol	8.8	8	ug/L	10.0		88.3	80-120		
Bis(2-Chloroethyl) Ether	8.8	8	ug/L	10.0		88.0	80-120		
2-Chlorophenol	9.0	8	ug/L	10.0		89.9	80-120		
2-Methylphenol (o-Cresol)	8.6	8	ug/L	10.0		86.5	80-120		
Bis[2-Chloroisopropyl]ether	9.0	8	ug/L	10.0		89.7	80-120		
n-Nitroso-di-n-propylamine	8.8	8	ug/L	10.0		88.4	80-120		
N-Nitrosopyrrolidine	8.6	8	ug/L	10.0		85.5	80-120		
Acetophenone	9.4	8	ug/L	10.0		94.4	80-120		
(3 & 4)-Methylphenol	8.8	8	ug/L	10.0		87.7	80-120		
Hexachloroethane	8.9	8	ug/L	10.0		89.1	80-120		
Nitrobenzene	9.3	8	ug/L	10.0		92.8	80-120		
N-Nitrosopiperidine	8.8	8	ug/L	10.0		88.5	80-120		
Isophorone	9.2	8	ug/L	10.0		91.7	80-120		
2-Nitrophenol	9.3	8	ug/L	10.0		93.2	80-120		
2,4-Dimethylphenol	9.2	8	ug/L	10.0		92.3	80-120		
Bis (2-Chloroethoxy) Methane	9.1	8	ug/L	10.0		91.4	80-120		
2,4-Dichlorophenol	9.2	8	ug/L	10.0		91.8	80-120		
Naphthalene	9.0	8	ug/L	10.0		89.9	80-120		
2,6-Dichlorophenol	9.8	8	ug/L	10.0		97.9	80-120		
Hexachloropropene	9.9	8	ug/L	10.0		99.2	80-120		
Hexachlorobutadiene	9.2	8	ug/L	10.0		92.0	80-120		
N-Nitrosodi-n-butylamine	8.3	8	ug/L	10.0		82.8	80-120		
4-Chloro-3-methylphenol	8.3	8	ug/L	10.0		82.7	80-120		

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C									
Reference (11C0791-SRM1)	Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:52								
2-Methylnaphthalene	9.2	8	ug/L	10.0		91.5 80-120			
Isosafrole	9.2	8	ug/L	10.0		92.3 80-120			
1,2,4,5-Tetrachlorobenzene	9.6	8	ug/L	10.0		95.7 80-120			
Hexachlorocyclopentadiene	9.8	8	ug/L	10.0		97.5 80-120			
2,4,6-Trichlorophenol	9.2	8	ug/L	10.0		91.9 80-120			
2,4,5-Trichlorophenol	8.9	8	ug/L	10.0		88.6 80-120			
Safrole	9.6	8	ug/L	10.0		95.7 80-120			
2-Chloronaphthalene	8.9	8	ug/L	10.0		88.8 80-120			
2-Nitroaniline	8.9	8	ug/L	10.0		89.3 80-120			
1,4-Naphthoquinone	11.2	8	ug/L	10.0		112 80-120			
Dimethylphthalate	9.0	8	ug/L	10.0		89.6 80-120			
1,3-Dinitrobenzene	9.3	8	ug/L	10.0		93.2 80-120			
1,2-Dinitrobenzene	8.9	8	ug/L	10.0		88.9 80-120			
2,6-Dinitrotoluene	9.2	8	ug/L	10.0		91.5 80-120			
Acenaphthylene	8.9	8	ug/L	10.0		88.8 80-120			
3-Nitroaniline	<8	8	ug/L	10.0		75.0 80-120			M2
Acenaphthene	8.8	8	ug/L	10.0		88.5 80-120			
2,4-Dinitrophenol	9.6	8	ug/L	10.0		96.0 80-120			
4-Nitrophenol	<8	8	ug/L	10.0		72.3 80-120			M2
Dibenzofuran	8.9	8	ug/L	10.0		89.1 80-120			
2,4-Dinitrotoluene	9.0	8	ug/L	10.0		90.4 80-120			
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	10.0		75.8 80-120			M2
Pentachlorobenzene	9.6	8	ug/L	10.0		96.2 80-120			
Diethyl Phthalate	9.1	8	ug/L	10.0		90.6 80-120			
Fluorene	9.0	8	ug/L	10.0		90.2 80-120			
4-Chlorophenyl Phenyl Ether	8.9	8	ug/L	10.0		89.4 80-120			
4-Nitroaniline	8.6	8	ug/L	10.0		85.9 80-120			
5-Nitro-o-toluidine	<8	8	ug/L	10.0		80-120			M2
4,6-Dinitro-2-methylphenol	8.8	8	ug/L	10.0		88.4 80-120			
N-Nitrosodiphenylamine	9.1	8	ug/L	10.0		90.6 80-120			
Diphenylamine	9.1	8	ug/L	10.0		90.6 80-120			
Azobenzene	9.1	8	ug/L	10.0		90.8 80-120			
Diallate	10.1	8	ug/L	10.0		101 80-120			
1,3,5-Trinitrobenzene	9.7	8	ug/L	10.0		97.4 80-120			
Phenacetin	9.7	8	ug/L	10.0		97.0 80-120			
4-Bromophenyl Phenyl Ether	8.9	8	ug/L	10.0		89.2 80-120			
Pentachlorophenol	<8	8	ug/L	10.0		71.5 80-120			M2
Pronamide	9.9	8	ug/L	10.0		98.8 80-120			
Pentachloronitrobenzene (PCNB)	9.6	8	ug/L	10.0		96.2 80-120			
Phenanthrene	9.0	8	ug/L	10.0		89.6 80-120			
Anthracene	8.8	8	ug/L	10.0		87.9 80-120			
Di-n-butyl Phthalate	8.8	8	ug/L	10.0		88.4 80-120			

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0791 - 3520C BNA Cont Liq - EPA 8270C										
Reference (11C0791-SRM1)				Prepared: 03/17/25 14:17 Analyzed: 03/24/25 17:52						
Fluoranthene	8.9	8	ug/L	10.0		88.6	80-120			
Isodrin	9.5	8	ug/L	10.0		95.1	80-120			
Chlorobenzilate	10.0	8	ug/L	10.0		99.9	80-120			
Pyrene	9.1	8	ug/L	10.0		91.0	80-120			
Butyl Benzyl Phthalate	9.0	8	ug/L	10.0		90.3	80-120			
Benzo(a)anthracene	8.8	8	ug/L	10.0		88.4	80-120			
Chrysene	8.9	8	ug/L	10.0		89.4	80-120			
Bis(2-Ethylhexyl) Phthalate	8.9	6	ug/L	10.0		88.8	80-120			
2-Acetylaminofluorene	8.9	8	ug/L	10.0		88.7	80-120			
Di-n-octyl Phthalate	9.4	8	ug/L	10.0		94.5	80-120			
Benzo(b)Fluoranthene	8.6	8	ug/L	10.0		86.5	80-120			
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	10.0			80-120			M2
Benzo(k)Fluoranthene	9.2	8	ug/L	10.0		92.2	80-120			
Benzo(a)Pyrene	9.1	8	ug/L	10.0		90.7	80-120			
3-Methylcholanthrene	8.6	8	ug/L	10.0		85.6	80-120			
Dibenzo(a,h)anthracene	9.0	8	ug/L	10.0		89.7	80-120			
Indeno(1,2,3-cd)Pyrene	9.1	8	ug/L	10.0		91.2	80-120			
Benzo(g,h,i)perylene	9.2	8	ug/L	10.0		91.5	80-120			
Surrogate: 2-Fluorophenol	19.3		ug/L	20.6		93.6	10-149			
Surrogate: Phenol-d6	18.0		ug/L	19.6		91.8	10-143			
Surrogate: Nitrobenzene-d5	19.1		ug/L	20.6		93.0	20-149			
Surrogate: 2-Fluorobiphenyl	18.2		ug/L	19.5		93.4	11-146			
Surrogate: 2,4,6-Tribromophenol	19.0		ug/L	20.0		94.6	10-153			
Surrogate: Terphenyl-d14	19.9		ug/L	20.6		96.6	27-155			
Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0795 - 3510C NP/OC Sep Fnl - EPA 8141										
Blank (11C0795-BLK1)				Prepared: 03/17/25 14:27 Analyzed: 03/24/25 16:19						
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L							
Thionazin	<0.4	0.4	ug/L							
Phorate	<0.4	0.4	ug/L							
Dimethoate	<0.4	0.4	ug/L							
Disulfoton	<0.4	0.4	ug/L							
Methyl Parathion	<0.4	0.4	ug/L							
Parathion	<0.4	0.4	ug/L							
Famphur	<0.4	0.4	ug/L							
Surrogate: 2-Nitro-m-xylene	8.34		ug/L	13.9		59.9	15-154			
LCS (11C0795-BS1)				Prepared: 03/17/25 14:27 Analyzed: 03/25/25 00:43						

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CERTIFICATE OF ANALYSIS

1IC0696

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0795 - 3510C NP/OC Sep Fnl - EPA 8141									
LCS (1IC0795-BS1) Prepared: 03/17/25 14:27 Analyzed: 03/25/25 00:43									
O,O,O-Triethyl phosphorothioate	3.68	0.4	ug/L	4.00		92.0	29-156		
Thionazin	4.02	0.4	ug/L	4.00		100	63-131		
Phorate	4.22	0.4	ug/L	4.00		105	51-136		
Dimethoate	5.88	0.4	ug/L	4.00		147	42-157		
Disulfoton	4.06	0.4	ug/L	4.00		102	37-158		
Methyl Parathion	3.85	0.4	ug/L	4.00		96.2	66-140		
Parathion	3.26	0.4	ug/L	4.00		81.6	66-120		
Famphur	4.94	0.4	ug/L	4.00		123	67-129		

Surrogate: 2-Nitro-m-xylene 12.3 ug/L 13.9 88.6 15-154

LCS Dup (1IC0795-BSD1) Prepared: 03/17/25 14:27 Analyzed: 03/25/25 01:25									
O,O,O-Triethyl phosphorothioate	3.28	0.4	ug/L	4.00		82.0	29-156	11.5	30
Thionazin	3.72	0.4	ug/L	4.00		92.9	63-131	7.76	30
Phorate	3.89	0.4	ug/L	4.00		97.2	51-136	8.02	30
Dimethoate	4.98	0.4	ug/L	4.00		125	42-157	16.4	30
Disulfoton	3.88	0.4	ug/L	4.00		96.9	37-158	4.79	30
Methyl Parathion	3.60	0.4	ug/L	4.00		89.9	66-140	6.85	30
Parathion	3.00	0.4	ug/L	4.00		75.1	66-120	8.29	26
Famphur	4.32	0.4	ug/L	4.00		108	67-129	13.4	30

Surrogate: 2-Nitro-m-xylene 9.30 ug/L 13.9 66.8 15-154

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes

Batch 1IC0735 - EPA 8151A - EPA 8151A

Blank (1IC0735-BLK1) Prepared: 03/14/25 15:57 Analyzed: 03/21/25 17:22									
2,4-D	<2.0	2.0	ug/L						
2,4,5-TP (Silvex)	<0.5	0.5	ug/L						
2,4,5-T	<0.5	0.5	ug/L						
Dinoseb	<0.5	0.5	ug/L						

Surrogate: 2,5-Dichlorobenzoic Acid 1.98 ug/L 2.02 98.3 36-159

LCS (1IC0735-BS1) Prepared: 03/14/25 15:57 Analyzed: 03/21/25 23:45									
2,4-D	<2.0	2.0	ug/L	1.00		66.5	34-138		
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	0.500		83.0	35-145		
2,4,5-T	<0.5	0.5	ug/L	0.500		85.0	17-168		
Dinoseb	0.86	0.5	ug/L	1.00		86.5	10-140		

Surrogate: 2,5-Dichlorobenzoic Acid 2.01 ug/L 2.02 99.5 36-159

LCS Dup (1IC0735-BSD1) Prepared: 03/14/25 15:57 Analyzed: 03/22/25 00:17									
2,4-D	<2.0	2.0	ug/L	1.00		79.0	34-138	17.2	30

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Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0735 - EPA 8151A - EPA 8151A										

LCS Dup (11C0735-BSD1)

Prepared: 03/14/25 15:57 Analyzed: 03/22/25 00:17

2,4,5-TP (Silvex)	<0.5	0.5	ug/L	0.500		90.0	35-145	8.09	30	
2,4,5-T	0.52	0.5	ug/L	0.500		104	17-168	20.1	30	
Dinoseb	0.61	0.5	ug/L	1.00		61.0	10-140	34.6	30	R1
Surrogate: 2,5-Dichlorobenzoic Acid	2.13		ug/L	2.02		105	36-159			

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 11C0789 - 3510C NP/OC Sep Fnl - EPA 8081

Blank (11C0789-BLK1)

Prepared: 03/17/25 14:21 Analyzed: 03/21/25 11:31

Alpha-BHC	<0.05	0.05	ug/L							
Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Beta-BHC	<0.05	0.05	ug/L							
Heptachlor	<0.05	0.05	ug/L							
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							
4,4'-DDE	<0.05	0.05	ug/L							
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4'-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4'-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Methoxychlor	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Hexachlorobenzene	<0.05	0.05	ug/L							

Surrogate: Tetrachloro-m-xylene 0.478 ug/L 0.600 79.6 40-116

LCS (11C0789-BS1)

Prepared: 03/17/25 14:21 Analyzed: 03/21/25 11:45

Alpha-BHC	0.201	0.05	ug/L	0.250		80.3	52-118			
Gamma-BHC [Lindane]	0.222	0.05	ug/L	0.250		88.9	53-122			
Beta-BHC	0.206	0.05	ug/L	0.250		82.6	54-116			
Heptachlor	0.191	0.05	ug/L	0.250		76.4	58-126			
Delta-BHC	0.222	0.05	ug/L	0.250		88.9	54-134			
Aldrin	0.203	0.05	ug/L	0.250		81.3	47-122			
Heptachlor Epoxide	0.231	0.05	ug/L	0.250		92.2	50-123			
Endosulfan I	0.220	0.05	ug/L	0.250		88.0	55-124			

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Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0789 - 3510C NP/OC Sep Fnl - EPA 8081									
LCS (1IC0789-BS1)									
Prepared: 03/17/25 14:21 Analyzed: 03/21/25 11:45									
4,4'-DDE	0.207	0.05	ug/L	0.250		83.0	49-141		
Dieldrin	0.211	0.05	ug/L	0.250		84.4	50-118		
Endrin	0.229	0.05	ug/L	0.250		91.6	39-170		
4,4'-DDD	0.205	0.05	ug/L	0.250		81.9	59-135		
Endosulfan II	0.216	0.05	ug/L	0.250		86.4	56-127		
4,4'-DDT	0.213	0.05	ug/L	0.250		85.0	67-150		
Endrin Aldehyde	0.149	0.05	ug/L	0.250		59.8	57-125		
Endosulfan Sulfate	0.214	0.05	ug/L	0.250		85.5	53-131		
Methoxychlor	0.207	0.05	ug/L	0.250		83.0	63-153		
Surrogate: Tetrachloro-m-xylene	0.499		ug/L	0.600		83.1	40-116		
LCS Dup (1IC0789-BSD1)									
Prepared: 03/17/25 14:21 Analyzed: 03/21/25 12:29									
Alpha-BHC	0.211	0.05	ug/L	0.250		84.4	52-118	4.95	30
Gamma-BHC [Lindane]	0.237	0.05	ug/L	0.250		95.0	53-122	6.59	30
Beta-BHC	0.216	0.05	ug/L	0.250		86.3	54-116	4.40	30
Heptachlor	0.209	0.05	ug/L	0.250		83.7	58-126	9.11	30
Delta-BHC	0.238	0.05	ug/L	0.250		95.3	54-134	6.97	30
Aldrin	0.210	0.05	ug/L	0.250		84.2	47-122	3.47	30
Heptachlor Epoxide	0.242	0.05	ug/L	0.250		96.6	50-123	4.69	30
Endosulfan I	0.230	0.05	ug/L	0.250		91.9	55-124	4.36	30
4,4'-DDE	0.212	0.05	ug/L	0.250		84.8	49-141	2.20	30
Dieldrin	0.221	0.05	ug/L	0.250		88.3	50-118	4.50	30
Endrin	0.242	0.05	ug/L	0.250		96.7	39-170	5.48	30
4,4'-DDD	0.216	0.05	ug/L	0.250		86.2	59-135	5.09	30
Endosulfan II	0.228	0.05	ug/L	0.250		91.2	56-127	5.37	30
4,4'-DDT	0.229	0.05	ug/L	0.250		91.6	67-150	7.41	30
Endrin Aldehyde	0.192	0.05	ug/L	0.250		76.8	57-125	25.0	30
Endosulfan Sulfate	0.227	0.05	ug/L	0.250		90.9	53-131	6.12	30
Methoxychlor	0.218	0.05	ug/L	0.250		87.2	63-153	4.89	30
Surrogate: Tetrachloro-m-xylene	0.493		ug/L	0.600		82.1	40-116		
Determination of Polychlorinated Biphenyls (PCB)									
Batch 1IC0790 - 3510C NP/OC Sep Fnl - EPA 8082									
Blank (1IC0790-BLK1)									
Prepared: 03/17/25 14:24 Analyzed: 03/21/25 11:31									
Arochlor 1016	<0.20	0.20	ug/L						
Arochlor 1221	<0.20	0.20	ug/L						
Arochlor 1232	<0.20	0.20	ug/L						
Arochlor 1242	<0.20	0.20	ug/L						

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls (PCB)										
Batch 11C0790 - 3510C NP/OC Sep Fnl - EPA 8082										
Blank (11C0790-BLK1)				Prepared: 03/17/25 14:24 Analyzed: 03/21/25 11:31						
Arochlor 1248	<0.20	0.20	ug/L							
Arochlor 1254	<0.20	0.20	ug/L							
Arochlor 1260	<0.20	0.20	ug/L							
Surrogate: Tetrachloro-m-xylene	0.478		ug/L	0.600		79.6	37-120			
Surrogate: Decachlorobiphenyl	0.582		ug/L	0.600		97.0	22-116			
LCS (11C0790-BS1)				Prepared: 03/17/25 14:24 Analyzed: 03/21/25 12:00						
Arochlor 1016	2.283	0.20	ug/L	2.60		87.8	42-132			
Arochlor 1260	2.425	0.20	ug/L	2.60		93.3	50-139			
Surrogate: Tetrachloro-m-xylene	0.531		ug/L	0.600		88.5	37-120			
Surrogate: Decachlorobiphenyl	0.555		ug/L	0.600		92.5	22-116			
LCS Dup (11C0790-BSD1)				Prepared: 03/17/25 14:24 Analyzed: 03/21/25 12:15						
Arochlor 1016	2.386	0.20	ug/L	2.60		91.8	42-132	4.40	20	
Arochlor 1260	2.565	0.20	ug/L	2.60		98.7	50-139	5.59	24	
Surrogate: Tetrachloro-m-xylene	0.577		ug/L	0.600		96.2	37-120			
Surrogate: Decachlorobiphenyl	0.586		ug/L	0.600		97.7	22-116			
Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Conventional Chemistry Parameters										
Batch 11C0503 - Wet Chem Preparation - EPA 9014										
Blank (11C0503-BLK1)				Prepared: 03/12/25 07:48 Analyzed: 03/14/25 08:53						
Cyanide, total	<0.010	0.010	mg/L							
LCS (11C0503-BS1)				Prepared: 03/12/25 07:48 Analyzed: 03/14/25 08:53						
Cyanide, total	0.0193	0.010	mg/L	0.0200		96.5	66-127			
Matrix Spike (11C0503-MS1)				Source: 11C0696-13 Prepared: 03/12/25 07:48 Analyzed: 03/14/25 08:53						
Cyanide, total	0.0118	0.010	mg/L	0.0200	ND	59.2	56-132			
Matrix Spike Dup (11C0503-MSD1)				Source: 11C0696-13 Prepared: 03/12/25 07:48 Analyzed: 03/14/25 08:53						
Cyanide, total	0.0130	0.010	mg/L	0.0200	ND	65.2	56-132	9.66	28	
Batch 11C0760 - Wet Chem Preparation - EPA 376.2										
Blank (11C0760-BLK1)				Prepared & Analyzed: 03/17/25 09:28						
Sulfide, total	<0.10	0.10	mg/L							
LCS (11C0760-BS1)				Prepared & Analyzed: 03/17/25 09:28						
Sulfide, total	0.263	0.10	mg/L	0.31		83.4	56-118			
Matrix Spike (11C0760-MS1)				Source: 11C0696-01 Prepared & Analyzed: 03/17/25 09:28						
Sulfide, total	0.471	0.30	mg/L	0.94	ND	49.9	50-150			M2



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Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0760 - Wet Chem Preparation - EPA 376.2										
Matrix Spike Dup (1IC0760-MSD1)	Source: 1IC0696-01			Prepared & Analyzed: 03/17/25 09:28						
Sulfide, total	0.493	0.30	mg/L	0.94	ND	52.2	50-150	4.55	30	
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0555 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IC0555-BLK1)	Prepared: 03/12/25 14:03 Analyzed: 03/13/25 22:26									
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Tin, total	<0.0200	0.0200	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1IC0555-BS1)	Prepared: 03/12/25 14:03 Analyzed: 03/13/25 22:45									
Antimony, total	0.0952	0.0020	mg/L	0.100		95.2	80-120			
Arsenic, total	0.0966	0.0040	mg/L	0.100		96.6	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.0982	0.0040	mg/L	0.100		98.2	80-120			
Cadmium, total	0.0950	0.0008	mg/L	0.100		95.0	80-120			
Chromium, total	0.0955	0.0080	mg/L	0.100		95.5	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Copper, total	0.0982	0.0040	mg/L	0.100		98.2	80-120			
Lead, total	0.100	0.0040	mg/L	0.100		100	80-120			
Nickel, total	0.0993	0.0040	mg/L	0.100		99.3	80-120			
Selenium, total	0.0966	0.0040	mg/L	0.100		96.6	80-120			
Silver, total	0.0990	0.0040	mg/L	0.100		99.0	80-120			
Thallium, total	0.0989	0.0020	mg/L	0.100		98.9	80-120			
Tin, total	0.0944	0.0200	mg/L	0.100		94.4	80-120			
Vanadium, total	0.0990	0.0200	mg/L	0.100		99.0	80-120			
Zinc, total	0.0968	0.0200	mg/L	0.100		96.8	80-120			
Matrix Spike (1IC0555-MS1)	Source: 1IC0696-01			Prepared: 03/12/25 14:03 Analyzed: 03/13/25 22:57						
Antimony, total	0.0936	0.0020	mg/L	0.100	ND	93.6	75-125			

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0555 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1IC0555-MS1) Source: 1IC0696-01 Prepared: 03/12/25 14:03 Analyzed: 03/13/25 22:57										
Arsenic, total	0.109	0.0040	mg/L	0.100	0.0110	97.5	75-125			
Barium, total	0.122	0.0040	mg/L	0.100	0.0163	106	75-125			
Beryllium, total	0.0849	0.0040	mg/L	0.100	ND	84.9	75-125			
Cadmium, total	0.0871	0.0008	mg/L	0.100	ND	87.1	75-125			
Chromium, total	0.0895	0.0080	mg/L	0.100	0.0007	88.8	75-125			
Cobalt, total	0.122	0.0004	mg/L	0.100	0.0210	101	75-125			
Copper, total	0.0846	0.0040	mg/L	0.100	ND	84.6	75-125			
Lead, total	0.0891	0.0040	mg/L	0.100	ND	89.1	75-125			
Nickel, total	0.124	0.0040	mg/L	0.100	0.0332	90.4	75-125			
Selenium, total	0.1012	0.0040	mg/L	0.100	ND	101	75-125			
Silver, total	0.0898	0.0040	mg/L	0.100	ND	89.8	75-125			
Thallium, total	0.0918	0.0020	mg/L	0.100	0.0002	91.7	75-125			
Tin, total	0.0942	0.0200	mg/L	0.100	ND	94.2	75-125			
Vanadium, total	0.0946	0.0200	mg/L	0.100	ND	94.6	75-125			
Zinc, total	0.0867	0.0200	mg/L	0.100	ND	86.7	75-125			
Matrix Spike Dup (1IC0555-MSD1) Source: 1IC0696-01 Prepared: 03/12/25 14:03 Analyzed: 03/13/25 23:03										
Antimony, total	0.0927	0.0020	mg/L	0.100	ND	92.7	75-125	0.974	20	
Arsenic, total	0.107	0.0040	mg/L	0.100	0.0110	95.7	75-125	1.67	20	
Barium, total	0.123	0.0040	mg/L	0.100	0.0163	106	75-125	0.229	20	
Beryllium, total	0.0839	0.0040	mg/L	0.100	ND	83.9	75-125	1.17	20	
Cadmium, total	0.0845	0.0008	mg/L	0.100	ND	84.5	75-125	3.08	20	
Chromium, total	0.0873	0.0080	mg/L	0.100	0.0007	86.6	75-125	2.45	20	
Cobalt, total	0.121	0.0004	mg/L	0.100	0.0210	99.6	75-125	1.01	20	
Copper, total	0.0831	0.0040	mg/L	0.100	ND	83.1	75-125	1.72	20	
Lead, total	0.0871	0.0040	mg/L	0.100	ND	87.1	75-125	2.32	20	
Nickel, total	0.123	0.0040	mg/L	0.100	0.0332	89.7	75-125	0.522	20	
Selenium, total	0.0978	0.0040	mg/L	0.100	ND	97.8	75-125	3.35	20	
Silver, total	0.0886	0.0040	mg/L	0.100	ND	88.6	75-125	1.40	20	
Thallium, total	0.0898	0.0020	mg/L	0.100	0.0002	89.6	75-125	2.24	20	
Tin, total	0.0931	0.0200	mg/L	0.100	ND	93.1	75-125	1.24	20	
Vanadium, total	0.0934	0.0200	mg/L	0.100	ND	93.4	75-125	1.31	20	
Zinc, total	0.0847	0.0200	mg/L	0.100	ND	84.7	75-125	2.32	20	
Post Spike (1IC0555-PS1) Source: 1IC0696-01 Prepared: 03/12/25 14:03 Analyzed: 03/13/25 23:09										
Antimony, total	0.0763		mg/L	0.0800	0.00007	95.3	80-120			
Arsenic, total	0.0918		mg/L	0.0800	0.0108	101	80-120			
Barium, total	0.0975		mg/L	0.0800	0.0159	102	80-120			
Beryllium, total	0.0704		mg/L	0.0800	0.00003	88.0	80-120			
Cadmium, total	0.0721		mg/L	0.0800	0.00006	90.1	80-120			
Chromium, total	0.0737		mg/L	0.0800	0.0007	91.3	80-120			
Cobalt, total	0.105		mg/L	0.0800	0.0206	106	80-120			
Copper, total	0.0719		mg/L	0.0800	0.0004	89.3	80-120			
Lead, total	0.0734		mg/L	0.0800	0.00005	91.7	80-120			
Nickel, total	0.110		mg/L	0.0800	0.0325	96.4	80-120			

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0555 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (11C0555-PS1)		Source: 11C0696-01		Prepared: 03/12/25 14:03 Analyzed: 03/13/25 23:09						
Selenium, total	0.0803		mg/L	0.0800	0.0003	100	80-120			
Silver, total	0.0739		mg/L	0.0800	0.0001	92.3	80-120			
Thallium, total	0.0755		mg/L	0.0800	0.0002	94.2	80-120			
Tin, total	0.0812		mg/L	0.0800	0.0001	101	75-125			
Vanadium, total	0.0795		mg/L	0.0800	0.0029	95.7	80-120			
Zinc, total	0.0708		mg/L	0.0800	0.0007	87.6	80-120			
Batch 11C1059 - EPA 7470A Hg Water - EPA 7470A										
Blank (11C1059-BLK1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:54								
Mercury, total	<0.00050	0.00050	mg/L							
LCS (11C1059-BS1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:57								
Mercury, total	0.00227	0.00050	mg/L	0.00250		90.7	80-120			
Matrix Spike (11C1059-MS1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:08						
Mercury, total	0.00210	0.00050	mg/L	0.00250	ND	84.1	75-125			
Matrix Spike Dup (11C1059-MSD1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:13						
Mercury, total	0.00235	0.00050	mg/L	0.00250	ND	94.2	75-125	11.3	20	

Definitions

AC:	Analyzed out of hold due to instrument malfunction.
H:	Sample was analyzed past holding time.
M1:	Matrix spike recovery is above acceptance limits.
M2:	Matrix spike recovery is below acceptance limits.
Q2:	LCS recovery is above acceptance limits.
Q3:	LCS recovery is below acceptance limits. The reported value is estimated.
Q4:	ICV recovery is above acceptance limits. Values that are <RL are not affected
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 3.8°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		



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11C0696

Report Comments

*The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. **The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.***

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/01/25 16:00



CHAIN OF CUSTODY

600 East 17th Street SE
Newton, IA 50208
641-792-8451



1 I C 0 6 9 6

HLW Engineering
PM: Heather Murphy

Page 1 of 1

Printed: 2/18/2025 10:48:08A

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SITE INFORMATION

Sampler: Todd Whipple
Project: Clarke Co. SLF - New Regs
6037

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St.
Story City, IA 50248

INVOICE TO

Jill Curnes
Clarke County Landfill Commission
Courthouse - 100 S Main St
Osceola, IA 50213

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1ICOLAL6

Temperature

Turn-Cooler: No

☐ Custody Seal
☐ Containers Intact
☐ COC/Labels Agree
☐ Preservation Confirmed
☐ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-33	Aqueous	GRAB	<u>3/10/25</u>	<u>9:47</u>	<u>8</u>	Indfil-app1-metals-6020 Indfil-app1-voc sulf-t-376.2-regen	<u>01</u>
-001	MW-23 (B)	Aqueous	GRAB	<u>3/10/25</u>	<u>8:03</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>02</u>
-001	MW-27 (B)	Aqueous	GRAB	<u>3/10/25</u>	<u>8:47</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>03</u>
-001	MW-21	Aqueous	GRAB	<u>3/10/25</u>	<u>10:32</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>04</u>
-001	MW-31	Aqueous	GRAB	<u>3/10/25</u>	<u>11:15</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>05</u>
-001	MW-28 (B)	Aqueous	GRAB	<u>3/10/25</u>	<u>8:57</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>06</u>
-001	MW-28 (B)	Aqueous	GRAB	<u>3/10/25</u>	<u>8:38</u>	<u>7</u>	Indfil-app1-metals-6020 Indfil-app1-voc	<u>07</u>

Relinquished By [Signature] Date/Time 3/11/25Relinquished By [Signature] Date/Time 3/11/25 1035

Remarks:

Received By [Signature] Date/Time 3/11/25Received for Lab By [Signature] Date/Time 3/11/25

Original - Lab Copy Yellow - Sampler Copy



CHAIN OF C

600 East 17th Street
Newton, IA 50208
641-792-8451



1 I C 0 6 9 6

HLW Engineering
PM: Heather Murphy

Page 2 of

Printed: 2/18/2025 10:48:06A

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SITE INFORMATION

Sampler:

TODD WHIPPLE

Project:

Clarke Co. SLF - New Regs
6037

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Jill Curnes
Clarke County Landfill Commission
Courthouse - 100 S Main St
Osceola, IA 50213

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order

1IC0696

Temperature

Turn-Cooler:

No

- ☐ Custody Seal
☐ Containers Intact
☐ COC/Labels Agree
☐ Preservation Confirmed
☐ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-36 (B)	Aqueous	GRAB	3/10/25	7:45	7	Indfil-app1-metals-6020 Indfil-app1-voc	08
-001	MW-37	Aqueous	GRAB	3/10/25	9:24	7	Indfil-app1-metals-6020 Indfil-app1-voc	09
-001	MW-22	Aqueous	GRAB	3/10/25	10:40	7	Indfil-app1-metals-6020 Indfil-app1-voc	10
-001	MW-32	Aqueous	GRAB	3/10/25	11:24	7	Indfil-app1-metals-6020 Indfil-app1-voc	11
-001	Field Duplicate	Aqueous	GRAB	3/10/25	✓	7	Indfil-app1-metals-6020 ~~Indfil-app1-voc~~	12
-001	MW-38	Aqueous	GRAB	3/10/25	11:42	17	Indfil-app2-inorg-6020 Indfil-app2-org	13
	MW-34			3/10/25	10:53	7	Landfill AppI metals + voc	14

Relinquished By

Date/Time

Relinquished By

Date/Time

Remarks:

Received By

Date/Time

Received for Lab By

Date/Time

Original - Lab Copy Yellow - Sampler Copy



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0772

Project Description

6037

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Wednesday, September 17, 2025

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc., Newton. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

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CERTIFICATE OF ANALYSIS

11I0772

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6037

Project / PO Number: 050312
Received: 09/09/2025
Reported: 09/17/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-33	11I0772-01	Aqueous	GRAB		09/05/25 08:58	09/09/25 10:50



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0772

Analytical Testing Parameters

Client Sample ID: MW-33
Sample Matrix: Aqueous
Lab Sample ID: 11I0772-01

Collected By: Whipple, Todd
Collection Date: 09/05/2025 8:58

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Vinyl Chloride	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Bromomethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Chloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Acetone	<10.0	10.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Methyl Iodide	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Carbon Disulfide	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Methylene Chloride	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1-Dichloroethane	1.3	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Vinyl Acetate	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
cis-1,2-Dichloroethylene	4.2	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Bromochloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Chloroform	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Benzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Trichloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,2-Dichloropropane	5.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Dibromomethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Bromodichloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Toluene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Dibromochloromethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Chlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Ethylbenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Xylenes, total	<2.0	2.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Styrene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Bromoform	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF

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CERTIFICATE OF ANALYSIS

11I0772

Client Sample ID: MW-33
Sample Matrix: Aqueous
Lab Sample ID: 11I0772-01

Collected By: Whipple, Todd
Collection Date: 09/05/2025 8:58

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		09/15/25 0000	09/15/25 1332	RAF
Surrogate: Dibromofluoromethane	99.8	.imit: 75-136	% Rec		09/15/25 0000	09/15/25 1332	RAF
Surrogate: 1,2-Dichloroethane-d4	104	.imit: 61-142	% Rec		09/15/25 0000	09/15/25 1332	RAF
Surrogate: Toluene-d8	101	.imit: 82-121	% Rec		09/15/25 0000	09/15/25 1332	RAF
Surrogate: 4-Bromofluorobenzene	89.9	.imit: 80-116	% Rec		09/15/25 0000	09/15/25 1332	RAF
Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 376.2							
Sulfide, total	<0.10	0.10	mg/L			09/12/25 0837	BSS
Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1817	JAR
Arsenic, total	0.0021	0.0020	mg/L		09/11/25 0837	09/11/25 1817	JAR
Barium, total	0.0254	0.0010	mg/L		09/11/25 0837	09/11/25 1817	JAR
Beryllium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1817	JAR
Cadmium, total	0.0021	0.0002	mg/L		09/11/25 0837	09/11/25 1817	JAR
Chromium, total	0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1817	JAR
Cobalt, total	0.0157	0.0005	mg/L		09/11/25 0837	09/11/25 1817	JAR
Copper, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1817	JAR
Lead, total	<0.0010	0.0010	mg/L		09/11/25 0837	09/11/25 1817	JAR
Nickel, total	0.0238	0.0050	mg/L		09/11/25 0837	09/11/25 1817	JAR
Selenium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1817	JAR
Silver, total	<0.0050	0.0050	mg/L		09/11/25 0837	09/11/25 1817	JAR
Thallium, total	<0.0005	0.0005	mg/L		09/11/25 0837	09/11/25 1817	JAR
Vanadium, total	<0.0020	0.0020	mg/L		09/11/25 0837	09/11/25 1817	JAR
Zinc, total	0.0100	0.0050	mg/L		09/11/25 0837	09/11/25 1817	JAR

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0772

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	11I0635	11I0635-BLK1	
		11I0635-BS1	
		11I0635-MS1	11I0767-01
		11I0635-MSD1	11I0767-01
		11I0635-PS1	11I0767-01
		11I0772-01	MW-33
Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	11I0728	11I0728-BS1	
		11I0728-BLK1	
		11I0772-01	MW-33
		11I0728-MSD1	11I0923-03
		11I0728-MS1	11I0923-03
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	11I0883	11I0883-BS1	
		11I0883-BSD1	
		11I0883-BLK1	
		11I0772-01	MW-33
		11I0883-MS1	11I1028-18
		11I0883-MSD1	11I1028-18

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Blank (11I0883-BLK1)				Prepared: 09/15/25 00:00 Analyzed: 09/15/25 11:16						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0772

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Blank (11I0883-BLK1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 11:16										
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane										
	48.6		ug/L	50.2		96.9	75-136			
Surrogate: 1,2-Dichloroethane-d4										
	49.2		ug/L	50.4		97.6	61-142			
Surrogate: Toluene-d8										
	49.3		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene										
	46.8		ug/L	50.2		93.4	80-116			
LCS (11I0883-BS1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:07										
Chloromethane	34.51	1.0	ug/L	30.3		114	63-155			
Vinyl Chloride	33.67	1.0	ug/L	30.2		111	70-154			
Bromomethane	29.00	1.0	ug/L	30.1		96.3	52-176			
Chloroethane	30.27	1.0	ug/L	30.3		99.8	72-148			
Trichlorofluoromethane	34.26	1.0	ug/L	30.3		113	70-152			
1,1-Dichloroethylene	56.03	1.0	ug/L	50.1		112	70-148			
Acetone	87.68	10.0	ug/L	100		87.7	43-172			
Methyl Iodide	95.45	1.0	ug/L	100		95.4	69-170			
Carbon Disulfide	110.6	1.0	ug/L	100		111	72-162			
Methylene Chloride	49.49	5.0	ug/L	50.1		98.8	68-142			
trans-1,2-Dichloroethylene	50.38	1.0	ug/L	50.1		101	66-148			

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11I0772

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
LCS (11I0883-BS1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:07										
1,1-Dichloroethane	52.92	1.0	ug/L	50.1		106	66-143			
Vinyl Acetate	155.7	5.0	ug/L	131		119	43-153			
cis-1,2-Dichloroethylene	45.62	1.0	ug/L	50.4		90.6	71-149			
2-Butanone (MEK)	104.5	10.0	ug/L	100		104	52-159			
Bromochloromethane	50.63	1.0	ug/L	50.4		100	69-143			
Chloroform	50.64	1.0	ug/L	50.1		101	69-144			
1,1,1-Trichloroethane	52.69	1.0	ug/L	50.1		105	62-129			
Carbon Tetrachloride	56.07	1.0	ug/L	50.1		112	63-141			
Benzene	49.74	1.0	ug/L	50.4		98.6	71-134			
1,2-Dichloroethane	54.13	1.0	ug/L	50.1		108	72-132			
Trichloroethylene	55.03	1.0	ug/L	50.1		110	71-135			
1,2-Dichloropropane	50.71	1.0	ug/L	50.1		101	69-136			
Dibromomethane	47.04	1.0	ug/L	50.4		93.4	73-147			
Bromodichloromethane	55.76	1.0	ug/L	50.1		111	68-129			
cis-1,3-Dichloropropene	53.70	1.0	ug/L	50.1		107	65-134			
4-Methyl-2-pentanone (MIBK)	100.0	5.0	ug/L	100		100	58-147			
Toluene	49.46	1.0	ug/L	50.5		98.0	72-133			
trans-1,3-Dichloropropene	57.22	1.0	ug/L	50.1		114	67-130			
1,1,2-Trichloroethane	50.05	1.0	ug/L	50.1		99.9	69-135			
Tetrachloroethylene	55.48	1.0	ug/L	50.1		111	69-130			
2-Hexanone (MBK)	97.65	5.0	ug/L	100		97.6	55-144			
Dibromochloromethane	52.66	1.0	ug/L	50.1		105	73-127			
1,2-Dibromoethane	53.35	1.0	ug/L	50.2		106	67-132			
Chlorobenzene	49.82	1.0	ug/L	50.1		99.5	72-123			
1,1,1,2-Tetrachloroethane	53.90	1.0	ug/L	50.3		107	73-127			
Ethylbenzene	50.91	1.0	ug/L	50.2		101	71-127			
Xylenes, total	155.0	2.0	ug/L	151		103	74-127			
Styrene	52.47	1.0	ug/L	50.4		104	66-126			
Bromoform	57.11	1.0	ug/L	50.1		114	68-130			
1,2,3-Trichloropropane	53.11	1.0	ug/L	50.3		105	63-136			
trans-1,4-Dichloro-2-butene	104.1	5.0	ug/L	100		104	54-134			
1,1,2,2-Tetrachloroethane	44.21	1.0	ug/L	50.1		88.2	61-131			
1,4-Dichlorobenzene	44.61	1.0	ug/L	50.1		89.0	70-129			
1,2-Dichlorobenzene	47.61	1.0	ug/L	50.1		95.0	69-126			
1,2-Dibromo-3-chloropropane	47.55	5.0	ug/L	50.1		94.9	50-143			

Surrogate: Dibromofluoromethane	49.0		ug/L	50.2		97.6	75-136
Surrogate: 1,2-Dichloroethane-d4	48.9		ug/L	50.4		97.1	61-142
Surrogate: Toluene-d8	48.9		ug/L	50.5		96.8	82-121
Surrogate: 4-Bromofluorobenzene	52.0		ug/L	50.2		104	80-116

LCS Dup (11I0883-BS1)										
Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:30										
Chloromethane	33.08	1.0	ug/L	30.3		109	63-155	4.23	24	
Vinyl Chloride	32.66	1.0	ug/L	30.2		108	70-154	3.05	25	



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CERTIFICATE OF ANALYSIS

11I0772

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
LCS Dup (11I0883-BSD1)				Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:30						
Bromomethane	28.95	1.0	ug/L	30.1		96.1	52-176	0.173	27	
Chloroethane	29.57	1.0	ug/L	30.3		97.5	72-148	2.34	25	
Trichlorofluoromethane	33.73	1.0	ug/L	30.3		111	70-152	1.56	26	
1,1-Dichloroethylene	53.31	1.0	ug/L	50.1		106	70-148	4.98	24	
Acetone	92.20	10.0	ug/L	100		92.2	43-172	5.03	30	
Methyl Iodide	97.12	1.0	ug/L	100		97.1	69-170	1.73	30	
Carbon Disulfide	108.1	1.0	ug/L	100		108	72-162	2.29	24	
Methylene Chloride	49.86	5.0	ug/L	50.1		99.5	68-142	0.745	21	
trans-1,2-Dichloroethylene	48.85	1.0	ug/L	50.1		97.5	66-148	3.08	27	
1,1-Dichloroethane	50.49	1.0	ug/L	50.1		101	66-143	4.70	24	
Vinyl Acetate	153.8	5.0	ug/L	131		117	43-153	1.23	30	
cis-1,2-Dichloroethylene	47.25	1.0	ug/L	50.4		93.8	71-149	3.51	26	
2-Butanone (MEK)	103.8	10.0	ug/L	100		104	52-159	0.663	27	
Bromochloromethane	50.26	1.0	ug/L	50.4		99.7	69-143	0.733	23	
Chloroform	49.47	1.0	ug/L	50.1		98.8	69-144	2.34	23	
1,1,1-Trichloroethane	50.67	1.0	ug/L	50.1		101	62-129	3.91	24	
Carbon Tetrachloride	54.17	1.0	ug/L	50.1		108	63-141	3.45	25	
Benzene	50.10	1.0	ug/L	50.4		99.3	71-134	0.721	24	
1,2-Dichloroethane	51.75	1.0	ug/L	50.1		103	72-132	4.50	24	
Trichloroethylene	52.49	1.0	ug/L	50.1		105	71-135	4.72	24	
1,2-Dichloropropane	50.91	1.0	ug/L	50.1		102	69-136	0.394	24	
Dibromomethane	48.43	1.0	ug/L	50.4		96.2	73-147	2.91	25	
Bromodichloromethane	53.01	1.0	ug/L	50.1		106	68-129	5.06	22	
cis-1,3-Dichloropropene	53.94	1.0	ug/L	50.1		108	65-134	0.446	23	
4-Methyl-2-pentanone (MIBK)	103.5	5.0	ug/L	100		103	58-147	3.39	27	
Toluene	48.41	1.0	ug/L	50.5		95.9	72-133	2.15	24	
trans-1,3-Dichloropropene	56.97	1.0	ug/L	50.1		114	67-130	0.438	24	
1,1,2-Trichloroethane	49.87	1.0	ug/L	50.1		99.6	69-135	0.360	23	
Tetrachloroethylene	51.63	1.0	ug/L	50.1		103	69-130	7.19	25	
2-Hexanone (MBK)	101.3	5.0	ug/L	100		101	55-144	3.66	25	
Dibromochloromethane	53.07	1.0	ug/L	50.1		106	73-127	0.776	22	
1,2-Dibromoethane	50.52	1.0	ug/L	50.2		101	67-132	5.45	24	
Chlorobenzene	49.13	1.0	ug/L	50.1		98.1	72-123	1.39	23	
1,1,1,2-Tetrachloroethane	52.26	1.0	ug/L	50.3		104	73-127	3.09	24	
Ethylbenzene	50.00	1.0	ug/L	50.2		99.7	71-127	1.80	26	
Xylenes, total	150.0	2.0	ug/L	151		99.3	74-127	3.26	25	
Styrene	52.45	1.0	ug/L	50.4		104	66-126	0.0381	23	
Bromoform	56.19	1.0	ug/L	50.1		112	68-130	1.62	23	
1,2,3-Trichloropropane	51.85	1.0	ug/L	50.3		103	63-136	2.40	24	
trans-1,4-Dichloro-2-butene	105.0	5.0	ug/L	100		105	54-134	0.871	27	
1,1,2,2-Tetrachloroethane	44.54	1.0	ug/L	50.1		88.9	61-131	0.744	29	
1,4-Dichlorobenzene	44.97	1.0	ug/L	50.1		89.7	70-129	0.804	24	
1,2-Dichlorobenzene	46.48	1.0	ug/L	50.1		92.8	69-126	2.40	26	

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CERTIFICATE OF ANALYSIS

11I0772

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
LCS Dup (11I0883-BSD1)				Prepared: 09/15/25 00:00 Analyzed: 09/15/25 10:30						
1,2-Dibromo-3-chloropropane	47.36	5.0	ug/L	50.1		94.5	50-143	0.400	30	
Surrogate: Dibromofluoromethane	47.8		ug/L	50.2		95.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.6		ug/L	50.4		100	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene	51.5		ug/L	50.2		103	80-116			
Matrix Spike (11I0883-MS1)				Source: 11I1028-18		Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:15				
Chloromethane	713.7	10.0	ug/L	303	ND	235	61-152			M1
Vinyl Chloride	373.8	10.0	ug/L	302	ND	124	66-149			
Bromomethane	163.4	10.0	ug/L	301	ND	54.2	43-171			
Chloroethane	353.7	10.0	ug/L	303	ND	117	69-148			
Trichlorofluoromethane	369.2	10.0	ug/L	303	ND	122	62-163			
1,1-Dichloroethylene	596.4	10.0	ug/L	501	ND	119	70-148			
Acetone	1194	100	ug/L	1000	ND	119	45-173			
Methyl Iodide	499.2	10.0	ug/L	1000	ND	49.9	62-167			M2
Carbon Disulfide	1175	10.0	ug/L	1000	ND	117	71-163			
Methylene Chloride	562.2	50.0	ug/L	501	ND	112	69-140			
trans-1,2-Dichloroethylene	531.2	10.0	ug/L	501	ND	106	69-144			
1,1-Dichloroethane	564.9	10.0	ug/L	501	ND	113	70-138			
Vinyl Acetate	1742	50.0	ug/L	1310	ND	133	58-142			
cis-1,2-Dichloroethylene	507.6	10.0	ug/L	504	ND	101	68-151			
2-Butanone (MEK)	1200	100	ug/L	1000	ND	120	50-160			
Bromochloromethane	556.4	10.0	ug/L	504	ND	110	65-143			
Chloroform	557.1	10.0	ug/L	501	ND	111	71-143			
1,1,1-Trichloroethane	555.5	10.0	ug/L	501	ND	111	63-133			
Carbon Tetrachloride	509.9	10.0	ug/L	501	ND	102	63-142			
Benzene	527.6	10.0	ug/L	504	ND	105	69-133			
1,2-Dichloroethane	544.9	10.0	ug/L	501	ND	109	63-138			
Trichloroethylene	568.5	10.0	ug/L	501	ND	113	71-133			
1,2-Dichloropropane	544.2	10.0	ug/L	501	ND	109	69-132			
Dibromomethane	523.4	10.0	ug/L	504	ND	104	70-147			
Bromodichloromethane	542.6	10.0	ug/L	501	ND	108	67-130			
cis-1,3-Dichloropropene	597.5	10.0	ug/L	501	ND	119	61-126			
4-Methyl-2-pentanone (MIBK)	1134	50.0	ug/L	1000	ND	113	55-147			
Toluene	517.8	10.0	ug/L	505	ND	103	71-133			
trans-1,3-Dichloropropene	600.7	10.0	ug/L	501	ND	120	63-124			
1,1,2-Trichloroethane	530.6	10.0	ug/L	501	ND	106	69-133			
Tetrachloroethylene	569.1	10.0	ug/L	501	ND	114	70-124			
2-Hexanone (MBK)	1071	50.0	ug/L	1000	ND	107	53-141			
Dibromochloromethane	508.3	10.0	ug/L	501	ND	102	74-122			
1,2-Dibromoethane	542.0	10.0	ug/L	502	ND	108	66-127			
Chlorobenzene	521.7	10.0	ug/L	501	ND	104	76-116			
1,1,1,2-Tetrachloroethane	533.7	10.0	ug/L	503	ND	106	77-121			

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Matrix Spike (11I0883-MS1)	Source: 11I1028-18			Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:15						
Ethylbenzene	523.6	10.0	ug/L	502	ND	104	73-124			
Xylenes, total	1560	20.0	ug/L	1510	ND	103	75-123			
Styrene	549.8	10.0	ug/L	504	ND	109	70-120			
Bromoform	579.9	10.0	ug/L	501	ND	116	70-124			
1,2,3-Trichloropropane	560.8	10.0	ug/L	503	ND	111	62-135			
trans-1,4-Dichloro-2-butene	1186	50.0	ug/L	1000	ND	119	50-120			
1,1,2,2-Tetrachloroethane	498.3	10.0	ug/L	501	ND	99.5	63-126			
1,4-Dichlorobenzene	484.8	10.0	ug/L	501	ND	96.7	72-119			
1,2-Dichlorobenzene	518.9	10.0	ug/L	501	ND	104	71-117			
1,2-Dibromo-3-chloropropane	571.3	50.0	ug/L	501	ND	114	49-134			
Surrogate: Dibromofluoromethane	523		ug/L	502		104	75-136			
Surrogate: 1,2-Dichloroethane-d4	524		ug/L	504		104	61-142			
Surrogate: Toluene-d8	501		ug/L	505		99.3	82-121			
Surrogate: 4-Bromofluorobenzene	491		ug/L	502		97.8	80-116			
Matrix Spike Dup (11I0883-MSD1)	Source: 11I1028-18			Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:38						
Chloromethane	681.3	10.0	ug/L	303	ND	225	61-152	4.65	26	M1
Vinyl Chloride	350.5	10.0	ug/L	302	ND	116	66-149	6.43	23	
Bromomethane	157.6	10.0	ug/L	301	ND	52.3	43-171	3.61	29	
Chloroethane	326.0	10.0	ug/L	303	ND	108	69-148	8.15	25	
Trichlorofluoromethane	344.6	10.0	ug/L	303	ND	114	62-163	6.89	25	
1,1-Dichloroethylene	589.7	10.0	ug/L	501	ND	118	70-148	1.13	22	
Acetone	1253	100	ug/L	1000	ND	125	45-173	4.82	30	
Methyl Iodide	496.2	10.0	ug/L	1000	ND	49.6	62-167	0.603	24	M2
Carbon Disulfide	1129	10.0	ug/L	1000	ND	113	71-163	3.98	22	
Methylene Chloride	536.7	50.0	ug/L	501	ND	107	69-140	4.64	19	
trans-1,2-Dichloroethylene	521.5	10.0	ug/L	501	ND	104	69-144	1.84	22	
1,1-Dichloroethane	542.4	10.0	ug/L	501	ND	108	70-138	4.06	20	
Vinyl Acetate	1763	50.0	ug/L	1310	ND	135	58-142	1.20	24	
cis-1,2-Dichloroethylene	506.2	10.0	ug/L	504	ND	101	68-151	0.276	22	
2-Butanone (MEK)	1277	100	ug/L	1000	ND	128	50-160	6.26	23	
Bromochloromethane	526.8	10.0	ug/L	504	ND	105	65-143	5.47	22	
Chloroform	529.3	10.0	ug/L	501	ND	106	71-143	5.12	21	
1,1,1-Trichloroethane	534.2	10.0	ug/L	501	ND	107	63-133	3.91	23	
Carbon Tetrachloride	486.7	10.0	ug/L	501	ND	97.2	63-142	4.66	22	
Benzene	499.8	10.0	ug/L	504	ND	99.1	69-133	5.41	18	
1,2-Dichloroethane	532.3	10.0	ug/L	501	ND	106	63-138	2.34	20	
Trichloroethylene	513.6	10.0	ug/L	501	ND	103	71-133	10.1	23	
1,2-Dichloropropane	527.0	10.0	ug/L	501	ND	105	69-132	3.21	20	
Dibromomethane	489.3	10.0	ug/L	504	ND	97.1	70-147	6.73	22	
Bromodichloromethane	519.5	10.0	ug/L	501	ND	104	67-130	4.35	21	
cis-1,3-Dichloropropene	553.4	10.0	ug/L	501	ND	110	61-126	7.66	21	
4-Methyl-2-pentanone (MIBK)	1099	50.0	ug/L	1000	ND	110	55-147	3.15	23	

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0883 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (11I0883-MSD1)	Source: 11I1028-18			Prepared: 09/15/25 00:00 Analyzed: 09/15/25 19:38						
Toluene	490.2	10.0	ug/L	505	ND	97.1	71-133	5.48	19	
trans-1,3-Dichloropropene	571.1	10.0	ug/L	501	ND	114	63-124	5.05	21	
1,1,2-Trichloroethane	496.7	10.0	ug/L	501	ND	99.2	69-133	6.60	19	
Tetrachloroethylene	535.2	10.0	ug/L	501	ND	107	70-124	6.14	24	
2-Hexanone (MBK)	1075	50.0	ug/L	1000	ND	108	53-141	0.410	24	
Dibromochloromethane	515.8	10.0	ug/L	501	ND	103	74-122	1.46	21	
1,2-Dibromoethane	548.1	10.0	ug/L	502	ND	109	66-127	1.12	23	
Chlorobenzene	502.0	10.0	ug/L	501	ND	100	76-116	3.85	21	
1,1,1,2-Tetrachloroethane	526.4	10.0	ug/L	503	ND	105	77-121	1.38	25	
Ethylbenzene	498.2	10.0	ug/L	502	ND	99.3	73-124	4.97	20	
Xylenes, total	1504	20.0	ug/L	1510	ND	99.5	75-123	3.65	20	
Styrene	510.9	10.0	ug/L	504	ND	101	70-120	7.33	23	
Bromoform	565.9	10.0	ug/L	501	ND	113	70-124	2.44	22	
1,2,3-Trichloropropane	548.3	10.0	ug/L	503	ND	109	62-135	2.25	28	
trans-1,4-Dichloro-2-butene	1129	50.0	ug/L	1000	ND	113	50-120	4.97	26	
1,1,2,2-Tetrachloroethane	464.1	10.0	ug/L	501	ND	92.6	63-126	7.11	24	
1,4-Dichlorobenzene	446.2	10.0	ug/L	501	ND	89.0	72-119	8.29	24	
1,2-Dichlorobenzene	478.7	10.0	ug/L	501	ND	95.6	71-117	8.06	24	
1,2-Dibromo-3-chloropropane	548.0	50.0	ug/L	501	ND	109	49-134	4.16	28	
Surrogate: Dibromofluoromethane	515		ug/L	502		103	75-136			
Surrogate: 1,2-Dichloroethane-d4	552		ug/L	504		110	61-142			
Surrogate: Toluene-d8	502		ug/L	505		99.4	82-121			
Surrogate: 4-Bromofluorobenzene	500		ug/L	502		99.7	80-116			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0728 - Wet Chem Preparation - EPA 376.2										
Blank (11I0728-BLK1)	Prepared & Analyzed: 09/12/25 08:37									
Sulfide, total	<0.10	0.10	mg/L							
LCS (11I0728-BS1)	Prepared & Analyzed: 09/12/25 08:37									
Sulfide, total	0.127	0.10	mg/L	0.23		56.3	56-118			
Matrix Spike (11I0728-MS1)	Source: 11I0923-03 Prepared & Analyzed: 09/12/25 08:37									
Sulfide, total	<0.10	0.10	mg/L	0.23	ND	42.8	50-150			M2
Matrix Spike Dup (11I0728-MSD1)	Source: 11I0923-03 Prepared & Analyzed: 09/12/25 08:37									
Sulfide, total	0.131	0.10	mg/L	0.23	ND	58.3	50-150	30.6	30	R1

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A										



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CERTIFICATE OF ANALYSIS

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A									
Blank (11I0635-BLK1) Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:35									
Antimony, total	<0.0010	0.0010	mg/L						
Arsenic, total	<0.0020	0.0020	mg/L						
Barium, total	<0.0010	0.0010	mg/L						
Beryllium, total	<0.0005	0.0005	mg/L						
Cadmium, total	<0.0002	0.0002	mg/L						
Chromium, total	<0.0010	0.0010	mg/L						
Cobalt, total	<0.0005	0.0005	mg/L						
Copper, total	<0.0050	0.0050	mg/L						B
Lead, total	<0.0010	0.0010	mg/L						
Nickel, total	<0.0050	0.0050	mg/L						
Selenium, total	<0.0020	0.0020	mg/L						
Silver, total	<0.0050	0.0050	mg/L						
Thallium, total	<0.0005	0.0005	mg/L						
Vanadium, total	<0.0020	0.0020	mg/L						
Zinc, total	<0.0050	0.0050	mg/L						
LCS (11I0635-BS1) Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:37									
Antimony, total	0.101	0.0010	mg/L	0.100		101	80-120		
Arsenic, total	0.0993	0.0020	mg/L	0.100		99.3	80-120		
Barium, total	0.107	0.0010	mg/L	0.100		107	80-120		
Beryllium, total	0.100	0.0005	mg/L	0.100		100	80-120		
Cadmium, total	0.100	0.0002	mg/L	0.100		100	80-120		
Chromium, total	0.101	0.0010	mg/L	0.100		101	80-120		
Cobalt, total	0.101	0.0005	mg/L	0.100		101	80-120		
Copper, total	0.0937	0.0050	mg/L	0.100		93.7	80-120		
Lead, total	0.105	0.0010	mg/L	0.100		105	80-120		
Nickel, total	0.0961	0.0050	mg/L	0.100		96.1	80-120		
Selenium, total	0.0969	0.0020	mg/L	0.100		96.9	80-120		
Silver, total	0.101	0.0050	mg/L	0.100		101	80-120		
Thallium, total	0.104	0.0005	mg/L	0.100		104	80-120		
Vanadium, total	0.110	0.0020	mg/L	0.100		110	80-120		
Zinc, total	0.0985	0.0050	mg/L	0.100		98.5	80-120		
Matrix Spike (11I0635-MS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:42									
Antimony, total	0.106	0.0010	mg/L	0.100	0.0014	105	75-125		
Arsenic, total	0.102	0.0020	mg/L	0.100	ND	102	75-125		
Barium, total	0.291	0.0010	mg/L	0.100	0.180	111	75-125		
Beryllium, total	0.105	0.0005	mg/L	0.100	ND	105	75-125		
Cadmium, total	0.103	0.0002	mg/L	0.100	0.0006	102	75-125		
Chromium, total	0.108	0.0010	mg/L	0.100	0.0053	103	75-125		
Cobalt, total	0.100	0.0005	mg/L	0.100	0.0001	100	75-125		
Copper, total	0.0930	0.0050	mg/L	0.100	0.0068	86.3	75-125		
Lead, total	0.110	0.0010	mg/L	0.100	ND	110	75-125		
Nickel, total	0.101	0.0050	mg/L	0.100	0.0051	95.6	75-125		
Selenium, total	0.0994	0.0020	mg/L	0.100	0.0012	98.2	75-125		

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CERTIFICATE OF ANALYSIS

11I0772

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11I0635 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (11I0635-MS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:42										
Silver, total	0.104	0.0050	mg/L	0.100	ND	104	75-125			
Thallium, total	0.110	0.0005	mg/L	0.100	0.00005	110	75-125			
Vanadium, total	0.114	0.0020	mg/L	0.100	0.0013	113	75-125			
Zinc, total	0.116	0.0050	mg/L	0.100	0.0173	98.2	75-125			
Matrix Spike Dup (11I0635-MSD1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:45										
Antimony, total	0.106	0.0010	mg/L	0.100	0.0014	105	75-125	0.166	20	
Arsenic, total	0.0995	0.0020	mg/L	0.100	ND	99.5	75-125	2.59	20	
Barium, total	0.303	0.0010	mg/L	0.100	0.180	123	75-125	4.08	20	
Beryllium, total	0.102	0.0005	mg/L	0.100	ND	102	75-125	3.19	20	
Cadmium, total	0.102	0.0002	mg/L	0.100	0.0006	102	75-125	0.499	20	
Chromium, total	0.107	0.0010	mg/L	0.100	0.0053	102	75-125	1.08	20	
Cobalt, total	0.0977	0.0005	mg/L	0.100	0.0001	97.6	75-125	2.77	20	
Copper, total	0.0969	0.0050	mg/L	0.100	0.0068	90.1	75-125	4.08	20	
Lead, total	0.104	0.0010	mg/L	0.100	ND	104	75-125	6.12	20	
Nickel, total	0.0997	0.0050	mg/L	0.100	0.0051	94.6	75-125	0.931	20	
Selenium, total	0.0982	0.0020	mg/L	0.100	0.0012	97.0	75-125	1.29	20	
Silver, total	0.100	0.0050	mg/L	0.100	ND	100	75-125	3.55	20	
Thallium, total	0.106	0.0005	mg/L	0.100	0.00005	106	75-125	4.29	20	
Vanadium, total	0.111	0.0020	mg/L	0.100	0.0013	110	75-125	2.75	20	
Zinc, total	0.113	0.0050	mg/L	0.100	0.0173	95.8	75-125	2.08	20	
Post Spike (11I0635-PS1) Source: 11I0767-01 Prepared: 09/11/25 08:37 Analyzed: 09/11/25 17:47										
Antimony, total	0.0218		mg/L	0.0200	0.0014	102	80-120			
Arsenic, total	0.0198		mg/L	0.0200	0.0004	96.8	80-120			
Barium, total	0.196		mg/L	0.0200	0.177	97.7	80-120			
Beryllium, total	0.0198		mg/L	0.0200-0.000003		99.0	80-120			
Cadmium, total	0.0199		mg/L	0.0200	0.0006	96.4	80-120			
Chromium, total	0.0243		mg/L	0.0200	0.0052	95.6	80-120			
Cobalt, total	0.0184		mg/L	0.0200	0.0001	91.1	80-120			
Copper, total	0.0242		mg/L	0.0200	0.0066	87.6	80-120			
Lead, total	0.0197		mg/L	0.0200	0.0001	97.9	80-120			
Nickel, total	0.0233		mg/L	0.0200	0.0050	91.6	80-120			
Selenium, total	0.0207		mg/L	0.0200	0.0012	97.8	80-120			
Silver, total	0.0200		mg/L	0.0200	0.00007	99.7	80-120			
Thallium, total	0.0199		mg/L	0.0200	0.00005	99.4	80-120			
Vanadium, total	0.0210		mg/L	0.0200	0.0013	98.2	80-120			
Zinc, total	0.0357		mg/L	0.0200	0.0170	93.3	80-120			

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CERTIFICATE OF ANALYSIS

1110772

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
M1:	Matrix spike recovery is above acceptance limits.
M2:	Matrix spike recovery is below acceptance limits.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.9°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. **The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.**

Reviewed and Approved By:

Heather Murphy

Customer Relationship Specialist
heather.murphy@microbac.com
09/17/25 16:18

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1

Printed: 8/27/2025 4:06:31PM

Page 15 of 15

SITE INFORMATION

Sampler: Todd WhippleProject: **Clarke Co. SLF - New Regs**
6037

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Jill Curnes
Clarke County Landfill Commission
Courthouse - 100 S Main St
Osceola, IA 50213

1 I I 0 7 7 2

HLW Engineering
PM: Heather MurphyTemperature: 0.9 ice °C

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW-33	Aqueous	GRAB	9/5/25	8:58	8	Indfil-app1-metals-60201f-t-376.2-regen Indfil-app1-voc	01

Relinquished By [Signature]Date/Time 9/9/25Relinquished By [Signature]Date/Time 9/9/25 10:50 AM

Remarks:

Received By

Date/Time

Received for Lab By [Signature]

Date/Time

Appendix E

Summary of Field Turbidity

Clarke County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	9/29/14	11/24/14	3/19/15	6/17/15	8/26/15	11/10/15	3/9/16	5/10/16	9/14/16	3/7/17	6/6/17
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
21	0.55		42.8	0.16	0.7		1.24		1.06	0.76	
22					7.78		4.57		5.12	1.01	
23	1.43	0.92	2.98	1.97	0.18		0.76		1.85	3.7	
27	11.16	1.14	0.98	5.58	1.84		5.13		1.12	9.68	
28	12.14	21.9	49.9		57.65		4.29	2.10	1.61	4.6	
29	1.73	1.34	5.66	1.13	7.34		8.33		6.00	1.77	
31	4.26		0.99		0.18		1.23		0.81	0.39	
32					3.78		8.84		5.71	4.01	
33	3.3		8.01		2.67		2.55		1.26	5.87	
34	9.46		3.74		28.13		91.56		5.60	4.63	6.92
36	288.7		7.12		5.5	5.91	0.67		0.16		
37											
38											
Max	288.70	21.90	49.90	14.71	113.60	5.91	91.56	2.10	6.00	9.68	6.92
Min	0.43	0.92	0.98	0.16	0.18	4.19	0.55	2.10	0.16	0.39	6.92
Median	3.30	1.34	5.66	1.97	3.78	5.05	4.29	2.10	1.61	3.86	6.92
Average	30.49	5.41	12.48	4.71	17.92	5.05	10.55	2.10	2.75	3.81	6.92

Clarke County Sanitary Landfill

Field Turbidity Over Time

	9/11/17	3/7/18	9/5/18	4/1/19	6/7/19	9/9/19	12/5/19	3/10/20	9/14/20	3/4/21	5/19/21
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
21	0.72	0.39	0.24	1.5	1.02	0.99		0.85	0.67	1.6	6.25
22	1.02	0.93	0.68	1.79		1.33		1.75	5.97	1.85	
23	0.56	1.2	0.32	1.2		0.96		1.09	1.65	2.06	
27	0.68	0.34	0.96	1.16		10.8		4.8	5.86	12.9	
28	4.3	1.70	31.33	43.1		4.14		21.20	40.89	3.51	
29	2.11	3.45	1.21	1.22		2.71		3.07	4.81	1.37	
31	0.58	3.51	0.53	0.64		1.56	0.89	0.89	4.27	1.17	
32	2.68	2.3	2.48		34.59	3.03		1.87	1.27	6.78	
33	4.8	2.58	3.95	21.56		33.47		2.9	6.55	3.37	
34	4.88	2.87	37.39			1.73		2.02	2.97	2.84	
36	0.59	1.2	1.02	0.99		1.01		0.86	1.01	1.67	
37									1.74	1.46	
38											
Max	24.07	6.28	37.39	43.10	35.41	37.80	0.89	21.20	40.89	12.90	6.25
Min	0.56	0.34	0.24	0.64	1.02	0.96	0.89	0.85	0.67	1.17	6.25
Median	1.10	2.30	1.02	1.36	34.59	2.71	0.89	1.87	3.12	2.06	6.25
Average	3.70	2.48	7.83	7.98	23.67	8.80	0.89	3.61	5.96	3.66	6.25

Clarke County Sanitary Landfill

Field Turbidity Over Time

	9/9/21	10/11/21	3/24/22	9/9/22	11/10/22	3/21/23	5/9/23	9/7/23	3/6/24	4/1/24	6/3/24
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
21	1.84		0.57	1.38		1.24					
22	2.25		0.95	2.48		1.95					
23	2.89		5.07	3.16		2.21					
27	5.2		4.83	1.05		2.68					
28	31.32		2.82	37.28		5.03					
29	3.8		2.64	1.51		4.09					
31	1.79		0.33	1.16		0.94					
32	2.66		1.4	2.02		1.99					
33	2.88		2.44	2.66		1.85		2.85	7.96		
34	1.55		1.19	5.11		4.55				1.92	
36	2.12		0.54	1.28		1.06					
37	1.96		3.7	6.63		3.04					
38		9.59	11.21	1.33	3.22	1.34	1.94				6.31
Max	31.32	9.59	11.21	37.28	3.22	5.03	1.94	2.85	7.96	1.92	6.31
Min	1.55	9.59	0.33	1.05	3.22	0.94	1.94	2.85	7.96	1.92	6.31
Median	2.46	9.59	2.44	2.02	3.22	1.99	1.94	2.85	7.96	1.92	6.31
Average	5.02	9.59	2.90	5.16	3.22	2.46	1.94	2.85	7.96	1.92	6.31

Clarke County Sanitary Landfill

Field Turbidity Over Time

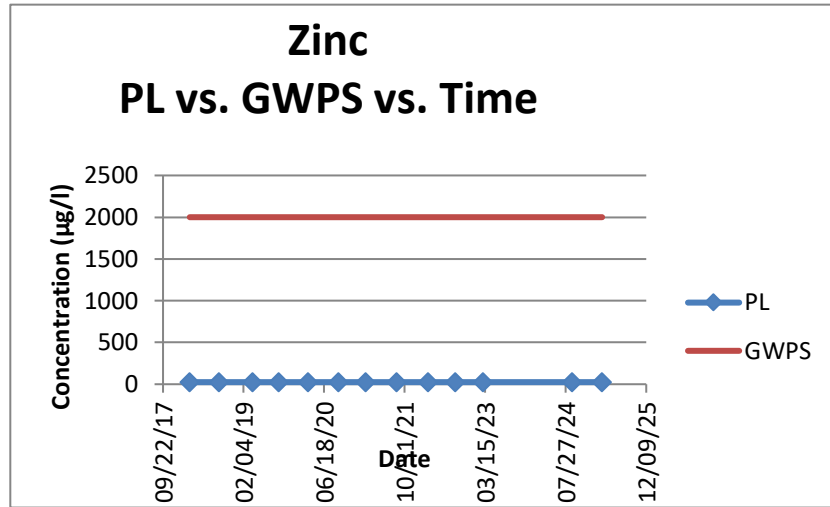
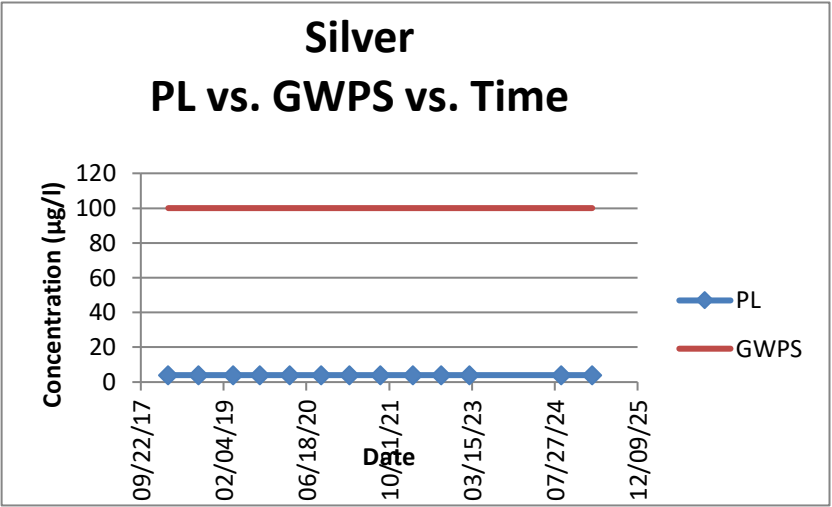
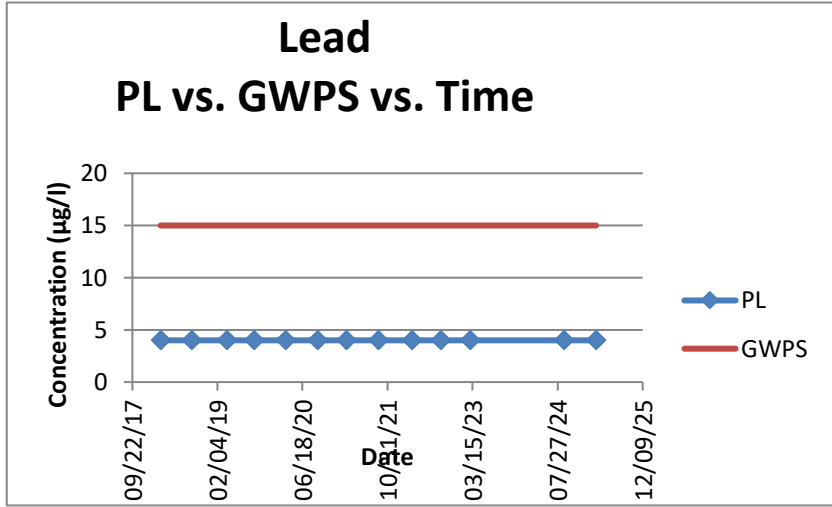
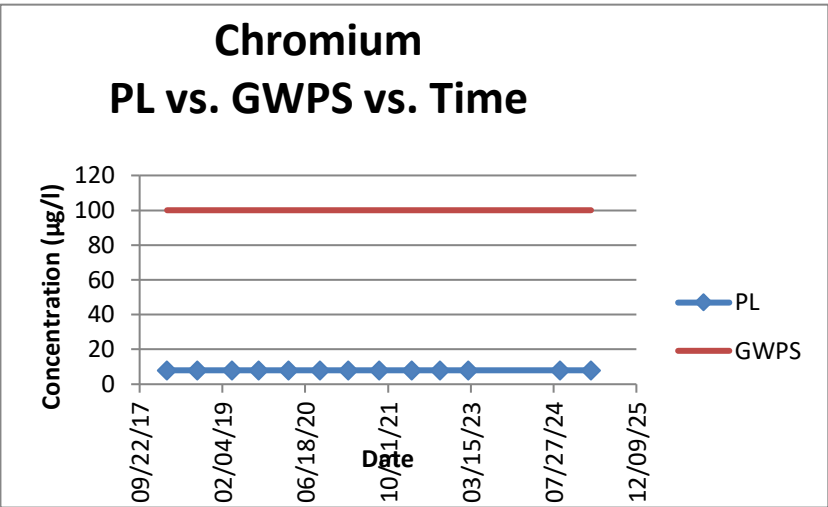
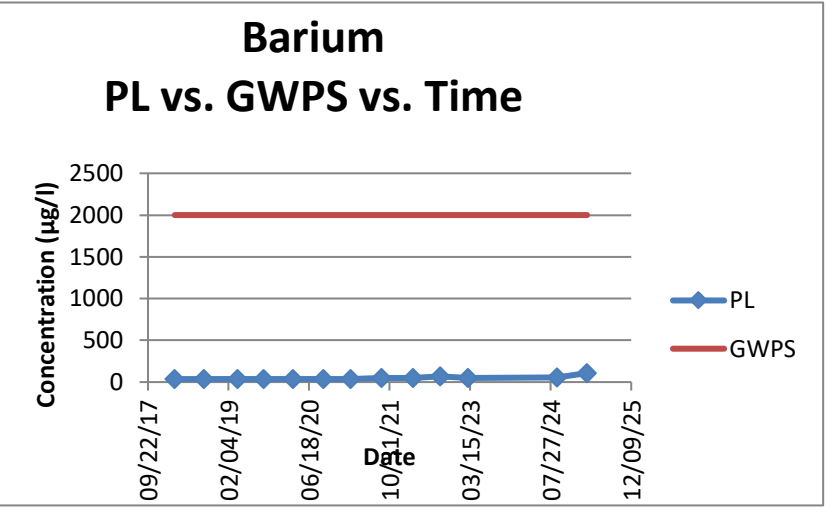
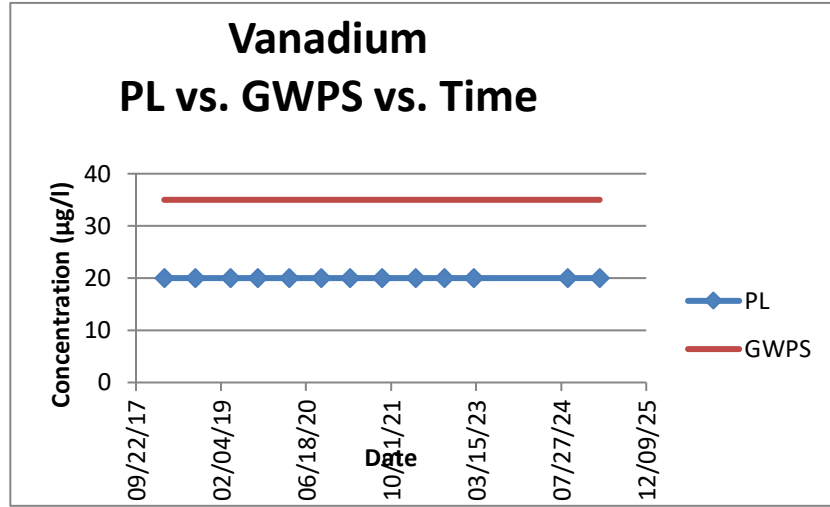
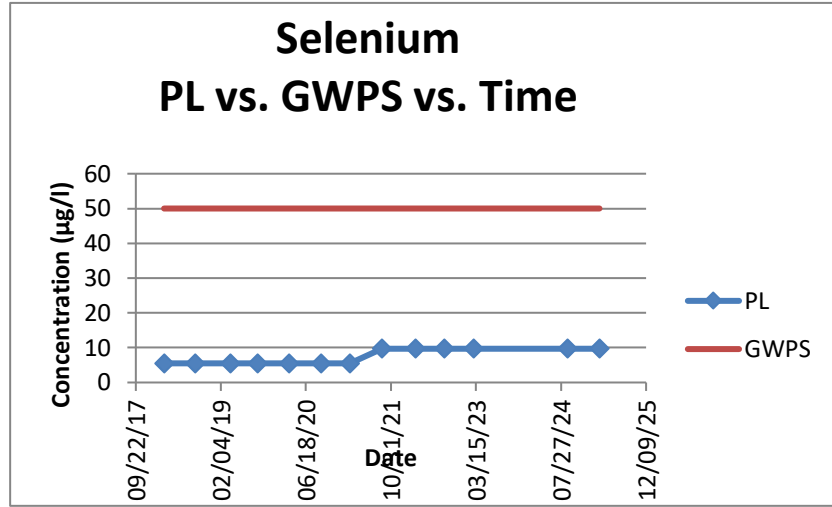
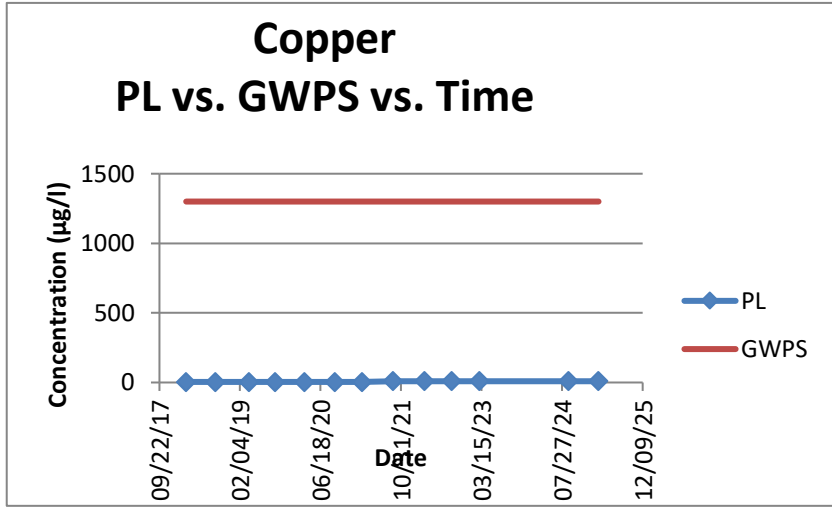
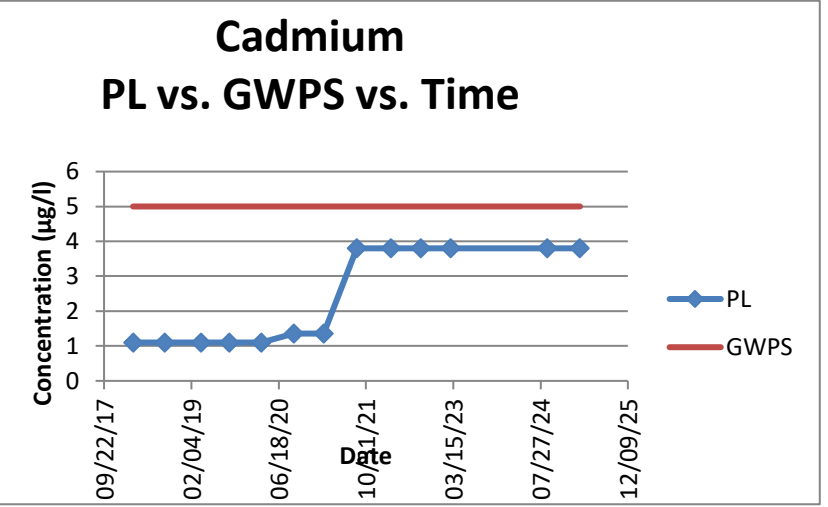
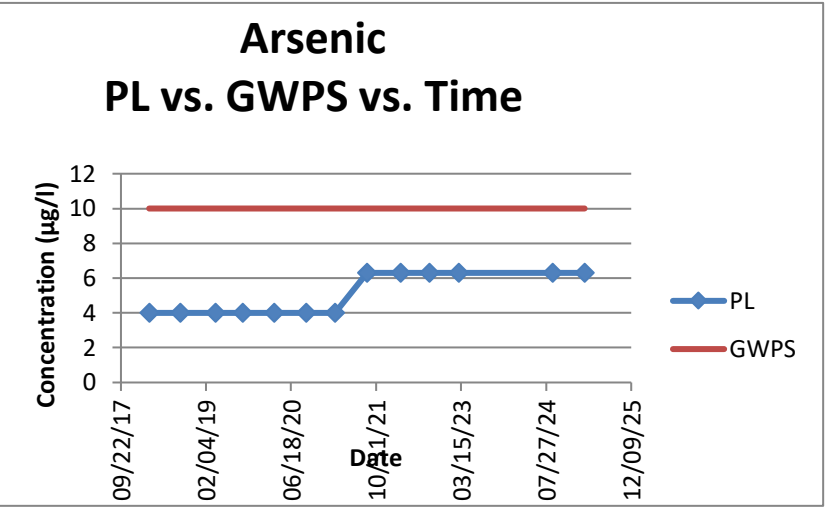
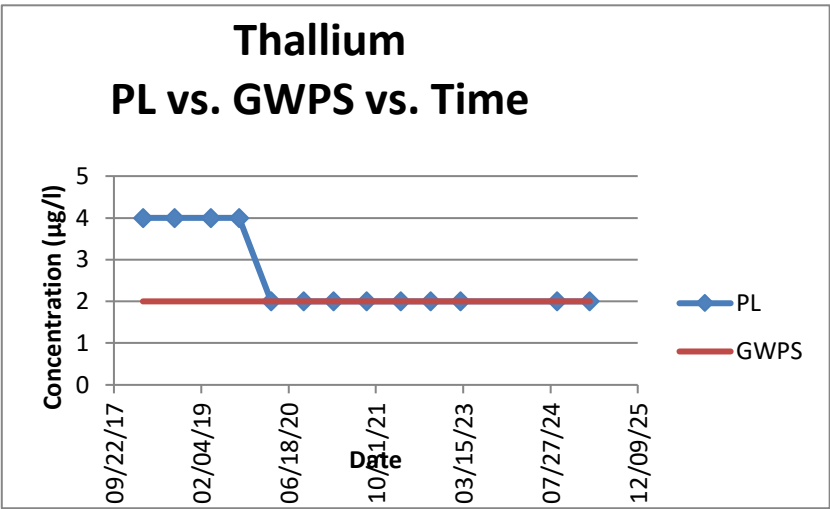
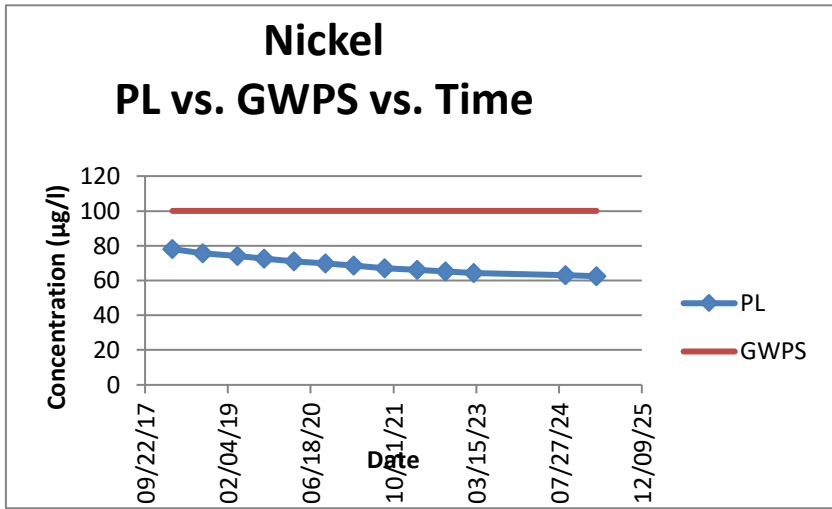
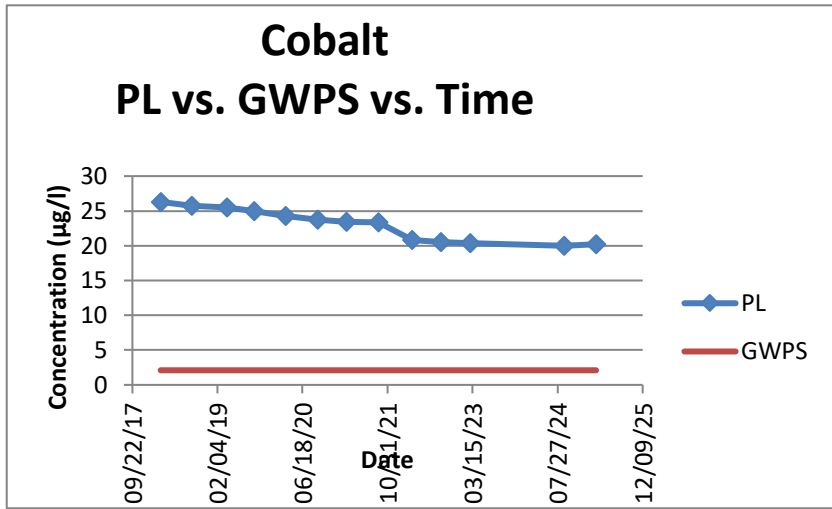
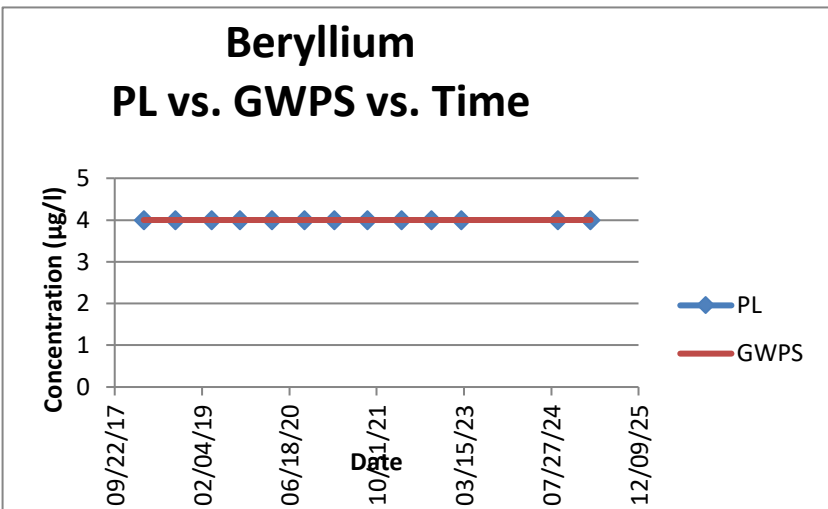
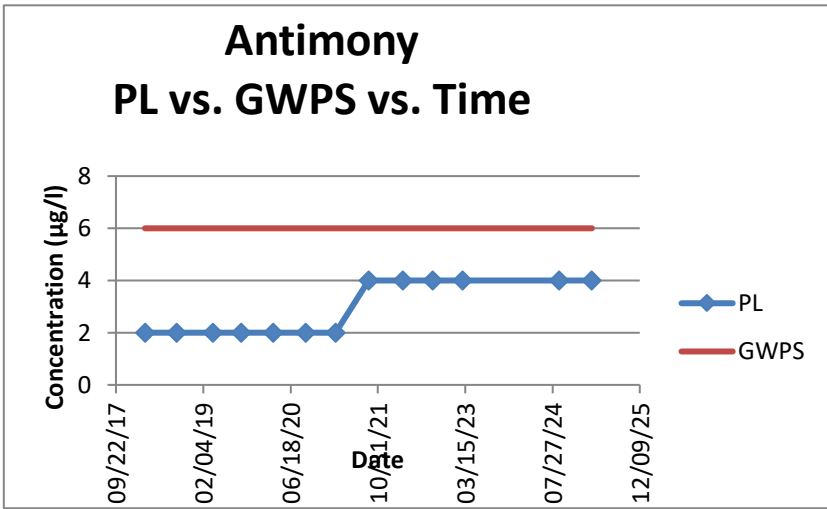
	9/4/24	3/10/25	9/5/25	Max	Min	Ave	Std Dev
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>				
21	1.79	1.7		42.80	0.16	3.04	8.75
22	1.69	4.1		7.78	0.68	2.62	2.03
23	5.11	2.25		5.11	0.18	1.98	1.38
27	5.55	8.37		12.90	0.34	4.63	3.87
28	3.07	4.91		57.65	1.61	17.67	18.34
29	6.21	2.19		8.33	1.13	3.35	2.17
31	2.78	2.04		4.27	0.18	1.47	1.23
32	2.9	3.42		34.59	1.27	5.10	7.62
33	2.85	8.88	5.47	33.47	1.26	6.12	7.29
34		3.61		91.56	1.19	11.13	21.05
36	2.84	1.79		288.70	0.16	16.30	64.15
37	2.32	1.93		6.63	1.46	2.85	1.70
38		3.76		11.21	1.33	4.84	3.82
Max	6.21	8.88	5.47				
Min	1.69	1.70	5.47				
Median	2.85	3.42	5.47				
Average	3.37	3.77	5.47				

Appendix F

Background History

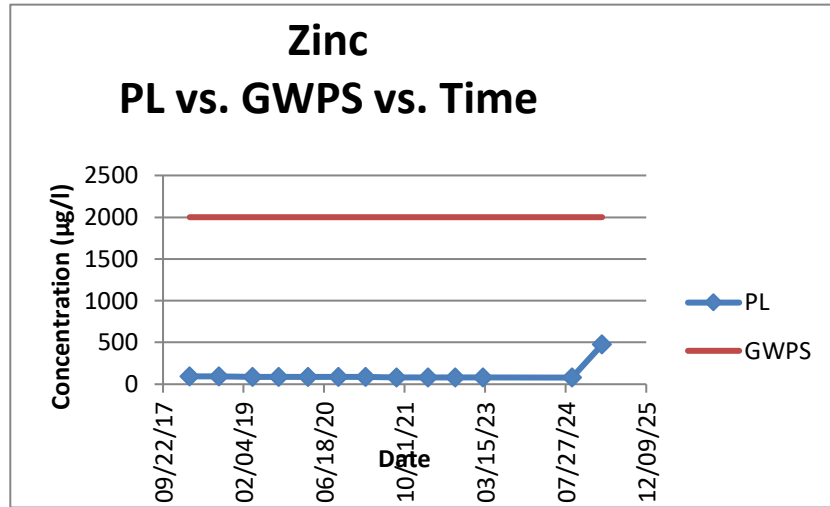
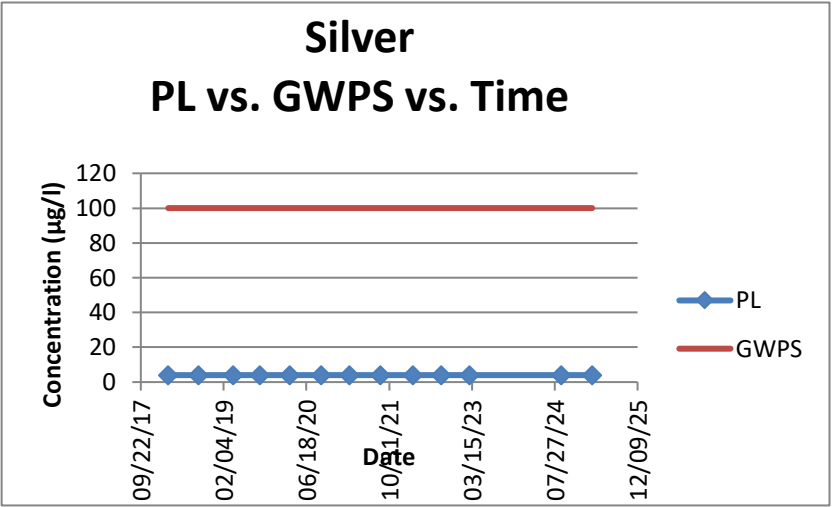
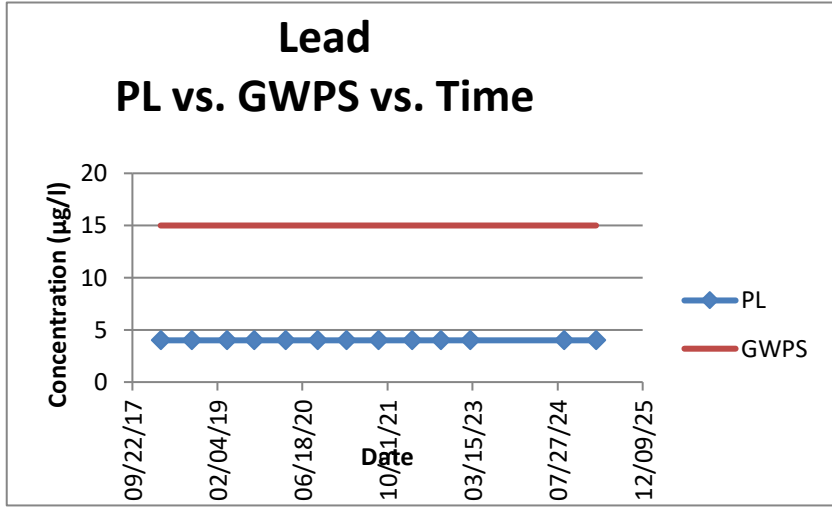
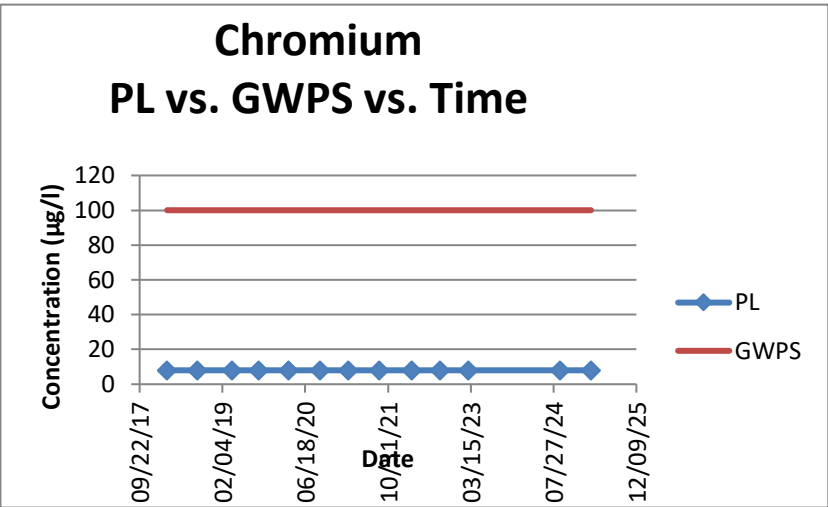
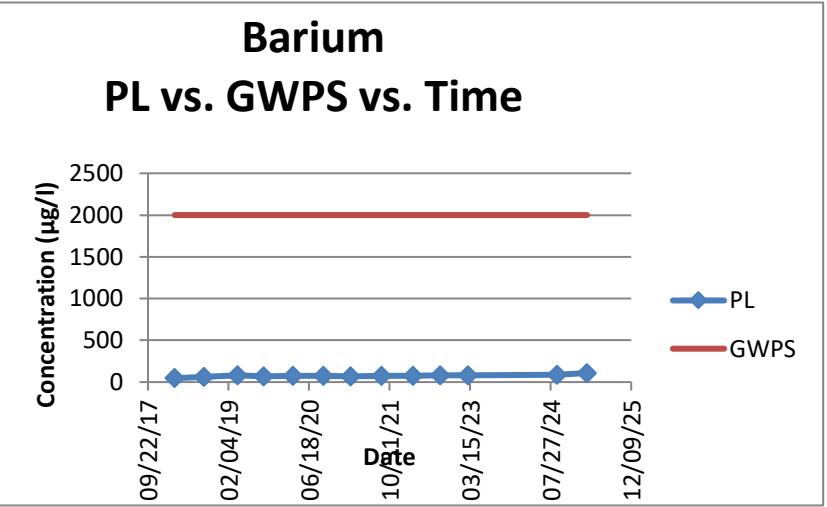
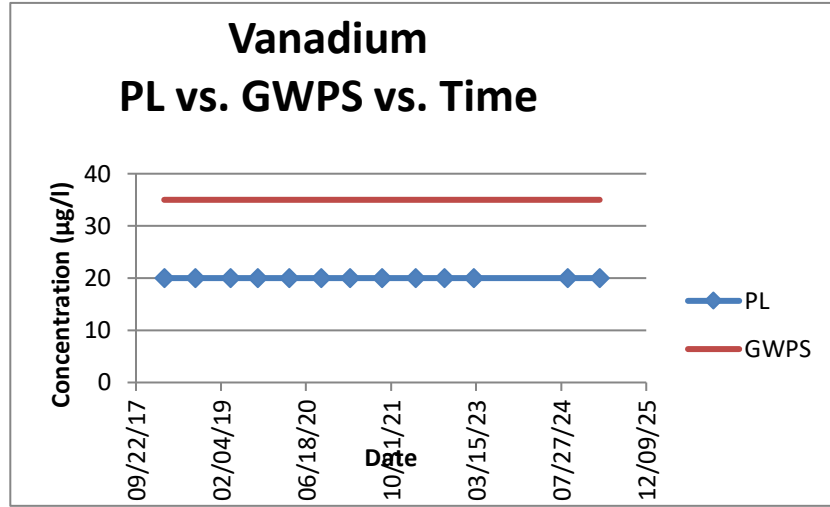
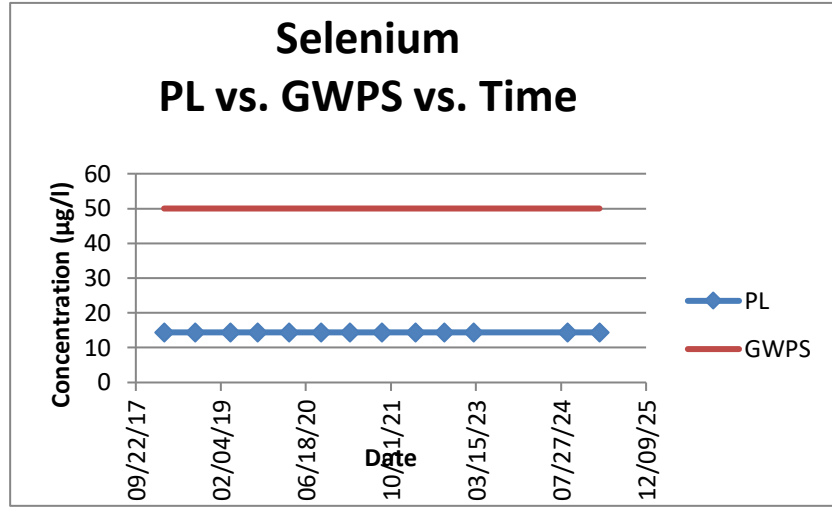
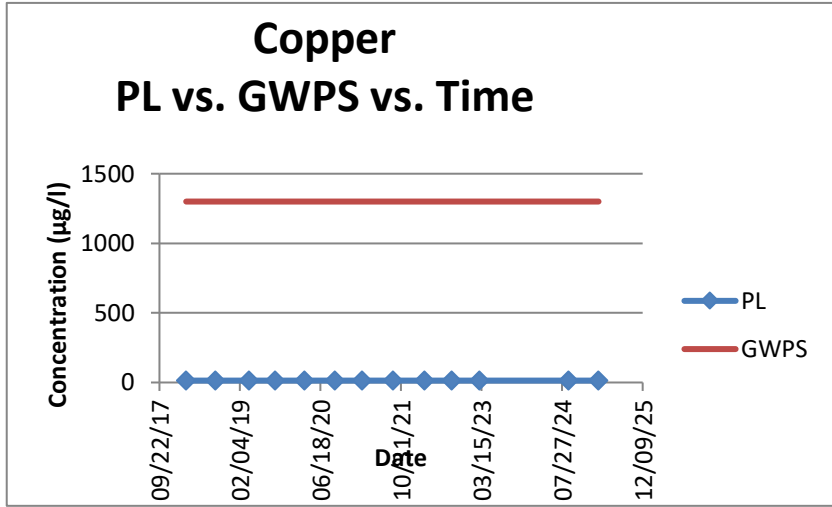
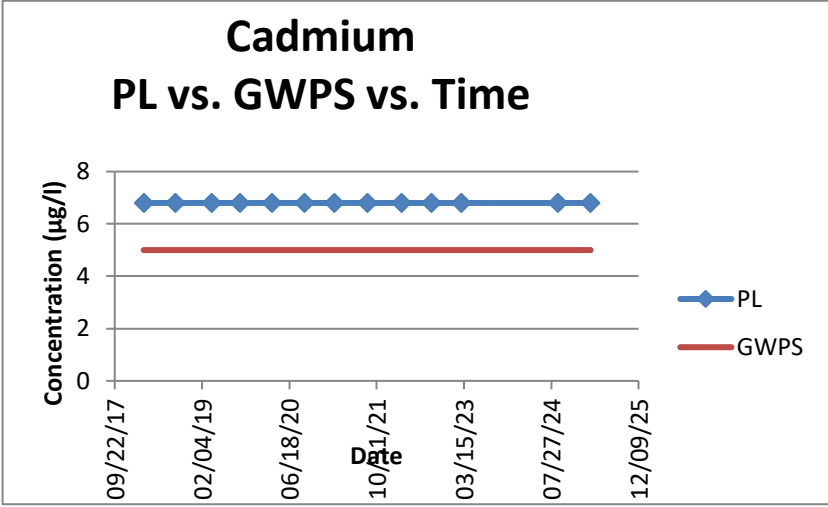
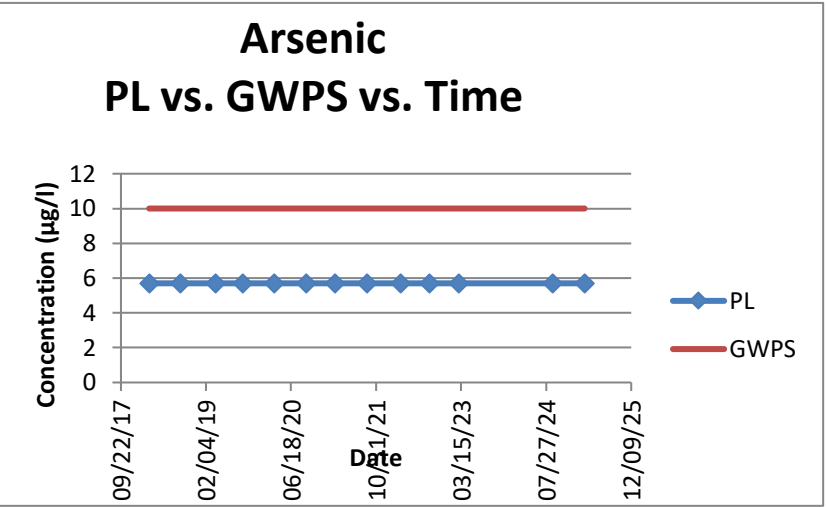
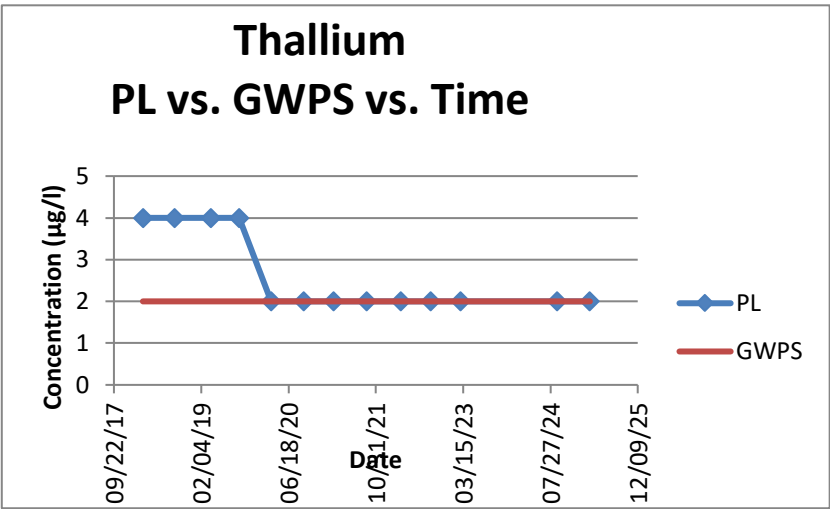
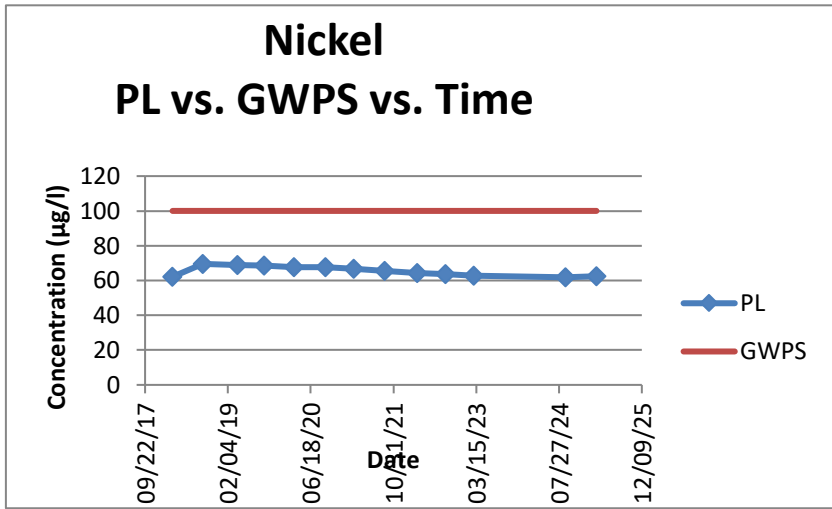
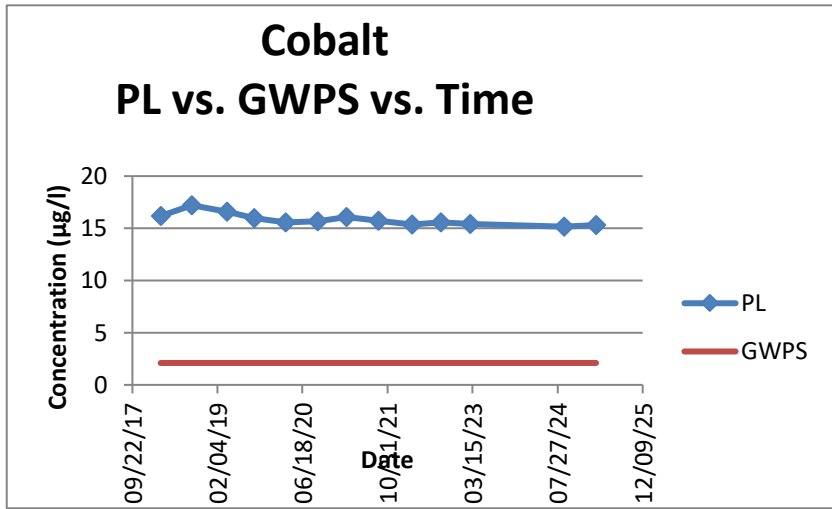
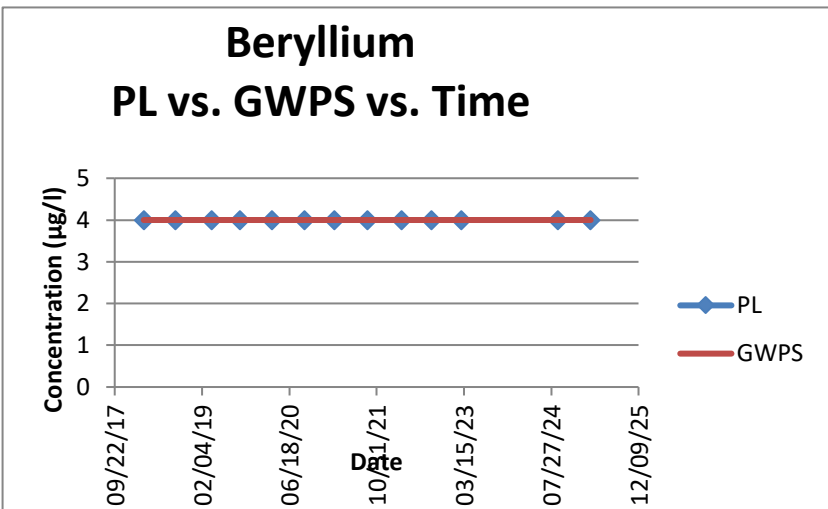
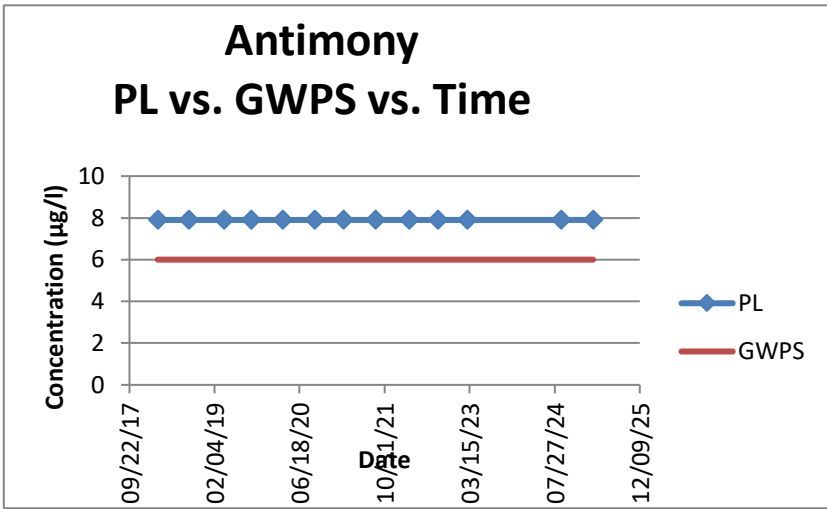
Shallow/Till System

Sample Date	Antimony (µg/l)		Arsenic (µg/l)		Barium (µg/l)		Beryllium (µg/l)		Cadmium (µg/l)		Chromium (µg/l)		Cobalt (µg/l)		Copper (µg/l)		Lead (µg/l)		Nickel (µg/l)		Selenium (µg/l)		Silver (µg/l)		Thallium (µg/l)		Vanadium (µg/l)		Zinc (µg/l)		
	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	
3/7/2018	2		6	4	10	35.677	2000	4	4	1.1	5	8	100	26.2956	2.1	4	1300	4	15	78.0305	100	5.5	50	4	100	4	2	20	35	24.9	2000
9/5/2018	2		6	4	10	36.1855	2000	4	4	1.1	5	8	100	25.7271	2.1	4	1300	4	15	75.6871	100	5.5	50	4	100	4	2	20	35	24.9	2000
4/1/2019	2		6	4	10	36.5768	2000	4	4	1.1	5	8	100	25.4632	2.1	4	1300	4	15	74.1419	100	5.5	50	4	100	4	2	20	35	24.9	2000
9/9/2019	2		6	4	10	38.9803	2000	4	4	1.1	5	8	100	24.9767	2.1	4	1300	4	15	72.4703	100	5.5	50	4	100	4	2	20	35	24.9	2000
3/10/2020	2		6	4	10	39.0468	2000	4	4	1.1	5	8	100	24.2441	2.1	4	1300	4	15	71.1741	100	5.5	50	4	100	2	2	20	35	24.9	2000
9/14/2020	2		6	4	10	38.4888	2000	4	4	1.35	5	8	100	23.7611	2.1	4	1300	4	15	69.9068	100	5.5	50	4	100	2	2	20	35	24.9	2000
3/4/2021	2		6	4	10	37.8339	2000	4	4	1.35	5	8	100	23.4305	2.1	4	1300	4	15	68.6612	100	5.5	50	4	100	2	2	20	35	24.9	2000
9/9/2021	4		6	6.3	10	49.4702	2000	4	4	3.8	5	8	100	23.3625	2.1	8.9	1300	4	15	67.1566	100	9.7	50	4	100	2	2	20	35	24.9	2000
3/24/2022	4		6	6.3	10	48.9195	2000	4	4	3.8	5	8	100	20.7923	2.1	8.9	1300	4	15	66.1569	100	9.7	50	4	100	2	2	20	35	24.9	2000
9/9/2022	4		6	6.3	10	70.7000	2000	4	4	3.8	5	8	100	20.5439	2.1	8.9	1300	4	15	65.2415	100	9.7	50	4	100	2	2	20	35	24.9	2000
3/1/2023	4		6	6.3	10	51.6704	2000	4	4	3.8	5	8	100	20.3935	2.1	8.9	1300	4	15	64.1713	100	9.7	50	4	100	2	2	20	35	24.9	2000
9/4/2024	4		6	6.3	10	54.1225	2000	4	4	3.8	5	8	100	19.9885	2.1	8.9	1300	4	15	63.2102	100	9.7	50	4	100	2	2	20	35	24.9	2000
3/10/2025	4		6	6.3	10	108	2000	4	4	3.8	5	8	100	20.2173	2.1	8.9	1300	4	15	62.4558	100	9.7	50	4	100	2	2	20	35	24.9	2000



Bedrock System

Sample Date	Antimony (µg/l)		Arsenic (µg/l)		Barium (µg/l)		Beryllium (µg/l)		Cadmium (µg/l)		Chromium (µg/l)		Cobalt (µg/l)		Copper (µg/l)		Lead (µg/l)		Nickel (µg/l)		Selenium (µg/l)		Silver (µg/l)		Thallium (µg/l)		Vanadium (µg/l)		Zinc (µg/l)		
	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	PL	MCL/SS	
3/7/2018	7.9		6	5.7	10	46.6954	2000	4		6.8	5	8	100	16.1684	2.1	13.6	1300	4	15	62.1241	100	14.4	50	4	100	4	2	20	35	93.0493	2000
9/5/2018	7.9		6	5.7	10	61.0434	2000	4	4	6.8	5	8	100	17.2049	2.1	13.6	1300	4	15	69.5467	100	14.4	50	4	100	4	2	20	35	93.2218	2000
4/1/2019	7.9		6	5.7	10	82.6219	2000	4	4	6.8	5	8	100	16.5663	2.1	13.6	1300	4	15	68.7541	100	14.4	50	4	100	4	2	20	35	90.0645	2000
9/9/2019	7.9		6	5.7	10	69.6137	2000	4	4	6.8	5	8	100	15.9704	2.1	13.6	1300	4	15	68.6519	100	14.4	50	4	100	4	2	20	35	88.2538	2000
3/10/2020	7.9		6	5.7	10	73.0037	2000	4	4	6.8	5	8	100	15.5807	2.1	13.6	1300	4	15	67.5648	100	14.4	50	4	100	2	2	20	35	86.4321	2000
9/14/2020	7.9		6	5.7	10	72.1991	2000	4	4	6.8	5	8	100	15.6936	2.1	13.6	1300	4	15	67.7268	100	14.4	50	4	100	2	2	20	35	86.9168	2000
3/4/2021	7.9		6	5.7	10	70.9464	2000	4	4	6.8	5	8	100	16.0737	2.1	13.6	1300	4	15	66.8025	100	14.4	50	4	100	2	2	20	35	86.2926	2000
9/9/2021	7.9		6	5.7	10	72.4883	2000	4	4	6.8	5	8	100	15.7063	2.1	13.6	1300	4	15	65.4065	100	14.4	50	4	100	2	2	20	35	84.1958	2000
3/24/2022	7.9		6	5.7	10	76.7746	2000	4	4	6.8	5	8	100	15.3877	2.1	13.6	1300	4	15	64.4066	100	14.4	50	4	100	2	2	20	35	83.3344	2000
9/9/2022	7.9		6	5.7	10	78.1079	2000	4	4	6.8	5	8	100	15.5620	2.1	13.6	1300	4	15	63.7511	100	14.4	50	4	100	2	2	20	35	81.9923	2000
3/1/2023	7.9		6	5.7	10	78.1740	2000	4	4	6.8	5	8	100	15.4322	2.1	13.6	1300	4	15	62.8553	100	14.4	50	4	100	2	2	20	35	80.5878	2000
9/4/2024	7.9		6	5.7	10	85.6000	2000	4	4	6.8	5	8	100	15.1572	2.1	13.6	1300	4	15	61.8403	100	14.4	50	4	100	2	2	20	35	79.441	2000
3/10/2025	7.9		6	5.7	10	109.0000	2000	4	4	6.8	5	8	100	15.3211	2.1	13.6	1300	4	15	62.4296	100	14.4	50	4	100	2	2	20	35	474.1207	2000



Appendix G

Assessment Compound Testing Summary

Sulfide (mg/L) Results

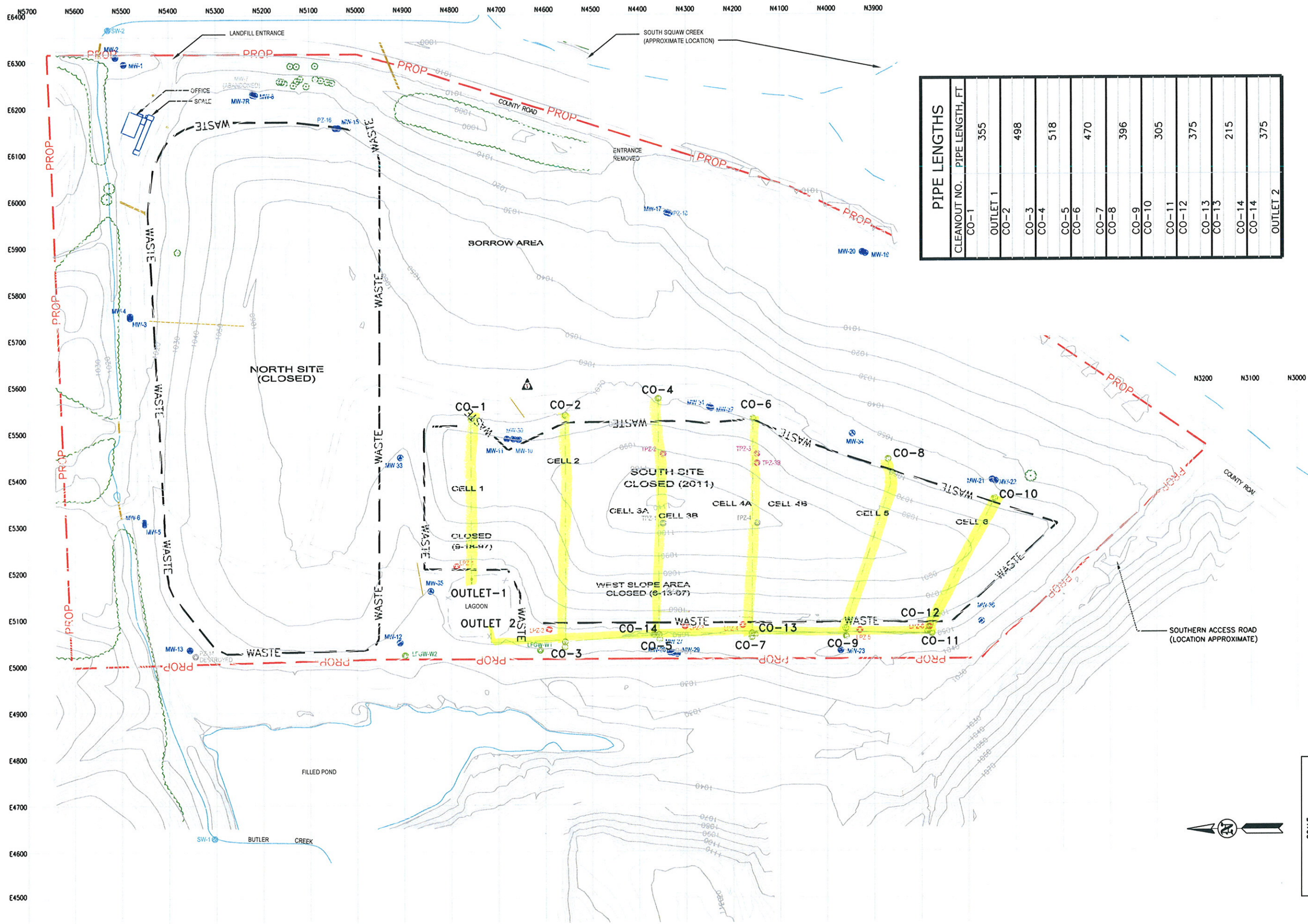
Date	MW-21	MW-31	MW-33	MW-34	MW-38
2/27/10	NT	NT	NT	<1	---
3/22/10	NT	NT	1.9	NT	---
9/7/10	NT	NT	<1	NT	---
9/20/11	NT	NT	<1	NT	---
12/15/11	NT	NT	<1	NT	---
2/17/12	NT	NT	NT	<1	---
3/19/12	NT	NT	<1	NT	---
6/20/12	NT	NT	NT	NT	---
9/6/12	NT	NT	<0.23	NT	---
2/1/13	NT	NT	<1	NT	---
6/20/13	NT	NT	NT	NT	---
9/27/13	NT	NT	<1	<1	---
3/13/14	NT	NT	<1	NT	---
9/29/14	NT	NT	<0.1	<0.1	---
11/24/14	NT	NT	NT	NT	---
3/19/15	NT	NT	<0.1	NT	---
8/26/15	NT	NT	0.33	NT	---
3/9/2016	NT	NT	0.40	NT	---
9/14/16	NT	NT	0.11	NT	---
3/7/17	NT	NT	0.13	NT	---
9/11/17	NT	NT	1.2	NT	---
3/7/2018	NT	NT	4.9	NT	---
9/5/18	NT	NT	0.71	<0.3	---
4/1/19	NT	NT	0.47	NT	---
9/9/19	NT	NT	<0.1	NT	---
3/10/20	NT	<0.1	0.18	NT	---
9/14/20	NT	NT	1.9	NT	---
3/4/21	NT	<0.1	2.4	NT	---
9/9/21	<0.1	NT	0.17	NT	---
3/24/22	NT	NT	3.5	NT	NT
9/9/22	<0.15	NT	0.29	NT	NT
3/1/23	NT	NT	2.4	NT	NT
9/7/2023	NT	NT	3.0	NT	NT
3/6/2024	NT	NT	2.3	NT	NT
4/1/2024	NT	NT	NT	<0.15	NT
6/3/2024	NT	NT	NT	NT	<0.15
9/4/2024	NT	NT	18.0	NT	NT
3/10/2025	NT	NT	<0.10	NT	<0.10
9/5/2025	NT	NT	NT	NT	NT

Bis(2-ethylhexyl)phthalate (ug/L) Results

Date	MW-21	MW-31	MW-33	MW-34	MW-38
2/27/10	NT	NT	NT	NT	---
3/22/10	NT	NT	<10	NT	---
9/7/10	NT	NT	<10	NT	---
9/20/11	NT	NT	<10	NT	---
2/17/12	NT	NT	NT	<10	---
3/19/12	NT	NT	NT	NT	---
6/20/12	NT	NT	NT	NT	---
9/6/12	NT	NT	NT	NT	---
2/1/13	NT	NT	NT	NT	---
9/27/13	NT	NT	NT	<10	---
3/13/14	NT	NT	NT	NT	---
9/29/14	NT	NT	NT	NT	---
3/19/15	NT	NT	NT	NT	---
8/26/15	NT	NT	NT	NT	---
3/9/2016	NT	NT	NT	NT	---
9/14/16	NT	NT	<8	NT	---
3/7/17	NT	NT	NT	NT	---
9/11/17	NT	NT	NT	NT	---
3/7/18	NT	NT	NT	NT	---
9/5/18	NT	NT	NT	<6	---
4/1/19	NT	NT	NT	NT	---
9/9/19	NT	NT	NT	NT	---
3/10/20	NT	<6	NT	NT	---
9/14/20	NT	NT	NT	NT	---
3/4/21	NT	34.0	NT	NT	---
9/9/21	<6	33.0	<6	NT	---
3/24/22	NT	<6	NT	NT	NT
9/9/22	9.0	97.0	NT	NT	NT
3/1/23	<6	<6	NT	NT	NT
9/7/2023	NT	NT	NT	NT	NT
3/6/2024	NT	NT	NT	NT	NT
4/1/2024	NT	NT	NT	<6	NT
6/3/2024	NT	NT	NT	NT	<6
9/4/2024	NT	NT	NT	NT	NT
3/10/2025	NT	NT	NT	NT	<6
9/5/2025	NT	NT	NT	NT	NT

Appendix H

Leachate Collection System Information



PIPE LENGTHS	
CLEANOUT NO.	PIPE LENGTH, FT
CO-1	355
OUTLET 1	
CO-2	498
CO-3	
CO-4	518
CO-5	
CO-6	470
CO-7	
CO-8	396
CO-9	
CO-10	305
CO-11	
CO-12	375
CO-13	
CO-14	215
OUTLET 2	375



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0692

Project Description

Leachate

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, March 28, 2025

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc., Newton. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

Microbac Laboratories, Inc.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0692

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Leachate

Project / PO Number: N/A
Received: 03/11/2025
Reported: 03/28/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
Leachate	1IC0692-01	Aqueous	GRAB		03/10/25 12:35	03/11/25 10:35



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0692

Analytical Testing Parameters

Client Sample ID: Leachate
Sample Matrix: Aqueous
Lab Sample ID: 11C0692-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 12:35

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624.1								
Methyl Chloride	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Vinyl Chloride	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Methyl Bromide	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Chloroethane	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Acrolein	<10.0	10.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,1-Dichloroethylene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
trans-1,2-Dichloroethylene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Chloroform	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,1,1-Trichloroethane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Carbon Tetrachloride	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Benzene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,2-Dichloroethane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Trichloroethylene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,2-Dichloropropane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Dichlorobromomethane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
2-Chloroethylvinyl ether	<10.0	10.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Toluene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,1,2-Trichloroethane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Tetrachloroethylene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Chlorodibromomethane	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Chlorobenzene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Ethylbenzene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Bromoform	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,4-Dichlorobenzene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,2-Dichlorobenzene	<0.5	0.5	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		03/21/25 0000	03/21/25 2106	CSM
Surrogate: Dibromofluoromethane	88.8	Limit: 59-123	% Rec	1		03/21/25 0000	03/21/25 2106	CSM
Surrogate: 1,2-Dichloroethane-d4	88.8	Limit: 56-130	% Rec	1		03/21/25 0000	03/21/25 2106	CSM
Surrogate: Toluene-d8	104	Limit: 85-113	% Rec	1		03/21/25 0000	03/21/25 2106	CSM
Surrogate: 4-Bromofluorobenzene	95.0	Limit: 82-112	% Rec	1		03/21/25 0000	03/21/25 2106	CSM

Determination of Base/Neutral Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625.1								

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0692

Client Sample ID: Leachate
Sample Matrix: Aqueous
Lab Sample ID: 11C0692-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 12:35

Determination of Base/Neutral Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
n-Decane	<5	5	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
n-Octadecane	<5	5	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzyl Alcohol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Dibenzofuran	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Carbazole	<5	5	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Fluoranthene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorophenol	83.7	Limit: 16-140	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Phenol-d6	83.4	Limit: 13-147	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Nitrobenzene-d5	84.5	Limit: 17-150	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Nitrobenzene-d5	84.5	Limit: 17-150	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorobiphenyl	95.4	Limit: 15-134	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorobiphenyl	95.4	Limit: 15-134	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2,4,6-Tribromophenol	110	Limit: 20-158	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Terphenyl-dl4	107	Limit: 12-157	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Terphenyl-dl4	107	Limit: 12-157	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Determination of Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625.1								
2,4,5-Trichlorophenol	<50.0	50.0	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorophenol	83.7	Limit: 16-140	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Phenol-d6	83.4	Limit: 13-147	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2,4,6-Tribromophenol	110	Limit: 20-158	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625.1								
N-Nitrosodimethylamine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Phenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Bis(2-Chloroethyl) Ether	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2-Chlorophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
n-Nitroso-di-n-propylamine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Hexachloroethane	<10	10	ug/L	1	Q3	03/13/25 0835	03/18/25 2217	EPP
Nitrobenzene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Isophorone	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2-Nitrophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,4-Dimethylphenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzoic acid	<50	50	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,4-Dichlorophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Naphthalene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Hexachlorobutadiene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP

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CERTIFICATE OF ANALYSIS

11C0692

Client Sample ID: Leachate
Sample Matrix: Aqueous
Lab Sample ID: 11C0692-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 12:35

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
p-Chloro-m-Cresol	<10	10	ug/L	1	Q8	03/13/25 0835	03/18/25 2217	EPP
Hexachlorocyclopentadiene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,4,6-Trichlorophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2-Chloronaphthalene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Dimethylphthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Acenaphthylene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,6-Dinitrotoluene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Acenaphthene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,4-Dinitrophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
2,4-Dinitrotoluene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
4-Nitrophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Diethyl Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Fluorene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
1,2-Diphenylhydrazine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
4,6-Dinitro-o-Cresol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
N-Nitrosodiphenylamine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
4-Bromophenyl Phenyl Ether	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Hexachlorobenzene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Pentachlorophenol	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Phenanthrene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Anthracene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Di-n-butyl Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Fluoranthene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzidine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Pyrene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Butyl Benzyl Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzo(a)anthracene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Chrysene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Di-n-octyl Phthalate	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
3,3'-Dichlorobenzidine	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
3,4-Benzofluoranthene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzo(k)Fluoranthene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzo(a)Pyrene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Dibenzo(a,h)anthracene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Benzo(g,h,i)perylene	<10	10	ug/L	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorophenol	83.7	Limit: 16-140	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Phenol-d6	83.4	Limit: 13-147	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: Nitrobenzene-d5	84.5	Limit: 17-150	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2-Fluorobiphenyl	95.4	Limit: 15-134	% Rec	1		03/13/25 0835	03/18/25 2217	EPP
Surrogate: 2,4,6-Tribromophenol	110	Limit: 20-158	% Rec	1		03/13/25 0835	03/18/25 2217	EPP

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CERTIFICATE OF ANALYSIS

11C0692

Client Sample ID: Leachate
Sample Matrix: Aqueous
Lab Sample ID: 11C0692-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 12:35

Determination of Base/Neutral/Acid Extractable Compounds

	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Surrogate: Terphenyl-dl4	107	Limit: 12-157	% Rec	1		03/13/25 0835	03/18/25 2217	EPP

Determination of Organochlorine Insecticides & Metabolites

EPA 3520C/EPA 612

Hexachlorobenzene	<0.050	0.050	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Surrogate: Tetrachloro-m-xylene	68.0	Limit: 28-110	% Rec	1		03/13/25 1033	03/20/25 1255	EPP

Determination of Organochlorine Insecticides & PCBs

EPA 3520C/EPA 608.3 GC-ECD

Alpha-BHC	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Beta-BHC	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Heptachlor	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Delta-BHC	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Aldrin	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Heptachlor Epoxide	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Endosulfan I	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

4,4'-DDE	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Dieldrin	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Endrin	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

4,4'-DDD	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Endosulfan II	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

4,4'-DDT	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Endrin Aldehyde	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Endosulfan Sulfate	<0.05	0.05	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Chlordane	<0.10	0.10	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Toxaphene	<0.20	0.20	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1016	<0.10	0.10	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1221	<0.20	0.20	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1232	<0.20	0.20	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1242	<0.20	0.20	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1248	<0.20	0.20	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1254	<0.10	0.10	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Arochlor 1260	<0.10	0.10	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Total PCB's	<0.10	0.10	ug/L	1		03/13/25 1033	03/20/25 1255	EPP

Surrogate: Tetrachloro-m-xylene	68.0	Limit: 31-116	% Rec	1		03/13/25 1033	03/20/25 1255	EPP

Surrogate: Decachlorobiphenyl	25.2	Limit: 12-130	% Rec	1		03/13/25 1033	03/20/25 1255	EPP

Determination of Conventional Chemistry Parameters

4500CN-E

Cyanide, total	<0.010	0.010	mg/L	1		03/13/25 1401	03/14/25 1502	AKK

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CERTIFICATE OF ANALYSIS

11C0692

Client Sample ID: Leachate
Sample Matrix: Aqueous
Lab Sample ID: 11C0692-01

Collected By: Whipple, Todd
Collection Date: 03/10/2025 12:35

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
5310B								
Total Organic Carbon	26.6	0.50	mg/L	1		03/26/25 0000	03/26/25 1455	CSM
EPA 1664A								
Oil and Grease	<4	4	mg/L	1		03/17/25 0911	03/18/25 0735	RDH
SM 2320 B-2011								
Alkalinity, as CaCO ₃	387	10	mg/L	1			03/13/25 1420	BSS
SM 4500-H+ B-2011								
pH	7.9	0.5	pH	1	H4	03/14/25 0831	03/18/25 0806	BSS
SM 5210 B-2016								
BOD (5 day)	<6	6	mg/L	3		03/12/25 0913	03/12/25 1032	MND
TIMBERLINE								
Nitrogen, Ammonia	7.71	0.10	mg/L	1		03/13/25 1054	03/13/25 1403	SDF
USGS I-1750-85								
Total Dissolved Solids (TDS)	828	5	mg/L	13		03/12/25 0852	03/13/25 1216	MSP
USGS I-3765-85								
Total Suspended Solids (TSS)	6	2	mg/L	2		03/17/25 0720	03/17/25 0945	LAW
Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
300.0								
Chloride	189	5.0	mg/L	5			03/12/25 1554	MID
Nitrogen, Nitrate	0.8	0.1	mg/L	1		03/11/25 0000	03/11/25 2058	MID
Sulfate	106	5.0	mg/L	5			03/12/25 1554	MID
Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
200.7								
Calcium, total	47.6	0.1	mg/L	1		03/19/25 0710	03/20/25 1138	JAR
Iron, total	0.217	0.100	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
Magnesium, total	57.7	0.10	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
Potassium, total	25.2	1.00	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
Sodium, total	150	1.00	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
245.1								
Mercury, total	<0.00050	0.00050	mg/L	1		03/20/25 1533	03/21/25 1317	JAR
EPA 200.7, Rv. 4.4 (1994)								
Titanium, total	<0.050	0.050	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
Tin, total	<0.25	0.25	mg/L	1		03/19/25 0710	03/20/25 0021	JAR
EPA 200.8, Rv. 5.4 (1994)								
Antimony, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Arsenic, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Barium, total	0.0288	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Beryllium, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Cadmium, total	<0.0002	0.0002	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Chromium, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV

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CERTIFICATE OF ANALYSIS

1IC0692

Client Sample ID:	Leachate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	03/10/2025 12:35
Lab Sample ID:	1IC0692-01		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Cobalt, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Copper, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Lead, total	<0.0008	0.0008	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Molybdenum, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Nickel, total	0.0115	0.0040	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Silver, total	<0.0020	0.0020	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Thallium, total	<0.0008	0.0008	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Vanadium, total	<0.0080	0.0080	mg/L	4		03/11/25 1525	03/12/25 2307	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		03/11/25 1525	03/12/25 2307	RVV

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CERTIFICATE OF ANALYSIS

1IC0692

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8, Rv. 5.4 (1994)	1IC0479	1IC0479-BLK1	
		1IC0479-BS1	
		1IC0479-MS1	1IC0501-02
		1IC0479-MSD1	1IC0501-02
		1IC0692-01	Leachate
		1IC0479-PS1	1IC0501-02
Method	Batch	Laboratory ID	Client / Source ID
USGS I-1750-85	1IC0509	1IC0692-01	Leachate
		1IC0509-BS1	
		1IC0509-DUP1	1IC0485-02
		1IC0509-BLK1	
Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B-2016	1IC0511	1IC0511-BLK1	
		1IC0511-SRM1	
		1IC0692-01	Leachate
		1IC0511-DUP1	1IC0689-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 625.1	1IC0536	1IC0536-BLK1	
		1IC0536-BLK1	
		1IC0536-BLK1	
		1IC0536-BS1	
		1IC0536-BS1	
		1IC0536-BS1	
		1IC0536-SRM1	
		1IC0536-SRM1	
		1IC0536-SRM1	
		1IC0692-01	Leachate
		1IC0692-01	Leachate
		1IC0692-01	Leachate
Method	Batch	Laboratory ID	Client / Source ID
300.0	1IC0565	1IC0565-BLK1	
		1IC0565-MRL1	
		1IC0565-BS1	
		1IC0565-BSD1	
		1IC0565-MS1	1IC0315-01
		1IC0565-MSD1	1IC0315-01
		1IC0692-01	Leachate

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CERTIFICATE OF ANALYSIS

1IC0692

Method	Batch	Laboratory ID	Client / Source ID
EPA 612	1IC0617	1IC0617-BLK1	
EPA 608.3 GC-ECD		1IC0617-BLK1	
		1IC0617-BS1	
EPA 612		1IC0617-BS1	
		1IC0617-BSD1	
EPA 608.3 GC-ECD		1IC0617-BSD1	
EPA 612		1IC0617-SRM1	
EPA 608.3 GC-ECD		1IC0617-SRM1	
		1IC0692-01	Leachate
EPA 612		1IC0692-01	Leachate
Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1IC0621	1IC0621-BLK2	
		1IC0621-BS2	
		1IC0621-MS2	1IC0803-04
		1IC0621-MSD2	1IC0803-04
		1IC0692-01	Leachate
Method	Batch	Laboratory ID	Client / Source ID
300.0	1IC0628	1IC0628-BS1	
		1IC0628-BSD1	
		1IC0628-BLK1	
		1IC0628-MRL1	
		1IC0692-01	Leachate
		1IC0628-MS1	1IC0336-02
		1IC0628-MSD1	1IC0336-02
Method	Batch	Laboratory ID	Client / Source ID
4500CN-E	1IC0642	1IC0642-MSD1	1IC0688-01
		1IC0642-MS1	1IC0688-01
		1IC0642-BS1	
		1IC0692-01	Leachate
		1IC0642-BLK1	
Method	Batch	Laboratory ID	Client / Source ID
SM 2320 B-2011	1IC0646	1IC0646-MSD1	1IC0515-02
		1IC0646-MS1	1IC0515-02
		1IC0692-01	Leachate
		1IC0646-BS1	
		1IC0646-BLK1	
Method	Batch	Laboratory ID	Client / Source ID
SM 4500-H+ B-2011	1IC0696	1IC0696-SRM3	

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CERTIFICATE OF ANALYSIS

11C0692

SM 4500-H+ B-2011	11C0696	11C0696-SRM2	
		11C0696-DUP2	11C0633-02
		11C0696-SRM1	
		11C0696-DUP1	11C0688-01
		11C0692-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	11C0742	11C0742-BS1	
		11C0742-DUP1	11C0638-01
		11C0692-01	Leachate
		11C0742-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 1664A	11C0759	11C0759-BLK1	
		11C0759-BS1	
		11C0759-BSD1	
		11C0692-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.7, Rv. 4.4 (1994) 200.7	11C0910	11C0910-BLK1	
		11C0910-BLK1	
		11C0910-BLK1	
		11C0910-BS1	
EPA 200.7, Rv. 4.4 (1994) 200.7		11C0910-BS1	
		11C0910-BS1	
		11C0910-MS1	11C0655-01
EPA 200.7, Rv. 4.4 (1994) 200.7		11C0910-MS1	11C0655-01
		11C0910-MS1	11C0655-01
EPA 200.7, Rv. 4.4 (1994) 200.7		11C0910-MSD1	11C0655-01
		11C0910-MSD1	11C0655-01
		11C0910-MSD1	11C0655-01
		11C0910-PS1	11C0655-01
EPA 200.7, Rv. 4.4 (1994) 200.7		11C0910-PS1	11C0655-01
		11C0910-PS1	11C0655-01
EPA 200.7, Rv. 4.4 (1994) 200.7		11C0692-01	Leachate
		11C0692-01	Leachate
		11C0692-01	Leachate
		11C0692-01RE1	Leachate

Method	Batch	Laboratory ID	Client / Source ID
245.1	11C1059	11C1059-BLK1	
		11C1059-BS1	
		11C1059-MS1	11C0688-01
		11C1059-MSD1	11C0688-01



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CERTIFICATE OF ANALYSIS

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245.1	1IC1059	1IC0692-01	Leachate
Method	Batch	Laboratory ID	Client / Source ID
EPA 624.1	1IC1150	1IC1150-BS1	
		1IC1150-BLK1	
		1IC0692-01	Leachate
		1IC1150-MS1	1IC1317-07
		1IC1150-MSD1	1IC1317-07
Method	Batch	Laboratory ID	Client / Source ID
5310B	1IC1376	1IC1376-BSD1	
		1IC1376-BLK1	
		1IC1376-BS1	
		1IC0692-01	Leachate
		1IC1376-MS1	1IC0692-01
		1IC1376-MSD1	1IC0692-01

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1150 - EPA 5030B - EPA 624.1										
Blank (1IC1150-BLK1)				Prepared: 03/21/25 00:00 Analyzed: 03/21/25 12:36						
Methyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<0.5	0.5	ug/L							
Methyl Bromide	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<0.5	0.5	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<0.5	0.5	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Chloroform	<0.5	0.5	ug/L							
1,1,1-Trichloroethane	<0.5	0.5	ug/L							
Carbon Tetrachloride	<0.5	0.5	ug/L							
Benzene	<0.5	0.5	ug/L							
1,2-Dichloroethane	<0.5	0.5	ug/L							
Trichloroethylene	<0.5	0.5	ug/L							
1,2-Dichloropropane	<0.5	0.5	ug/L							
Dichlorobromomethane	<0.5	0.5	ug/L							
2-Chloroethylvinyl ether	<10.0	10.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
Toluene	<0.5	0.5	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<0.5	0.5	ug/L							

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C1150 - EPA 5030B - EPA 624.1										
Blank (11C1150-BLK1) Prepared: 03/21/25 00:00 Analyzed: 03/21/25 12:36										
Tetrachloroethylene	<0.5	0.5	ug/L							
Chlorodibromomethane	<0.5	0.5	ug/L							
Chlorobenzene	<0.5	0.5	ug/L							
Ethylbenzene	<0.5	0.5	ug/L							
Bromoform	<0.5	0.5	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<0.5	0.5	ug/L							
1,2-Dichlorobenzene	<0.5	0.5	ug/L							
1,2,4-Trichlorobenzene	1.54	1.0	ug/L							B1
Surrogate: Dibromofluoromethane	38.8		ug/L	50.2		77.4	59-123			
Surrogate: 1,2-Dichloroethane-d4	36.7		ug/L	50.1		73.3	56-130			
Surrogate: Toluene-d8	52.5		ug/L	50.4		104	85-113			
Surrogate: 4-Bromofluorobenzene	50.3		ug/L	50.1		100	82-112			
LCS (11C1150-BS1) Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:51										
Methyl Chloride	27.75	1.0	ug/L	30.3		91.5	5-205			
Vinyl Chloride	28.59	0.5	ug/L	30.2		94.5	5-195			
Methyl Bromide	27.85	1.0	ug/L	30.1		92.5	15-185			
Chloroethane	28.82	1.0	ug/L	30.3		95.1	40-160			
Acrolein	39.30	10.0	ug/L	50.4		78.1	60-140			
1,1-Dichloroethylene	49.61	0.5	ug/L	50.1		99.0	50-150			
Methylene Chloride	44.75	5.0	ug/L	50.1		89.3	60-140			
Acrylonitrile	51.38	5.0	ug/L	50.2		102	60-140			
trans-1,2-Dichloroethylene	49.71	0.5	ug/L	50.1		99.2	70-130			
1,1-Dichloroethane	50.06	1.0	ug/L	50.1		99.9	70-130			
Chloroform	49.24	0.5	ug/L	50.1		98.3	70-135			
1,1,1-Trichloroethane	50.06	0.5	ug/L	50.1		99.9	70-130			
Carbon Tetrachloride	48.30	0.5	ug/L	50.1		96.4	70-130			
Benzene	47.08	0.5	ug/L	50.4		93.3	65-135			
1,2-Dichloroethane	53.23	0.5	ug/L	50.1		106	70-130			
Trichloroethylene	47.95	0.5	ug/L	50.1		95.7	65-135			
1,2-Dichloropropane	49.61	0.5	ug/L	50.1		99.0	35-165			
Dichlorobromomethane	52.55	0.5	ug/L	50.1		105	65-135			
2-Chloroethylvinyl ether	105.8	10.0	ug/L	100		106	5-225			
cis-1,3-Dichloropropene	51.95	1.0	ug/L	50.1		104	25-175			
Toluene	52.31	0.5	ug/L	50.5		104	70-130			
trans-1,3-Dichloropropene	50.97	1.0	ug/L	50.1		102	50-150			
1,1,2-Trichloroethane	49.67	0.5	ug/L	50.1		99.2	70-130			
Tetrachloroethylene	47.66	0.5	ug/L	50.1		95.1	70-130			
Chlorodibromomethane	51.83	0.5	ug/L	50.1		104	81-118			
Chlorobenzene	48.99	0.5	ug/L	50.1		97.8	65-135			
Ethylbenzene	52.65	0.5	ug/L	50.2		105	60-140			

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1150 - EPA 5030B - EPA 624.1										
LCS (1IC1150-BS1)										
				Prepared: 03/21/25 00:00 Analyzed: 03/21/25 11:51						
Bromoform	53.69	0.5	ug/L	50.1		107	70-130			
1,1,2,2-Tetrachloroethane	47.82	1.0	ug/L	50.1		95.4	60-140			
1,3-Dichlorobenzene	49.71	1.0	ug/L	50.1		99.3	70-130			
1,4-Dichlorobenzene	46.95	0.5	ug/L	50.1		93.7	65-135			
1,2-Dichlorobenzene	49.94	0.5	ug/L	50.1		99.7	65-135			
1,2,4-Trichlorobenzene	53.87	1.0	ug/L	50.4		107	67-133			
Surrogate: Dibromofluoromethane	47.6		ug/L	50.2		94.8	59-123			
Surrogate: 1,2-Dichloroethane-d4	49.7		ug/L	50.1		99.3	56-130			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.5	85-113			
Surrogate: 4-Bromofluorobenzene	51.4		ug/L	50.1		103	82-112			
Matrix Spike (1IC1150-MS1)										
				Source: 1IC1317-07		Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:35				
Methyl Chloride	301.0	10.0	ug/L	303	ND	99.3	5-273			
Vinyl Chloride	310.0	5.0	ug/L	302	ND	102	5-251			
Methyl Bromide	284.7	10.0	ug/L	301	ND	94.5	5-242			
Chloroethane	306.3	10.0	ug/L	303	ND	101	14-230			
Acrolein	416.3	100	ug/L	504	ND	82.7	40-160			
1,1-Dichloroethylene	545.3	5.0	ug/L	501	ND	109	5-235			
Methylene Chloride	468.4	50.0	ug/L	501	ND	93.5	5-221			
Acrylonitrile	583.9	50.0	ug/L	502	ND	116	40-160			
trans-1,2-Dichloroethylene	544.6	5.0	ug/L	501	ND	109	54-156			
1,1-Dichloroethane	548.5	10.0	ug/L	501	ND	109	59-155			
Chloroform	538.8	5.0	ug/L	501	ND	108	51-138			
1,1,1-Trichloroethane	542.1	5.0	ug/L	501	ND	108	52-162			
Carbon Tetrachloride	533.8	5.0	ug/L	501	ND	107	70-140			
Benzene	501.9	5.0	ug/L	504	ND	99.5	37-151			
1,2-Dichloroethane	556.3	5.0	ug/L	501	ND	111	59-155			
Trichloroethylene	500.7	5.0	ug/L	501	ND	100	70-157			
1,2-Dichloropropane	516.9	5.0	ug/L	501	ND	103	5-210			
Dichlorobromomethane	554.5	5.0	ug/L	501	ND	111	35-155			
2-Chloroethylvinyl ether	1098	100	ug/L	1000	ND	110	5-305			
cis-1,3-Dichloropropene	523.7	10.0	ug/L	501	ND	105	5-227			
Toluene	536.5	5.0	ug/L	505	ND	106	47-150			
trans-1,3-Dichloropropene	513.4	10.0	ug/L	501	ND	103	17-183			
1,1,2-Trichloroethane	506.4	5.0	ug/L	501	ND	101	52-150			
Tetrachloroethylene	487.3	5.0	ug/L	501	ND	97.3	64-148			
Chlorodibromomethane	537.7	5.0	ug/L	501	ND	107	53-149			
Chlorobenzene	498.3	5.0	ug/L	501	ND	99.5	37-160			
Ethylbenzene	524.4	5.0	ug/L	502	ND	105	79-119			
Bromoform	556.1	5.0	ug/L	501	ND	111	45-169			
1,1,2,2-Tetrachloroethane	507.5	10.0	ug/L	501	ND	101	46-157			
1,3-Dichlorobenzene	501.1	10.0	ug/L	501	ND	100	59-156			
1,4-Dichlorobenzene	481.8	5.0	ug/L	501	ND	96.1	18-190			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1150 - EPA 5030B - EPA 624.1										
Matrix Spike (1IC1150-MS1)	Source: 1IC1317-07			Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:35						
1,2-Dichlorobenzene	512.5	5.0	ug/L	501	ND	102	18-190			
1,2,4-Trichlorobenzene	566.7	10.0	ug/L	504	ND	112	60-129			
Surrogate: Dibromofluoromethane	522		ug/L	502		104	59-123			
Surrogate: 1,2-Dichloroethane-d4	540		ug/L	501		108	56-130			
Surrogate: Toluene-d8	500		ug/L	504		99.2	85-113			
Surrogate: 4-Bromofluorobenzene	513		ug/L	501		102	82-112			
Matrix Spike Dup (1IC1150-MSD1)	Source: 1IC1317-07			Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:57						
Methyl Chloride	294.1	10.0	ug/L	303	ND	97.0	5-273	2.32	60	
Vinyl Chloride	299.4	5.0	ug/L	302	ND	99.0	5-251	3.48	66	
Methyl Bromide	287.2	10.0	ug/L	301	ND	95.3	5-242	0.874	61	
Chloroethane	289.6	10.0	ug/L	303	ND	95.5	14-230	5.60	78	
Acrolein	437.8	100	ug/L	504	ND	87.0	40-160	5.03	60	
1,1-Dichloroethylene	535.6	5.0	ug/L	501	ND	107	5-235	1.79	32	
Methylene Chloride	473.7	50.0	ug/L	501	ND	94.5	5-221	1.13	60	
Acrylonitrile	589.7	50.0	ug/L	502	ND	117	40-160	0.988	60	
trans-1,2-Dichloroethylene	529.6	5.0	ug/L	501	ND	106	54-156	2.79	45	
1,1-Dichloroethane	537.6	10.0	ug/L	501	ND	107	59-155	2.01	40	
Chloroform	537.6	5.0	ug/L	501	ND	107	51-138	0.223	54	
1,1,1-Trichloroethane	528.3	5.0	ug/L	501	ND	105	52-162	2.58	36	
Carbon Tetrachloride	521.0	5.0	ug/L	501	ND	104	70-140	2.43	41	
Benzene	504.1	5.0	ug/L	504	ND	100	37-151	0.437	61	
1,2-Dichloroethane	576.9	5.0	ug/L	501	ND	115	59-155	3.64	49	
Trichloroethylene	508.4	5.0	ug/L	501	ND	101	70-157	1.53	48	
1,2-Dichloropropane	545.8	5.0	ug/L	501	ND	109	5-210	5.44	55	
Dichlorobromomethane	572.5	5.0	ug/L	501	ND	114	35-155	3.19	56	
2-Chloroethylvinyl ether	1162	100	ug/L	1000	ND	116	5-305	5.65	71	
cis-1,3-Dichloropropene	547.3	10.0	ug/L	501	ND	109	5-227	4.41	58	
Toluene	547.0	5.0	ug/L	505	ND	108	47-150	1.94	41	
trans-1,3-Dichloropropene	546.2	10.0	ug/L	501	ND	109	17-183	6.19	86	
1,1,2-Trichloroethane	545.6	5.0	ug/L	501	ND	109	52-150	7.45	45	
Tetrachloroethylene	492.9	5.0	ug/L	501	ND	98.4	64-148	1.14	39	
Chlorodibromomethane	567.6	5.0	ug/L	501	ND	113	53-149	5.41	50	
Chlorobenzene	512.4	5.0	ug/L	501	ND	102	37-160	2.79	53	
Ethylbenzene	540.4	5.0	ug/L	502	ND	108	79-119	3.01	63	
Bromoform	566.2	5.0	ug/L	501	ND	113	45-169	1.80	42	
1,1,2,2-Tetrachloroethane	551.2	10.0	ug/L	501	ND	110	46-157	8.26	61	
1,3-Dichlorobenzene	542.1	10.0	ug/L	501	ND	108	59-156	7.86	43	
1,4-Dichlorobenzene	511.1	5.0	ug/L	501	ND	102	18-190	5.90	57	
1,2-Dichlorobenzene	558.7	5.0	ug/L	501	ND	112	18-190	8.63	57	
1,2,4-Trichlorobenzene	647.9	10.0	ug/L	504	ND	129	60-129	13.4	11	R1
Surrogate: Dibromofluoromethane	522		ug/L	502		104	59-123			
Surrogate: 1,2-Dichloroethane-d4	532		ug/L	501		106	56-130			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C1150 - EPA 5030B - EPA 624.1										
Matrix Spike Dup (11C1150-MSD1)	Source: 11C1317-07			Prepared: 03/21/25 00:00 Analyzed: 03/21/25 22:57						
Surrogate: Toluene-d8	502		ug/L	504		99.6	85-113			
Surrogate: 4-Bromofluorobenzene	514		ug/L	501		102	82-112			
Determination of Base/Neutral Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1										
Blank (11C0536-BLK1)	Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:31									
n-Decane	<5	5	ug/L							
n-Octadecane	<5	5	ug/L							
Benzyl Alcohol	<10	10	ug/L							
Dibenzofuran	<10	10	ug/L							
Carbazole	<5	5	ug/L							
Fluoranthene	<10	10	ug/L							
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L							
Surrogate: 2-Fluorophenol	16.8		ug/L	20.6		81.6	16-140			
Surrogate: Phenol-d6	16.9		ug/L	19.6		86.1	13-147			
Surrogate: Nitrobenzene-d5	16.8		ug/L	20.6		81.5	17-150			
Surrogate: Nitrobenzene-d5	16.8		ug/L	20.6		81.5	17-150			
Surrogate: 2-Fluorobiphenyl	17.0		ug/L	19.5		86.9	15-134			
Surrogate: 2-Fluorobiphenyl	17.0		ug/L	19.5		86.9	15-134			
Surrogate: 2,4,6-Tribromophenol	23.0		ug/L	20.0		115	20-158			
Surrogate: Terphenyl-d14	23.4		ug/L	20.6		114	12-157			
Surrogate: Terphenyl-d14	23.4		ug/L	20.6		114	12-157			
LCS (11C0536-BS1)	Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:56									
n-Decane	<5	5	ug/L	10.0		33.4	10-104			
n-Octadecane	6.4	5	ug/L	10.0		63.7	25-128			
Benzyl Alcohol	<10	10	ug/L	10.0		61.7	10-125			
Dibenzofuran	<10	10	ug/L	10.0		74.8	49-108			
Carbazole	8.8	5	ug/L	10.0		88.0	45-122			
Fluoranthene	<10	10	ug/L	10.0		89.2	52-128			
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	10.0		91.3	45-148			
Surrogate: 2-Fluorophenol	14.9		ug/L	20.6		72.2	16-140			
Surrogate: Phenol-d6	14.0		ug/L	19.6		71.3	13-147			
Surrogate: Nitrobenzene-d5	15.5		ug/L	20.6		75.4	17-150			
Surrogate: Nitrobenzene-d5	15.5		ug/L	20.6		75.4	17-150			
Surrogate: 2-Fluorobiphenyl	15.8		ug/L	19.5		80.9	15-134			
Surrogate: 2-Fluorobiphenyl	15.8		ug/L	19.5		80.9	15-134			
Surrogate: 2,4,6-Tribromophenol	21.9		ug/L	20.0		109	20-158			
Surrogate: Terphenyl-d14	23.2		ug/L	20.6		113	12-157			
Surrogate: Terphenyl-d14	23.2		ug/L	20.6		113	12-157			

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Determination of Base/Neutral Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1									
Reference (11C0536-SRM1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 17:45					
n-Decane	7.8	5	ug/L	10.0		77.5	80-120		S
n-Octadecane	7.8	5	ug/L	10.0		77.6	80-120		S
Benzyl Alcohol	<10	10	ug/L	10.0		78.5	80-120		S
Dibenzofuran	<10	10	ug/L	10.0		91.3	80-120		
Carbazole	9.1	5	ug/L	10.0		91.3	80-120		
Fluoranthene	<10	10	ug/L	10.0		93.2	80-120		
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	10.0		88.1	80-120		

Surrogate: 2-Fluorophenol	21.0		ug/L	20.6		102	16-140		
Surrogate: Phenol-d6	18.7		ug/L	19.6		95.5	13-147		
Surrogate: Nitrobenzene-d5	20.3		ug/L	20.6		98.9	17-150		
Surrogate: Nitrobenzene-d5	20.3		ug/L	20.6		98.9	17-150		
Surrogate: 2-Fluorobiphenyl	20.9		ug/L	19.5		107	15-134		
Surrogate: 2-Fluorobiphenyl	20.9		ug/L	19.5		107	15-134		
Surrogate: 2,4,6-Tribromophenol	23.1		ug/L	20.0		115	20-158		
Surrogate: Terphenyl-d14	21.4		ug/L	20.6		104	12-157		
Surrogate: Terphenyl-d14	21.4		ug/L	20.6		104	12-157		

Determination of Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1									
Blank (11C0536-BLK1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:31					
2,4,5-Trichlorophenol	<50.0	50.0	ug/L						
Surrogate: 2-Fluorophenol	16.8		ug/L	20.6		81.6	16-140		
Surrogate: Phenol-d6	16.9		ug/L	19.6		86.1	13-147		
Surrogate: 2,4,6-Tribromophenol	23.0		ug/L	20.0		115	20-158		

LCS (11C0536-BS1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:56					
2,4,5-Trichlorophenol	<50.0	50.0	ug/L	10.0		87.9	50-121		
Surrogate: 2-Fluorophenol	14.9		ug/L	20.6		72.2	16-140		
Surrogate: Phenol-d6	14.0		ug/L	19.6		71.3	13-147		
Surrogate: 2,4,6-Tribromophenol	21.9		ug/L	20.0		109	20-158		
Reference (11C0536-SRM1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 17:45					
2,4,5-Trichlorophenol	<50.0	50.0	ug/L	10.0		96.8	80-120		
Surrogate: 2-Fluorophenol	21.0		ug/L	20.6		102	16-140		
Surrogate: Phenol-d6	18.7		ug/L	19.6		95.5	13-147		
Surrogate: 2,4,6-Tribromophenol	23.1		ug/L	20.0		115	20-158		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes



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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0536 - EPA 625 BNA - EPA 625.1									
Blank (1IC0536-BLK1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:31					
N-Nitrosodimethylamine	<10	10	ug/L						
Phenol	<10	10	ug/L						
Bis(2-Chloroethyl) Ether	<10	10	ug/L						
2-Chlorophenol	<10	10	ug/L						
Bis[2-Chloroisopropyl]ether	<10	10	ug/L						
n-Nitroso-di-n-propylamine	<10	10	ug/L						
Hexachloroethane	<10	10	ug/L						
Nitrobenzene	<10	10	ug/L						
Isophorone	<10	10	ug/L						
2-Nitrophenol	<10	10	ug/L						
2,4-Dimethylphenol	<10	10	ug/L						
Bis (2-Chloroethoxy) Methane	<10	10	ug/L						
Benzoic acid	<50	50	ug/L						
2,4-Dichlorophenol	<10	10	ug/L						
Naphthalene	<10	10	ug/L						
Hexachlorobutadiene	<10	10	ug/L						
p-Chloro-m-Cresol	<10	10	ug/L						
Hexachlorocyclopentadiene	<10	10	ug/L						
2,4,6-Trichlorophenol	<10	10	ug/L						
2-Chloronaphthalene	<10	10	ug/L						
Dimethylphthalate	<10	10	ug/L						
Acenaphthylene	<10	10	ug/L						
2,6-Dinitrotoluene	<10	10	ug/L						
Acenaphthene	<10	10	ug/L						
2,4-Dinitrophenol	<10	10	ug/L						
2,4-Dinitrotoluene	<10	10	ug/L						
4-Nitrophenol	<10	10	ug/L						
Diethyl Phthalate	<10	10	ug/L						
Fluorene	<10	10	ug/L						
4-Chlorophenyl Phenyl Ether	<10	10	ug/L						
1,2-Diphenylhydrazine	<10	10	ug/L						
4,6-Dinitro-o-Cresol	<10	10	ug/L						
N-Nitrosodiphenylamine	<10	10	ug/L						
4-Bromophenyl Phenyl Ether	<10	10	ug/L						
Hexachlorobenzene	<10	10	ug/L						
Pentachlorophenol	<10	10	ug/L						
Phenanthrene	<10	10	ug/L						
Anthracene	<10	10	ug/L						
Di-n-butyl Phthalate	<10	10	ug/L						
Fluoranthene	<10	10	ug/L						
Benzidine	<10	10	ug/L						
Pyrene	<10	10	ug/L						

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1									
Blank (11C0536-BLK1)									
Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:31									
Butyl Benzyl Phthalate	<10	10	ug/L						
Benzo(a)anthracene	<10	10	ug/L						
Chrysene	<10	10	ug/L						
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L						
Di-n-octyl Phthalate	<10	10	ug/L						
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L						
3,3'-Dichlorobenzidine	<10	10	ug/L						
3,4-Benzofluoranthene	<10	10	ug/L						
Benzo(k)Fluoranthene	<10	10	ug/L						
Benzo(a)Pyrene	<10	10	ug/L						
Dibenzo(a,h)anthracene	<10	10	ug/L						
Benzo(g,h,i)perylene	<10	10	ug/L						
Surrogate: 2-Fluorophenol	16.8		ug/L	20.6		81.6	16-140		
Surrogate: Phenol-d6	16.9		ug/L	19.6		86.1	13-147		
Surrogate: Nitrobenzene-d5	16.8		ug/L	20.6		81.5	17-150		
Surrogate: 2-Fluorobiphenyl	17.0		ug/L	19.5		86.9	15-134		
Surrogate: 2,4,6-Tribromophenol	23.0		ug/L	20.0		115	20-158		
Surrogate: Terphenyl-d14	23.4		ug/L	20.6		114	12-157		
LCS (11C0536-BS1)									
Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:56									
N-Nitrosodimethylamine	<10	10	ug/L	10.0		32.1	10-116		
Phenol	<10	10	ug/L	10.0		65.0	17-120		
Bis(2-Chloroethyl) Ether	<10	10	ug/L	10.0		62.8	43-126		
2-Chlorophenol	<10	10	ug/L	10.0		70.5	36-120		
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	10.0		66.0	63-139		
n-Nitroso-di-n-propylamine	<10	10	ug/L	10.0		61.5	14-198		
Hexachloroethane	<10	10	ug/L	10.0		54.4	55-120		Q3
Nitrobenzene	<10	10	ug/L	10.0		68.5	54-158		
Isophorone	<10	10	ug/L	10.0		67.3	47-180		
2-Nitrophenol	<10	10	ug/L	10.0		72.4	45-167		
2,4-Dimethylphenol	<10	10	ug/L	10.0		72.7	42-120		
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	10.0		67.3	49-165		
2,4-Dichlorophenol	<10	10	ug/L	10.0		76.6	53-122		
Naphthalene	<10	10	ug/L	10.0		65.3	36-120		
Hexachlorobutadiene	<10	10	ug/L	10.0		52.8	38-120		
p-Chloro-m-Cresol	<10	10	ug/L	10.0		80.8	55-125		
Hexachlorocyclopentadiene	<10	10	ug/L	10.0		30.6	10-107		
2,4,6-Trichlorophenol	<10	10	ug/L	10.0		81.9	52-129		
2-Chloronaphthalene	<10	10	ug/L	10.0		65.8	65-120		
Dimethylphthalate	<10	10	ug/L	10.0		82.1	1-120		
Acenaphthylene	<10	10	ug/L	10.0		72.8	54-126		
2,6-Dinitrotoluene	<10	10	ug/L	10.0		84.6	68-137		
Acenaphthene	<10	10	ug/L	10.0		71.9	60-132		

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1									
LCS (11C0536-BS1)									
				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 16:56					
2,4-Dinitrophenol	<10	10	ug/L	10.0		74.5	1-172		
2,4-Dinitrotoluene	<10	10	ug/L	10.0		87.7	48-127		
4-Nitrophenol	<10	10	ug/L	10.0		76.7	13-129		
Diethyl Phthalate	<10	10	ug/L	10.0		86.8	1-120		
Fluorene	<10	10	ug/L	10.0		76.6	70-120		
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	10.0		76.9	38-145		
4,6-Dinitro-o-Cresol	<10	10	ug/L	10.0		89.5	50-139		
N-Nitrosodiphenylamine	<10	10	ug/L	10.0		83.8	29-136		
4-Bromophenyl Phenyl Ether	<10	10	ug/L	10.0		82.1	44-127		
Hexachlorobenzene	<10	10	ug/L	10.0		79.6	8-142		
Pentachlorophenol	<10	10	ug/L	10.0		76.6	38-152		
Phenanthrene	<10	10	ug/L	10.0		84.2	65-120		
Anthracene	<10	10	ug/L	10.0		83.8	43-120		
Di-n-butyl Phthalate	<10	10	ug/L	10.0		91.3	8-120		
Fluoranthene	<10	10	ug/L	10.0		89.2	42-121		
Pyrene	<10	10	ug/L	10.0		92.8	70-120		
Butyl Benzyl Phthalate	<10	10	ug/L	10.0		88.7	1-140		
Benzo(a)anthracene	<10	10	ug/L	10.0		88.4	42-133		
Chrysene	<10	10	ug/L	10.0		89.3	44-140		
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	10.0		91.3	29-137		
Di-n-octyl Phthalate	<10	10	ug/L	10.0		88.5	19-132		
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	10.0		90.6	1-151		
3,4-Benzofluoranthene	<10	10	ug/L	10.0		84.0	29-157		
Benzo(k)Fluoranthene	<10	10	ug/L	10.0		91.4	27-168		
Benzo(a)Pyrene	<10	10	ug/L	10.0		90.4	32-148		
Dibenzo(a,h)anthracene	<10	10	ug/L	10.0		90.8	1-200		
Benzo(g,h,i)perylene	<10	10	ug/L	10.0		90.3	1-195		
Surrogate: 2-Fluorophenol	14.9		ug/L	20.6		72.2	16-140		
Surrogate: Phenol-d6	14.0		ug/L	19.6		71.3	13-147		
Surrogate: Nitrobenzene-d5	15.5		ug/L	20.6		75.4	17-150		
Surrogate: 2-Fluorobiphenyl	15.8		ug/L	19.5		80.9	15-134		
Surrogate: 2,4,6-Tribromophenol	21.9		ug/L	20.0		109	20-158		
Surrogate: Terphenyl-d14	23.2		ug/L	20.6		113	12-157		
Reference (11C0536-SRM1)									
				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 17:45					
N-Nitrosodimethylamine	<10	10	ug/L	10.0		83.1	80-120		
Phenol	<10	10	ug/L	10.0		87.0	80-120		
Bis(2-Chloroethyl) Ether	<10	10	ug/L	10.0		86.0	80-120		
2-Chlorophenol	<10	10	ug/L	10.0		90.3	80-120		
Bis[2-Chloroisopropyl]ether	<10	10	ug/L	10.0		88.7	80-120		
n-Nitroso-di-n-propylamine	<10	10	ug/L	10.0		81.3	80-120		
Hexachloroethane	<10	10	ug/L	10.0		88.4	80-120		
Nitrobenzene	<10	10	ug/L	10.0		89.4	80-120		

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1									
Reference (11C0536-SRM1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 17:45					
Isophorone	<10	10	ug/L	10.0		88.3	80-120		
2-Nitrophenol	<10	10	ug/L	10.0		96.4	80-120		
2,4-Dimethylphenol	<10	10	ug/L	10.0		91.4	80-120		
Bis (2-Chloroethoxy) Methane	<10	10	ug/L	10.0		88.9	80-120		
2,4-Dichlorophenol	<10	10	ug/L	10.0		97.1	80-120		
Naphthalene	<10	10	ug/L	10.0		91.0	80-120		
Hexachlorobutadiene	10.3	10	ug/L	10.0		103	80-120		
p-Chloro-m-Cresol	<10	10	ug/L	10.0		88.7	80-120		
Hexachlorocyclopentadiene	<10	10	ug/L	10.0		50.5	80-120		S
2,4,6-Trichlorophenol	<10	10	ug/L	10.0		96.6	80-120		
2-Chloronaphthalene	<10	10	ug/L	10.0		88.6	80-120		
Dimethylphthalate	<10	10	ug/L	10.0		92.1	80-120		
Acenaphthylene	<10	10	ug/L	10.0		91.1	80-120		
2,6-Dinitrotoluene	<10	10	ug/L	10.0		95.2	80-120		
Acenaphthene	<10	10	ug/L	10.0		91.3	80-120		
2,4-Dinitrophenol	<10	10	ug/L	10.0		75.6	80-120		S
2,4-Dinitrotoluene	<10	10	ug/L	10.0		93.4	80-120		
4-Nitrophenol	<10	10	ug/L	10.0		81.2	80-120		
Diethyl Phthalate	<10	10	ug/L	10.0		90.0	80-120		
Fluorene	<10	10	ug/L	10.0		91.6	80-120		
4-Chlorophenyl Phenyl Ether	<10	10	ug/L	10.0		93.7	80-120		
1,2-Diphenylhydrazine	<10	10	ug/L	10.0		90.5	80-120		
4,6-Dinitro-o-Cresol	<10	10	ug/L	10.0		90.4	80-120		
N-Nitrosodiphenylamine	<10	10	ug/L	10.0		90.4	80-120		
4-Bromophenyl Phenyl Ether	<10	10	ug/L	10.0		93.7	80-120		
Hexachlorobenzene	<10	10	ug/L	10.0		95.8	80-120		
Pentachlorophenol	<10	10	ug/L	10.0		74.0	80-120		S
Phenanthrene	<10	10	ug/L	10.0		90.2	80-120		
Anthracene	<10	10	ug/L	10.0		88.8	80-120		
Di-n-butyl Phthalate	<10	10	ug/L	10.0		90.3	80-120		
Fluoranthene	<10	10	ug/L	10.0		93.2	80-120		
Pyrene	<10	10	ug/L	10.0		89.2	80-120		
Butyl Benzyl Phthalate	<10	10	ug/L	10.0		84.7	80-120		
Benzo(a)anthracene	<10	10	ug/L	10.0		90.3	80-120		
Chrysene	<10	10	ug/L	10.0		91.1	80-120		
Bis(2-Ethylhexyl) Phthalate	<10	10	ug/L	10.0		88.1	80-120		
Di-n-octyl Phthalate	<10	10	ug/L	10.0		89.1	80-120		
Indeno(1,2,3-cd)Pyrene	<10	10	ug/L	10.0		91.1	80-120		
3,3'-Dichlorobenzidine	<10	10	ug/L	10.0		81.2	80-120		
3,4-Benzofluoranthene	<10	10	ug/L	10.0		86.5	80-120		
Benzo(k)Fluoranthene	<10	10	ug/L	10.0		92.2	80-120		
Benzo(a)Pyrene	<10	10	ug/L	10.0		93.2	80-120		

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Determination of Base/Neutral/Acid Extractable Compounds	Result		RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0536 - EPA 625 BNA - EPA 625.1											
Reference (11C0536-SRM1)				Prepared: 03/13/25 08:35 Analyzed: 03/18/25 17:45							
Dibenzo(a,h)anthracene	<10		10	ug/L	10.0		90.7	80-120			
Benzo(g,h,i)perylene	<10		10	ug/L	10.0		88.9	80-120			
Surrogate: 2-Fluorophenol	21.0			ug/L	20.6		102	16-140			
Surrogate: Phenol-d6	18.7			ug/L	19.6		95.5	13-147			
Surrogate: Nitrobenzene-d5	20.3			ug/L	20.6		98.9	17-150			
Surrogate: 2-Fluorobiphenyl	20.9			ug/L	19.5		107	15-134			
Surrogate: 2,4,6-Tribromophenol	23.1			ug/L	20.0		115	20-158			
Surrogate: Terphenyl-d14	21.4			ug/L	20.6		104	12-157			
Determination of Organochlorine Insecticides & Metabolites	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0617 - 3520C NP/OC Cont Liq - EPA 612											
Blank (11C0617-BLK1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:05							
Hexachlorobenzene	<0.024	0.024	0.050	ug/L							
Surrogate: Tetrachloro-m-xylene	0.445			ug/L	0.600		74.2	28-110			
LCS (11C0617-BS1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:24							
Hexachlorobenzene	0.2712	0.024	0.050	ug/L	0.250		108	32-138			
Surrogate: Tetrachloro-m-xylene	0.491			ug/L	0.600		81.9	28-110			
LCS Dup (11C0617-BSD1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:41							
Hexachlorobenzene	0.3239	0.024	0.050	ug/L	0.250		130	32-138	17.7	30	
Surrogate: Tetrachloro-m-xylene	0.510			ug/L	0.600		85.0	28-110			
Reference (11C0617-SRM1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:58							
Hexachlorobenzene	0.2332	0.024	0.050	ug/L	0.250		93.3	80-120			
Surrogate: Tetrachloro-m-xylene	0.603			ug/L	0.600		100	28-110			
Determination of Organochlorine Insecticides & PCBs	Result		RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD											
Blank (11C0617-BLK1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:05							
Alpha-BHC	<0.05		0.05	ug/L							
Gamma-BHC [Lindane]	<0.05		0.05	ug/L							
Beta-BHC	<0.05		0.05	ug/L							
Heptachlor	<0.05		0.05	ug/L							



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Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD									
Blank (1IC0617-BLK1)									
Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:05									
Delta-BHC	<0.05	0.05	ug/L						
Aldrin	<0.05	0.05	ug/L						
Heptachlor Epoxide	<0.05	0.05	ug/L						
Endosulfan I	<0.05	0.05	ug/L						
4,4'-DDE	<0.05	0.05	ug/L						
Dieldrin	<0.05	0.05	ug/L						
Endrin	<0.05	0.05	ug/L						
4,4'-DDD	<0.05	0.05	ug/L						
Endosulfan II	<0.05	0.05	ug/L						
4,4'-DDT	<0.05	0.05	ug/L						
Endrin Aldehyde	<0.05	0.05	ug/L						
Endosulfan Sulfate	<0.05	0.05	ug/L						
Chlordane	<0.10	0.10	ug/L						
Toxaphene	<0.20	0.20	ug/L						
Arochlor 1016	<0.10	0.10	ug/L						
Arochlor 1221	<0.20	0.20	ug/L						
Arochlor 1232	<0.20	0.20	ug/L						
Arochlor 1242	<0.20	0.20	ug/L						
Arochlor 1248	<0.20	0.20	ug/L						
Arochlor 1254	<0.10	0.10	ug/L						
Arochlor 1260	<0.10	0.10	ug/L						
Total PCB's	<0.10	0.10	ug/L						
Surrogate: Tetrachloro-m-xylene	0.445		ug/L	0.600		74.2		31-116	
Surrogate: Decachlorobiphenyl	0.0896		ug/L	0.600		14.9		12-130	
LCS (1IC0617-BS1)									
Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:24									
Alpha-BHC	0.205	0.05	ug/L	0.250		81.9		56-125	
Gamma-BHC [Lindane]	0.229	0.05	ug/L	0.250		91.8		44-124	
Beta-BHC	0.191	0.05	ug/L	0.250		76.3		56-122	
Heptachlor	0.214	0.05	ug/L	0.250		85.7		57-124	
Delta-BHC	0.228	0.05	ug/L	0.250		91.2		53-138	
Aldrin	0.212	0.05	ug/L	0.250		85.0		53-114	
Heptachlor Epoxide	0.246	0.05	ug/L	0.250		98.6		61-128	
Endosulfan I	0.218	0.05	ug/L	0.250		87.3		60-124	
4,4'-DDE	0.221	0.05	ug/L	0.250		88.4		59-122	
Dieldrin	0.222	0.05	ug/L	0.250		89.0		52-119	
Endrin	0.234	0.05	ug/L	0.250		93.5		45-152	
4,4'-DDD	0.215	0.05	ug/L	0.250		86.2		59-127	
Endosulfan II	0.228	0.05	ug/L	0.250		91.2		57-130	
4,4'-DDT	0.216	0.05	ug/L	0.250		86.4		55-143	
Endrin Aldehyde	0.182	0.05	ug/L	0.250		73.0		55-139	
Endosulfan Sulfate	0.217	0.05	ug/L	0.250		86.9		64-123	

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Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0617 - 3520C NP/OC Cont Liq - EPA 608.3 GC-ECD									
LCS (1IC0617-BS1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:24					
Surrogate: Tetrachloro-m-xylene	0.491		ug/L	0.600		81.9	31-116		
Surrogate: Decachlorobiphenyl	0.100		ug/L	0.600		16.7	12-130		
LCS Dup (1IC0617-BSD1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:41					
Alpha-BHC	0.206	0.05	ug/L	0.250		82.2	56-125	0.383	30
Gamma-BHC [Lindane]	0.230	0.05	ug/L	0.250		92.0	44-124	0.211	30
Beta-BHC	0.187	0.05	ug/L	0.250		74.8	56-122	1.91	30
Heptachlor	0.216	0.05	ug/L	0.250		86.4	57-124	0.802	30
Delta-BHC	0.233	0.05	ug/L	0.250		93.4	53-138	2.32	30
Aldrin	0.217	0.05	ug/L	0.250		86.8	53-114	2.20	30
Heptachlor Epoxide	0.264	0.05	ug/L	0.250		106	61-128	6.95	30
Endosulfan I	0.210	0.05	ug/L	0.250		84.1	60-124	3.73	30
4,4'-DDE	0.226	0.05	ug/L	0.250		90.2	59-122	2.08	30
Dieldrin	0.229	0.05	ug/L	0.250		91.8	52-119	3.06	30
Endrin	0.238	0.05	ug/L	0.250		95.1	45-152	1.74	30
4,4'-DDD	0.219	0.05	ug/L	0.250		87.5	59-127	1.54	30
Endosulfan II	0.231	0.05	ug/L	0.250		92.5	57-130	1.44	30
4,4'-DDT	0.220	0.05	ug/L	0.250		88.0	55-143	1.86	30
Endrin Aldehyde	0.199	0.05	ug/L	0.250		79.5	55-139	8.59	30
Endosulfan Sulfate	0.222	0.05	ug/L	0.250		88.8	64-123	2.08	30
Surrogate: Tetrachloro-m-xylene	0.510		ug/L	0.600		85.0	31-116		
Surrogate: Decachlorobiphenyl	0.0703		ug/L	0.600		11.7	12-130		S2
Reference (1IC0617-SRM1)				Prepared: 03/13/25 10:33 Analyzed: 03/20/25 10:58					
Alpha-BHC	0.225	0.05	ug/L	0.250		90.1	80-120		
Gamma-BHC [Lindane]	0.242	0.05	ug/L	0.250		96.7	80-120		
Beta-BHC	0.230	0.05	ug/L	0.250		92.2	80-120		
Heptachlor	0.225	0.05	ug/L	0.250		90.0	80-120		
Delta-BHC	0.247	0.05	ug/L	0.250		98.9	80-120		
Aldrin	0.232	0.05	ug/L	0.250		93.0	80-120		
Heptachlor Epoxide	0.251	0.05	ug/L	0.250		100	80-120		
Endosulfan I	0.240	0.05	ug/L	0.250		96.1	80-120		
4,4'-DDE	0.228	0.05	ug/L	0.250		91.2	80-120		
Dieldrin	0.225	0.05	ug/L	0.250		90.1	80-120		
Endrin	0.234	0.05	ug/L	0.250		93.7	80-120		
4,4'-DDD	0.219	0.05	ug/L	0.250		87.7	80-120		
Endosulfan II	0.232	0.05	ug/L	0.250		92.9	80-120		
4,4'-DDT	0.235	0.05	ug/L	0.250		93.9	80-120		
Endrin Aldehyde	0.259	0.05	ug/L	0.250		103	80-120		
Endosulfan Sulfate	0.234	0.05	ug/L	0.250		93.6	80-120		
Surrogate: Tetrachloro-m-xylene	0.603		ug/L	0.600		100	31-116		
Surrogate: Decachlorobiphenyl	0.652		ug/L	0.600		109	12-130		

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Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0509 - Wet Chem Preparation - USGS I-1750-85										
Blank (11C0509-BLK1)	Prepared: 03/12/25 08:52 Analyzed: 03/13/25 12:16									
Total Dissolved Solids (TDS)	<5	5	mg/L							
LCS (11C0509-BS1)	Prepared: 03/12/25 08:52 Analyzed: 03/13/25 12:16									
Total Dissolved Solids (TDS)	95	5	mg/L	100		95.3	79-114			
Duplicate (11C0509-DUP1)	Source: 11C0485-02 Prepared: 03/12/25 08:52 Analyzed: 03/13/25 12:16									
Total Dissolved Solids (TDS)	1220	5	mg/L		1220			0.219	24	
Batch 11C0511 - General Prep Micro - SM 5210 B-2016										
Blank (11C0511-BLK1)	Prepared: 03/12/25 09:13 Analyzed: 03/12/25 10:04									
BOD (5 day)	<2	2	mg/L							AC, K1
Duplicate (11C0511-DUP1)	Source: 11C0689-01 Prepared: 03/12/25 09:13 Analyzed: 03/12/25 10:58									
BOD (5 day)	439	12	mg/L		419			4.66	30	
Reference (11C0511-SRM1)	Prepared: 03/12/25 09:13 Analyzed: 03/12/25 10:11									
BOD (5 day)	182	100	mg/L	198		92.2	84.6-115.4			
Batch 11C0621 - General Prep HPLC/IC - TIMBERLINE										
Blank (11C0621-BLK2)	Prepared: 03/13/25 10:54 Analyzed: 03/13/25 12:37									
Nitrogen, Ammonia	<0.10	0.10	mg/L							
LCS (11C0621-BS2)	Prepared: 03/13/25 10:54 Analyzed: 03/13/25 12:39									
Nitrogen, Ammonia	5.03	0.10	mg/L	5.00		101	90-114			
Matrix Spike (11C0621-MS2)	Source: 11C0803-04 Prepared: 03/13/25 10:54 Analyzed: 03/13/25 12:41									
Nitrogen, Ammonia	5.50	0.10	mg/L	5.00	0.0885	108	84-115			
Matrix Spike Dup (11C0621-MSD2)	Source: 11C0803-04 Prepared: 03/13/25 10:54 Analyzed: 03/13/25 12:42									
Nitrogen, Ammonia	5.57	0.10	mg/L	5.00	0.0885	110	84-115	1.41	20	
Batch 11C0642 - Wet Chem Preparation - 4500CN-E										
Blank (11C0642-BLK1)	Prepared: 03/13/25 14:01 Analyzed: 03/14/25 15:02									
Cyanide, total	<0.010	0.010	mg/L							
LCS (11C0642-BS1)	Prepared: 03/13/25 14:01 Analyzed: 03/14/25 15:02									
Cyanide, total	0.103	0.010	mg/L	0.100		103	64-123			
Matrix Spike (11C0642-MS1)	Source: 11C0688-01 Prepared: 03/13/25 14:01 Analyzed: 03/14/25 15:02									
Cyanide, total	0.056	0.020	mg/L	0.100	ND	56.0	60-127			M2
Matrix Spike Dup (11C0642-MSD1)	Source: 11C0688-01 Prepared: 03/13/25 14:01 Analyzed: 03/14/25 15:02									
Cyanide, total	0.052	0.020	mg/L	0.100	ND	52.0	60-127	7.41	30	M2

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Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 11C0646 - Wet Chem Preparation - SM 2320 B-2011										
Blank (11C0646-BLK1)			Prepared & Analyzed: 03/13/25 14:20							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (11C0646-BS1)			Prepared & Analyzed: 03/13/25 14:20							
Alkalinity, as CaCO3	261	10	mg/L	235		111	82-112			
Matrix Spike (11C0646-MS1)			Source: 11C0515-02 Prepared & Analyzed: 03/13/25 14:20							
Alkalinity, as CaCO3	401	10	mg/L	235	150	107	70-113			
Matrix Spike Dup (11C0646-MSD1)			Source: 11C0515-02 Prepared & Analyzed: 03/13/25 14:20							
Alkalinity, as CaCO3	404	10	mg/L	235	150	108	70-113	0.770	10	
Batch 11C0696 - Wet Chem Preparation - SM 4500-H+ B-2011										
Duplicate (11C0696-DUP1)		Source: 11C0688-01		Prepared: 03/14/25 08:31 Analyzed: 03/18/25 08:06						
pH	7.2	0.5	pH		8.0			10.6	10	R1
Duplicate (11C0696-DUP2)		Source: 11C0633-02		Prepared: 03/14/25 08:31 Analyzed: 03/18/25 08:06						
pH	8.0	0.5	pH		7.2			10.6	10	R1
Reference (11C0696-SRM1)		Prepared: 03/14/25 08:31 Analyzed: 03/18/25 08:06								
pH	7.0	0.5	pH	7.00		99.6	98.6-101.4			
Reference (11C0696-SRM2)		Prepared: 03/14/25 08:31 Analyzed: 03/18/25 08:06								
pH	7.0	0.5	pH	7.00		99.6	98.6-101.4			
Reference (11C0696-SRM3)		Prepared & Analyzed: 03/14/25 08:31								
pH	7.0	0.5	pH	7.00		99.9	98.6-101.4			
Batch 11C0742 - Wet Chem Preparation - USGS I-3765-85										
Blank (11C0742-BLK1)			Prepared: 03/17/25 07:20 Analyzed: 03/17/25 09:45							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (11C0742-BS1)			Prepared: 03/17/25 07:20 Analyzed: 03/17/25 09:45							
Total Suspended Solids (TSS)	14.0	1	mg/L	15.0		93.3	71-110			
Duplicate (11C0742-DUP1)		Source: 11C0638-01		Prepared: 03/17/25 07:20 Analyzed: 03/17/25 09:45						
Total Suspended Solids (TSS)	63.0	10	mg/L		61.0			3.23	30	
Batch 11C0759 - Wet Chem Preparation - EPA 1664A										
Blank (11C0759-BLK1)			Prepared: 03/17/25 09:11 Analyzed: 03/18/25 07:35							
Oil and Grease	<4	4	mg/L							
LCS (11C0759-BS1)			Prepared: 03/17/25 09:11 Analyzed: 03/18/25 07:35							
Oil and Grease	38.5	4	mg/L	40.0		96.2	78-114			
LCS Dup (11C0759-BSD1)			Prepared: 03/17/25 09:11 Analyzed: 03/18/25 07:35							
Oil and Grease	40.9	4	mg/L	40.0		102	78-114	6.05	18	
Batch 11C1376 - TOC/DOC - 5310B										



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Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC1376 - TOC/DOC - 5310B										
Blank (1IC1376-BLK1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 11:15									
Total Organic Carbon	<0.50	0.50	mg/L							
LCS (1IC1376-BS1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 13:13									
Total Organic Carbon	5.44	0.50	mg/L	5.00		109	89-116			
LCS Dup (1IC1376-BSD1)	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 11:00									
Total Organic Carbon	5.42	0.50	mg/L	5.00		108	89-116	0.313	10	
Matrix Spike (1IC1376-MS1)	Source: 1IC0692-01	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 16:41								
Total Organic Carbon	30.25	0.50	mg/L	5.00	26.62	72.6	50-133			
Matrix Spike Dup (1IC1376-MSD1)	Source: 1IC0692-01	Prepared: 03/26/25 00:00 Analyzed: 03/26/25 16:57								
Total Organic Carbon	31.66	0.50	mg/L	5.00	26.62	101	50-133	4.55	10	
Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0565 - General Prep HPLC/IC - 300.0										
Blank (1IC0565-BLK1)	Prepared: 03/11/25 00:00 Analyzed: 03/11/25 09:51									
Nitrogen, Nitrate	<0.1	0.1	mg/L							
LCS (1IC0565-BS1)	Prepared: 03/11/25 00:00 Analyzed: 03/11/25 10:27									
Nitrogen, Nitrate	2.72	0.1	mg/L	2.68		102	90-110			
LCS Dup (1IC0565-BSD1)	Prepared: 03/11/25 00:00 Analyzed: 03/11/25 10:45									
Nitrogen, Nitrate	2.71	0.1	mg/L	2.68		101	90-110	0.515	10	
Matrix Spike (1IC0565-MS1)	Source: 1IC0315-01	Prepared: 03/11/25 00:00 Analyzed: 03/11/25 11:22								
Nitrogen, Nitrate	27.39	1.0	mg/L	26.8	ND	102	80-120			
Matrix Spike Dup (1IC0565-MSD1)	Source: 1IC0315-01	Prepared: 03/11/25 00:00 Analyzed: 03/11/25 11:40								
Nitrogen, Nitrate	27.52	1.0	mg/L	26.8	ND	103	80-120	0.474	10	
Batch 1IC0628 - General Prep HPLC/IC - 300.0										
Blank (1IC0628-BLK1)	Prepared & Analyzed: 03/12/25 12:35									
Chloride	<1.0	1.0	mg/L							
Sulfate	<1.0	1.0	mg/L							
LCS (1IC0628-BS1)	Prepared & Analyzed: 03/12/25 09:51									
Chloride	14.49	1.0	mg/L	15.4		94.3	90-110			
Sulfate	33.83	1.0	mg/L	33.9		99.9	90-110			
LCS Dup (1IC0628-BSD1)	Prepared & Analyzed: 03/12/25 10:10									
Chloride	14.55	1.0	mg/L	15.4		94.7	90-110	0.413	10	
Sulfate	34.46	1.0	mg/L	33.9		102	90-110	1.82	10	
Matrix Spike (1IC0628-MS1)	Source: 1IC0336-02	Prepared & Analyzed: 03/12/25 18:38								
Chloride	405.5	10.0	mg/L	154	243.4	105	80-120			
Sulfate	413.4	10.0	mg/L	339	49.34	107	80-120			

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Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0628 - General Prep HPLC/IC - 300.0										
Matrix Spike Dup (1IC0628-MSD1)		Source: 1IC0336-02		Prepared & Analyzed: 03/12/25 18:56						
Chloride	403.7	10.0	mg/L	154	243.4	104	80-120	0.433	10	
Sulfate	418.1	10.0	mg/L	339	49.34	109	80-120	1.14	10	
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0479 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (1IC0479-BLK1)		Prepared: 03/11/25 15:25 Analyzed: 03/12/25 20:34								
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0020	0.0020	mg/L							
Barium, total	<0.0020	0.0020	mg/L							
Beryllium, total	<0.0020	0.0020	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0020	0.0020	mg/L							
Cobalt, total	<0.0020	0.0020	mg/L							
Copper, total	<0.0020	0.0020	mg/L							
Lead, total	<0.0008	0.0008	mg/L							
Molybdenum, total	<0.0020	0.0020	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0020	0.0020	mg/L							
Thallium, total	<0.0008	0.0008	mg/L							
Vanadium, total	<0.0080	0.0080	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1IC0479-BS1)		Prepared: 03/11/25 15:25 Analyzed: 03/12/25 20:40								
Antimony, total	0.0971	0.0020	mg/L	0.100		97.1	85-115			
Arsenic, total	0.0930	0.0020	mg/L	0.100		93.0	85-115			
Barium, total	0.106	0.0020	mg/L	0.100		106	85-115			
Beryllium, total	0.0982	0.0020	mg/L	0.100		98.2	85-115			
Cadmium, total	0.0932	0.0002	mg/L	0.100		93.2	85-115			
Chromium, total	0.0940	0.0020	mg/L	0.100		94.0	85-115			
Cobalt, total	0.0973	0.0020	mg/L	0.100		97.3	85-115			
Copper, total	0.0961	0.0020	mg/L	0.100		96.1	85-115			
Lead, total	0.0981	0.0008	mg/L	0.100		98.1	85-115			
Molybdenum, total	0.0955	0.0020	mg/L	0.100		95.5	85-115			
Nickel, total	0.0963	0.0040	mg/L	0.100		96.3	85-115			
Selenium, total	0.0878	0.0040	mg/L	0.100		87.8	85-115			
Silver, total	0.0967	0.0020	mg/L	0.100		96.7	85-115			
Thallium, total	0.0975	0.0008	mg/L	0.100		97.5	85-115			
Vanadium, total	0.0933	0.0080	mg/L	0.100		93.3	85-115			
Zinc, total	0.0922	0.0200	mg/L	0.100		92.2	85-115			
Matrix Spike (1IC0479-MS1)		Source: 1IC0501-02		Prepared: 03/11/25 15:25 Analyzed: 03/12/25 21:04						
Antimony, total	0.0969	0.0020	mg/L	0.100	ND	96.9	70-130			

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0479 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Matrix Spike (11C0479-MS1) Source: 11C0501-02 Prepared: 03/11/25 15:25 Analyzed: 03/12/25 21:04										
Arsenic, total	0.0964	0.0020	mg/L	0.100	0.0013	95.1	70-130			
Barium, total	0.210	0.0020	mg/L	0.100	0.101	110	70-130			
Beryllium, total	0.0977	0.0020	mg/L	0.100	ND	97.7	70-130			
Cadmium, total	0.0930	0.0002	mg/L	0.100	ND	93.0	70-130			
Chromium, total	0.0952	0.0020	mg/L	0.100	ND	95.2	70-130			
Cobalt, total	0.103	0.0020	mg/L	0.100	ND	103	70-130			
Copper, total	0.101	0.0020	mg/L	0.100	0.0074	93.8	70-130			
Lead, total	0.0956	0.0008	mg/L	0.100	ND	95.6	70-130			
Molybdenum, total	0.104	0.0020	mg/L	0.100	0.0020	102	70-130			
Nickel, total	0.0998	0.0040	mg/L	0.100	0.0009	98.9	70-130			
Selenium, total	0.0880	0.0040	mg/L	0.100	0.0018	86.2	70-130			
Silver, total	0.0956	0.0020	mg/L	0.100	ND	95.6	70-130			
Thallium, total	0.0952	0.0008	mg/L	0.100	ND	95.2	70-130			
Vanadium, total	0.0957	0.0080	mg/L	0.100	ND	95.7	70-130			
Zinc, total	0.108	0.0200	mg/L	0.100	ND	108	70-130			
Matrix Spike Dup (11C0479-MSD1) Source: 11C0501-02 Prepared: 03/11/25 15:25 Analyzed: 03/12/25 21:10										
Antimony, total	0.0992	0.0020	mg/L	0.100	ND	99.2	70-130	2.34	20	
Arsenic, total	0.0966	0.0020	mg/L	0.100	0.0013	95.3	70-130	0.243	20	
Barium, total	0.216	0.0020	mg/L	0.100	0.101	115	70-130	2.60	20	
Beryllium, total	0.100	0.0020	mg/L	0.100	ND	100	70-130	2.33	20	
Cadmium, total	0.0947	0.0002	mg/L	0.100	ND	94.7	70-130	1.83	20	
Chromium, total	0.0956	0.0020	mg/L	0.100	ND	95.6	70-130	0.459	20	
Cobalt, total	0.103	0.0020	mg/L	0.100	ND	103	70-130	0.144	20	
Copper, total	0.102	0.0020	mg/L	0.100	0.0074	94.7	70-130	0.909	20	
Lead, total	0.0976	0.0008	mg/L	0.100	ND	97.6	70-130	2.13	20	
Molybdenum, total	0.108	0.0020	mg/L	0.100	0.0020	106	70-130	3.57	20	
Nickel, total	0.0989	0.0040	mg/L	0.100	0.0009	98.0	70-130	0.929	20	
Selenium, total	0.0895	0.0040	mg/L	0.100	0.0018	87.8	70-130	1.78	20	
Silver, total	0.0993	0.0020	mg/L	0.100	ND	99.3	70-130	3.79	20	
Thallium, total	0.0977	0.0008	mg/L	0.100	ND	97.7	70-130	2.59	20	
Vanadium, total	0.100	0.0080	mg/L	0.100	ND	100	70-130	4.69	20	
Zinc, total	0.108	0.0200	mg/L	0.100	ND	108	70-130	0.0807	20	
Post Spike (11C0479-PS1) Source: 11C0501-02 Prepared: 03/11/25 15:25 Analyzed: 03/13/25 11:47										
Antimony, total	0.0825		mg/L	0.0800	0.0003	103	70-130			
Arsenic, total	0.0780		mg/L	0.0800	0.0013	95.9	70-130			
Barium, total	0.186		mg/L	0.0800	0.0987	109	70-130			
Beryllium, total	0.0836		mg/L	0.0800	0.00001	105	70-130			
Cadmium, total	0.0774		mg/L	0.0800	0.00001	96.8	70-130			
Chromium, total	0.0849		mg/L	0.0800	0.0005	105	70-130			
Cobalt, total	0.0849		mg/L	0.0800	0.0001	106	70-130			
Copper, total	0.0918		mg/L	0.0800	0.0073	106	70-130			
Lead, total	0.0746		mg/L	0.0800	0.0002	93.0	70-130			
Molybdenum, total	0.0855		mg/L	0.0800	0.0019	104	70-130			

Microbac Laboratories, Inc., Newton

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CERTIFICATE OF ANALYSIS

1IC0692

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IC0479 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Post Spike (1IC0479-PS1)		Source: 1IC0501-02		Prepared: 03/11/25 15:25 Analyzed: 03/13/25 11:47						
Nickel, total	0.0846		mg/L	0.0800	0.0009	105	70-130			
Selenium, total	0.0693		mg/L	0.0800	0.0017	84.5	70-130			
Silver, total	0.0773		mg/L	0.0800	0.00008	96.5	70-130			
Thallium, total	0.0752		mg/L	0.0800	-0.00002	94.0	70-130			
Vanadium, total	0.0860		mg/L	0.0800	0.0031	104	70-130			
Zinc, total	0.0926		mg/L	0.0800	0.0122	101	70-130			
Batch 1IC0910 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Blank (1IC0910-BLK1)		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:35								
Calcium, total	<0.1	0.1	mg/L							
Iron, total	<0.100	0.100	mg/L							
Magnesium, total	<0.10	0.10	mg/L							
Potassium, total	<1.00	1.00	mg/L							
Sodium, total	<1.00	1.00	mg/L							
Titanium, total	<0.050	0.050	mg/L							
Tin, total	<0.25	0.25	mg/L							
LCS (1IC0910-BS1)		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:41								
Calcium, total	2.42	0.1	mg/L	2.20		110	85-115			
Iron, total	2.49	0.100	mg/L	2.20		113	85-115			
Magnesium, total	2.17	0.10	mg/L	2.20		98.7	85-115			
Potassium, total	4.08	1.00	mg/L	4.00		102	85-115			
Sodium, total	2.27	1.00	mg/L	2.20		103	85-115			
Titanium, total	0.208	0.050	mg/L	0.200		104	85-115			
Tin, total	<0.25	0.25	mg/L	0.200		107	85-115			
Matrix Spike (1IC0910-MS1)		Source: 1IC0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 22:56						
Calcium, total	134	0.1	mg/L	2.20	130	178	70-130			M6
Iron, total	2.99	0.100	mg/L	2.20	0.619	108	70-130			
Magnesium, total	52.6	0.10	mg/L	2.20	49.2	157	70-130			M6
Potassium, total	24.6	1.00	mg/L	4.00	20.3	110	70-130			
Sodium, total	329	1.00	mg/L	2.20	322	284	70-130			M6
Titanium, total	0.208	0.050	mg/L	0.200	0.00297	103	70-130			
Tin, total	<0.25	0.25	mg/L	0.200	ND	105	70-130			
Matrix Spike Dup (1IC0910-MSD1)		Source: 1IC0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 23:07						
Calcium, total	140	0.1	mg/L	2.20	130	442	70-130	4.24	20	M6
Iron, total	3.18	0.100	mg/L	2.20	0.619	116	70-130	5.99	20	
Magnesium, total	54.3	0.10	mg/L	2.20	49.2	233	70-130	3.16	20	M6
Potassium, total	25.7	1.00	mg/L	4.00	20.3	135	70-130	4.05	20	M6
Sodium, total	347	1.00	mg/L	2.20	322	NR	70-130	5.58	20	M6
Titanium, total	0.217	0.050	mg/L	0.200	0.00297	107	70-130	4.00	20	
Tin, total	<0.25	0.25	mg/L	0.200	ND	110	70-130	5.08	20	
Post Spike (1IC0910-PS1)		Source: 1IC0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 23:17						
Calcium, total	140		mg/L	8.80	130	111	85-115			

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

11C0692

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11C0910 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Post Spike (11C0910-PS1)		Source: 11C0655-01		Prepared: 03/19/25 07:10 Analyzed: 03/19/25 23:17						
Iron, total	10.7		mg/L	8.80	0.619	115	85-115			
Magnesium, total	57.7		mg/L	8.80	49.2	96.5	85-115			
Potassium, total	37.7		mg/L	16.0	20.3	109	85-115			
Sodium, total	321		mg/L	8.80	322	NR	85-115			M6
Titanium, total	0.865		mg/L	0.800	0.00297	108	85-115			
Tin, total	0.891		mg/L	0.800	0.00358	111	85-115			
Batch 11C1059 - EPA 7470A Hg Water - 245.1										
Blank (11C1059-BLK1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:54								
Mercury, total	<0.00050	0.00050	mg/L							
LCS (11C1059-BS1)		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 12:57								
Mercury, total	0.00227	0.00050	mg/L	0.00250		90.7	85-115			
Matrix Spike (11C1059-MS1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:08						
Mercury, total	0.00210	0.00050	mg/L	0.00250	ND	84.1	70-130			
Matrix Spike Dup (11C1059-MSD1)		Source: 11C0688-01		Prepared: 03/20/25 15:33 Analyzed: 03/21/25 13:13						
Mercury, total	0.00235	0.00050	mg/L	0.00250	ND	94.2	70-130	11.3	10	R1

Definitions

AC:	BOD blank = 0.23mg/L
B1:	The target analyte was detected in the method blank at or above the method acceptance criteria. The sample concentration is below the method acceptance criteria.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
K1:	Unseeded dilution blank depletion exceeds 0.2 mg/L.
M2:	Matrix spike recovery is below acceptance limits.
M6:	Matrix spike recovery is outside of acceptance limits. The analyte concentration is greater than 4X the spiking level.
MDL:	Minimum Detection Limit
Q3:	LCS recovery is below acceptance limits. The reported value is estimated.
Q8:	CCV recovery is below acceptance limits. The reported value is estimated.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S:	Spike recovery outside of acceptance limits.
S2:	Surrogate recovery is below acceptance limits.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.4°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IC0692

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
03/28/25 16:13



600 East
Newton, IA
641-792-8



Page 1 of 2

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SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Clarke Co. SLF - Pollutants

Leachate

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Jill Curnes
Clarke County Landfill Commission
Courthouse - 100 S Main St
Osceola, IA 50213

LAB USE ONLY

Work Order IC0692

Temperature 0.4

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☐ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Leachate	Aqueous	GRAB	<u>3/10/25</u>	<u>12:35</u>	<u>18</u>	608-tto 624-tto 625@benzoic-acid 625@dibenzofuran 625-tto alk-cuco3-2320 ba-l-200.8 bod-5210 cd-l-200.8 cn-t-4500e cr-t-200.8 fe-l-200.7 k-l-200.7 mo-t-200.8 ni3-limberline no3-300.0 pb-l-200.8 612-100 625@2,4,5-Trichlorophe nol 625@benzylalcohol 625-901 ag-t-200.8 as-t-200.8 be-l-200.8 ca-l-200.7 cl-300.0 co-t-200.8 cu-t-200.8 hg-l-245.1 mg-l-200.7 na-t-200.7 ni-l-200.8 og-t-1664 ph-4500	<u>01</u>

Relinquished By Todd Whipple Date/Time 3/11/25

Relinquished By _____ Date/Time _____

Received By _____ Date/Time _____

Received for Lab By Heather Murphy Date/Time 3/11/25 1035

Original - Lab Copy Yellow - Sampler Copy

Remarks:



600 East 1st
Newton, IA
641-792-84



1 I C 0 6 9 2

HLW Engineering
PM: Heather Murphy

Page 2 of 2

Printed: 2/24/2025 10:17:58A

www.keystonelabs.com

Page 34 of 34

SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Clarke Co. SLF - Pollutants
Leachate

REPORT TO

Todd Whipple
HLW Engineering
204 West Broad St
Story City, IA 50248

INVOICE TO

Jill Curnes
Clarke County Landfill Commission
Courthouse - 100 S Main St
Osceola, IA 50213

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1IC0692

Temperature 0.4

Turn-Cooler: No

☐ Custody Seal
☒ Containers Intact
☐ COC/Labels Agree
☐ Preservation Confirmed
☒ Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
							sb-l-200.8 sn-l-200.7 lds-i-1750-85 fl-l-200.8 lss-i-3765-85 zn-t-200.8	se-l-200.8 so4-300.0 li-l-200.7 loc-5310b v-l-200.8

Received By 3/11/25
Date/Time

Relinquished By 3/11/25 1035
Date/Time

Remarks:

Received By Date/Time

Received for Lab By Date/Time

Original - Lab Copy Yellow - Sampler Copy



**DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY**

CITY OF DES MOINES, OPERATING CONTRACTOR

February 24, 2022

Cindy West
Clarke County Landfill
100 S. Main Street
Osceola, IA 50213

RE: Hauled Waste Discharge Permit No. B10133

Dear Ms. West:

Enclosed is your Hauled Waste Discharge Permit for the Clarke County Landfill facility in Osceola, IA. This permit is effective until the expiration date; however, an annual permit fee will be due.

Please keep us informed of any changes that may affect your facility's volume or characteristics of the wastewater hauled to the WRF. Questions should be directed to Paul Ebert, in Industrial Pretreatment, at 515/323-8133.

Sincerely,

Larry Hare
WRF Treatment Manager
WRA Wastewater Reclamation Facility

LH/ajf

Enc: Hauled Wastewater Discharge Permit

CC: T. Whipple, HLW Engineering (twhipple@hlwengineering.com)
File

WORKING TOGETHER FOR CLEAN WATER

Phone 515/323-8000 • Fax 515/323-8050 • www.dmmwra.org
3000 Vandalia Road • Des Moines, Iowa 50317-1346



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**DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY**

CITY OF DES MOINES, OPERATING CONTRACTOR

**DES MOINES METROPOLITAN WASTEWATER RECLAMATION AUTHORITY
HAULED WASTE DISCHARGE PERMIT
PERMIT NO. B10133**

In accordance with the provisions of the Municipal Code of Des Moines, Chapter 118, Article III known as the Industrial Waste Ordinance,

(Physical Address)

Clarke County Landfill Commission
2095 Leisure Drive
Osceola, IA 50213

(Mailing Address)

Clarke County Landfill Commission
100 S. Main Street
Osceola, IA 50213

is hereby authorized to deliver wastewater from the RCRA Subtitle D non-hazardous landfill via a properly licensed and maintained tank truck to the Des Moines Metropolitan Wastewater Reclamation Facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the industrial user of its obligations to comply with all applicable pretreatment regulations, standards, requirements, or laws that are or may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the City of Des Moines Industrial Waste Ordinance.

EFFECTIVE DATE: March 1, 2022

EXPIRATION DATE: February 28, 2027

RENEWAL DATE: November 30, 2026

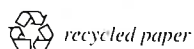
The industrial user must file an application for permit renewal 90 days prior to the expiration date.

Scott Hutchens, P.E., WRA Director
City of Des Moines
WRA Wastewater Reclamation Facility

REVISED: January 11, 2022

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Phone 515/323-8000 • Fax 515/323-8050 • www.dmmwra.org
3000 Vandalia Road • Des Moines, Iowa 50317-1346



PART 1 - REQUIREMENTS RELATING TO TRUCKED WASTES

The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) will accept process wastewater from the Industrial User (IU) under the following terms:

A. Process Wastewater Characteristics and Volume

1. The pH of any load must not be less than 5.0 S.U. or greater than 12.0. S.U.
2. The COD of any load delivered to the headworks (Structure 07) must not exceed 100,000 mg/L.
3. The Arsenic Daily Maximum concentration of any load shall not exceed 0.38 mg/L, and the Total Daily Loading of Arsenic shall not exceed 0.014 lbs/day.
4. Total Toxic Organics (TTO) will be monitored routinely by the WRA. TTOs are sum of all volatile organic compounds detected using EPA Method 624.
5. The number of truck loads delivered to the Des Moines Metropolitan Wastewater Reclamation Facility (WRF) shall not exceed ten (10) per day. The IU may request an increase in writing. The WRA reserves the right to further restrict the volume of leachate per day in order to meet pollutant loading limits for the WRA as identified in Chapter 118-343.
6. Hauled waste shall be delivered to the headworks (Structure 07) at the WRF, unless directed otherwise by WRA personnel.
7. Only landfill leachate wastewater is allowed by truck without advanced notice to and permission from the WRA Director.

B. Treatment Charges

1. Charges must cover 150% of the costs incurred by the WRA to handle and treat the wastewater as determined by the WRA Director, as well as 100% of the costs to analyze the wastewater.
2. Charges are billed monthly with NET 30 terms payable to CITY OF DES MOINES and mailed to

City of Des Moines Treasurer's Office
P.O. Box 1633
Des Moines, IA 50306-1633
3. Treatment charges for waste loads disposed of at the headworks (Structure 07) shall be \$0.00868/lb. (subject to annual rate increases, given 30-days' notice).
4. Reevaluation of charges:
 - (a) Charges will be reevaluated on February 1st and annually thereafter at a minimum.
 - (b) Charges may be reevaluated at the request of the IU or by the WRA at any time due to waste characteristic changes in the process wastewater.
 - (c) Changes in treatment charges are effective after 30-days' notice to the IU.

C. Sampling & Analysis

1. WRA Sampling & Analysis
 - (a) The WRA may, at a minimum, perform daily sampling and measurement of pH, O&G, COD, TSS, TKN, %TS, %VS at the cost provided for in Chapter 118-352. The cost will be assessed to the IU and included in the charges in Part 1, B.1. above.
 - (b) The WRA will perform other sampling and analysis at the expense of the IU as necessary to accurately assess charges and pollutant loadings.
 - (c) Samples shall be taken from the tank truck at the WRF prior to discharge or mixing with any other waste.
2. IU Sampling & Analysis
 - (a) The IU shall perform an annual scan of priority pollutants and report results to the WRA.
 - (b) Such scan does not eliminate the need for the WRA to perform its normal sampling and analysis.
 - (c) Samples shall be taken from the leachate collection vessel used to fill tank trucks for transport to the WRF.

D. Hours of Operation

1. The WRA will accept trucked waste 24/7 if drivers are familiar with the WRF manifesting, scaling, and unloading processes.
2. The WRA has the right to restrict hours as necessary and restrict truck driver access as necessary. Additional costs to provide service will be charged to the IU.

E. Termination of this Permit

1. This permit may be terminated by the IU by making a written request to the WRA providing 30 days' advanced notice.
2. This permit may be terminated by the WRA for any reason by providing 30 days' advanced written notice to the IU.
3. Delivery of wastes may be immediately suspended by the WRA if acceptance of this wastewater causes, or is anticipated to cause, interference, pass through of pollutants, or violation of any environmental permit held by the WRA.

F. Automatic Permit Extension

Expired permits shall remain effective and enforceable until the permit is reissued unless the IU is notified of permit termination by the WRA Director. (Chapter 118-372)

G. Damages

Anyone delivering or discharging wastes to the WRF whose waste causes upset, interference, or pass through is liable for the costs incurred by such incident and to penalties as allowed under city, state, and federal law.

H. Spill Control Plan

When required to do so by the WRA, the IU shall develop a Spill Control Plan to address potential spills or slugs.

PART 2 – REPORTING REQUIREMENTS

A. Monitoring Reports

The WRA will provide the IU with routine reports of the concentration of pollutants in the IU's effluent which are being monitored as described above.

1. Semi-Annual Reports

A certification statement, signed by an Authorized Representative, which uses the language required by federal law (40 CFR 403.12(l)), must be returned to the WRA every six (6) months. The industry is certifying that information it has submitted to the WRA is true and accurate. Those with TTO limits in wastewater discharge permits have an additional certifying statement regarding use and disposal of these substances. The IU shall submit a semi-annual report to the WRA as follows:

<u>Semi-Annual</u>	<u>Periods Covered</u>
1st Half	January – June
2nd Half	July - December

Semi-Annual Report Format

- (a) Identifying information.
- (b) Measurement of pollutants for any samples collected by the IU, per Chapter 118-377(5).
- (c) Certification and signature by IU.
- (d) Compliance schedule (as required).
- (e) Additional monitoring (as required).

2. Reports - Additional Monitoring

If the IU monitors any permitted pollutant from the sample location identified in Part 1.C more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136, the results of such monitoring shall be submitted to the WRA. Such monitoring results shall be summarized and reported to the WRA as part of the semi-annual report.

B. Accidental Discharge Report

The IU shall notify the WRA immediately of all discharges that could cause problems to the POTW, including any slug loadings, as outlined in Chapter 118-349. Formal written notification discussing circumstances and remedies shall be submitted to the WRA within five (5) days of the occurrence. The following procedures shall be followed:

1. Accidental discharges that contain pollutants that exceed the permitted limit by 5x or that exceed a designated slug discharge concentration shall be reported immediately.
2. Accidental discharges that may cause permanent damage to treatment system shall be reported immediately. These discharges include, but are not limited to, pollutants that may cause a fire or explosion hazard, pH of less than 4.0 or greater than 13.0 for, any pollutant in a concentration that would increase the atmosphere in the POTW above the LC50 for human exposure, and any pollutant that may increase the concentration in the influent to the WRF enough to decrease treatment efficiency.
3. The IU shall notify the WRA immediately by telephone at 515/323-8000 or 8133. The notification shall include the name of the person making the call, telephone number where said person can be reached, location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken.

The party making the call shall be available by phone for a minimum of fifteen (15) minutes after the notification is made. This is so that a member of the WRA may contact the industry representative for more information, if necessary.

4. Within five (5) days following an accidental discharge, the IU shall submit to the WRA a detailed written report. The report shall specify:
 - (a) Description of the upset, slug or accidental discharge, the cause thereof, and the impact on the IU's compliance status. The description should also include location of discharge, type, concentration and volume of waste.
 - (b) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.
 - (c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge, or other condition of noncompliance.

C. Anticipated Noncompliance

The IU shall give advance notice to the WRA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

D. Signatory Requirements

1. All applications and reports submitted to the WRA must contain the following certification statement and be signed by an authorized representative of the IU as defined below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Representative means:

- (a) An executive officer of a corporation.
 - (b) A general partner of a partnership.
 - (c) The proprietor of a proprietorship.
 - (d) The conservator, trustee, attorney in fact, receiver or other person or agent authorized in law and in fact to act on behalf of IUs which are not corporations, partnerships, or proprietorships or on behalf of other entities which must legally act through an agent.
 - (e) Any other authorized representative of (a), (b), (c), or (d) above if the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company and the written authorization is submitted to the WRA Director.
 - (f) Any other person authorized by law to act on behalf of any entity.
2. If an authorization under paragraph (d) of this subpart is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this subpart must be submitted to the WRA prior to or together with any reports to be signed by an authorized representative.

E. Wastewater Reclamation Authority Address and Phone Number

All reports, applications and correspondence shall be submitted to the following address:

Des Moines Metropolitan Wastewater Reclamation Authority
Attention: Pretreatment Department
3000 Vandalia Road
Des Moines, IA 50317

Telephone notification shall be to WRA - 515/323-8000 or 8133.

PART 3 - GENERAL CONDITIONS

The EPA in 40 CFR 403 requires wastewater treatment plants with pretreatment authority to have the following authority over all dischargers:

A. Duty to Comply

You must comply with the terms, conditions, and limits of this permit and of city ordinance. (Chapters 118-321 and 118-376)

B. Duty to Mitigate

The IU shall take all reasonable steps to minimize, correct, or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting the WRF, collection system, human health or environment. (Chapter 118-349)

C. Changes Resulting In New or Increase Pollutants

New or increased contributions of pollutants or changes in the nature of pollutant discharged to the WRF, whether due to changes in production, activity, flow or construction, shall require ninety (90) days prior approval by the WRA Director. (Chapter 118-370(11))

D. Permit Transfer

The IU shall not reassign or transfer this permit. New owners must apply for a new wastewater discharge permit sixty (60) days prior to a change of ownership. (Chapter 118-374)

E. Inspection of Premises, Records, Equipment, Methods and Discharges

You must permit authorized representatives of the WRA to inspect and sample in accordance with Chapter 118-405.

F. Confidential Information

No information shall be confidential except as specified in Chapters 118-381 and 118-382.

G. Dilution

The IU shall not increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with limitations contained in this permit.

H. Annual Publication

A list of all permitted users which significantly violated pretreatment standards or requirements (including permit requirements) during the twelve (12) previous months shall be annually published in the largest daily newspaper within the service area. (Chapter 118-396)

I. Civil and Criminal Penalties

Violation of pretreatment standards and requirements, administrative orders, or compliance schedules may subject the IU to civil and criminal penalties contained in Chapter 118-400 and Iowa Code 364.22(1).